HRGreen®

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August 9, 2021

Ms. Kari Parsons
Planning & Community Development Department - Land Use Review Division
City of Colorado Springs
2880 International Circle
Colorado Springs, CO 80910

Re: Army Corp of Engineers (ACOE) Wetland Determination

Dear Ms. Parsons,

Included within our submittal, is the Jurisdictional Determination request for channels A and B within Grandview Filing 1. We completed a site walk with the ACOE on July 27th to verify the findings contained within the attached ECOS report. Note that this meeting was originally scheduled to occur at the end of June, but due to training conflicts at the ACOE, they required the meeting to be pushed one month.

The ACOE stated at the site walk that they preliminarily agree with the findings of the ECOS report. Due to delays within the ACOE, an official Jurisdictional Determination letter is not anticipated until October. Based on the ECOS report, portions of Drainage A are a jurisdictional wetland. Drainage B is a non-jurisdictional wetland. The type of permit required for construction within both wetlands will be determined upon receipt of the Jurisdictional Determination.

Sincerely,

HR GREEN, INC

Gregory Panza, PE, PMP
Senior Project Manager

ecos ecosystem services LLC

Approved Jurisdictional Determination Request

June 17, 2021

Kara Hellige, Chief
Southern Colorado Branch
U.S. Army Corps of Engineers
Albuquerque District
1970 E. 3rd Avenue, #109
Durango, CO 81301

RE: Request for Approved Jurisdictional Determination for DR Horton proposed Grandview Reserve Residential Development Project in El Paso County, Colorado

Dear Ms. Hellige:

1.0 Introduction

On behalf of DR Horton, LLC (Applicant), Ecosystem Services, LLC (Ecos or ecos) is herein formally requesting an Approved Jurisdictional Determination from the U.S. Army Corps of Engineers (USACE) for the Grandview Reserve Residential Development Project in El Paso County, Colorado (Project). Ecos delineated waters of the U.S. and associated aquatic resources (WOTUS) within the 768.2-acre Project boundaries (Site) initially in 2018 and then reviewed and adjusted the delineation in 2021 and would like an AJD to verify the WOTUS boundaries prior to proceeding with project design, impact assessment and a 404 Permit application.

The contact information for the Applicant and their Agent is provided below:

APPLICANT

Bill Carlisle
D.R. HORTON, LLC
9555 S. Kingston Court
Englewood, Colorado 80112
Phone: 303-503-4903
WMCarlisle@drhorton.com

AGENT

Grant E. Gurnée, P.W.S.
Ecosystem Services, LLC
1455 Washburn Street
Erie, Colorado 80516
Mobile Phone: (303) 746-0091
Office Phone: (970) 812-6167
Email: grant@ecologicalbenefits.com

Until further notice, the Applicant herein authorizes Ecosystem Services, LLC to act as their Agent for all submittals and agency correspondence related to the Grandview Reserve Residential Development Project.

D.R. HORTON, LLC

6/17/21
Date

2.0 Site Location and Description

The Site is located in the Falcon/Peyton area of El Paso County and is bounded along the north by undeveloped land(Four Way Ranch future development), along the south by the Waterbury Residential development project, along the southeast by Highway 24, and along the west by Eastonville Road. There are no existing structures, roads, or other infrastructure on the Site. The Site is located approximately 4.14 miles southwest of Peyton, 4.16 miles northeast of Falcon and 4.66 miles south of Eastonville, in El Paso County, Colorado. The Site is generally located within the south ½ of Section 21, south ½ of Section 22, the north ½ of Section 27, and the north ½ of Section 28, Township 12 South, Range 64 West in El Paso County, Colorado. The center of the Site is situated at approximately Latitude 38.98541389 north, -104.55472222 east (refer to Figure 1 USGS Site Location Map).

The Site is generally characterized as gently sloping from northwest to southeast with four drainages (prairie sloughs) present, two of which are discontinuous and two are tributary to Black Squirrel Creek offsite. Naturally undulating swales drain toward the sloughs, which contain wetlands in low areas and dry areas where alluvial deposits have formed. Site topography ranges from a high elevation of 7020 feet above mean sea level (AMSL) in the northwestern corner to a low elevation of 6860 feet above AMSL where the northeastern tributary exits the Site on the east boundary along Highway 24; for a total elevation drop of 160 feet. An ill-defined and undulating hill, which is likely an eroded remnant bluff, is present in the north-central portion of the Site. Refer to Figure 2 for the Topographic Map.

3.0 Project Purpose and Need

3.1 Purpose

The Applicant proposes to develop the 768.2-acre Site as a residential community. The Project consists of low, medium, medium – high and high density single-family detached rural-residential parcels; a school parcel; a church parcel; open space and two commercial parcels along Highway 24, including utilities, streets and cul-de-sacs that provide access. Refer to Figure 3 for the Sketch Plan.

3.1 Need

The Project is a portion of the County's Master Plan and is intended to serve local and regional housing needs due to the County's growing population. The specific zoning that will be associated with this land is high density, but in efforts to preserve the open area, the community will have a minimum of 127.1 acres (over 16.5% of the site area) in open space consisting of the community park, pocket parks, trail corridors, existing drainage ways, detention areas, and buffers.

The Project will consist of a mix of urban residential densities, institutional (i.e., school and church) and commercial land uses to accommodate the growth within the vicinity of the growing town of Falcon. In addition, the project is necessary to establish transportation expansion corridors of the north/south route of Eastonville Road to the west and Elbert Road to the east along with the major east/west thoroughfare of Rex Road dissecting the property for connection to CDOT Highway 24 on the east side of the project, being part of the counties overall master transportation plan.

4.0 Jurisdictional Delineation Waters of the U.S.

4.1 Methodology

Ecos utilized the National Wetland Inventory (NWI) Wetlands Mapper (USFWS, 2020a); Colorado Wetland Inventory Mapping Tool (CNHP, 2020); historic and current Google Earth aerial photography; USGS 7.5-minute

topographic mapping; and detailed Project topographic mapping to screen the Site for potential wetland habitat and waters of the U.S. Additionally, ecos performed a jurisdictional delineation to identify the boundaries of WOTUS.

The mapping data above were proofed and wetland delineations were conducted in 2018 and 2021 to determine the presence/absence of potential WOTUS. Once a feature was verified to be present, ecos determined whether it is a jurisdictional wetland/waters under the Clean Water Act. The USACE wetland delineation methodology was employed to document the 3 field indicators (parameters) of wetland habitat (i.e., wetland hydrology, hydric soils and a predominance of hydrophytic vegetation as explained in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) and supplemented by the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2) (USACE, 2010). The wetland delineation was surveyed by the project team surveyor

Consistent with the NWI and Colorado Wetland Inventory Mapping Tool (Figure 4) and topographic mapping (Figure 2), the wetland/waters delineation revealed the presence of four drainages with the potential to support wetland habitat (Figure 5). Two of the drainages (i.e., northeast Drainage D and southwest Drainage A) were preliminarily determined to be jurisdictional WOTUS by ecos (pending USACE verification) and support predominantly palustrine emergent wetland (PEMC1) habitat with minor occurrences of palustrine scrub-shrub (PSS) and palustrine forested (PFO) species along their fringes. Both of these drainages have a distinct surface connection downstream to Black Squirrel Creek. Central Drainage C and south-central Drainage B were investigated found to be discontinuous, prairie sloughs and preliminarily determined to be non-jurisdiction, "isolated" features. Drainage C does, however, have the potential for surface connection downstream to a confluence with Drainage A during high precipitation events and warrants specific onsite review by the USACE. Drainage B does not have any obvious surface connection to downstream WOTUS. The findings of the delineation are summarized below, and the USACE datasheets and representative photographs are included in Appendix A.

