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BIOLOGICAL ASSESSMENT AND CULTURAL RESOURCES RECORDS REVIEW

PLUM CREEK SUBDIVISION
WEST OF CROSSHAVEN PLACE
AND PLUM CREEK BOULEVARD
CASTLE ROCK, COLORADO

Prepared for:

The Douglas Group, Inc.
413 Wilcox Street, #204
Castle Rock, Colorado 80104

Attention: Mr. Michael Tollefson

Project No. DN51,549.000-240-R1

May 2, 2022



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TERMS

ACOE – Army Corps of Engineers

BGEPA – Bald and Golden Eagle Protection Act

CHS – Colorado Historical Society

CPW – Colorado Parks and Wildlife

CWA – Clean Water Act

ESA – Endangered Species Act

Federally Endangered/Threatened Species – Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future.

FEMA – Federal Emergency Management Agency

IPaC – Information for Planning and Consultation

Jurisdictional WOTUS– Waters that are "jurisdictional" are subject to the multiple regulatory requirements of the Clean Water Act by the US Army Corps of Engineers. Non-jurisdictional waters are not subject to those requirements.

MBTA – Migratory Bird Treaty Act

NFHL – National Flood Hazard Layer

NHD – National Hydrology Dataset

NHPA – National Historic Preservation Act

PMJM – Preble's meadow jumping mouse

State Endangered/Threatened Species – A species that is considered Endangered or Threatened by State legislature. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range throughout the state. "Threatened" means a species is likely to become endangered within the foreseeable future.

'Take' – According to the Endangered Species Act, 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

USFWS – United States Fish and Wildlife Service

USGS – United States Geological Survey

WOTUS – Waters of the U.S.



1.0 INTRODUCTION

The Douglas Group contracted CTL | Thompson, Inc. (CTL) to perform a Biological Assessment and Cultural Records Review for the property known as Plum Creek Subdivision (the Subject Property).

TABLE I
LOCATION AND LEGAL DESCRIPTION

Descriptor	Description
<i>Location</i>	West of Crosshaven Place and Plum Creek Boulevard, Castle Rock, Douglas County, Colorado 80104
<i>Township and Range</i>	West ½ of Section 22 and east ½ of Section 23, Township 8 South, Range 67 West of the 6th Principal Meridian
<i>USGS Quadrangle</i>	Castle Rock
<i>Parcel Number</i>	2505-232-07-003
<i>Legal Description (Abbreviated)</i>	TRACT B BLK 2 THE ESTATES ABOVE PLUM CREEK # 4 1.5003 AM/L
<i>Current Use</i>	Vacant land
<i>Total Land Area</i>	1.5 acres
<i>Ownership</i>	Douglas Group, Inc

We evaluated the Subject Property for:

- The presence of jurisdictional wetlands;
- The presence of threatened or endangered species;
- The presence of endangered or threatened species critical habitat; and,
- The presence of registered archeological and/or historic sites.

On April 29, 2022, Ms. Christine Whitacre conducted a site visit. Subject Property conditions consisted of temperatures in the low 70s, cloud cover of approximately 10% and winds of approximately one to three (1-3) miles per hour (mph). Photographic documentation is presented in **Appendix A**. During this visit, Ms. Whitacre collected specific information about the Subject Property's physical features, vegetation, hydrology, soil conditions, and surrounding environmental conditions. This information is required to evaluate aquatic and



biological components of the Subject Property. CTL searched publicly available literature on federal, state and local websites, and contacted local historical officials regarding the Subject Property, which are outlined in the **References** section of this letter report.

1.1 Summary of Site Historical Use

Historical aerial photograph research indicates that the Subject Property was vacant or in agricultural use from at least the late 1930s. The Subject Property location and plan are shown on Figure 1 (Area Map) and Figure 2 (Site Plan).

1.2 Existing Conditions

The Subject Property consists of approximately 1.5 acres of vacant land in a naturally vegetated state. Common species observed at the Subject Property mostly consisted of native and non-native prairie species. The EPA's Region 8 Ecoregion Map classifies the Subject Property as southwestern tablelands and pine oak woodlands. A photographic record of our site reconnaissance is presented in **Appendix A**.

