General Resource Protection Standards

for
Easements or Rights of Way
on
City of Fort Collins ("City")
Natural Areas and Conserved Lands
(Updated February 2013)

Introduction

This document lists the various resource protection standards that may be required as conditions of granting an easement, license to enter or right-of-way (collectively referred to in this document as "easements") on City Natural Areas and other conserved lands, in order to protect or restore natural resource values. These measures are consistent with the requirements in the City Land Use Code for Ecological Characterization Studies and for Resource Protection associated with development projects. The measures will be evaluated for each easement request and applied as needed, depending on the site location, characteristics of the site, and on the nature of the easement.

The applicable resource protection standards will be specifically included in the terms of the easement agreement. They must also be included as notes on the approved construction plans for the easement request. The easement holder ("Grantee") must provide these standards to all contractors who will be doing work for the Grantee within the easement area. The City may also attach some or all of these requirements as an addendum to the Grantee's Development Agreement, if applicable.

These resource protection standards are current as of June 2011. They may be updated from time to time by the Natural Areas Department based on new information about the resources of the City's natural areas or on new information about best management practices. Applicants must contact the Natural Resources Department for a current list of standards.

The Grantee is responsible for completing, or requiring its contractors to complete, each of the following conditions that the City determines is applicable to the Grantee's project:

Plans and Permits

Prior to starting any construction on the Project:

1. Submit final plans to the City and ensure that they have been approved and signed on behalf of the City. Confirm that all permanent and temporary easements have been approved by City Council and that the easement documents have been signed by both parties and recorded at the County Clerk's Office. Plans must include: 1'-2' contours; property lines with adjoining property ownership shown; all wetlands; streams; ditches; riparian areas; prairie dog colonies; all existing and proposed man made structures; all existing utilities; all

needed easements for access, construction staging areas, and construction (limits of disturbance); construction plans and profiles; restoration plans; and general notes stating all construction and restoration requirements.

2. Obtain a City Excavation Permit.

3. Perform field investigations and surveys to determine the presence and location of sensitive plants or animal species and geological or archeological features.

4. Develop an erosion control plan. This plan must comply with the City's *Storm Drainage Design Criteria and Construction Standards*. Ensure that the erosion control plan has been approved and signed by the City.

5. Contact the Corps of Engineers to obtain a 404 permit and/or clearance of the project. Submit two copies of the permit, or the letter of clearance from the Corps, to the City.

6. Conduct a Preble's meadow jumping mouse survey according to U.S. Fish and Wildlife Service guidelines. Submit two copies of the report and letter of clearance from the U.S. Fish and Wildlife Service to the City.

7. Conduct a Ute ladies' tresses orchid survey according to U.S. Fish and Wildlife Service guidelines. Submit two copies of the report and letter of clearance from the U.S. Fish and Wildlife Service to the City.

<u>Construction Coordination and Project Acceptance</u>

8. Arrange for the City's designated representative to attend the pre-construction meeting to meet the contractors, discuss the importance of the resource protection requirements, discuss and approve the construction schedule and establish lines of communication to be used during construction.

9. Maintain ongoing communication with the City's representative during construction to communicate progress, changes in schedule, problems, and periodic inspections.

10. Once the project has been completed, arrange for the City's representative to inspect the project site to verify that the project was completed and the site restored according to the applicable plans and agreements. Once the City accepts the restoration work, the City will generally take over the vegetation maintenance, per the specific terms of the easement agreement.

11. Provide the City with Drawings of Record within sixty (60) days after the completion of the improvements.

Wildlife

12. Raptors: Survey the site to determine if any of the following species are present and check with the City for information on possible nesting, feeding or roosting sites.

    a. If the site is used as a winter feeding area by large birds of prey, construction cannot take place from October 15 through March 15 to avoid disturbing feeding eagles and large hawks, unless otherwise directed by the City.

    b. If a bald eagle and/or ferruginous hawk winter night roost is located near the proposed easement, construction cannot take place from October 15 through March 15 to avoid disturbing night-roosting eagles and/or hawks.

    c. If a Swainson's hawk nest is located near the proposed easement, construction cannot take place from April 1 through July 15 to avoid disrupting the nesting cycle of the hawk.

    d. If a red-tailed hawk nest is located near the proposed easement, construction cannot take place from March 1 through July 15 to avoid disrupting the nesting cycle of the hawk.

    e. If burrowing owls are nesting within 330 feet of the limits of development, construction cannot take place from April 1 through August 1 to avoid disrupting the nesting cycle of the owls.

13. If construction will be taking place in or through an area that contains or may contain prairie dogs, either relocate the prairie dogs or fumigate the burrows immediately prior to any grading. Relocation of Prairie dogs between February 1 and August 1 is not permitted.

14. Perform the wildlife surveys described below, notify the City of the survey results and obtain approval of construction schedule prior to starting construction. These surveys may be done several months prior to construction, but if done more than 30 days prior to construction they must be performed again within 30 days prior to the start of construction to verify results.

    a. The site may contain den sites for red foxes. Conduct surveys to determine if any foxes are denning within 100 feet of the limits of development. If fox are found to be denning within 100 feet, then construction cannot take place during the normal denning and pup-rearing season (February 1 through October 1).

    b. The site may contain den sites for coyotes. Conduct surveys to determine if any coyotes are denning within 300 feet of the limits of development. If

coyotes are found to be denning within 300 feet, then construction cannot take place during the normal denning and pup-rearing season (February 1 through October 1).

c. The site may contain den sites for badgers. Conduct surveys to determine if any badgers are denning within 300 feet of the limits of development. If badgers are found to be denning within 300 feet, then construction cannot take place during the normal denning and young-rearing season (January 1 through August 1).