4.2 Field Assessment Findings

The results of the onsite assessment for each of the four onsite drainages are summarized below, with an explanation of the field indicators (parameters) of wetland habitat/waters that were observed, and an explanation as to whether ecos preliminarily determined each feature was jurisdictional or non- jurisdictional under Section 404 of the Clean Water Act.

4.2.1 Potential Jurisdictional WOTUS

Drainage D – Northeast Drainage D is classified as a Palustrine Emergent, Persistent, Seasonally Flooded wetland (PEMC1). Wetland Area A is tributary to Black Squirrel Creek off of the Site to the southeast. It is dominated by Nebraska sedge, redtop, clustered field sedge, three-square bulrush, swordleaf rush, soft-stem bulrush, poverty rush, Baltic rush, and watercress. Other species were present, including water mint, sporadic patches of sandbar willow, cutleaf evening primrose, fireweed, curly dock, and water milfoil, and snowberry, wild licorice and Wood's rose along the high banks. Soil samples indicate the presence of field indicators of hydric soils (organic horizon from 0-2 inches, 10YR4/2 clay loam from 2-9 inches, 10YR4/1 clay loam from 9-14 inches, and 10YR5/1 sandy clay from 14-18+ inches). Sustaining hydrology was evident as flowing water is present within a defined channel and saturated soils are present at the surface and throughout the floodplain, including groundwater driven side-slope seepage. This area meets all 3 parameters for jurisdictional wetland habitat.

Drainage A – Southwest Drainage A is classified as a Palustrine Emergent, Persistent, Seasonally Flooded wetlands (PEMC1 Wetland Area D is tributary to Black Squirrel Creek off of the Site to the southeast. It is

dominated by Nebraska sedge, clustered field sedge, swordleaf rush, redtop, poverty rush, Baltic rush, and pussytoes. Other species were present, including soft-stem bulrush, three-square bulrush, smartweed, saltgrass, foxtail barley, water mint, scouring rush, wild geranium, watercress, narrowleaf cattail, and snowberry, wild licorice and Wood's rose along the high banks. Sporadic occurrences of sandbar willow, crack willow and plains cottonwood were present. Soil samples indicate the presence of field indicators of hydric soils (10YR2/2 loamy clay from 0-6 inches, 10YR4/2 sand from 6-12 inches, 10YR4/1 sand from 12-16 inches, and 10YR4/1 clayey sand from 16-18+ inches). Sustaining hydrology from groundwater seepage was evident as saturated soil is present at or within 8-12 inches of the ground surface. These areas meet all 3 parameters for jurisdictional wetland habitat.

4.2.1 Potential Non-Jurisdictional WOTUS

Drainages C & B - The central Drainage C and south-central Drainage B were investigated found to be discontinuous, prairie sloughs with reaches that are upland swales; they exhibited upland "breaks" in which they did not exhibit defined bed or bank (Figure 5); and they were also found to be "isolated" as they did not directly connect with downstream WOTUS. As noted above, Drainage C does, however, have the potential for surface connection downstream to a confluence with Drainage A during high precipitation events and warrants specific onsite review by the USACE; therefore, ecos delineated the potentially jurisdictional boundaries of this feature in May 2021. Patches of PEMC1 wetland habitat exist in Drainages C and B that exhibit the same characteristics of other wetlands on site and meets all 3 parameters for jurisdictional wetland habitat.

Ecos performed an onsite review of central Drainage C and south-central Drainage B on June 21, 2019 and under the regulations in place at that time, Tony Martinez concurred that Drainages C and B are isolated and located entirely upland (refer to the Appendix B USACE Verification Email).

4.3 Soils

Ecos utilized the U.S. Department of Agriculture, Natural Resource Conservation Service Web Soil Survey (USDA, NRCS, 2020) to determine if hydric soils are present within the Site, as this data assist in informing the presence/absence of potential wetland habitat regulated under the Clean Water Act. The soils data were also utilized to supplement the field observations of vegetation, as the USDA provides correlation of native vegetation species by soils types. Please refer to Appendix C for the USDA NRCS Soils Data.

Blakeland loamy sand (Map Unit #8), Columbine gravelly sandy loam (Map Unit #19) and Stapleton sandy loam (Map Unit #83) are listed by the NRCS as hydric soils that are found in swales and depressions. Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS, 1994) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in Field Indicators of Hydric Soils in the United States (USDA, NRCS, 2010).

Please refer to Section 4.2 above for specific descriptions of sol test pits observed during the field delineation.

4.4 Hydrology

Sustaining hydrology for the onsite drainages is provided by precipitation, runoff from adjacent areas, and runoff from impervious surfaces in the upper watershed that have been developed. The onsite drainages also likely

receive shallow interflow from stormwater facilities and basement drains associated with residential properties in the upper watershed. Over the 27 years that ecos has been assessing and delineating aquatic resources in this area we have noticed that development in the watershed has provided additional sustaining hydrology, often converting ephemeral sloughs to intermittent and perennial drainages.

5.0 Federal Listed Species

A number of species that occur in El Paso County are listed as candidate, threatened or endangered by the USFWS (USFWS, 2020b) under the Endangered Species Act (ESA). Ecos compiled the Federally-listed species for the Site in Table 1 based on the Site-specific, USFWS IPaC Trust Resources Report we ran for the Project (Appendix D); and our onsite assessment. Ecos has provided our professional opinion regarding the probability that these species may occur within the Site and their probability of being impacted by the Project.

The likelihood that the Project would impact any of the species listed below is very low to none. Most are not expected occur in the Project area or on the Site; nor will they be affected by the indirect effects of the project.

TABLE 1 - FEDERAL LISTED SPECIES ASSESSED FOR THE PROJECT

Species	Status	Habitat Requirements and Presence	Probability of Impact by Project
FISH			
Greenback cutthroat trout (*Oncorhynchus clarki stomias*)	Threatened	Cold, clear, gravely headwater streams and mountain lakes that provide an abundant food supply of insects.	None. Suitable habitat does not exist on the Site.
Pallid sturgeon (*Scaphirhynchus albus*)	Endangered	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska.	None. The proposed project is not in the watershed for any of the listed river basins.
BIRDS			
Least tern (*Sternula antillarum*)	Endangered	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska.	None. The proposed project is not in the watershed for any of the listed river basins.
Mexican spotted owl (*Strix occidentalis lucida*)	Threatened	Mature, old-growth forests of white pine, Douglas fir, and ponderosa pine; steep slopes and canyons with rocky cliffs. The closest USFWS designated Critical habitat is over 15 miles southwest of the Site in mountainous terrain (USFWS, 2018).	None. Suitable habitat does not exist on the Site.