2.0 AQUATIC RESOURCE ASSESSMENT

The following subsections discuss our research and onsite assessment of Waters of the U.S., wetlands, and FEMA floodplains on the Subject Property and/or in connection with the Subject Property.

2.1 Waters of the U.S.

The Clean Water Act was passed by the U.S. Congress in 1971 to protect the physical, biological, and chemical quality of "Waters of the U.S." The U.S. Army Corps of Engineers (Corps) Regulatory Program administers and enforces Section 404 of the Clean Water Act. Under Section 404, a Corps permit is required for the discharge of dredged or fill material into wetlands and Waters of the U.S. The Corps defines Waters of the U.S. as all navigable waters



and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters.

The Corps jurisdiction of the “Waters of the U.S.” changed in 2006 as a result of the U.S. Supreme Court’s Decision in *Rapanos v. United States* and *Carabell v. United States*. The June 5, 2007 Agency Guidance document indicates the Corps will continue to assert jurisdiction over all water which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. The agency will continue to assert jurisdiction over wetlands “adjacent” to traditional navigable waters.

The Corps will assert jurisdiction over non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months). The Corps will assert jurisdiction over those adjacent wetlands that have continuous surface connection to such tributaries (e.g. they are not separated by uplands, a berm, dike, or similar feature).

The Corps will assert jurisdiction over non-navigable water, defined as not relatively permanent tributaries and their adjacent wetlands, as long as such tributaries and wetlands have a significant nexus to traditional navigable waters. Significant nexus includes consideration of hydraulic factors including the following:

- Volume, duration, and frequency of flow, including consideration of certain physical characteristics of the tributary;
- Proximity to the traditional navigable water;
- Size of the watershed;
- Average annual rainfall; and,
- Average annual winter snow pack.

Finally, the Corps has indicated the following geographic features generally are not jurisdictional waters:

- Swales or erosion control features (e.g. gullies, small washes characterized by low volume, infrequent, or short duration flow); and,



- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

During our site visit on April 29, 2022 we observed the site for potential Waters of the US. We did not observe Waters of the U.S. on or adjacent to the Subject Property.

2.2 Wetlands

Wetlands are defined by the Corps as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. To meet the classification, a wetland must show evidence of a minimum of one positive wetland indicator from each parameter of hydrology, soil, and vegetation. Each must be found in order to make a positive wetland determination. Delineated wetlands that are determined as jurisdictional by the Corps are regulated and proper care must be taken to protect them during development. If the disturbance and/or development of a jurisdictional wetland cannot be avoided, the Corps may approve mitigation. Mitigation may include the construction of a new wetland to replace the former wetland, either on or off the Site. Guidelines for the mitigation of new wetlands are outlined in the U.S. Army Corps of Engineers Standard Operating Procedures for the Regulatory Program.

During our site visit, we did not observe jurisdictional wetlands as defined by the Corps on or adjacent to the Subject Property.

The U.S. Fish and Wildlife Service (USFWS) defines wetlands as lands transitional between terrestrial and aquatic systems, where the water table is usually at or near the surface, or the land is covered by shallow water. For the purpose of this classification, wetlands must have at least one of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of the year.



CTL|T used a USFWS National Wetland Inventory Map as an aid to help determine the location of wetlands that might be present at the Subject Property. The map, included in **Appendix B**, does not indicate the presence of wetlands on the Subject Property.

2.3 FEMA Floodplains

The Federal Emergency Management Agency (FEMA) provides Flood Insurance Risk Maps (FIRMs), which display floodplains (also referred to as flood zones) and define floodplains based on the annual chance of flooding over a designated period of time. Floodplains may provide critical habitat for State and/or Federal protected species. FEMA also provides locations of regulatory floodways, which must be reserved in order to discharge the base flood of an area without cumulatively increasing the water surface elevation more than a designated height. FEMA requires hydrologic and hydraulic analyses that demonstrate that the proposed development of a regulatory floodway would not result in any increase of flood levels.

