

## Chapter 5 Permits and Inspections - revisions

<b>MS4 Permit Required</b>	<b>Section of item to be changed</b>	<b>Typo, minor or major</b>	<b>Description</b>
No	Section 5.1.1	Minor	<b>Change last sentence to:</b> The chapter also establishes the acceptance process for public infrastructure and common development improvements.
No	5.6.1	Minor	<b>Rewrite paragraph:</b> The Erosion and Stormwater Quality Control Permit (ESQCP) and Builder's Erosion and Stormwater Quality Control Permit (BESQCP) are established tools to protect water quality in the County; provide for the enforcement of specific stormwater control measures (also known as Best Management Practices (BMPs)), during construction through final stabilization; and implement control measures required by the County's MS4 Permit. The permits and associated standards are intended to minimize soil erosion and sedimentation during and after construction; and to control non-point source pollution by requiring the implementation of soil erosion, sedimentation, and runoff control measures for protection of water quality.
Yes	5.6.2	Major	<b>Rewrite paragraph:</b> <b>ESQCP Permit and Notice to Proceed Required</b> An ESQCP is required for construction activities that result in land disturbance of greater than or equal to one acre or that is less than one acre, but is part of a larger common plan of development or sale that would disturb one acre or more, unless the activity meets exclusion criteria in section 5.6.3. For builders of single residential homes that are not part of a common plan of development or sale and that will disturb less than one acre of land, a BESQCP may be obtained following a simplified procedure. No work shall begin under an approved ESQCP or BESQCP until the ECM Administrator has issued a Notice to Proceed under an approved Construction Permit or issuance of a Building Permit.
Yes	5.6.3	Major	<b>New section 5.6.3</b> The following construction activities are not subject to ESQCP or BESQCP requirements. A. Construction activities that qualify for

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			<p>the R-Factor waiver provided in Colorado Regulation 61.3(2)(f)(ii)(B).</p> <p>B. Large lot single family home construction when land disturbance greater than one acre occurs on a single-family residential lot or agricultural zoned land with a parcel size greater than or equal to 2.5 acres and a total site impervious area less than or equal to 10 percent. Up to 20% impervious area may be allowed when a study specific to the watershed and /or parcel conducted by the owner and approved by the ECM Administrator, which demonstrates that expected soil and vegetation are suitable to infiltrate 100% of the Water Quality Capture Volume (WQCV). See Appendix I for information on WQCV.</p> <p>C. Facilities associated with oil and gas exploration, production, processing, or treatment operations, or transmission facilities, whether or not such field activities or operations may be considered construction activity.</p>
No	Section 5.6.4	Minor	<p><b>Add in text and section title from 5.6.3 replaced above:</b>  <b>Relationship to Other ECM Permits</b>                  In most cases, construction of public facilities within any County right-of-way or easement or the construction of common development improvements including grading will require that the applicant obtain an ESQCP. In cases were submitted drainage report demonstrates the need for permanent stormwater quality management, a grading and erosion control plan may be required in cases where land disturbance is less than one (1) acre.</p>
No	New Section 5.6.5	Minor	<p><b>Add text from existing section 5.6.4.</b>  <b>Application, Review, Approval, Inspections and Enforcement.</b></p>
No	Section 5.3.15	Minor	<p><b>Change Section Title to:</b>                  Construction Surety, Warranties, and Acceptance of Public and Common Development Improvements</p>
Yes/No	Section 5.3.15. A	Minor	<p><b>Rewrite paragraph:</b>                  The purpose for this section is to provide the policies and procedural guidelines for providing an acceptable guarantee of performance and compliance with County and State requirements for the acceptance of public and common development improvements.</p>

