

Grading, Erosion and Sediment Control Manual

Revision History

Manual Creation Date: January 2005

- 2/22/2005 - Board of County Commissioners adopt current *Grading, Erosion and Sediment Control (GESC) Manual*.
BOCC Resolution No. 050113
- 1/30/2007 – County adopts *Arapahoe County Stormwater Management Manual (SWMM)* to replace *Arapahoe County Storm Drainage Design and Technical Criteria Manual (c. 1985)*.
BOCC Resolution No. 070060
- 1/26/2010 - GESC Manual Revisions
- Section 1
- Minor administrative modifications only.
- Section 2
- Maintenance of pavement repair, including mill and overlay projects, do not require GESC permit as long as the project does not expose sub-grade.
 - Add Irrevocable Letter of Credit from out of state financial institutions in a form acceptable to County.
 - Modify terms of collateral for governmental and quasi-governmental entities. Waive governmental and quasi-governmental agencies from financial collateral upon providing agreement with conditions of approval.
 - Financial Collateral may be released prior to two years if seeding, mulching, re-vegetation and stabilization are complete in accordance with GESC requirements.
 - Clarification that annual permits may be granted for special conditions and certain public agencies, on a case-by-case basis.
 - Minor administrative modifications.
- Section 3
- Update engineer's cost estimates (based on a 2009 cost update analysis) are used as the basis for collateral determination.
 - Updated notes on initial, interim and final GESC Drawings.
 - Updated Design Engineer's Certification statement.
 - Updated Owner's certification statement.
 - Minor administrative modifications.
- Section 4
- Additional BMPs are introduced to add flexibility and address Erosion and Sediment Control, including Bonded Fiber matrix, Inlet Protection- Curb Socks, Concrete Washout, and Vehicle Tracking Control.
 - Due to linear nature and limited are of some CIP/roadway projects, vegetated buffers and swales as acceptable BMP in lieu of sediment basin, as needed.
 - Stockpile requirement modified to allow sediment pond or other appropriate BMP to control sediment, i.e. SCL, silt fence, etc.
 - Stockpile height is maintained at 10'.

- Encourage earthwork balance, not required. A variance is no longer needed for earthwork balance.
- Minor administrative modifications.

Section 5

- Delete 48 hour requirement to modify or implement BMP. This time constraint is not specified in the County's MS4 permit with CDPHE.

Section 6

- County may invoice contractors if sediment leaves site and streets need to be cleaned by County staff.
- Description of additional BMP options for inlet protection, vehicle tracking, erosion blanket, etc.

Section 7

- Minor administrative modifications.

Section 8

- Minor administrative modifications.

Section 10

- Minor administrative modifications.

Appendix A

- Minor Phone number updates, including SEMSWA phone number and updated WQCD phone number.

Appendix B

- Standard notes change: Deleted "all maintenance and repair of BMPs must be completed within 48 hours".
- Standard notes change: Deleted note regarding requirement of earthwork balance.
- New BMP detail for curb sock (CS) and bonded fiber matrix (BFM).
- Revised detail for concrete washout area (CWA) to include membrane liner.

Appendix C

- Include CIP drawings examples, as available.

Appendix D

- Updated checklists to complement proposed GESC changes (i.e. encourage instead of requiring earthwork balance, and include option to use BFM or other BMPs deemed appropriate during construction).

Appendix E

- Update certification language to match sections 3.1.1 and 3.2.1.
- Update general note: ALL INTERIM BMPS, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED WITHIN 14 DAYS IF THE AREAS WILL REMAIN UNDISTURBED FOR A PERIOD GREATER THAN 30 DAYS.
- Update general note: ALL PROPOSED SLOPES ON THIS PLAN HAVE A MAXIMUM SLOPE OF 4:1. ANY STEEPER SLOPES WILL REQUIRE THE USE OF EROSION CONTROL BLANKETS OR BONDED FIBER MATRIX.

Appendix F

- GESC Cost Estimates for Initial and Interim BMPs updated based on unit cost updates (2009) for determining collateral for implementing various GESC BMPs.

Appendix G

- GESC Cost Estimates for Final BMPs updated based on unit cost updates (2009) for determining collateral for implementing various GESC BMPs.

Appendix

- Consistent changes in Comprehensive Grading plan that comport with changes in GESC (i.e. encourage earthwork balance/no need for variance)

BOCC Resolution No. 100036

3/12/2013 - GESC Manual Revisions

Section 3.1 and 3.2

- In order to remove repetitious language, text found within the current 'Appendix E – GESC Drawing and Report Checklist' was removed from sections 3.1 and 3.2.

Section 3.4

- The following statement was added: "Variances that would cause a non-compliance with the County's Municipal Separate Storm Sewer System Permit (MS4) permit will not be considered".

Section 5.8.1

- The statement "During the construction phase, erosion and sediment controls will be inspected..." has been revised to state "During the construction phase, erosion, sediment and waster controls will be inspected..."
- The statement "County Inspectors will consider the overall effectiveness..." has been revised to state "County Inspectors or designated agent will consider the overall effectiveness"

Section 9.9.2

- The following statement was removed: "Level II Violations shall be corrected within 48 hours of notification, unless otherwise specified in writing by the County Inspector. A re-inspection will be completed by the County following the allotted 48 hour time frame."
- The statement "If corrections have not been completed satisfactorily within the 48 hour time frame, and additional inspections are needed, reinspection fees will be applied for subsequent inspections." has been revised to state "if corrections have not been completed satisfactorily, and additional inspections are needed, reinspection fees will be applied for subsequent inspections."

Appendix B Sheet 1, General Note 21

- The words "within 48 hours" were removed.

BOCC Resolution No. 130206