We researched the FEMA National Flood Hazard Layer (NFHL) map for floodplains on the Subject Property. The FEMA NFHL indicated the site as an area of minimal flood hazard. Floodplains were not indicated on the Property. The FEMA NFHL is presented in **Appendix C**.

3.0 BIOLOGICAL RESOURCE ASSESSMENT

The following subsections discuss our assessment of critical habitat or potential habitat of State and Federal protected species, as well as other species of concern, on the Subject Property and/or in connection with the Subject Property.

3.1 Federally Threatened, Endangered, and Candidate Species

The Subject Property was assessed for potential habitat for threatened, endangered, and candidate species under the Endangered Species Act (ESA). Federally threatened and endangered species are protected under the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 et seq.). Significant adverse effects to a federally listed species or its habitat require consultation with the U.S. Fish and Wildlife (USFWS) under Section 7 or 10 of the



Endangered Species Act (ESA). The service lists ten (10) threatened or endangered species with potential habitat in Douglas County (USFWS 2022). Table II lists common and scientific names and the status of the species.

TABLE II
FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES
DOUGLAS COUNTY

COMMON NAME	SCIENTIFIC NAME	STATUS
Mexican Spotted Owl	Bird – <i>Strix occidentalis lucida</i>	Threatened
Piping Plover	Bird – <i>Charadrius melodus</i>	Threatened
Whooping Crane	Bird – <i>Grus americanus</i>	Endangered
Pallid Sturgeon	Fish – <i>Scaphithynchus albus</i>	Endangered
Black-Footed Ferret	Mammal – <i>Mustela nigripes</i>	Endangered
Preble's Meadow Jumping Mouse	Mammal – <i>Zapus hudsonius preblei</i>	Threatened
Greenback Cutthroat Trout	Fish – <i>Oncorhynchus clarkii stomias</i>	Threatened
Ute Ladies'-tresses	Plant – <i>Spiranthes diluvialis</i>	Threatened
Colorado Butterfly Plant	Plant – <i>Gaura neomexicana</i> var. <i>coloradensis</i>	Threatened
Western Prairie Fringed Orchid	Plant – <i>Platanthera praeclara</i>	Threatened

The Mexican spotted owl (*Strix occidentalis lucida*) is a large bird that nests and roosts on cliff ledges or in caves in canyons with dense stands of mature mixed-conifer, pine-oak and riparian forests. An adequate habitat includes large trees, uneven aged tree stands, multi-storied canopy, standing dead trees, and a tree canopy creating shade over 40 percent or more of the ground with some type of water source available. According to USFWS data, the Subject Property does not contain critical habitat for this species. In our professional opinion, development of the Subject Property will not impact the Mexican spotted owl.

The piping plover (*Charadrius melodus*), and the whooping crane (*Grus americanus*) are species that are affected by impacts to waterways and lakes. Piping plover typically reside along open shorelines of creeks, lakes, and rivers. Whooping crane breed and nest in wetland habitat where bulrush, cattail, are the dominant vegetation type. Piping plovers nest primarily in southeastern Colorado in Kiowa and Bent Counties. There are no large bodies of water with wetlands or sandy shorelines present on the Subject Property, thus there is no suitable habitat



for these species. We do not believe the development of the Subject Property will adversely impact these bird species.

The pallid sturgeon (*Scaphirhynchus albus*) is a river bottom dweller, found in areas of strong current and firm sand bottom in the main channel of large turbid rivers such as the Platte River. There are no known occurrences of the pallid sturgeon in Colorado. The species would be adversely impacted if large rivers in Colorado that flow into Nebraska were impacted. There are no large rivers on or adjacent to the Subject Property that flow into Nebraska. Thus, we do not believe that the development of the Subject Property will adversely affect this species.

The black-footed ferret (*Mustela nigripes*) is usually found on shortgrass and midgrass prairies and in close association with prairie dogs. There are six reintroduction sites in Colorado. Attempts to reintroduce the ferret to Colorado have been difficult, as they do not migrate well to expand their population. Black-footed ferrets rely primarily on prairie dogs for food, and abandoned prairie dog burrows provide their preferred dens to raise their young. The Subject Property is approximately 30 miles south of the nearest black-footed ferret release location at Rocky Mountain Arsenal and does not contain connectivity. We do not believe that development of the Subject Property will impact this species.