Commented [JC1]: Need to re-evaluate the exemption conditions

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Yes/No	Section 5.3.15.B	Minor	<p><b>Rewrite paragraph:</b></p> <p>The applicant shall be required to submit construction surety in a form acceptable to the ECM Administrator prior to the issuance of a Construction Permit. The construction surety shall be released in accordance with the provisions of Section 5.3.16.E or as otherwise allowed by any approved development agreement or subdivision improvements agreement. A 2-year defect warranty shall be posted by the permit holder for public and <b>common development</b> improvements prior to preliminary acceptance and release of any portion of the construction surety.</p>
Yes/No	Section 5.3.15.D.1.	Minor	<p><b>Rewrite paragraph:</b></p> <p>The applicant is required to ensure the construction of all public and <b>common development</b> improvements and utilities are in accordance with the Construction Permit, approved plans, these Standards, and any development or subdivision improvements agreement. The construction surety must be posted prior to issuance of a Construction Permit for the proposed work or recording of the final plat in the case of a subdivision.</p>
Yes/No	Section 5.3.15.D.2	Minor	<p><b>Rewrite paragraph:</b></p> <p>All surety estimates will be prepared based on unit prices for new public or private sector construction in the County. The applicant shall complete and submit a Construction Surety Estimate to the ECM Administrator. The ECM Administrator will review the surety estimate for public and <b>common development</b> improvements and will coordinate with the appropriate utility providers to review the surety estimate for water, sewer, and other utilities.</p>
Yes/No	Section 5.3.15.E.1.	Minor	<p><b>Rewrite 1<sup>st</sup> paragraph:</b></p> <p>The permit holder seeking preliminary acceptance shall notify the ECM Administrator that the public <b>and common development</b> improvements are complete and ready to be accepted by the County. The permit holder shall schedule a preliminary acceptance walk-through. The ECM Administrator shall develop a punch list of items to be corrected prior to preliminary acceptance, and noncritical items which must only be completed prior to final acceptance. The walk through shall involve at a minimum the ECM Administrator and the construction representative.</p>

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No	Section 5.3.15.E.3	Minor	<p><b>Rewrite last bullet of bulleted list and last paragraph:</b>  Reductions will not occur until completion and approval of at least 30% of the public and common development improvements.</p> <p>Twenty percent (20%) of the original construction surety amount will be retained until final completion and preliminary acceptance of all public and common development improvements. Preliminary acceptance will not begin until the applicable defect warranty surety is posted.</p>
Yes	Section 5.3.15.E.4	Minor	<p><b>Rewrite paragraphs:</b>  Construction surety shall be released upon completion and preliminary acceptance of all public and common development improvements. A county public improvement is deemed to be complete when it is preliminarily accepted and taken over for maintenance by the County. Other public improvements are deemed to be complete when approved by the authority or state agency responsible for maintaining and operating the improvement. A common development improvement is deemed to be approved once the ECM Administrator determines that the improvements are complete and operates in accordance with the approved plan. For common development improvements that include permanent stormwater quality control measures, additional final inspection criteria are provided in Appendix I.</p> <p>Engineering Record Drawings are required at the time of preliminary acceptance in accordance with 5.10.6. However, any field modifications made to the site contrary to the accepted drawings during the warranty period will be documented during inspections, and an addendum must be submitted to revise the Engineering Record Drawings prior to receiving Final Acceptance.</p>
No	5.10.4.A.	Minor	<p><b>At end of "General" Paragraph add:</b>  For additional information on sites subject to Erosion and Stormwater Quality Control Permit (ESQCP) inspections please refer to Appendix I.</p>
Yes/No	5.10.6	Major	<p><b>Replace entire section with text provided at end of this revision table.</b></p>

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### NEW SECTION 5.10.6

#### 5.10.6 Engineering Record Drawings

##### A. Record Drawing Required

Engineering Record Drawings (also known as "as-built" plans) are required for all projects that include public improvements or common development improvements, including but not limited to roadway improvements, public sidewalks and trails, storm drainage facilities, and utility infrastructure on public property or private property within public easements or rights-of-way. Engineering Record Drawings are necessary for inclusion of public improvements into the El Paso County Asset Management System, as a basis to plan and design future projects in the same area, for ADA compliance, and to document compliance with permitting requirements including the County's MS4 permit. Engineering Record Drawings shall be submitted in an electronic format acceptable to the ECM Administrator as described below in section 5.10.6.D and the El Paso County Digital CAD/GIS Data Submission Technical Guide, Version 1.0- July 2019, included in Appendix M.

