

CHAPTER 2 - SUBMITTAL PROCEDURES

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CHAPTER 2 - SUBMITTAL PROCEDURES

2.1 DRAWINGS AND SPECIFICATIONS SUBMITTAL PROCEDURE

2.1.1 Overview

Consulting engineers and developers seeking approval and acceptance of civil engineering reports and construction plans are required to follow the procedures outlined herein. Your adherence to these procedures will assist in an efficient review of engineering plans and reports. Submittal procedures and requirements for the various County land development processes can be found in the County's Land Development Code and in a Planning Division publication "Land Development Application Guide."

2.1.2 Presubmittal Meetings

The Planning Division routinely conducts presubmittal meetings at which time applicants ask questions about the various County land development processes, obtain direction or information from Planning and Engineering Staff. These meetings may be used by the applicant to obtain very basic information about County procedures, requirements, or standards as a basis to begin development planning. Alternatively, the applicant may use the meeting as a final check by staff to verify if a specific type of application is complete.

2.1.2.1 Division of Engineering Presubmittal Meetings

The Land Development Services Section of the Engineering Division will reserve time for the purpose of meeting with applicants who plan to submit public improvement construction plans. In this meeting, the applicant may consult with the County Engineering Division for general information regarding applicable design criteria, required procedures, drainage concerns and submittal requirements.

2.1.3 Land Use Plan Submittals

Land use applications submitted to the Planning Division for all subdivisions or developments, whether residential, retail, commercial or office, shall include Preliminary Construction Drawings and Reports for the proposed development. The Preliminary Construction Plans shall be a minimum of 50% complete at the time of initial submittal. Construction Plans at 50% complete shall include, preliminary roadway and storm sewer profiles non-detailed grading plans, horizontal control plans, overall utility plan and standard design details. Construction plans shall be a minimum of 75% complete for acceptance of the Engineer's Cost Estimate. Estimates of Public Improvements and the associated Improvements Agreement.

2.1.3.1 County acceptance of the Construction Plans constitutes:

- Engineering Division review and acceptance of the final design concept shown on the Construction Plans.
- Engineering Division concurrence with the Engineer's Cost Estimate of Public Improvements, as defined in Chapter 12.
- Engineering Division review and acceptance of an Improvement Agreement as defined in the Arapahoe County Publication "Understanding Improvement Agreements", Latest Edition.

2.1.3.2 Approval of the Final Construction Plans shall be completed prior to the issuance of any Land Development Construction Permits. Approval of the Final Construction Plans shall not occur prior to final approvals of the associated land use application.

2.1.4 Engineering Review Objective

The Engineering Division objective is to issue comments on Construction Plans prior to the Planning Commission hearing, or within 30 calendar days if a Planning Commission hearing is not applicable, however, the actual time required is a function of the submittal complexity and overall workload of the Engineering Division. In the event the Construction Plans are submitted as part of a Land Use Case the review time shall coincide with the time allowed for the case submittal review as set forth by the Planning Division. The applicant will be advised of the estimated completion date for review of submitted documents.

2.1.5 Results of Engineering Review

After the review is completed, comments and/or redlines along with the disposition copy of the Application for Review and Approval, AC Form 581 (See Chapter 13 for an example copy of this form), will be returned to the applicant or his representative. The applicant or his representative will be notified by phone when the submittal is ready to be picked up, or if the applicant chooses, the information will be mailed out. If the Construction Plans are returned to the consultant for lack of adequate information or are considered seriously deficient, any resubmitted plans shall be considered a new submittal.

2.1.6 Developer Revision of Engineering Plans and Reports

The applicant's representative shall make all the requested revisions on their original plans/report and resubmit according to the instructions. **Seriously deficient plans or plans encompassing a significant area may require several reviews prior to approval. In the event the applicant does not address the comments issued by the Engineering Division, Staff reserves the right to re-assess fees based on the requirements set forth in the most recent Engineering Fee Schedule.**

2.1.7 Submitting Revised Plans

When submitting revised plans or reports to the Engineering Division, the resubmittal must contain:

1. A completed application for Review and Approval (AC Form 581).
2. The revised plans and/or reports.
3. All redlines from previous Staff reviews, and a point by point response to staff comments.
4. Review fees, if applicable.

