



June 29, 2016

Craig Russell
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RE: Ecological Characterization Study (ECS) Report for the Eldon James Corporation Project Area

Craig:

This letter report is submitted to satisfy the requirements of Section 3.4.1 of the Land Use Code of the City of Fort Collins regarding the submittal of an ECS Memo for the Eldon James Corporation project area (project area) in Fort Collins, Colorado. The report was prepared in accordance with Section 3.4.1 of the Land Use Code of the City of Fort Collins regarding the preparation of an ECS Report. The proposed development would be a 90,000 square-foot office and manufacturing facility. The project area is located near the northwest corner of the Lady Moon Drive/Precision Drive intersection in the southeast 1/4 of the northwest 1/4 of Section 4 (T. 6 N., Range 68 W.). The project area location is depicted on Figure 1. Existing commercial development and undeveloped land (fallow cropland) currently surround the project site (see Figure 1).

Ecological characteristics of the project area were evaluated in the field on June 27, 2016. Based on City of Fort Collins Planning Staff comments on the proposed project, the primary focus of the field survey was evaluating wildlife use and the extent of wetlands in the unnamed ditch to the north of the project area (see Figure 1). Observations recorded during the field evaluation included: major vegetation communities and wildlife habitats present in the project area. Wildlife presence and habitat use was based on on-site observations and habitat presence in conjunction with the known habitat requirements of potential wildlife species. Existing habitats were also evaluated regarding their ability to support populations of threatened, endangered, and other sensitive plant and wildlife species.

The following provides a summary of information required by Fort Collins Land Use Code under 3.4.1 (D) (1) items (a) through (l).

ECOLOGICAL STUDY CHARACTERIZATION CHECKLIST

(a & j) The entire project area was formerly farmland that is no longer cultivated and has been left fallow or disturbed by grading activities. The site is characterized by bare areas from current grading and road building activities or is vegetated by smooth brome (*Bromus inermis*¹) and weedy species such as cheatgrass (*Bromus tectorum*), prickly lettuce (*Lactuca serriola*), kochia (*Bassia scoparia*), and Canada thistle (*Cirsium arvense*). Weedy and non-native grassland habitats are not designated as requiring special habitat protection or development setbacks in Section 3.4.1 of the Land Use Code.

Wildlife habitat value of most of the project area is very low because of past clearing of the site, dominance by non-native and weedy grass and herbaceous species, and surrounding roadway and developments. Mice, voles, cottontail rabbit and urban-adapted songbirds are the only species possibly establishing resident populations in the project area.

(b) No evidence of wetland hydrology, hydric soils, or wetland vegetation found in the project area. The unnamed ditch to the north does support wetlands and contained flowing water at the time of the field survey.

¹ Scientific nomenclature follows USDA, NRCS Plants Database. Available online at: <http://plants.usda.gov/java/>

Characteristic wetland plants supported in the unnamed ditch wetlands are: narrowleaf cattail (*Typha angustifolia*), reed canarygrass (*Phalaris arundinacea*), Emory sedge (*Carex emoryii*), mountain rush (*Juncus arcticus*), showy milkweed (*Asclepias speciosa*), and narrowleaf (coyote) willow. At the time of the survey, current road building activities had constructed a filled road crossing and approximately 508 feet of newly constructed ditch channel scraped bare of wetlands. Current grading activities have also cleared areas of vegetation immediately adjacent to the wetland ditch channel. The perimeter of currently undisturbed ditch wetlands and the newly constructed ditch channel were circumscribed with a handheld GPS unit (accuracy \pm 6-12 feet) to determine the approximate size of remaining wetlands and the wetland area lost to recent grading and road fill activities. Total ditch length was determined to be 1,154 feet and the bank to bank width containing wetlands ranged from 22 feet at the west end to 15 feet at the east end. Estimated wetland size for the undisturbed west and east ends of the ditch was determined to be approximately 0.18 acre and 0.10 acre, respectively. It was also estimated that approximately 0.20 acre of wetlands was lost in the central portion of the ditch, which had been recently re-constructed (see Figure 1). Representative views of the vegetated wetland and recently re-constructed portions of the ditch are provided by attached Photos 1 through 4.

Undisturbed open water and wetlands in the unnamed ditch provide wildlife habitat for songbirds such as red-winged blackbird, common yellowthroat, and song sparrow as well as habitat for amphibians and reptiles such as northern chorus frog, Woodhouse's toad, and garter snake species. Wetlands in the ditch also serve to improve water quality in the ditch by filtering out sediment and other possible contaminants.