TABLE 1 - FEDERAL LISTED SPECIES ASSESSED FOR THE PROJECT			
Species	**Status**	**Habitat Requirements and Presence**	**Probability of Impact by Project**
Piping plover (*Charadrius melodus*)	Threatened	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska.	None. The proposed project is not in the watershed for any of the listed river basins.
Whooping crane (*Grus americana*)	Endangered	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska.	None. The proposed project is not in the watershed for any of the listed river basins.
MAMMALS			
North American Wolverine (*Gulo gulo luscus*)	Proposed Threatened	Occur in select high elevation areas that are cold and receive enough winter precipitation to reliably maintain deep persistent snow late into the warm season.	None. Suitable habitat does not exist on the Site.
Preble's meadow jumping mouse (*Zapus hudsonius preblei*)	Threatened	Inhabits well-developed riparian habitat with adjacent, relatively undisturbed grassland communities, and a nearby water source. Well-developed riparian habitat includes a dense combination of grasses, forbs and shrubs; a taller shrub and tree canopy may be present. Has been found to regularly use uplands at least as far out as 100 meters beyond the 100-year floodplain.	Very Low. Unlikely to occur on Site due to: 1) the absence of habitat required to support the life requisites of the species; 2) negative trapping results reported by USFWS adjacent to the Site; 3) 10.22-mile distance from closest CPW "Potential" Occupied Habitat (west/northwest of the Site in Colorado Springs); 4) 6.5-mile distance from closest USFWS Critical Habitat (southwest of the Site along Black Squirrel Creek in Colorado Springs); and 5) lack of habitat connection corridor from known habitat to the Site.
PLANTS			

TABLE 1 - FEDERAL LISTED SPECIES ASSESSED FOR THE PROJECT			
Species	**Status**	**Habitat Requirements and Presence**	**Probability of Impact by Project**
Ute ladies'-tresses orchid (*Spiranthes diluvialis*)	Threatened	Primarily occurs along seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels or valleys, and lakeshores. May also occur along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, roadside borrow pits, reservoirs, and other human-modified wetlands.	Very Low. Unlikely to occur due to very poor habitat conditions from historic and ongoing grazing disturbance.
Western prairie fringed orchid (*Platanthera praeclara*)	Threatened	Occurs in tallgrass prairie in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and Oklahoma. Upstream depletions to the Platte River system in Colorado and Wyoming may affect the species in Nebraska.	None. The proposed project will not alter or deplete flows to the South Platte.

5.1 ESA Clearance Request and USFWS Concurrence

As part of the El Paso County planning process, ecos drafted an ESA Clearance Requests in 2019 and 2020 that were submitted to the U.S. Fish and Wildlife Service for review. The USFWS concurred with ecos findings as summarized in Table 1 above in both 2019 and 2020. The 2020 USFWS concurrence is included in Appendix E, and includes the USFWS remarks, " Ute ladies'-tresses orchid and Preble's mouse are not likely to occupy the Project site. Project is still consistent with the section 7 conclusions from 2019."

6.0 Migratory Birds and Bald and Golden Eagles

Ecos did not observe any active migratory bird or bald or golden eagle nests in the Site or within close proximity to the site.

7.0 Evaluation of Potential Impacts to Historic Properties and Cultural Resources

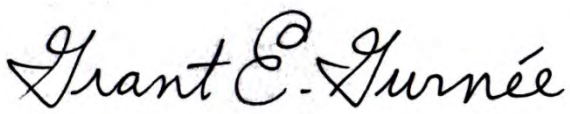
No potential historic or cultural features were observed by ecos during the Site assessment. However, the Applicant will defer to the USACE's internal review of the OAHP database.

8.0 Conclusions

Ecos delineated WOTUS within the 768.2-acre Site and would like an AJD from the USACE to verify the WOTUS boundaries prior to proceeding with project design, impact assessment and a 404 Permit application.

Respectfully submitted by:

Ecosystem Services, LLC



Grant E. Gurnée, P.W.S.
Owner - Restoration Ecologist

REFERENCES

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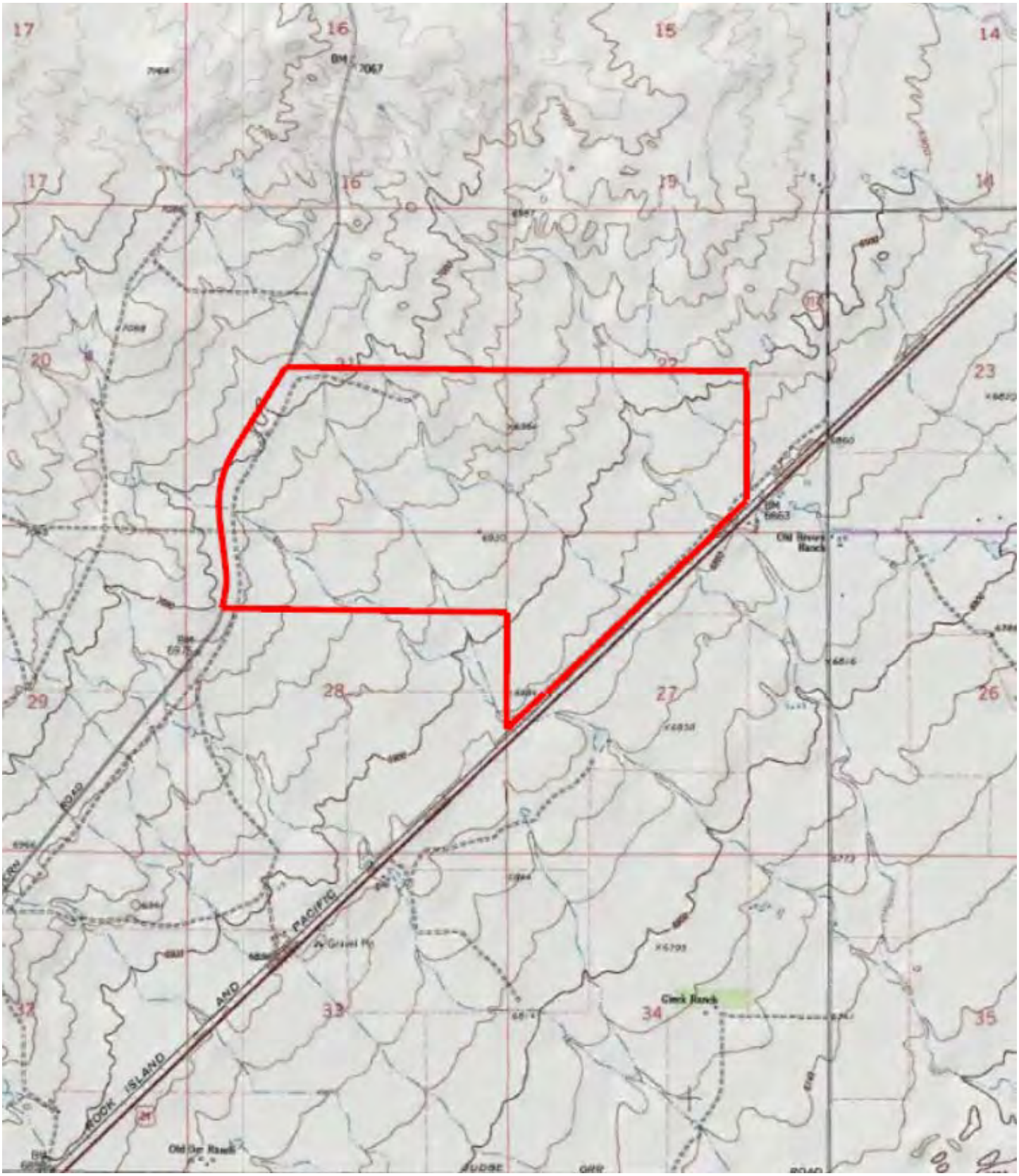
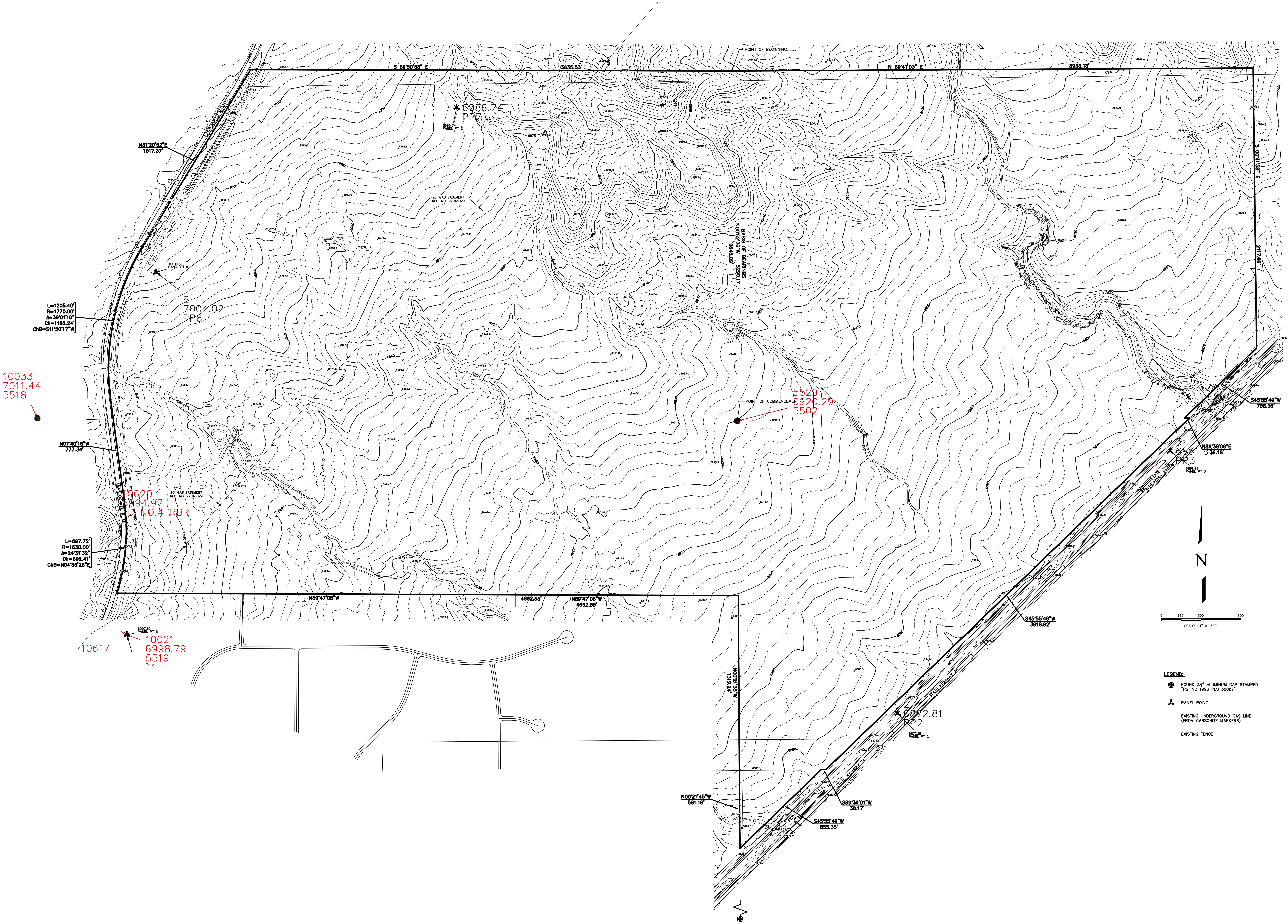


USGS 7.5 min. Quad: Falcon
Latitude: 38.985713°N
Longitude: -104.552854°W
Section 21, 22, 27 & 28, Township 12 South, Range 64 West