The Preble's meadow jumping mouse (*Zapus hudsonius preblei*), referred to as PMJM, is a species that is typically located in low undergrowth consisting of grasses and forbs, in open wet meadows, riparian corridors near forests, or where tall shrubs and low trees provide adequate cover. The mice prefer well developed riparian habitat with adjacent, relatively undisturbed grassland communities and a nearby water source. Their nests are composed of plant material and are generally located aboveground at the base of shrubs and trees or in open grasslands. The Subject Property was assessed for potential Preble's meadow jumping mouse habitat. We do not believe the Subject Property contains the necessary habitat for this species. Additionally, USFWS does not indicate that the property is considered critical habitat for this species. We do not believe development of the Subject Property will negatively impact this species.

The greenback cutthroat trout is a coldwater fish belonging to the trout, salmon, and whitefish family. They have dark, round, spots on the sides and tail and two colorful blood-red stripes on each side of the throat under the jaw. Greenbacks prefer cold, clear gravelly



headwater streams and mountain lakes which provide an abundant food supply of insects. Greenbacks originally lived in the mountain and foothill areas of the Arkansas and South Platte River systems. We assessed the property for the greenback cutthroat trout. Based on the lack of habitat on or adjacent to the Subject Property, we don't believe that development will adversely affect this species.

The Ute ladies'-tresses orchid (*Spiranthes diluvialis*) typically occurs at elevations below 6,500 feet in moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes. Occurrences of Ute ladies'-tresses have been documented in Colorado, Wyoming, Idaho, Nevada, and Utah. The populations in Colorado mostly occur along the Front Range. The Subject Property was assessed for potential Ute ladies'-tresses habitat. According to the FEMA NFHL there are no floodplains of perennial streams located on the Subject Property, indicating a lack of habitat for this species. It is our professional opinion that development will not adversely affect this species.

The Colorado butterfly plant (*Gaura neomexicana* var. *coloradensis*) is a short-lived perennial herb with reddish stems that are two (2) to three (3) feet tall. Flowers are arranged in a branched, elongated pattern around the leaves and have four reddish sepals (modified leaves surrounding the flower) and four white petals that turn pink or red with age. It is found within a small area of southeastern Wyoming, western Nebraska, as well as Platte, Larimer and Weld counties in Colorado, mostly on private lands managed for livestock and agriculture. The Colorado butterfly plant is found in active floodplains along perennial streams and occurs where vegetation is relatively open. The Subject Property was assessed for potential Colorado butterfly plant habitat. According to the FEMA National Flood Hazard Layer, there are no floodplains of perennial streams located on the or adjacent to the Subject Property. It is our opinion that the Property does not present habitat suitable for the Colorado butterfly plant and that development will not adversely affect this species.

The western prairie fringed orchid (*Platanthera praeclara*) is a perennial orchid found in North American tall grass prairies. The orchid grows to a height of approximately four (4) feet tall with a flowering stalk that bears up to 24 white flowers about one inch across. The species is believed to occur in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. This species is listed in Adams County because of the potential downstream effects from activities in this area. Upstream depletions of the Platte River system



may affect the species in Nebraska. The Subject Property does not contain a tributary to the South Platte River. We do not believe development will impact this species.

3.2 State Threatened, Endangered, and Candidate Species

The project area was assessed for potential habitat for threatened, endangered, and candidate species and critical habitat designated by Colorado Parks and Wildlife (CPW). Colorado's State Wildlife Action Plan (SWAP) articulates a set of conservation priorities that considers an expansive array of wildlife from a statewide perspective. According to the SWAP plan, the Tier 1 list represents the species of highest conservation priority in the State, while Tier 2 species remain important in light of forestalling population trends or habitat conditions that may lead to a threatened or endangered listing status.

The burrowing owl (*Athene cunicularia*) is a small, migratory owl that occupies prairie dog towns in Colorado during the spring and summer breeding season. The owl is active during the day and uses prairie dog burrows for nesting and roosting. Burrowing owls are a threatened species and are protected under federal and state laws, including the Migratory Bird Treaty Act. Per CPW, no human encroachment is allowed within 150 feet of prairie dog burrows that are being used as nests from March 15 through October 31. It is recommended that efforts to eradicate prairie dogs or destroy abandoned towns do not occur between March 15 and October 31, as owls may be present. We did not observe active or inactive prairie dog towns on or adjacent to the Subject Property, indicating a lack of habitat for burrowing owls. We do not believe that development will impact this species.

The olive-backed pocket mouse (*Perognathus fasciatus*) resides in arid and semi-arid upland areas and is often found in thinly covered grasslands and prairies. They prefer forest edges and are associated with blue gramma and wheat grasses. According to CPW data, the Subject Property falls within olive-backed pocket mouse's overall range. However, due to the lack of forest edge habitat, we do not believe the Site contains critical habitat for the olive-backed pocket mouse.

The interior least tern (*Sterna antillarum athalassos*) is affected by impacts to waterways and lakes. The least tern generally prefers sparsely-vegetated sandy shores of



reservoirs and gravel pits where they nest directly on the ground. The diet of least terns consists primarily of small, slender fish and aquatic invertebrates. The least tern nests primarily in southeastern Colorado. There are no large bodies of water with sandy shorelines present on the Subject Property, thus there is no suitable habitat for these species. We did not observe evidence of these birds, nor do we believe the development of the Subject Property will adversely impact these bird species based on the lack of potential habitat within the Subject Property boundaries.

The Property is a grassland and therefore could possibly support habitat for Tier I reptile species such as the Massauga rattlesnake (*Sistrurus catenatus*) and the Colorado checkered whiptail (*Aspidoscelis neotesselata*). However, we did not observe these species and we do not believe the Property would be considered critical habitat for either of these species.

The black-tailed prairie dog (*Cynomys ludovicianus*) is a burrowing rodent, 15 inches in length with a black-tipped tail. Once occupying seven million acres in Colorado, the black-tailed prairie dog is now present on the eastern third of Colorado below 6,000 feet. Approximately 150 other species rely on the habitat that the black-tailed prairie dog creates. We did not observe evidence of prairie dogs on or adjacent to the Property. Due to the lack of nearby colonies, it is unlikely that prairie dogs would migrate onto the Subject Property prior to development. Should prairie dogs colonize the Subject Property prior to development, we recommend a supplemental biological study and a burrowing owl survey if development is planned between March 15 and October 31.

Other CPW listed species of concern have been taken into consideration. Based on lack of suitable habitat on Site and information regarding population locations from CPW, we do not believe these species to be a concern for the Subject Property.

3.4 Local Requirements

Douglas County and the Town of Castle Rock have additional requirements for Land Suitability Analysis to demonstrate the suitability of the site development plan to the land.



The Subject Property is located in a residential area of Castle Rock and is bordered by single-family homes and a golf course. While we observed deer or antelope scat on the site, due to its location and size, it is unlikely that the Property would be considered a critical migration corridor. Additionally, according to CPW data, the Property is not a migration corridor for elk or other species.

According to the Colorado State Forest Service, the Property is urban/undeveloped with short, sparse dry climate grass. Maps indicate that the Property is in an area of low to lowest wildfire risk and low to moderate burn probability. According to Douglas County, the property is in an area of low ignition risk, low to medium resistance to control, and low wildfire hazard potential.

3.4 Migratory Bird Treaty Act

Migratory birds, as well as their eggs and nests, are protected under the Migratory Bird Treaty Act (MBTA). The MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without bird or eggs), provided that no “take” (of bird or eggs) occurs during the destruction. The regulatory definition of “take” means to pursue, hunt, shoot, kill, trap, capture or collect, or attempt to pursue, hunt, wound, kill, trap, capture, or collect. While destruction of a nest by itself is not prohibited under MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs is illegal and fully prosecutable under the MBTA. One method to avoid a violation of the MBTA is to remove vegetation and nests outside the active breeding season, which typically falls between March and August, depending on species.