The source of water flowing in the unnamed ditch could not be determined with certainty in the field. It was assumed that water in the ditch travels by underground pipe from the detention pond on Intel's property nearby to the west, but water supply into the pond could not be determined. Water in the unnamed ditch flows east to the west edge of Lady Moon Drive then flows south in a narrow, incised ditch to an underground drain. The narrow incised portion of the flowing ditch does not support any wetlands, and smooth brome is the dominant vegetation on both sides of this ditch segment. The discharge location of water flowing into the drain could not be determined in the field. It is possible it discharges into the Fossil Creek Reservoir Inlet Canal approximately 0.6 mile to the east. If so, the U.S. Army Corps of Engineers would likely classify open water and wetlands in the unnamed ditch as jurisdictional since it has classified the Fossil Creek Reservoir Inlet Canal as jurisdictional. In this case, fill and construction activities in the unnamed ditch would require a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers.

(c) The project area does not provide any unobstructed views of any significant natural features except for partial views of the Front Range foothills.

(d & e) As indicated under (a & j) the project area is dominated by non-native grass and weedy herbaceous vegetation, and there are no woody species present within the project area boundaries. Therefore, there are no significant native trees, other native vegetation stands, or non-native trees within the project area.

(f) There are no perennial streams or bodies of water in the project area. The unnamed ditch to the north carries water at least seasonally. Whether or not it flows year round is unknown.

(g) Because of the extent past land clearing and lack of native habitats on the project area, there are no suitable habitats for any threatened, endangered, or sensitive species.

(h) Past disturbance and land clearing activities in the project area has eliminated the potential for any special habitat features.

(i) Since the entire project area was historically cultivated for agricultural production, it does not support any wildlife movement corridors. The unnamed drainage to the north of the project area also does not serve as a

wildlife movement corridor connection to natural areas or undeveloped land since the ditch terminates where the east end flows into an underground drain. It is uncertain where flow into the drain daylights, but the closest possible drainage corridor (Fossil Creek Inlet Canal) is 0.6 mile away to the east and is separated from the ditch by roadways and land without any possible corridor connection.

(k) There are no issues regarding the timing of property development and ecological features or wildlife use of the project area.

(l) Since the majority of the project area has been previously cleared of native vegetation and habitat, project development would have no direct impact on natural habitats or important habitat features.

It is estimated that the unnamed ditch to the north of the project area formerly supported approximately 0.48 acre of wetlands, and currently about 0.28 acre of wetlands. Buffer requirements stipulated for less than 0.3 acre and greater than 0.3 acre are 50 feet and 100 feet, respectively. The Eldon James Corporation project area is 155 feet south of the south top of bank of the unnamed ditch (see Figure 1) so any development within the project area would be in compliance with either buffer zone requirement.

One mitigation recommendation is based on Article 3.2.4(D)(6) in the City of Fort Collins Land Use Code that requires protection of natural areas and natural features from light spillage from off site sources. Therefore, intensity of street or building lighting should be shielded or directed to minimize the intrusion of artificial nighttime light into the buffer zone for the unnamed drainage ditch.

This concludes Cedar Creek Associates, Inc.'s evaluation of the Eldon James Corporation project area. If you have any questions or require additional information regarding my evaluation, please give me a call.

Sincerely,

CEDAR CREEK ASSOCIATES, INC.



T. Michael Phelan
Principal and Senior Wildlife Biologist

attachments: Habitat map and photos



LEGEND

- Project Area Boundary
- Habitat Boundary

Aerial Photo Source: Larimer County Landscape & Imagery Explorer - 2012 Aerial Imagery

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FIGURE 1
Habitat Mapping for the Eldon James Corporation Project Area



Photo 1. View of Undisturbed Wetlands and Open Water in the Eastern Portion of Unnamed Ditch. (View is from west end of east segment looking east. Dominant wetland vegetation in this view is narrowleaf cattail.)



Photo 2. View of Undisturbed Wetlands and Open Water in the Western Portion of the Unnamed Ditch. (View is from west end of west segment looking east. Dominant wetland vegetation in this segment is reed canarygrass, Emory sedge, and mountain rush.)



Photo 3. View of Re-constructed Ditch Segment Without Wetlands East of New Road Crossing. (View is looking east from new road crossing. Note bare dirt and complete lack of wetland vegetation in this segment.)



Photo 4. View of Re-constructed Ditch Segment Without Wetlands West of New Road Crossing. (View is looking west from new road crossing. Trees and shrubs in ditch in middle background are a Russian olive and a cluster of narrowleaf willows at the east end of the western segment ditch wetlands.)