

City and County of Denver

UTILITY PROJECT FLOODPLAIN PERMIT REQUIREMENTS (Dec. 2018 v1.0)

FLOODPLAIN PERMIT APPLICATION: All utility work within the regulatory floodplain requires a Floodplain Permit per City Ordinance. This includes dry utilities such as electric, gas, telephone, cable, fiber optic, etc. and wet utilities such as storm, sanitary, potable water, recycled water, etc.

- The Floodplain Permit is applied for by using the Sewer Use & Drainage Permit (SUDP) application: www.denvergov.org/content/dam/denvergov/Portals/696/documents/SUDP/SUDP_Application.pdf
- Contact David Boles david.boles@denvergov.org for an application **project address**.
- Submit SUDP application, plans, and any other required documents electronically via email to: wastewaterpermits@denvergov.org

Project work area in the SUDP application shall match the project work area in the utility plan review. However, only the plans showing work in a **regulatory floodplain** are required for the SUDP application. The SUDP application shall include the following supporting information based on work proposed in the **regulatory floodplain, floodway** and/or crossing a **drainageway** in a **regulatory floodplain**.

PLANS (sealed & signed by a Colorado Professional Engineer):

Level of Care 1 - Where proposed facilities are within a **regulatory floodplain (Zones A, AE, AH or AO)**, but not crossing a **drainageway**:

- Show and label the **regulatory floodplain** boundaries, with flood zones identified. Floodplain boundaries and flood zones can be downloaded from FEMA's Map Service Center free of charge (see DATA REFERENCE LOCATIONS section). Note if revised due to an effective LOMR.
- Label the **floodplain** designation/common name as identified on Denver or FEMA maps.
- Show and label existing site improvements (sidewalk, trails, edge of pavement, C&G, fences, etc.) with sufficient detail for the reviewer and Contractor to confirm the work location.
- Show and label proposed facilities. If any facilities are above grade, show how these items are being protected from flood damage. The minimum Flood Protection Elevation (FPE) for all machinery and equipment (transformers, electric/telecom cabinets, gas meters, etc.) is 1.5 feet above the Base Flood Elevation (BFE).
- Label the BFE, FPE and the bottom elevation of all above-grade facilities located in the **regulatory floodplain**.
- Complete the following note with the correct information and include it on the plans:
 1. FLOOD HAZARD AREA INFORMATION AS SHOWN ON FEMA FIRM, MAP NUMBER [10 digits followed by 1 letter], MAP REVISED [date].

Level of Care 2 - Where proposed facilities cross through a **floodway**, but not crossing a **drainageway**, provide the following in addition to the items in Level of Care 1:

- Show and label the **floodway** boundaries.
- Include the following additional notes on the plans for work in a **floodway**:
 2. THE CONTRACTOR SHALL TAKE PRE-PROJECT PHOTOS OF THE WORK AREA IN THE FLOODWAY FOR COMPARISON TO POST-PROJECT PHOTOS.
 3. NO TEMPORARY STAGING OF MATERIALS OR EQUIPMENT IS ALLOWED IN THE FLOODWAY.
 4. NO NEW STRUCTURES OR OBSTRUCTIONS (INCLUDES HANDHOLES) SHALL BE INSTALLED IN THE FLOODWAY.

5. POST-PROJECT GRADES SHALL MATCH PRE-PROJECT GRADES IN THE FLOODWAY UPON COMPLETION OF THE PROJECT, NO FILL ALLOWED IN THE FLOODWAY.
6. THE CONTRACTOR SHALL TAKE POST-PROJECT PHOTOS FROM THE SAME LOCATION AS PRE-PROJECT PHOTOS UPON COMPLETION OF THE WORK IN THE FLOODWAY. PRE- AND POST-PROJECT PHOTOS SHALL BE SENT TO DAVID BOLES DAVID.BOLE@DENVERGOV.ORG PRIOR TO SCHEDULING THE FINAL FLOODPLAIN INSPECTION.
7. THE CONTRACTOR SHALL SCHEDULE A POST-PROJECT FINAL FLOODPLAIN INSPECTION WITH DAVID BOLES AT 720-865-3175 (48-HOUR NOTICE REQUIRED).

Level of Care 3 - Where proposed facilities cross through a **drainageway** with a **regulatory floodplain** or **floodway** (including piped drainageways, culverts, and bridges), provide the following items in addition to the items in Level of Care 1 and Level of Care 2.

- Add existing contours (2-foot maximum interval) to the plan view.
- City benchmark (NAVD 1988 datum) for topography obtained from field survey.
- A true profile using accurate existing elevation information (NAVD 1988 datum) showing stations of the boring alignment that match plan view stationing.
- Show and label the floodplain and floodway boundaries in both the plan and profile views.
- Dimension the minimum 5-foot clearance under the drainageway thalweg and dimension the applicable boring hold-down length.
- In the case of piped drainageways, an accurate representation of the pipe with the material and size called-out and dimension the minimum clearance between pipe exteriors.
- Existing ground features (sidewalk, trails, edge of pavement, C&G, fences, etc.) in both the plan and profile. Add dimensions to these features from the boring alignment if they may be used as in-field references.
- Existing underground utilities/features (sewers, water, duct banks, gas mains, etc.) in the vicinity.
- Show and label existing structures (foundations, abutments, etc.) and call-out the minimum separation clearance required by its owner.
- Include the above 7 notes on the profile sheet.

STATEMENT OF NO IMPACT LETTER (sealed & signed by a Colorado Professional Engineer):

In addition to the above PLAN requirements, Level of Care 2 and Level of Care 3 instances require a Statement of No Impact (SNI) letter to include:

- A brief narrative of the proposed boring alignment through the **drainageway** and/or **floodway**.
- A reference to the floodplain designation and FEMA FIRM Panel(s) where the work is proposed.
- A reference the Plans submitted for approval, noting the Engineer's signature date.
- Make a statement that all new facilities associated with the project were designed to be at or below existing grade and that grades will be restored to existing conditions upon completion of the work.
- Make a statement that the project will result in no impacts to the Base Flood Elevations and will have no adverse impacts to adjacent properties.

DATA REFERENCE LOCATIONS:

Floodplain Ordinance and other reference information:

- www.denvergov.org/flood

Floodplain data may be viewed and downloaded (data may require formatting) from:

- www.denvergov.org/maps/map/floodplain
- msc.fema.gov/portal/search

Contour, benchmark and other CCD data may be downloaded from:

- www.denvergov.org/opendata/search