The Subject Property was assessed for potential migratory bird nesting habitat. Several migratory birds were observed on the Subject Property including western meadowlarks (*Sturnella neglecta*) and black-billed magpie (*Pica hudsonia*). The majority of the Subject Property provides ground-nesting habitat as well as some tree-nesting habitat. For a higher level of assurance and to avoid destruction of migratory bird nests, vegetation should be removed outside of the breeding season (March to August). If development is planned during the breeding season, we recommend a migratory bird survey be performed prior to development.



3.5 Colorado Raptors

Colorado raptors such as red-tailed hawks (*Buteo jamacicensis*), Ferruginous hawk (*Buteo regalis*), and American kestrels (*Falco sparverius*) are protected by the MBTA (discussed in the previous section). Additionally, Colorado Parks and Wildlife recommends buffer zones around active raptor nests to avoid and minimize disturbance to nesting raptors in Colorado. For raptors, CPW recommends no human encroachment beyond that which historically occurred, within one-third to one-fourth mile radius of active nests, depending on the species. Raptor species in Colorado have varying breeding seasons dependent upon their food sources and when hatchlings fledge (leave) the nest. The general raptor breeding season in Colorado is from January to August.

We did not observe raptors during our site visit. The trees on the Subject Property are relatively small and are generally not large enough to support a raptor nest. Additionally, the lack of preferred food sources and significant human activity in the area makes it unlikely that nesting raptors would utilize the Property. It is our professional opinion that development will not result in a take of nesting raptors.

3.6 Bald and Golden Eagle Protection Act of 1940

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected by the MBTA (discussed in the previous section) and the Bald and Golden Eagle Protection Act of 1940, as amended November 1978. These species nest in a variety of habitats, including on cliffs and in large trees, and prefer a nearby water source. The Act allows further protection of eagles by prohibiting anyone, without a permit issued by the Secretary of the Interior, from “taking” eagles, including their parts, eggs or nests. Like MBTA, “take” means to pursue, hunt, wound, kill, trap, capture, or collect; however, it also includes “disturb,” which means to agitate or bother a bald or golden eagle to the level that causes or is likely to cause injury, decrease in productivity, or nest abandonment.

CPW data indicates that the Property does not fall within a known bald eagle range. CPW data indicates that the closest active bald eagle nest is located approximately seventeen (17) miles northwest of the Property. There are no mature trees on or adjacent to the Property that would support and eagle nests. Additionally, we did not observe eagles during our visit,



and we believe that it is unlikely eagles would utilize the Property due to its proximity to human encroachment and active development. We do not believe development of the Property would result in a take of bald eagles or golden eagles.

4.0 CULTURAL RESOURCE ASSESSMENT

The following section discusses our assessment of historical or archaeological listings on the Subject Property and/or in connection with the site.

4.1 Historical and Archaeological Findings

Historic properties are properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties prior to construction. If it determines that it has no undertaking, or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further Section 106 obligations. However, if it determines its undertaking may have an adverse effect on a historic property it must notify the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer to consult with during the process. It should also plan to involve the public and identify other potential consulting parties. Additionally, under NHPA Section 110(f), where a federal undertaking may directly and adversely affect a property designated as a National Historic Landmark, the agency must, prior to approving the undertaking and to the maximum extent possible, undertake such planning and actions necessary to minimize harm to such landmark. It should be noted, that with certain limited exceptions, federal agencies are prohibited by NHPA Section 110(k) from granting loans, loan guarantees, permits, licenses, or other assistance to any applicant who intentionally significantly adversely affected a historic property to which the assistance would relate with the intent to avoid the requirements of Section 106. If you perform these activities prior to the start of construction, it will help to avoid significant project delays and possible project cancellation. A review of listed cultural resources does not always rise to the level of a Section 106 review.