##### B. Reflect Changes to Construction Plans

Engineering Record Drawings are a record of any substantial variations or changes to the original intended physical product of the approved construction plans. The revisions shall be shown on a copy of the original approved construction plans that are filed with the County. Engineering Record Drawings submitted for County review shall reflect the same degree of detail as the original plan drawings. Engineering Record Drawings shall be accompanied by a completion letter from the permit holder which shall state that the site and adjacent properties (as affected by work performed under the County permit) are stable with respect to settlement and subsidence, sloughing of cut and fill slopes, revegetation or other ground cover, and the as-built improvements (public improvements, common development improvements, site grading and paving) meet or exceed the minimum design requirements. For sites including detention and/or water quality facilities, the completion letter shall include a statement that the facilities provide the required storage volume and will meet the required release rates, as documented by an attached UDFCD design form with the as-built stage areas, elevations and outlet dimensions. If the detention/WQCV facility cannot be modeled with UDFCD spreadsheets due to a large contributing area, other verified stage/storage/discharge tables for the applicable design storms shall be provided with the letter.

Engineering Record Drawings submitted for review and approval shall include those features and feature details(attributes) as defined in the El Paso County Digital CAD/GIS Data Submittal Technical Guide, Version 1.0- July 2019.

##### C. Record Drawings Approval Process

To facilitate the approval process of record drawings, the following procedure shall be followed.

- The permit holder's engineer of record shall submit the Engineering Record Drawings for ECM Administrator review in the applicable formats specified below.

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- The ECM Administrator will review the drawings and redline any necessary changes. The construction/project engineer shall update the drawings and resubmit the drawings for approval.
- Upon ECM Administrator approval of the final Engineering Record Drawings, the drawings will be uploaded to the El Paso County Planning and Community Development (PCD) EDARP (Electronic Development Application Review Program) system. If there are multiple hardcopy sets the County will retain one set.

The Engineering Record Drawings shall clearly indicate the "as-built" state of the project. Each sheet of the record drawings shall be designated as "Engineering Record Drawings", and signed and dated by the engineer of record.

Financial assurances for the "as-built" line item in the project Financial Assurance Estimate will not be released until the Engineering Record Drawings are submitted, verified and approved, nor will partial releases of any line item be reduced to less than 20%. It is recommended that the required format of drawings and completion letter be submitted at least one month prior to the developer's request for Preliminary Acceptance to expedite the County acceptance process.

### **D. Required Engineering Record Drawings Format**

1. A complete construction plan set, including the plat or parcel boundary as applicable, conforming to the minimum requirements in this section is required. Hard copy drawings will only be accepted in special cases as approved by the ECM Administrator.
2. Date of project approval:
  - a. For projects approved prior to January 1, 2017 with County-maintained public improvements:
    - i. PDF file(s)
    - ii. CAD file(s) as defined in the El Paso County Digital CAD/GIS Data Submittal Technical Guide v1.0 - July 2019
  - b. For projects submitted between January 1, 2017 and July 1, 2019, with County-maintained public improvements:
    - i. PDF file(s)
    - ii. CAD file(s) as defined in the El Paso County Digital CAD/GIS Data Submittal Technical Guide v1.0 - July 2019
  - c. For projects submitted on or after July 1, 2019, CAD or GIS data shall be required in accordance with the El Paso County Digital CAD/GIS Data Submittal Technical Guide, Version 1.0, July 2019, in addition to the PDF file.
3. Format of Submittals: Defined in the El Paso County Digital CAD/GIS Data Submittal Technical Guide v1.0 - July 2019, Sections 2.1 and 2.2.
4. Horizontal and vertical data: Defined in the El Paso County Digital CAD/GIS Data Submittal Technical Guide v1.0 - July 2019, Section 2.1.6.

