OVERVIEW:
Although, the City of Colorado Springs (City) Drainage Criteria Manual Volumes 1 & 2 (DCM) describes the policy requirements for when permanent, also known as “post-construction,” water quality (WQ) treatment best management practices (BMPs) facilities are required for roadway development, redevelopment, and maintenance projects, additional guidance is necessary.

This document seeks to provide specific guidance on the City’s policy requirements for permanent WQ BMPs for roadway development, redevelopment, and maintenance projects.

DEFINITIONS:
For the purposes of these policy clarifications the following definitions will govern:

- “Construction activity” refers to ground surface disturbing and associated activities, which include, but are not limited to, clearing, grading, excavation, demolition, installation of new or improved haul roads and access roads, staging areas, stockpiling of fill materials, and borrow areas. Construction Activity does not include maintenance to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

- “Maintenance” refers to maintenance paving, pothole repairs, patching, milling and overlay, striping, and other similar roadway maintenance activities, which do not expose the base or subbase. Maintenance shall not be considered redevelopment.

- Roadways: Include roads and bridges that are improved, designed or ordinarily used for vehicular travel and contiguous areas improved, designed or ordinarily used for pedestrian or bicycle traffic, drainage for the roadway, and/or parking along the roadway. Areas primarily used for parking or access to parking are not roadways.

- Development: Means all new roadway construction projects and associated facilities, i.e. bike lanes, sidewalks, curb and gutter, multi-use paths, medians, intersections improvements, etc.

- Redevelopment: Includes projects that replace, reconstruct, re-align, or otherwise alter existing roadways.
POLICY CLARIFICATION:

***WQ BMP Requirements for Roadway Development, Redevelopment, and Maintenance***

The DCM states that all development and redevelopment projects for which construction activities disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development shall follow the Four Step Process. The Four Step Process, as detailed in Volume 2, Chapter 1, Section 4 of the DCM, consists of the following:

Step 1) Employ Run-off Reduction Practices

Step 2) Implement BMPs that Provide a Water Quality Capture Volume (WQCV) with Slow Release

Step 3) Stabilize Drainageways

Step 4) Implement Site Specific and Other Source Control BMPs

Excluded Sites: The following may be excluded from the requirements of an applicable development or redevelopment site.

Roadway redevelopment projects that disturb less than one acre outside of the original footprint of the roadways’ driving surfaces. This exclusion applies to projects where the total area of disturbance would be one acre or greater if the disturbances within the roadways’ driving surfaces were accounted for. Disturbances within the roadways’ driving surface include activities that disturb or expose the road surface, subgrade, and/or directly underlying soils. (Reference Colorado Department of Public Health and Environment, January 20, 2012 Memorandum, Re: MS4 Permit New Development and Redevelopment Requirements for Roadways)

Reference material:

The City’s Municipal Separate Storm Sewer System (MS4) permit (Permit) Language:

The City’s permit states the following, “New Development and Redevelopment: The permittee must implement and enforce a program to address stormwater runoff from projects which construction activities disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.”

The City’s permit states the following, “The Division did not add a definition for "new development" or "redevelopment." These terms are only used to denote program applicability and not in determining the program scope. The language was changed in Part I.B.I.a(2) to clarify that the program applies to all projects for which construction activities, as defined in Part I.K disturb greater than or equal to one acre, including projects less than one acre that are
part of a larger common plan of development or sale, that discharge into the MS4. **Disturbance is the trigger regardless of the change in impervious area.**

The DCM provides the following guidance related to requirements for stormwater WQ BMPs on development and redevelopment sites:

**Volume 1, Chapter 3, Section 3.2** states, “All new developments and redevelopments are required to address stormwater quality for post-construction conditions (Treatment BMPs) and during construction (Construction BMPs), as described in Chapters 4 and 7, respectively, in Volume 2 of this Manual. Planning and design of post-construction (permanent) water quality BMPs is best addressed hand-in-hand with stormwater conveyance and detention storage requirements for a site.”

**Volume 2, Chapter 1, Section 4** states, “Since 2002 with the inception of the DCM, Volume 2, the City of Colorado Springs has required the UDFCD Four Step Process for receiving water protection that focuses on reducing runoff volumes, treating the WQCV, stabilizing drainageways, and implementing long-term source controls.” The section further states, “The Four Step Process, as illustrated and described in the following, is applicable to all new and redevelopment projects with construction activities that disturb 1 acre or greater or that disturb less than 1 acre but are part of a larger common plan of development or sale.”

**Volume 2, Chapter 4, Section 2** states, “The MS4 permit requires that a program must be implemented and enforced by the MS4 permitting agency to address post-construction stormwater runoff from new development and redevelopment projects for which construction activities disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. Chapter 7 further defines a common plan of development.

For the purpose of defining when treatment WQ BMPs are required, “New Development and Redevelopment” are defined as:

- All sites that include total development/redevelopment areas for which construction activities disturb greater than or equal to one (1) acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge to the MS4. WQCV shall be provided for the total site or individual lots/parcels. Other treatment BMPs may also be required as appropriate.

- All other sites that do not meet the above requirements may be required to provide treatment WQ BMPs, if significant WQ impacts are anticipated or observed as a result of development/redevelopment of the site.”

The DCM provides the following guidance related to requirements for the implementation of underground BMPs:

**Volume 2, Chapter 4, Section 4** states, “As part of the required implementation of the Four Step Process, the use of underground, vault type BMPs is generally prohibited; however, they may be allowed on a case by case basis using the variance procedures described in Chapter 1, Volume 1 of this Manual. Space constrained development sites still require the Four Step
Process, and underground BMPs are only allowed in select locations as follows: Public road improvement projects where limited space is available for Treatment BMPs and in redevelopment projects in the downtown core (from Boulder Street to Vermijo Street, and Cascade Avenue to Weber Street). Private underground stormwater BMPs are allowed in this downtown area provided they keep captured organic material dry to mitigate leaching of nutrients from leaves and grass clippings, and have an approved monitoring, inspection, and maintenance program. For private BMPs, a recorded maintenance agreement is required. Public Capital Improvement projects, such as PPRTA projects, are required to have approval from the Public Works Director in order to use these products because this department is responsible for their long term maintenance and effectiveness. Maintenance plans are also required for the public underground BMPs. Criteria used to select the appropriate underground BMP is described in the USDCM, V3 Underground BMP Fact Sheet.*