CTL|T contacted History Colorado, Office of Archaeology and Historic Preservation, and requested a search of the Colorado Inventory of Cultural Resources. We received a



response on April 20, 2022, which did not indicate historical sites within the Subject Property boundaries. The History Colorado response is presented in **Appendix D**.

5.0 OPINION AND RECOMMENDATION

Based on the direct field observations and our limited literature research, it is our professional opinion that Waters of the U.S. and jurisdictional wetlands are not present on or adjacent to Subject Property.

FEMA did not indicate the presence of floodplains on or adjacent to the Subject Property.

We did not observe the presence of Federal or State listed endangered or threatened species on the Subject Property.

We do not believe that, due to the size and location of the Subject Property, that it would be utilized as a migration corridor.

According to the Colorado State Forest Service, the Subject Property is in an area of low wildfire risk.

For a higher level of assurance and to avoid destruction of ground-nesting and tree-nesting migratory bird nests, vegetation should be removed outside of the breeding season (March to August). If construction activities are planned during the breeding season, we recommend a migratory bird survey be conducted prior to development.

We do not believe that development will result in a take of Colorado raptors or eagle species.

No historic or archeological finding was documented on the Subject Property or in the surrounding area.



6.0 LIMITATIONS

This assessment only applies to the Subject Property in its current state, in areas that were easily observed. If development of the Subject Property is planned for later 2022, you should consider a supplementary study be completed, as site conditions and animal behaviors are not static season to season. We believe that CTL|T performed services in a professional manner, consistent with industry standards and practices in the locality of the project at the time the services were performed. No warranty, express or implied, is made.

CTL|THOMPSON, INC.

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REFERENCES

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U.S. Fish and Wildlife Service, Mountain and Prairie Region, Endangered Species Program website, www.mountain-prairie.fws.gov/endspp.

U.S Fish and Wildlife Service, IPac, The Environment Conservation Online System (ECOS),
<https://ecos.fws.gov/ipac/>







APPENDIX A SITE PHOTOGRAPHS

Subject Property Photos			
			
Description: General site view Direction: West		Description: General site view Direction: East	
			
Description: Eastern portion of the property Direction: East		Description: Northern portion of property Direction: North	