If all the above items are not included with the submittal package submitted, the resubmittal may be returned without further action until such time as they are included.

2.1.8 Number of Plans for Approval Required

Once plans and/or reports have been accepted for approval by the Engineering Division, the Applicant's representative shall submit to the Engineering Department a minimum of five (5) sets of blackline copies of the Construction Plans & Reports. All five (5) sets must be signed and stamped by a Professional Engineer, registered in the State of Colorado. The Engineering Division will approve Construction Plans and Reports by signing all five (5) sets. One (1) set of signed plans / reports will be returned to the Applicant's and four (4) sets of signed plans / reports shall be retained by the Engineering Division for County Records. The representative may also submit additional signed sets of Construction Plan and Report blacklines to be approved and signed by the Engineering Division for use by the, owner / developer, consultant, contractors, etc.

Arapahoe County will not approve copies that have not been signed and stamped by a professional engineer.

2.1.9 Time Needed for Final Approval after Submittal

The maximum length of time needed to process resubmitted final Construction plans will be ten (10) working days. This time may be extended under unusual conditions of workload.

2.1.10 Priority of Submittals

The Engineering Division's policy on processing submittals. Applications are prioritized on a first come, first serve basis categories, no exceptions:

1. Blackline copies for approval by County
2. Resubmittal
3. Initial submittal

Complete submittals are those, which include all drawings and supporting reports. Partial or incomplete submittals that are missing one or more items applicable to the review process may be, at the discretion the Engineering Division, held or returned until all required information is submitted. If you have any questions regarding what constitutes a complete submittal for a specific project, call the, Land Development Services Section, of the Engineering Division.

When partial or incompletd plans are returned to the applicant, the resubmittal of those plans will be considered an initial submittal. Additional review fees may be assessed.

2.2 REVISIONS TO APPROVED PLANS

2.2.1 Plan Expiration and Extensions

Construction plans, pavement design reports, drainage reports, and other technical documents are approved initially approved for twenty-four (24) months. If the improvements are not constructed during this time period and the plans expire, the applicant must resubmit the plans for standard re-approval.

2.2.2 Revisions to Approved Plans

Whenever updates or revisions to previously approved construction plans, specifications or drainage reports are necessary, the applicant will submit updates or revisions through the normal document submittal process. After all the Engineering Division comments and revisions have been incorporated, the blackline sheets containing revisions may be submitted for approval by the applicant. This approval submittal shall meet requirements of 2.1.8.

Requests for updates and revisions to **construction plans** will be considered only if there are NO impacts to the original development plan(s) or drainage report. The County will review the original development plan(s) or drainage report for compliance with current standards under normal review procedures (requests for updates will be considered resubmittals), and if found in compliance with current standards, the construction plan(s), pavement design report(s), or drainage report(s) will be approved.

2.2.3 Field Changes

Minor changes to construction plans can be made in the field provided that the Engineering Division approves the changes prior to implementation. Failure to receive approval of field changes from the Engineering Division may result in non-acceptance of the facility. All field changes must be accurately depicted on the record drawings as defined in Chapter 7. The applicant shall provide to the Engineering Division a letter, signed and sealed by the Professional Engineer responsible for the original design stating that the proposed field change shall not deviate from the intent of the original design.

2.3 SUBMITTAL CHECKLIST

2.3.1 Final Construction Plans and supporting documents are required for all public improvements and improvements within Arapahoe County rights-of-ways, this applies to all land development applicants Metropolitan District improvements, special purpose district public improvements, or other improvements in Arapahoe County Right-of-Way. Approval authority is the Director, Public Works and Development.

2.3.1.1 A completed Application for Review & Approval (Form 581).

2.3.1.2 Engineering Review & Approval Fee.

2.3.1.3 Street Plan and Profile.

2.3.1.4 Storm Sewer Plan and Profile as recommended in the Phase III Drainage Report, including details for all structures and material specifications.

2.3.1.5 Culvert plan, profile and construction detail for structures.

2.3.1.6 Detailed Grading Plan – Grading plans that include relevant spot elevations including, but not limited to, high and low points, Points of Curvature, Points of Tangency and Points of Curb Return. Include the detailed Grading, Erosion and Sediment Control Plans within the Grading plan set.

2.3.1.7 Horizontal Control Plan – Provides detail of the proposed horizontal layout of the site including, but not limited to, line and curve information, parking lot dimensions, building setback dimensions, etc.