POINT OF BEGINNING
S 89°50'58" E
3635.53'
N 89°41'03" E
3938.18'
S 00°41'58" E
2117.66'
S45°55'49"W
758.36'
N89°38'06"E
36.18'
S45°55'49"W
3818.92'
S89°39'01"W
36.17'
S45°55'49"W
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N00°21'38"W
1319.24'
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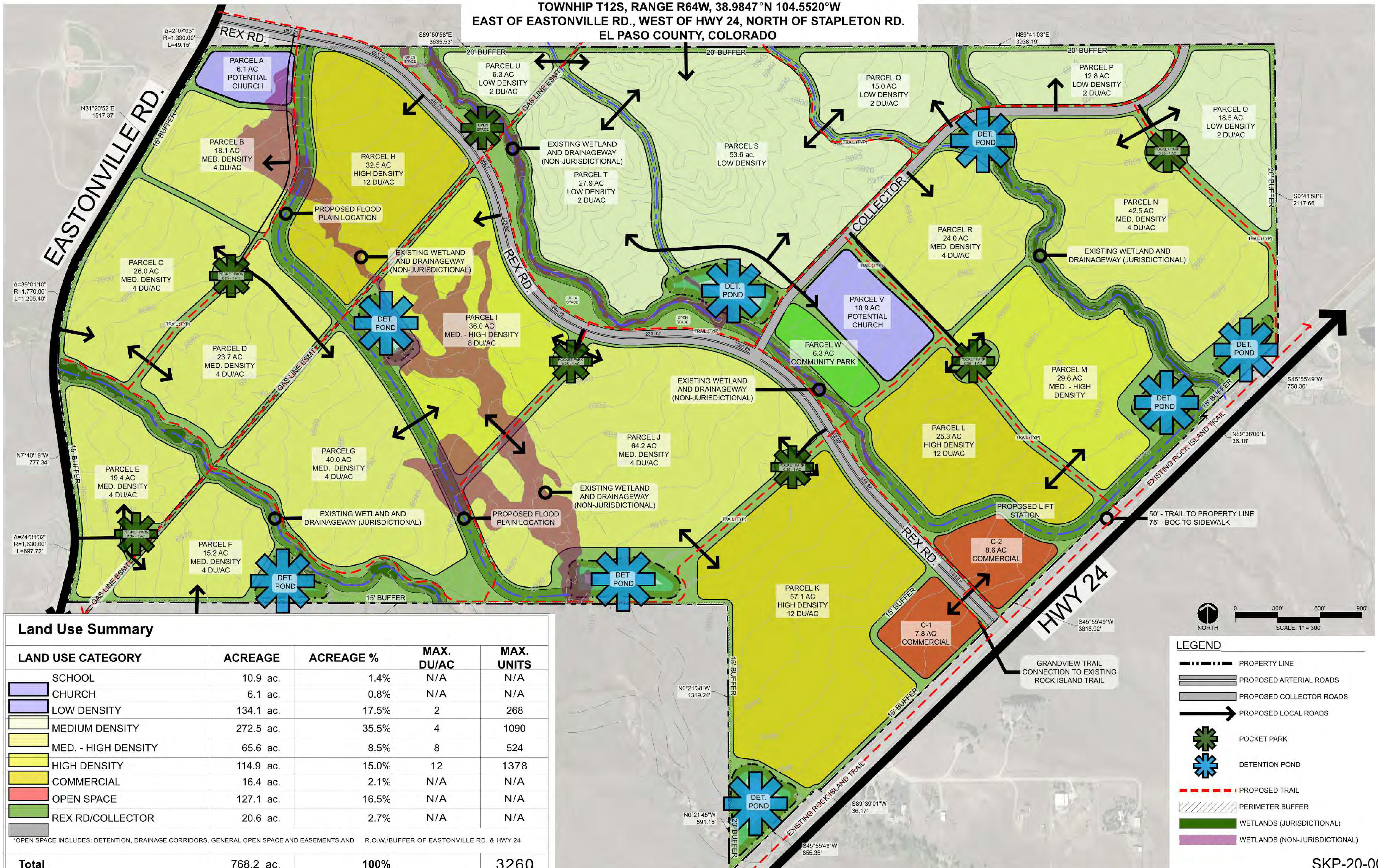
4692.55'
N89°47'08"W
4692.55'
N31°20'52"E
1517.37'
L=1205.40'
R=1770.00'
Δ=39°01'10"
Ch=1182.24'
ChB=S11°50'17"W
N07°40'18"W
777.34'
L=697.72'
R=1630.00'
Δ=24°31'32"
Ch=692.41'
ChB=N04°35'28"E
EASTONVILLE ROAD
STATE HIGHWAY 24
20' GAS EASEMENT
REC. NO. 97046029
BASIS OF BEARINGS
N00°52'26"W
2645.09'
5290.17
POINT OF COMMENCEMENT
7
6986.74
PP7
6986.74
PANEL PT 7
6
7004.02
PP6
7004.02
PANEL PT 6
6997.19
PANEL PT 5
6872.81
PP2
6872.81
PANEL PT 2
6861.91
PANEL PT 3
PP3
10033
7011.44
5518
10620
6994.97
D NO.4 RBR
10617
10021
6998.79
5519
5529
6920.29
5502
N
0
150'
300'
600'
SCALE: 1" = 300'
LEGEND:
FOUND 3¼" ALUMINUM CAP STAMPED "PS INC 1996 PLS 30087"
PANEL POINT
EXISTING UNDERGROUND GAS LINE (FROM CARSONITE MARKERS)
EXISTING FENCE

GRANDVIEW RESERVE SKETCH PLAN

TOWNHIP T12S, RANGE R64W, 38.9847°N 104.5520°W
EAST OF EASTONVILLE RD., WEST OF HWY 24, NORTH OF STAPLETON RD.
EL PASO COUNTY, COLORADO



Land Use Summary

LAND USE CATEGORY	ACREAGE	ACREAGE %	MAX. DU/AC	MAX. UNITS
SCHOOL	10.9 ac.	1.4%	N/A	N/A
CHURCH	6.1 ac.	0.8%	N/A	N/A
LOW DENSITY	134.1 ac.	17.5%	2	268
MEDIUM DENSITY	272.5 ac.	35.5%	4	1090
MED. - HIGH DENSITY	65.6 ac.	8.5%	8	524
HIGH DENSITY	114.9 ac.	15.0%	12	1378
COMMERCIAL	16.4 ac.	2.1%	N/A	N/A
OPEN SPACE	127.1 ac.	16.5%	N/A	N/A
REX RD/COLLECTOR	20.6 ac.	2.7%	N/A	N/A
Total	768.2 ac.	**100%**		3260

*OPEN SPACE INCLUDES: DETENTION, DRAINAGE CORRIDORS, GENERAL OPEN SPACE AND EASEMENTS,AND R.O.W./BUFFER OF EASTONVILLE RD. & HWY 24

SKP-20-001

HR GREEN Xrefs: 01-DV-DSGN; xgt-1-ARCH DH01; 01-VICINITY MAP; 01-XL-CONCEPT; 01-DV-SURF

DRAWN BY: JAG | JOB DATE: 7/6/2020
APPROVED: PLS | JOB NUMBER: 191897
CAD DATE: ----
CAD FILE: J:\2019\191897\CAD\Dwgs\L\01-L-SHEETS

BAR IS ONE INCH ON OFFICIAL DRAWINGS. 0 1" IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.

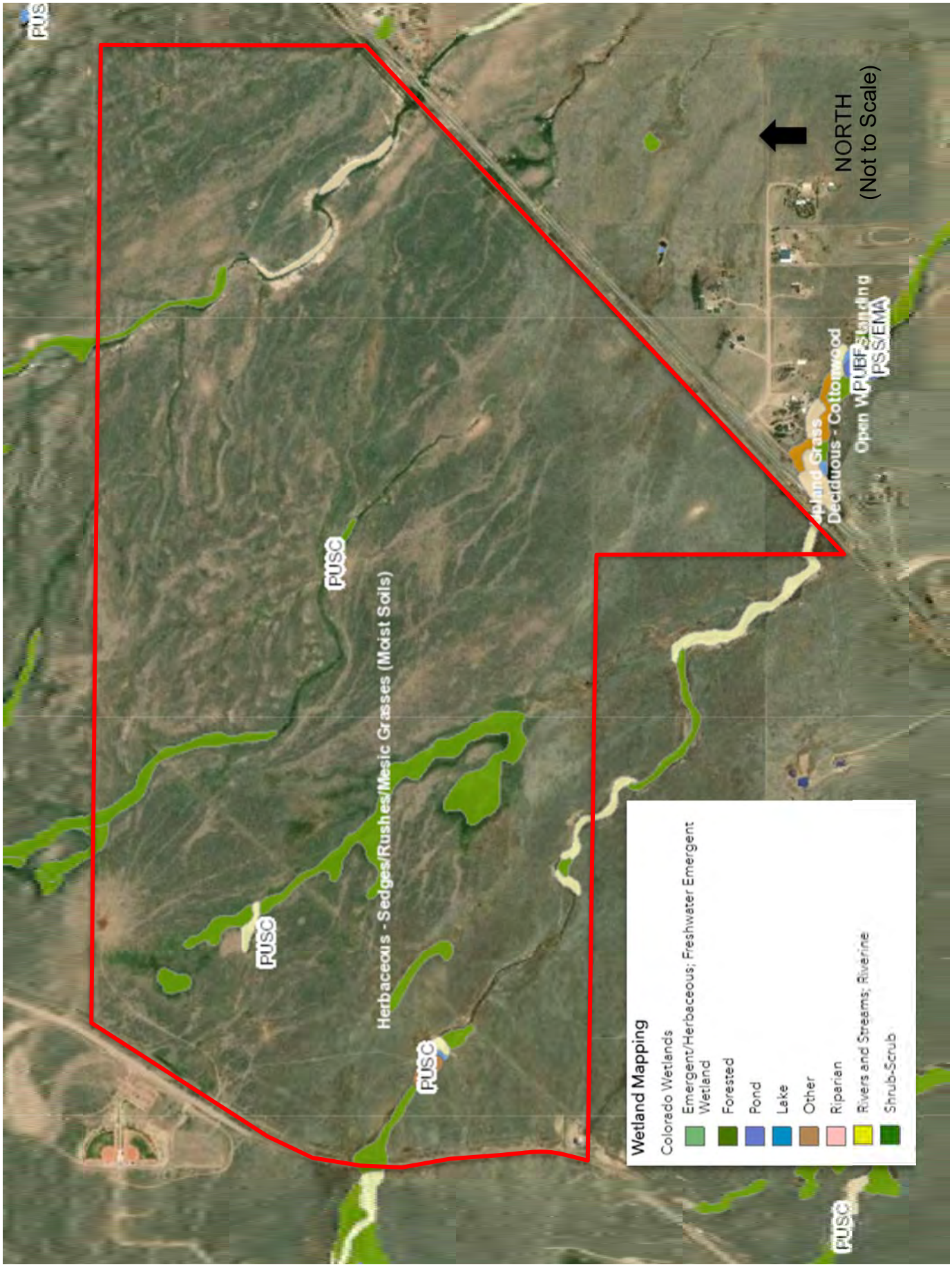
NO.	DATE	BY	REVISION DESCRIPTION

HRGreen — HRGreen.com

GRANDVIEW RESERVE
4 SITE INVESTMENT, LLC
FALCON, COLORADO

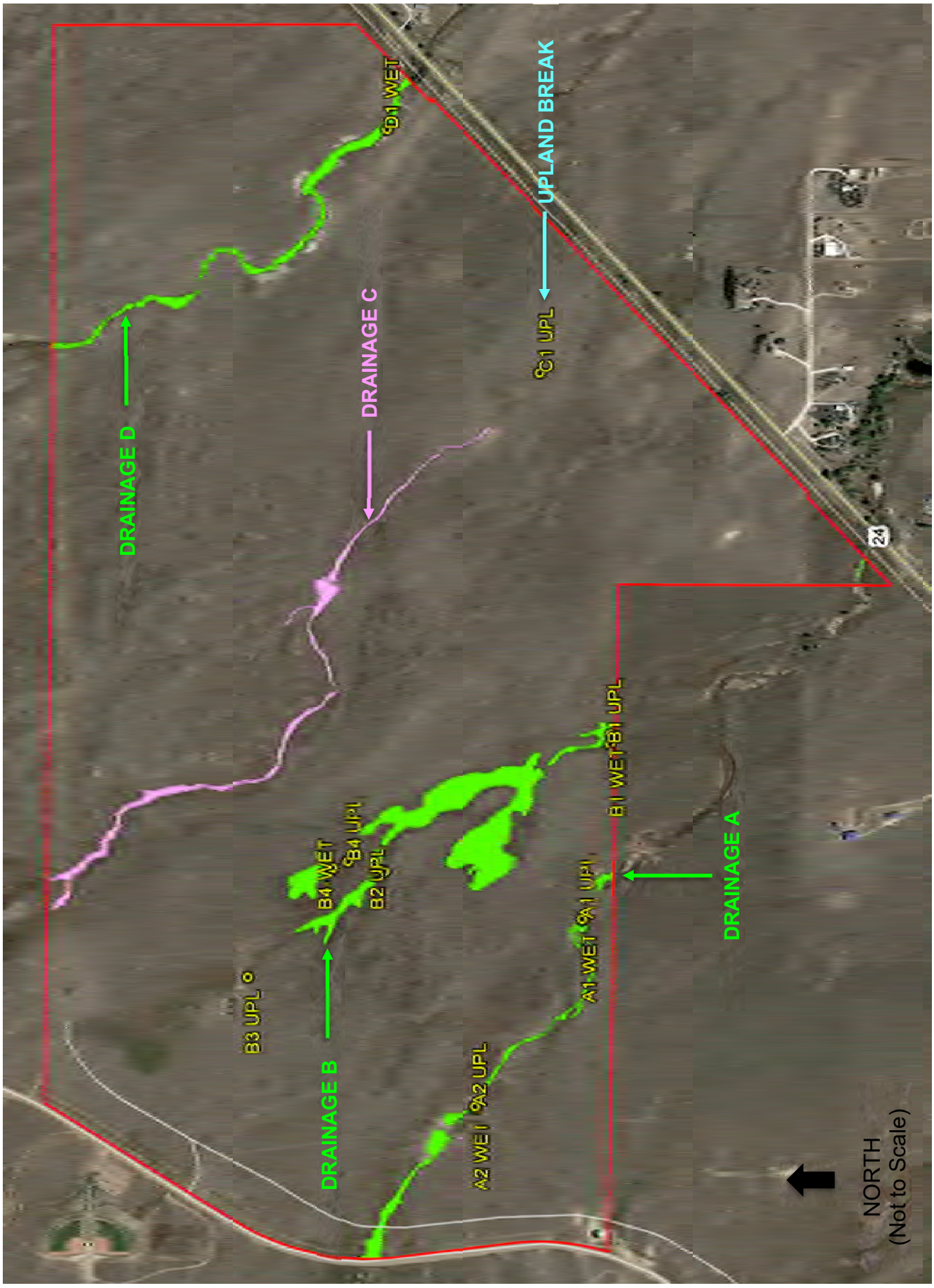
GRANDVIEW RESERVE SKETCH PLAN
SKETCH PLAN

SHEET SP1.2 | 2



SOURCE: USFWS, National Wetland Inventory & CNHP, Colorado Wetland Inventory

Figure 5 NATIONAL WETLAND INVENTORY & CNHP WETLAND & RIPARIAN AREAS MAP



SOURCE: Ecosystem Services, LLC On-site Delineation, 4-6-21 and 5-12-21

Figure 5 ECOS WOTUS DELINEATION MAP

Appendix A
USACE Datasheets and Representative Photographs

Appendix A – Representative Photographs

A1 Wetland – looking upstream (above) and downstream (below) 4-6-21

A2 Wetland – looking upstream (above) and downstream (below) 4-6-21

B1 Upland – looking upstream (above) and downstream (below) 4-6-21

B1 Wetland – looking upstream (above) and downstream (below) 4-6-21

B2 Wetland – looking upstream (above) and downstream (below) 4-6-21

B3 Upland looking upstream 5-12-21

B3 Upland looking downstream 5-12-21

B4 Upland looking upstream 5-12-21

B4 Upland looking downstream 5-12-21

B4 Wetland looking upstream 5-12-21

B4 Wetland looking downstream 5-12-21

C1 Wetland looking upstream 5-12-21

C1 Wetland looking downstream 5-12-21

D1 Wetland – looking upstream (above) and downstream (below) 10-10-18

Appendix B
Appendix B USACE Verification Email

From:	Martinez, Joseph A CIV USARMY CESPA (US)
To:	Grant Gurnee
Subject:	RE: [Non-DoD Source] FW: Grandview Reserve Project - Request for Verification of Non-JD Drainages (UNCLASSIFIED)
Date:	Friday, July 5, 2019 1:58:43 PM

CLASSIFICATION: UNCLASSIFIED

Mr. Gurnee,

Based on the information provided in the attached email and our site visit on June 21, 2019 our office concurs with your observations that central Drainage C and south-central Drainage B are isolated and are located entirely upland therefore, we conclude that No permit is required.

If you should have any questions, please contact me at (719).600.8641.

Respectfully,

Tony Martinez, R.E.M.

Regulatory Program Manager| U.S. Army Corps Of Engineers | Office: (719) 600.8641 | Email: joseph.a.martinez@usace.army.mil|

Albuquerque District
Southern Colorado Regulatory Branch
201 West 8th Street, Suite 350, Pueblo Colorado 81003