Plants

15. The site may contain plant species listed as rare in Colorado. If a rare plant is discovered prior to or during construction activities, notify the City. The City may, in its discretion, require the Grantee to remove all such plants within the limits of disturbance prior to construction, keep plants alive and replant after construction is completed, or the City may salvage existing plants and shrubs for transplanting to other sites.

16. The site may contain native shrubs and/or trees that may be within the limits of development. Any native shrubs/trees removed to allow construction or damaged during construction must be replaced on a two-for-one/same species basis. All replacement shrubs/trees must be 1-gallon container size and must be warranted to survive for 2 complete growing seasons.

Structures

17. Remove, store, protect and replace any man-made structures (e.g., kiosks, raptor perch poles, prairie dog barriers and fencing) within the limits of disturbance.

18. Repair any damage to concrete bike trails, fences, parking lots, or any other improvements caused directly or indirectly by the construction. Repair/replace improvements immediately to current City standards, including matching the color of the concrete.

Field Demarcation

19. Install orange construction fencing to mark the easement limits (limits of disturbance) on the site. Do not begin any construction activities until the City's representative has approved the fence location.

20. Post temporary signs informing the public that this is the Grantee's project and indicating the purpose of the project and the Grantee's phone number. Signs must be posted at the locations designated by the City.

Erosion Control

21. Have erosion control measures in place and approved by a City representative prior to any construction.

Grading/Construction

22. For areas with native vegetation, strip topsoil in all areas of excavation to a depth of 8 inches and stockpile separately. Wetland and upland soils must be stockpiled separately from each other. Place the topsoil in an 8-inch layer on top of the subsoil in the corresponding zone immediately following the completion of construction.

23. For areas with non-native vegetation, strip the top 2 inches of topsoil from the entire construction easement area and remove the topsoil from the site to remove the non-native vegetation seed source. Then strip 8 inches of topsoil from the area to be excavated and stockpile separately. Wetland and upland soils must be stockpiled separately from each other. Place the topsoil in an 8-inch layer on top of the subsoil in the corresponding zone immediately following the completion of construction.

24. Maintain a safe work area and protect the safety and welfare of Grantee's employees, contractors or subcontractors, and the general public, including without limitation providing barricades and safety fences around excavations and drop-offs left open at the end of a work day. Safety precautions must be in compliance with all applicable laws, rules and regulations.

25. Compact backfill in trenches to 95% Standard Proctor Density. Test the compacted soils at 100' intervals horizontally and 2' intervals vertically within the area of excavation to ensure that this requirement has been met. Submit to the City all laboratory Proctor density results, and a copy of all field compaction tests. After compaction to final subgrade (8" below finished grade), the top 6 inches of subsoil must be ripped, and the previously stripped and stockpiled topsoil materials spread evenly over the excavated areas. Soils in backfilled, compacted, topsoiled trenches must match the grade of the surrounding undisturbed areas.

26. Set all manhole covers, valve lids, vaults, etc. below or flush with the finished topsoil surface. If any improvements are approved for construction above the final grade, they must be painted with a color approved by the City.

27. Remove the upper sections of all existing manholes to be abandoned and fill the holes with soil. This soil must be compacted to 95% Standard Proctor Density to prevent settlement.

28. Remove the upper sections of all existing manholes to be retained, but that are not flush with the finished topsoil surface, and rebuild to be flush with the topsoil surface.

29. Bring to grade (match surrounding topography) all settled and eroded areas along the existing pipeline, if any, to be abandoned during construction of the new pipeline. Repair any settlement that occurs over the existing pipeline or new pipelines after completion and acceptance of the project by the City. Any necessary repairs must be conducted in a manner and at a time directed by the City. Repaired areas must be restored as per restoration requirements outlined in this document or in the easement agreement.

30. Areas within the limits of disturbance that have been driven over, compacted or rutted by equipment must be scarified to a depth of 8" and regraded to original grade and contours.

31. Meet with the City's representative to discuss and get approval of the final grading and the seeding/mulching process prior to reseeding. Seed all disturbed and topsoiled areas with a seed mix of native species specified by the City. The seed must be drilled into the soil an appropriate depth for the species in the mix and existing conditions, using a range drill (not a Brillion). Immediately following seeding roll the seeded areas with a sheepsfoot roller to lightly compact and imprint the soil. This removes air voids, provides better seed-soil contact and provides indention's in the soil that will capture moisture. All seeded areas must then be hydromulched in accordance with the City's *Storm Drainage Design Criteria and Construction Standards*. Following final grading and initial seeding of the Construction Easement Area and acceptance by the City, the City will be responsible for ongoing vegetation management, including weed control, mowing, and reseeding, as needed, in areas disturbed and seeded in accordance with this paragraph. The cost for the City to perform the vegetation management over the next five to ten years is calculated to be three thousand dollars ($3,000.00) per acre of disturbance based on grassland/shrubland cover types. Vegetation management fees will be determined on a case-by-case basis for other cover types.

Any requirements listed above that are not completed in a timely manner may be corrected by the City at the Grantee's expense. The City will bill the Grantee for the cost of the correction plus management costs.