Survey/GIS Reference Links:  
State monument records:

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[https://www.colorado.gov/pacific/dora/AES\\_Monument\\_Records](https://www.colorado.gov/pacific/dora/AES_Monument_Records)

<http://www.cp-db.com/kml/EIPasoCountyMonumentRecordsNetworkLink.kmz> (KMZ file)

Vertical benchmark data: <https://www.ngs.noaa.gov/NGSDDataExplorer/>

CSU Survey control points (GIS):

<https://maps.csu.org/ArcFMWebViewer27/index.html?viewer=GISPublic&runWorkflow=CSUDisclaimer&inTheme>

<http://desktop.arcgis.com/en/arcmap/10.3/map/working-with-arcmap/creating-a-map-package.htm>

<https://helpx.adobe.com/acrobat/using/geospatial-pdfs.html>

<https://thecadgeek.com/blog/2008/09/georeferenced-dwf-files/>

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### Existing Chapter 5 Language

#### 5.6.2 ESQCP Permit and Notice to Proceed Required

An ESQCP is required for construction activities that result in a land disturbance of greater than or equal to one acre. An ESQCP may be required for construction activity of less than one acre if the activity is part of a larger common plan of development or sale that will disturb at least one acre. For builders who are constructing a small number of residences in a single area, a BESQCP may be obtained following a simplified procedure.

No work shall begin under an approved ESQCP or BESQCP until the ECM Administrator has issued a Notice to Proceed under an approved Construction Permit or issuance of a Building Permit.

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### Existing 5.10.6

#### 5.10.6 Engineering Record Drawings

##### A. Record Drawing Required

Engineering Record drawings (also known as "as-built" plans) are required for all projects that include public improvements or common development improvements. Engineering Record Drawings are necessary as a basis to plan and design future projects in the same location and to make repairs to damaged structural components or other non-working facilities. Engineering Record Drawings shall be suitable quality for producing legible prints through scanning, microfilming or other standard copying procedure.

##### B. Reflect Changes to Construction Plans

Engineering Record Drawings are a record of any variations or changes to the original intended physical product of the approved construction plans. The revisions shall be shown on a copy of the original approved construction plans that are filed with the County. Engineering Record Drawings submitted for County review shall reflect the same degree of detail as the original plan drawings. Engineering Record Drawings shall be accompanied by a completion letter from the permit holder. The completion letter shall include a statement that the site and adjacent properties (as affected by work performed under the County permit) are stable with respect to settlement and subsidence, sloughing of cut and fill slopes, and the as-built improvements (public improvements, site grading and paving) meet or exceed the minimum design requirements.

Engineering Record Drawings submitted for review and approval shall include, but not be limited to, the following details:

- roadway widths.
- curb ramps.
- stormwater system catchbasins and manholes, inverts of inlet and outlet, rim elevations.
- detention pond elements including elevations of any overflow structures, bottom of pond elevations at each corner and center, intake and outlet pipes, and volume calculations.



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- control stormwater structure elements including size and elevation of all orifices, standpipe notches, bottom of structure, and bottom of lid.
- elevations on stormwater trenches at all pipe inlets and outlets.
- channel cross sections, grade, velocity and required stabilization.
- stormwater laterals with descriptions of their lengths, location, sizes, materials, and depths.

### **C. Record Drawings Approval Process:**

To facilitate the approval process of record drawings, the following procedure shall be followed when record drawings are required.

- The permit holder shall submit a paper copy of the Engineering Record Drawings for ECM Administrator review. The Record Drawings shall be done on a copy of the original approved construction plans.
- The ECM Administrator will review the drawings and redline any necessary changes. The construction engineer shall then resubmit a paper copy of the revised record drawings to the ECM Administrator for approval.
- Upon ECM Administrator approval of the paper copy of the Engineering Record Drawings, the permit holder shall submit a final copy of the drawings. The hardcopy remains as the legal record drawing and shall not be removed from the County's files. The Engineering Record Drawing shall clearly indicate the "as-built" state of the project. Each sheet of the record drawings shall be designated as "Engineering Record Drawings", and signed and dated by the construction engineer.