Visit our Web Site at: http://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/

-----Original Message-----
From: Grant Gurnee [mailto:grant@ecologicalbenefits.com]
Sent: Tuesday, June 18, 2019 2:21 PM
To: Martinez, Joseph A CIV USARMY CESPA (US) <Joseph.A.Martinez@usace.army.mil>
Subject: [Non-DoD Source] FW: Grandview Reserve Project - Request for Verification of Non-JD Drainages

Hi Tony –

Here is the email I sent Van on May 20, 2019.

I hope you received my calendar invitation to meet at 10:30 this Friday (June 21) at the intersection of Stapleton Road and Hwy. 24.

Thank you,

Grant

From: Grant Gurnee <grant@ecologicalbenefits.com <mailto:grant@ecologicalbenefits.com> >
Sent: Monday, May 20, 2019 10:23 AM
To: Truan, Van A SPA <van.a.truan@usace.army.mil <mailto:van.a.truan@usace.army.mil> >
Cc: Peter Martz <pmartzlrg@comcast.net <mailto:pmartzlrg@comcast.net> >; Mike Bramlett <mbramlett@jrengineering.com <mailto:mbramlett@jrengineering.com> >; Jon Dauzvardis <jon@ecologicalbenefits.com <mailto:jon@ecologicalbenefits.com> >

Subject: Grandview Reserve Project - Request for Verification of Non-JD Drainages
Importance: High

Hello Van –

Ecos would like to request the Corps' formal concurrence regarding the non-jurisdictional status of Drainages B and C on the Grandview Reserve Site in El Paso County (refer to Section 3.4 and additional information in the attached report). Please let us know if you would like to schedule a site visit to review these drainages with us.

Summary:

The central Drainage C and south-central Drainage B were investigated found to be discontinuous, prairie sloughs with reaches that are upland swales; they exhibited upland "breaks" in which they did not exhibit defined bed or bank (Figure 6 in attached report); and they were also found to be "isolated" as they did not connect with downstream WOUS. Patches of PEMC1 Wetland exists in these drainages that exhibits the 3 parameters for jurisdictional wetland habitat. However, they are clearly disconnected from Black Squirrel Creek by uplands that do not exhibit a defined bed or bank. Therefore, ecos determined that these drainages are isolated, non-jurisdictional features – pending Corps verification.

Thank you,

Grant

Grant Gurnée, P.W.S.

Owner – Restoration Ecologist

ecosystem services LLC

(o): 970-812-ECOS (3267)