2.3.1.8 Traffic Signing and Striping Plan including Traffic Signal Phasing Plans.

2.3.1.9 Traffic Signal plans if applicable.

2.3.1.10 Pavement Thickness Design Report with supporting geotechnical information Note: Final Construction Plans may be signed without a Final Pavement Design. An appropriate note indicating (1) a preliminary design basis or (2) that no design is complete, must be included. No pavement construction permits will be issued without an approved pavement design (See Chapter 5).

2.3.1.11 Landscaping Plans in conformance with Arapahoe County Streetscape Guidelines and Section 3.19 of the Standards. Landscape and irrigation Plans for improvements located within County Right-of-Way shall be submitted as a separate document from the Construction Plans.

2.3.1.12 All utility construction plans as approved by the governing district or utility. If installation within existing County roads, they must be approved by the County (see 2.3.5). If these plans are for lines to be installed with the proposed roadways, the plans are provided for information only.

2.3.1.13 If not previously approved, the Phase III Drainage Report (see Storm Drainage Design and Technical Criteria, Section 2.4).

2.3.1.14 Public Improvements Cost Estimate.

2.3.2 Pavement Design Report

When the pavement design report is not submitted as a part of a Final Construction Plans, an Application for Review and Approval of the Pavement Design Report shall be submitted. The Director, has the authority for approval. The Pavement Design Report shall be completed prior to issuance of any permits, in the event of excessive cut/fill (more than five (5) feet) the applicant shall submit a Preliminary Pavement Design and follow up with a Design Confirmation Report prior to paving operations commencing. The submittal of the Pavement Design Report must include the following:

2.3.2.1 A completed Application for Review & Approval (Form 581).

2.3.2.2. Engineering Review & Approval fee.

2.3.2.3 Proposed design and alternatives including a geotechnical engineering report (refer to Chapter 5 of the Standards).

2.3.3 Phase III Drainage Report

When the Phase III Drainage report is not submitted as a part of a Final Construction Plans, an Application for Review and Approval of the drainage report shall be submitted. The approval authority is the Director, Public Works and Development.

2.2.3.1 A completed Application for Review & Approval (Form 581).

2.2.3.2 Engineering Review & Approval Fee.

2.3.3.3 A drainage report & plan including all the requirements identified with the Storm Drainage Design & Technical Criteria Manual (latest revisions).

2.3.3.4 A review and approval fee shall be paid by the applicant for a submitted Phase III Drainage Report.

2.3.4 Final Construction Plans for County Roadway Access

When access to a County roadway is proposed and the request is not part of a land use application. Final Construction Plans of the improvements are required. The Director has the authority for approval. The submittal of the Final Construction Plans shall include the following:

2.3.4.1 A completed Application for Review and Approval (Form 581).

2.3.4.2 Engineering Review and Approval fee.

2.3.4.3 Plan and profile of the existing street(s) showing construction details of the access point(s). The plan and profile grades of the existing streets are to be shown a minimum of 150' in each direction of the access point(s). At the discretion of the County's Engineer, the plan and profile of the existing street may be required to be extended beyond the minimum distance.

2.3.4.4 The Engineering Division reserves the right to restrict traffic movements in the future.

2.3.5 Final Construction Plans for Utility Work in Arapahoe County Right-of-Way

For new installations or major extensions of utility lines that are proposed within the County Right-of-way and/or under existing County roadways, an Application for Review & Approval shall be submitted. These requirements do not apply to maintenance work or service taps from existing mains to new users. The Director has the authority of approval. Refer to Chapter 9 of these Standards for Permit Bonding and Inspection Requirements for Street Cut and R.O.W Use

Permit applications. Utility Design and Construction shall conform to the requirements in Chapter 10 of these Standards. The submittal of the Utility Plans shall include the following information:

2.3.5.1 A completed Application for Review and Approval (Form 581).

2.3.5.2 Engineering Review and Approval fee.

2.3.5.3 Street plan and profile including the location of the street cuts, size and location of utilities being repaired, replaced or constructed.

2.3.5.4 Specifications and construction details of trench backfill, compaction, and roadway reconstruction, as described within Chapter 8 of these Standards. This information can be provided through notes and details.