SITE PHOTOGRAPHS



APPENDIX B

WETLAND INVENTORY MAP



U.S. Fish and Wildlife Service

National Wetlands Inventory

Appendix B - Subject Property Wetlands



April 21, 2022

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



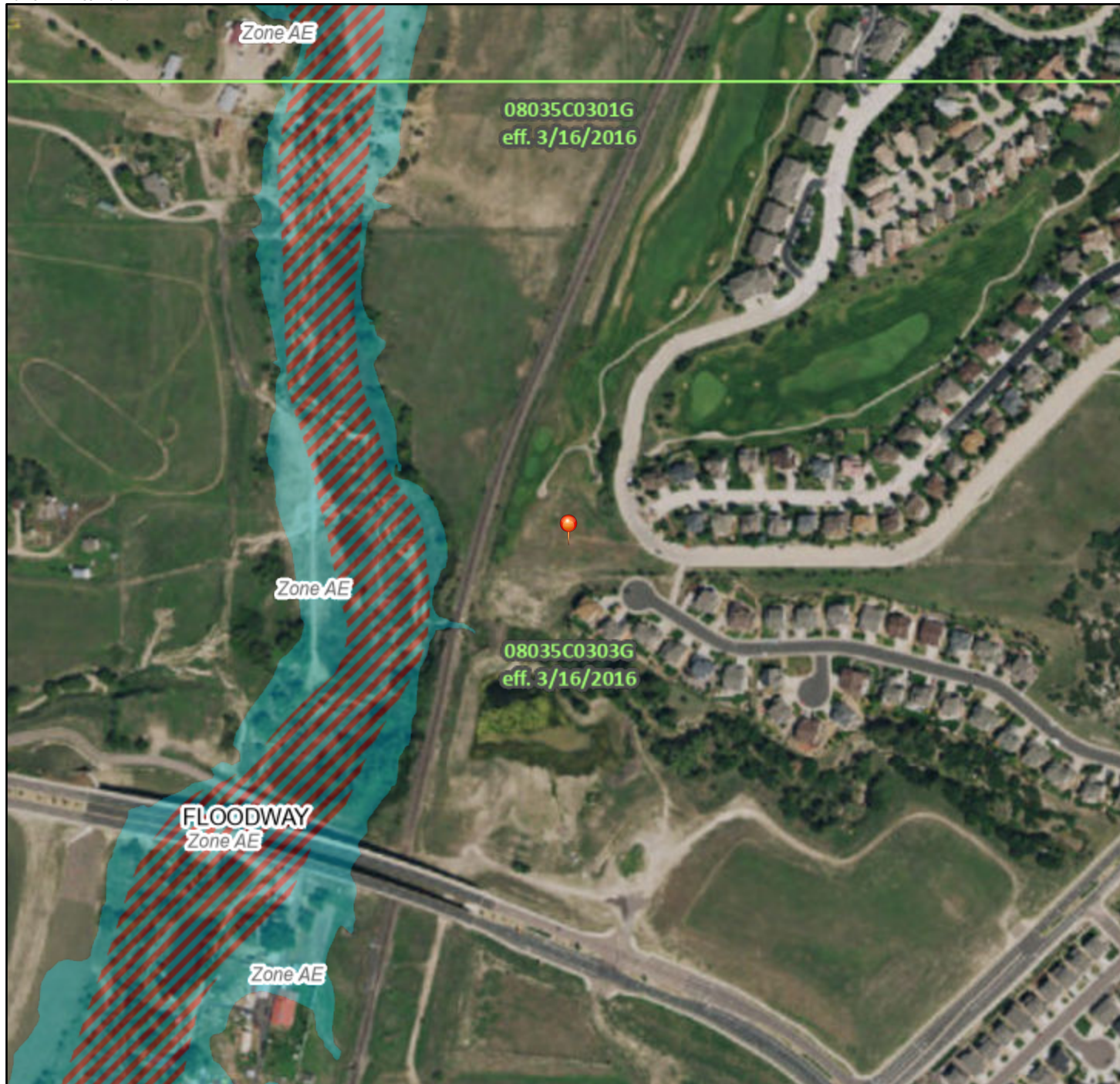
APPENDIX C

FEMA NHFL

National Flood Hazard Layer FIRMette



104°52'24"W 39°20'40"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°51'47"W 39°20'12"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

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

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



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/21/2022 at 2:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



APPENDIX D

HISTORY COLORADO



History Colorado

Christine Whitacre
CTL Thompson, Inc.
1971 West 12th Ave Denver CO 80204

April 20, 2022

Re: Plum Creek Subdivision DN51,549.000-240
File Search No. 24598

At your request, the Office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources based on your specified search criteria (the area shown in the provided map), located in the following areas:

PM	T	R	S
6TH	8S	67W	22, 23

0 sites and 1 surveys were located in the search area(s).

If any site, district, building, structure, object, or survey area was identified within the search area, a spreadsheet of detailed information* accompanies this letter. Our records may not represent all cultural resources in Colorado, nor can they be considered comprehensive, as most of the state has not been surveyed for cultural resources. There is the possibility that as yet unidentified cultural resources exist within the proposed impact area.

This letter is not considered formal consultation under Section 106 of the National Historic Preservation Act (36 CFR 800) or the Colorado Register of Historic Places (CRS 24-80.1). In the event that there is federal or state agency involvement, please note that it is the responsibility of the agencies to meet the requirements of these regulations.

We look forward to consulting with you regarding the effect of the proposed project on significant cultural resources in accordance with the Advisory Council on Historic Preservation regulations titled "Protection of Historic Properties" or the Colorado Register of Historic Places, as applicable (<http://www.historycolorado.org/consultation-guidance>).

If you have any questions, please contact the Office of Archaeology and Historic Preservation at (303) 866-3392. Thank you for your interest in Colorado's cultural heritage.

Dawn DiPrince
State Historic Preservation Officer

*Information regarding significant archaeological resources is excluded from the Freedom of Information Act. As such, legal locations of these resources must not be included in documents for public distribution.