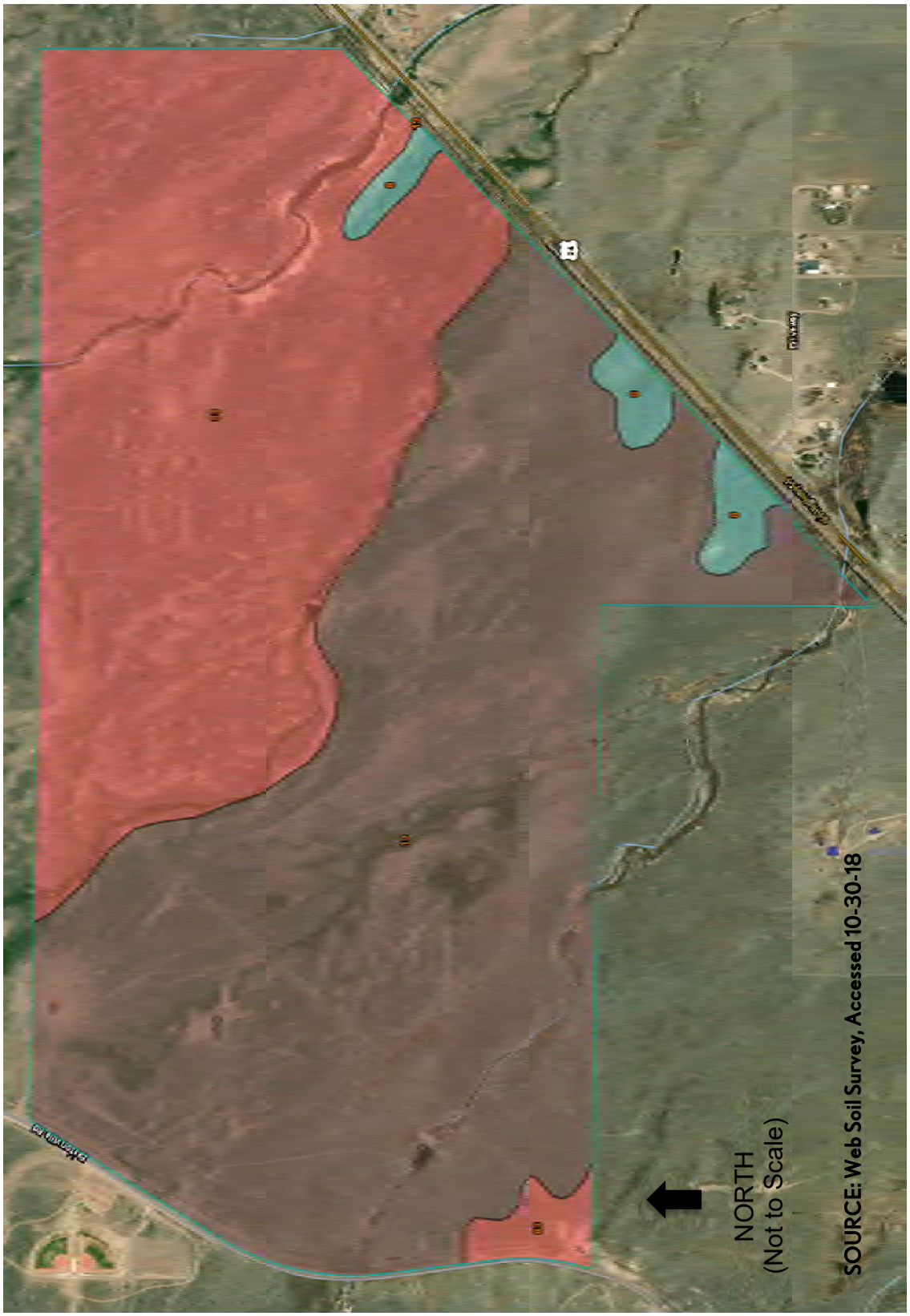
(c): 303-746-0091

(w): Blockedwww.ecologicalbenefits.com <Blockedhttp://www.ecologicalbenefits.com/>

(e): grant@ecologicalbenefits.com <mailto:grant@ecologicalbenefits.com>

P Life is like a river…we all must learn to adapt to the challenges of dynamic equilibrium

Appendix C
USDA NRCS Soils Data



Summary by Map Unit — El Paso County Area, Colorado (CO625)

Summary by Map Unit — El Paso County Area, Colorado (CO625)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
8	Blakeland loamy sand, 1 to 9 percent slopes	Blakeland loamy sand, 1 to 9 percent slopes	17.5	2.3%
19	Columbine gravelly sandy loam, 0 to 3 percent slopes	Columbine gravelly sandy loam, 0 to 3 percent slopes	428.6	55.8%
83	Stapleton sandy loam, 3 to 8 percent slopes	Stapleton sandy loam, 3 to 8 percent slopes	322.2	41.9%
Totals for Area of Interest			**768.3**	**100.0%**

Appendix D
USFWS IPaC Trust Resources Report

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Paso County, Colorado

Local office

Colorado Ecological Services Field Office

(303) 236-4773
(303) 236-4005

MAILING ADDRESS

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS

134 Union Boulevard, Suite 670
Lakewood, CO 80228-1807

http://www.fws.gov/coloradoES
http://www.fws.gov/platteriver

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

NAME	STATUS
Preble's Meadow Jumping Mouse Zapus hudsonius preblei There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4090	Threatened

Birds

NAME	STATUS
Least Tern Sterna antillarum This species only needs to be considered if the following condition applies: • Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8505	Endangered
Mexican Spotted Owl Strix occidentalis lucida There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8196	Threatened
Piping Plover Charadrius melodus This species only needs to be considered if the following condition applies: • Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Whooping Crane Grus americana This species only needs to be considered if the following condition applies: • Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/758	Endangered

Fishes

NAME	STATUS
Greenback Cutthroat Trout Oncorhynchus clarkii stomias No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2775	Threatened

NAME	STATUS
Pallid Sturgeon *Scaphirhynchus albus* This species only needs to be considered if the following condition applies: • Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7162	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis* No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2159	Threatened
Western Prairie Fringed Orchid *Platanthera praeclara* This species only needs to be considered if the following condition applies: • Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1669	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

THERE ARE NO MIGRATORY BIRDS OF CONSERVATION CONCERN EXPECTED TO OCCUR AT THIS LOCATION.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds

guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or

minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND
Palustrine

RIVERINE
Riverine

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix E
2020 ESA Clearance Letter from the USFWS

ecos ecosystem services LLC

Informal Consultation Request

April 10, 2020

Mr. Drue DeBerry
Acting Colorado Field Supervisor
U.S. Fish and Wildlife Service
Colorado Ecological Services Field Office
134 Union Blvd., Suite 670
Lakewood, Colorado 80228

RE: Request for Technical Assistance Regarding the Likelihood of Take of Federally-listed Threatened and Endangered Species resulting from the proposed development of the Grandview Reserve Project in El Paso County, Colorado

Dear Mr. DeBerry:

Ecosystem Services, LLC (ecos) has prepared the enclosed habitat evaluation on behalf of 4 Site Investments to describe the physical/ecological characteristics of the Grandview Reserve site (Site) and evaluate the potential effects of the proposed development project (Project) on the Federally-listed threatened and endangered (T&E) species protected under the Endangered Species Act (ESA).

The El Paso County Environmental Division has completed its review of the Project and has requested that 4 Site Investments provide a "Clearance Letter" obtained from the U.S. Fish and Wildlife Service (USFWS) to the Planning and Community Development Department prior to project commencement "where the project will result in ground disturbing activity in habitat occupied or potentially occupied by threatened or endangered species and/or where development will occur within 300 feet of the centerline of a stream or within 300 feet of the 100 year floodplain, whichever is greater."

At this time there is no Federal action and no Federal agency is making a formal effects determination under Section 7 (a)(2) of the ESA. Therefore, ecos is requesting technical assistance from USFWS regarding 4 Site Investments' (i.e., the non-federal party) responsibilities under the ESA, and specifically the likelihood of the Project (described herein) resulting in take of listed species. If the USFWS concurs with the findings presented herein we request that you issue an informal letter of concurrence for use in the El Paso County Project review process.

1.0 SITE LOCATION and PROJECT DESCRIPTION

The Site is located in the Falcon/Peyton area of El Paso County and is bounded along the north by 4 Way Ranch Phase I, along the south by Waterbury, along the southeast by Highway 24, and along the west by Eastonville Road. There are no existing structures, roads, or other infrastructure on the Site. The Site is located approximately 4.14 miles southwest of Peyton, 4.16 miles northeast of Falcon and 4.66 miles south of Eastonville, in El Paso County, Colorado. The Site is generally located within the south ½ of Section 21, south ½ of Section 22, the north ½ of Section 27, and the north ½ of Section 28, Township 12 South, Range 64 West in El Paso County, Colorado. The center of the Site is situated at approximately Latitude 38.98541389 north, -104.55472222 east (refer to Figure 1).

Technical Assistance
Tracking Number: 2019-TA-0460

U.S. FISH AND WILDLIFE SERVICE

(•) NO CONCERNS

( ) CONCUR NOT LIKELY TO ADVERSELY AFFECT

( ) NO COMMENT

04/29/2020

Liisa Schmoele DATE

Colorado Assistant Field Supervisor

Remarks: Ute ladies'-tresses orchid and Preble's mouse are not likely to occupy the project site. Project is still consistent with the section 7 conclusions from 2019.