2.3.5.5 Plan for traffic control during construction (may be supplied by contractor prior to permit issuance).

2.3.6 Revisions or Updates to Approved Final Construction Plans

When revisions or updates to previously approved Construction Plans are proposed, an Application for Review and Approval shall be submitted. The Director has the authority for approval. The submittal of the Revisions or Updates shall include the following information:

2.3.6.1 A completed Application for Review and Approval (Form 581).

2.3.6.2 Engineering Review and Approval fee.

2.3.6.3 Letter stating the scope and purpose of the construction plan revisions.

2.3.6.4 The previously approved construction plan sheets, marked up with revisions.

2.3.6.5 The revised final construction plan sheets, including all appropriate notes and details.

2.3.6.6 Referral to other approving agencies (additional copies required).

2.3.7 Striping and/or Signing Plan

When Signing and Striping Plans are not submitted with the Final Construction Plans, an Application for Review and Approval of the Signing and Striping Plans shall be submitted. The Director has the authority for approval. The submittal of the Signing and Striping Plans shall include the following:

2.3.7.1 A completed Application for Review and Approval (AC Form 581).

2.3.7.2 Engineering Review and Approval fee.

2.3.7.3 Plan of the existing signing and striping, see Chapter 3, Section 3.16.

2.3.7.4 Plan of proposed signing and striping, see Chapter 3, Section 3.16.

2.3.7.5 No review fee need accompany the application if Arapahoe County is contracted to install the signs.

2.3.7.6 If the Applicant is to furnish and install the signs/striping, the Engineering Review and Approval Fee shall be that for final construction.

2.3.8 Grading, Erosion, and Sediment Control (GESC) Plans and Report

The GESC Plans and Report are required to be submitted as a separate stand alone documents for review and approval. Please refer to the GESC Manual for the submittal requirements. The Director has the authority of approval. The submittal of the GESC Plans and Report shall include the following:

2.3.8.1 A completed Application for Review and Approval (Form 581).

2.3.8.2 Engineering Review and Approval fee.

2.3.8.3 GESC Plans and Reports in accordance with the GESC Manual.

2.3.9 Landscaping and Irrigation Plans

Landscaping and Irrigation Plans are required for any landscaping proposed within or adjacent to County Rights-of-Way and/or County easements. The improvements could affect sight distances, drainage characteristics, structural stability of existing or proposed public improvements, or other safety issues. Chapter 3, Section 3.19 of the Standards and the Arapahoe County Land Development Code, Streetscape Guidelines latest edition. The submittal of the Landscaping and Irrigation Plans shall include the following:

2.3.9.1 A completed Application for Review and Approval (Form 581).

2.3.9.2 Engineering Review and Approval fee.

2.3.9.3 Landscaping and Irrigation Plans.

Landscaping and Irrigation Plans including but not limited to, location and description of all proposed vegetation, irrigation lines, proposed street cuts, direction of drainage flows, street names, vicinity map, key map, general notes and the signature block.

2.4 DRAFTING STANDARDS

2.4.1 General

All plans submitted for approval and recordation shall meet the following minimum standards to facilitate microfilming.

- A. Plans shall be 24" x 36". Final plans shall be blackline originals.
- B. Double plan and profile sheets will not be allowed.
- C. Development plans shall meet current Arapahoe County drafting standards, which are available from the Mapping Section of the Engineering Division.

2.4.2 Lettering

Letter size shall not be less than one-tenth (0.10) of an inch. (Number 100 Leroy template).

LETTERING USED ON ENGINEERING DRAWINGS, WHETHER BE FREEHAND, TYPED, OR THE USE OF A LETTERING GUIDE WILL, BE GREATER THAN OR EQUAL TO A NUMBER 100 LETTERING GUIDE (0.10). ALL LETTERING MUST BE IN SHARP CONTRAST WITH THE BACKGROUND OF THE ORIGINAL LETTER SIZE AND CONTRAST IS A MUST FOR MICROFILMING ENGINEERING DRAWINGS FOR RECORDS AND SECURITY NEEDS. THIS PARAGRAPH DEMONSTRATES THE MINIMUM ALLOWABLE LETTER SPACING (MAXIMUM DENSITY).

2.5 FEES AND PENALTIES

Submittal Fees and Penalties shall be assessed in accordance with the current Engineering Fee Schedule.