

CHANNEL DESIGN PLAN CHECKLIST

Channel Design Plans shall include the following as a minimum. The DCM Criteria must be shown to be met with the Channel Design Plan. Additional information may be required to show Criteria is being met.

PLAN CONTENTS

1. Cover Sheet

- a. Plan set labeled as Public Channel Plan or Private Channel Plan
- b. General vicinity map – A map showing relationship of the site to existing and planned roadways, jurisdictional boundaries, major creeks, and streams.
- c. Subdivision/Channel name – The subdivision name as it appears on the Final Plat (if applicable) and the channel name. If the project is not associated with a subdivision, include project name in place of subdivision name.
- d. Project data to include the following:
 - i. Report containing the channel design calculations, including STM-REVXX-XXXX review number
 - ii. Responsible party for channel maintenance
- e. Cost Estimate – Include an itemized cost estimate with item description, quantity, and unit price. A 20% engineering contingency must be included. A total cost for the channel must also be included. Financial assurances in the amount of the cost estimate must be posted prior to Channel Design Plan approval. This requirement does not apply to capital projects.
- f. Notes:
 - i. The City of Colorado Springs does not assume liability for the design contained in this plan.
 - ii. This plan expires 1 year after approval unless construction has commenced.
- g. Signature blocks (see below)

2. Plan

- a. The plan must be shown at a maximum scale of 1-inch to 100 feet
- b. Flow arrows indicating channel flow direction must be included (minimum one per sheet)
- c. Engineer must stamp/sign each sheet
- d. North Arrow and Bar Scale
- e. Utilities
- f. Property lines and easements must be shown and labeled



- g. Existing topography at one or two foot contour intervals. The map should extend a minimum of 50-feet beyond the channel limits. Channel limits for the purpose of this checklist include all access to the channel.
- h. Proposed topography at one or two foot contour intervals. The map should extend a minimum of 50-feet beyond the channel limits.
- i. Slope labels for side slopes, drop slopes, slope between drops, and maintenance access
- j. Existing or proposed water courses – to include, but not limited to, groundwater springs, streams, wetland, or other surface waters.
- k. FEMA 100-yr and 500-yr floodplain boundaries with label
- l. Location of all drainage features in view – to include, but not limited to storm sewer, PCMs, etc. All drainage infrastructure must be labeled as public or private.
- m. Vegetation – Include reference to Landscaping Plan or include planting details
- n. Maintenance Access – shown and labeled
- o. Utility locations and easements - grading over existing utilities or within dedicated easements is restricted

3. Profile

- a. Channel profile must be included
- b. Profile must be clearly labeled with corresponding labels in the plan
- c. 10yr and 100yr water surface elevations must be shown on profile
- d. Crossing utilities must be shown on profile, with clearance distances labeled
- e. Existing and proposed grade must be shown and labeled

4. Construction Details

- a. Structural details and associated notes for all proposed structures within the channel. Conceptual drawings from the DCM and MHFD manual do not meet this requirement. Standard CDOT reinforcement details are acceptable where permitted by criteria. Standard CDOT details cannot be used for riprap sizing.
- b. Material specifications for items such as filter materials, weep drains, etc.



CHANNEL STANDARD NOTES

1. This Channel Design Plan will be subject to re-review and re-acceptance by SWENT if work on the channel does not commence within twelve (12) months of plan approval.
2. The contractor should contact the Engineer of Record and SWENT Lead Reviewer immediately should construction of the channel vary in any way from the plans.
3. A Professional Engineer (PE) Certification that the channel has been installed and constructed in general conformance with these plans will be required once the channel is fully constructed. An as-constructed survey must be completed to verify facility volumes and elevations. The as-built drawings must be submitted along with the PE Certification. A PE certification requires periodic on-site observations by the Engineer of Record or a person under their responsible charge. Coordination with the Engineer of Record to ensure that the necessary on-site observations are completed is the responsibility of the applicant.
4. Acceptance of this plan does not constitute approval to grade or cause any disturbance within in any utility easement or Right-of-Way. Approvals to work within utility easements must be obtained from the appropriate utility company. It is not permissible for any person to modify the grade of the earth on any utility easement or Right-of-Way without the appropriate written approval. The plan shall not increase or divert water toward utility facilities. Any changes to existing utility facilities to accommodate the plan must be approved by the affected utility owner prior to implementing the plan. The applicant is responsible for the cost to relocate or protect existing utilities or to provide interim access.



CHANNEL DESIGN PLAN SIGNATURE BLOCKS

Engineer's Statement:

This Channel Design Plan was prepared under my direction and supervision, was designed in accordance with the City of Colorado Springs Drainage Criteria Manual (current version), and is correct to the best of my knowledge and belief. I accept responsibility for any liability caused by any negligent acts, error or omissions on my part in preparation of this Channel Design Plan.

Signature:

Date:

Printed Name:

Email address:

Seal

Developer's Statement:

{Name of Developer} hereby certifies that the Channel for {Name of Development} shall be constructed according to the design presented in this plan. I understand that the City of Colorado Springs does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that are submitted to the City of Colorado Springs pursuant to section 7.4.701 of the City Code; and cannot, on behalf of {Name of Developer}, guarantee that the final drainage design review will absolve {Name of Developer} and/or their successors and/or assigns of future liability for improper design.

Name of Developer:

Authorized Signature:

Date:

Printed Name:

Title:

Email:

Address:

Phone:



City of Colorado Springs Review Statement:

Filed in accordance with Section 7.4.701 of the Code of the City of Colorado Springs, 2023.

For SWENT Manager

Date

Conditions:

