

## CHAPTER 16.0 CONSTRUCTION STORMWATER MANAGEMENT

### 16.1 Introduction

Larimer County maintains a construction stormwater management program to reduce or prevent the discharge of pollutants from construction activities to the storm drainage system and receiving waters. Stormwater quality is particularly vulnerable during construction activities due to exposed and disturbed soils, and the presence of various construction equipment and materials.

The County's construction stormwater management program is implemented to comply with the requirements of the County's MS4 Permit. The program is also designed to conform with requirements of the statewide General Permit for Stormwater Discharges Associated with Construction Activity, although the County is not directly responsible for enforcing the requirements of the latter. As such, the County's construction stormwater management program is based primarily on the following items:

- Development Construction Permit and Land Disturbance Permit – permits required by the County for various construction-related activities.
- Erosion and Sediment Control Plan (ESCP) – required by the County to document construction stormwater management plans.
- Construction Stormwater Management Guidance Document – a guidance document developed by the County to provide additional guidance on this topic, which may be updated more frequently than these Standards.
- The Construction BMPs chapter of the MHFD Manual for design and implementation of construction stormwater control measures (incorporated by reference).

Additional discussion of those items is presented in the following sections of this chapter.

### 16.2 Development Construction Permit

A Development Construction Permit (DCP) is one mechanism that the County uses to permit construction activities. All applications for DCPs are reviewed by County staff to determine if a drainage report or drainage letter is required as part of the submittals package. If a drainage report or drainage letter is required, County staff will also require an ESCP (see Section 16.4) and possibly a Land Disturbance Permit (see Section 16.3).

### 16.3 Land Disturbance Permit

A Land Disturbance Permit (LDP) was implemented in the County in 2023 (corresponding to the development and approval of these Standards). An LDP will be required for any project that disturbs at least 1 acre, or is part of a common plan of development, and is located within the

County’s MS4 permit boundary area. All LDPs will require submittal of an ESCP. The threshold for requiring an LDP will also require the applicant to obtain a statewide General Permit for Stormwater Discharges Associated with Construction Activity from CDPHE and prepare a Stormwater Management Plan (SWMP) in accordance with the requirements of that permit.

**Larimer County MS4 Permit Boundary**

- <https://maps1.larimer.org/gvh/?Viewer=LIL>
- Under “Layer List” turn on “Flood Information” Layer
- Under “Stormwater Layer” turn on “MS4 Permit Area”

## 16.4 Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan (ESCP) shall be submitted and approved by the County prior to the start of any construction activities that require a Drainage Letter, Drainage Report, DCP, or LDP. In addition, the County may require an ESCP for projects that are in close proximity to wetlands and receiving waters, and/or are identified by County staff as having potential for significant erosion.

The primary elements of an ESCP are outlined below. The submittal requirements and level of detail required for each of the elements will vary by project and be based on the County Engineer’s discretion. Appendix C contains the ESCP checklist, which must be completed and submitted with the ESCP. The applicant shall refer to the Construction Stormwater Management Guidance Document and associated appendices for additional guidance and requirements on these elements.

### 16.4.1 General Information and Site Description

The ESCP must describe the characteristics of the site and the construction activities that are proposed and how those activities will affect land disturbance and stormwater drainage. Identify areas that will be disturbed and where stormwater runoff will discharge to during various stages of construction.

### 16.4.2 Construction Stormwater Control Measures

The ESCP must describe and display on maps all potential sources of pollutants associated with the construction activities and appropriate stormwater control measures (SCM) that will be used to reduce or eliminate the potential for those pollutants to discharge to receiving waters and storm drainage system. The applicant is encouraged to follow the Construction BMPs chapter of the MHFD Manual in the design and implementation of construction SCMs.

### **Components of Effective Construction Stormwater Management**

- Erosion control practices are focused on preventing erosion and mobilization of soils/sediment from occurring in the first place. Typical erosion control practices include mulching, check dams and surface roughening.
- Sediment control practices are focused on preventing soils/sediments from reaching waterways once they have been mobilized by runoff. Typical soil control practices include sediment control logs, silt fences and inlet protection.
- Materials management practices are implemented to provide protection against various construction-related materials reaching waterways. Examples include fuel spills/leaks, concrete washout areas and portable toilets.
- Site management includes a variety of other activities that can be both structural and non-structural. Common types of site management practices include construction phasing, street sweeping and vehicle tracking controls. Practices that are typically more project-specific include dewatering operations and temporary stream crossings.

### 16.4.3 Inspections and Maintenance

The County requires routine site inspections be completed by the permittee to ensure that control measures function as designed and maintenance needs are promptly addressed.

### 16.4.4 Final Stabilization and Long-term Stormwater Management

At the completion of construction, all sites are required to reach final stabilization. A site will not be considered to have achieved final stabilization until the vegetation density of all disturbed areas reaches at least 70% of pre-construction density. A description of all practices used to achieve final stabilization and a revegetation plan are required as part of the ESCP.

### 16.4.5 Plan Map/Drawings

A spatial representation of the site must be included that depicts the area(s) of disturbance and the location of all potential sources of pollutants. The direction of stormwater flow through the site should be indicated, along with all SCMs used and any waters of the state. Additional details regarding items to be depicted on the drawings, standard construction symbols that should be used, and standard notes that must be included are described in the Guidance Document and associated appendices.

### 16.4.6 Erosion Control Escrow

The County requires an erosion control escrow be provided before construction will be approved. The developer is encouraged to contact the County early in the planning process for escrow amounts and calculation methods.

## 16.5 Enforcement

The ESCP shall be enforced following procedures outlined in the LCLUC.

## 16.6 REFERENCES

City of Fort Collins, 2018. Fort Collins Stormwater Criteria Manual.

Larimer County, 2021. Larimer County Land Disturbance Permit Checklist.

Larimer County, 2021. Larimer County Urban Area Street Standards.

Mile High Flood District, 2010. Urban Storm Drainage Criteria Manual, Volume 3: Stormwater Best Management Practices.