CE Wastewater As-Built Checklist

As-built drawings are to be prepared per the City and County of Denver’s (CCD) Storm Design and Technical Criteria Manual. Submit as-builts through e-permits, specify in cover letter when requesting the following items: Temporary Certificate of Occupancy (TCO) or Certificate of Occupancy (CO) inspection release; approval for bypass removal; phased occupancy inspection release with the approved phasing plan.

Complete Sanitary Storm Plan Review (SSPR) Permit Submittal Package:

- As-builts prepared and sealed by the Engineer of Record (EOR).
- Third-party Certification of Inspection (CI) letter.
- EOR sealed as-built Storm Detention and Infiltration (SDI) form, if applicable.

SSPR As-Built Drawing Minimum Requirements:

- As-built drawings prepared by the EOR with survey information provided by a Professional Land Surveyor (PLS).
- Include as-built statement certifying that “The as-built drawings are prepared by the EOR or under EOR’s supervision and that it meets the CCD’s requirements and the design intent of the project.”.
- As-built construction conditions to be indicated by red strikeout of design data and insert of new on the CCD approved plan set with all approved revisions included.
- “As-Built” or “Record Drawing” in large bold red text on all sheets.
- Include as-built data for actual length of installed pipe, type, diameter, and slope with invert elevations. Put a red checkmark when lengths are within 1’ or invert elevations are within .01’ of plan values.
- Provide Northing and Easting as-built data.
- Existing structures used for connections are to be updated with as-built conditions.
- Specify which structures are public and which are private.
- Provide survey information in NAVD88 elevations with benchmark(s) specified.
Detention Pond, Vault, and Other Special Structure Requirements:

- As-built water quality, 10-year, and 100-year detention volumes and corresponding elevations comparing required to constructed values. Include this information in a detention summary table.
- Detention/retention ponds require updating the topographic map.
- Detention vaults require updating the interior dimensions.
- Outlet structures require updating orifice, pipe, and overflow spillway elevations.
- Include pump material submittals with pump curves, pump commissioning letter from the manufacturer, and verification of set points for pump operation.
- Include the operation and maintenance check list.
- When applicable, follow the Urban Drainage and Flood Control District’s (UDFCD) “Maintenance Eligibility Program Guidelines For Flood Control Facilities Constructed By Others”.

SSPR Plan Revision Requirements:

- Cover letter from EOR summarizing request with any applicable calculations, sealed, included for review.
- Only revised plan sheets are to be included in plan revision request.
- EOR is to stamp, sign, and date revised plan sheets.
- Structural plan revisions are to be provided with calculations and sealed by the Structural Engineer of Record (SEOR).
- Plan revisions are to be submitted to e-permits who will direct review to CE Wastewater Engineering for approval.
- Plan revisions are not approved for construction without explicit written approval.
- Fees will be accessed per the DOTI consolidated fee schedule for all plan revisions.
Step by Step Submission Guide to E-Permits:

- Go to the E-permits site: [http://www.denvergov.org/epermits](http://www.denvergov.org/epermits)
- Go to “My Records” under the Home tab.
- Click on the appropriate SSPR record number. If you do not see your SSPR record on the list, please contact “Development.Services@denvergov.org” and request to have the record added to your account.
- Go to “Record Info” and then “Attachments”.
- Click “ADD” to upload files.
- Make sure to hit “SAVE” before exiting the page.

Sewer Use and Drainage Permit (Minor SP) Project Requirements:

- These items are required when indicated under the permit conditions.
- As-builts are to be prepared by a Colorado licensed PE.
- CI letter from third-party is not required.
- Provide survey information in NAVD88 elevations with benchmark(s) specified.
- Include overall site and utility map(s) with submittal.
- Reference as-built minimum requirements for required information.
- Submit electronic as-built documents to wastewaterpermits@denvergov.org upon completion of the project including the SUDP record number with the primary site contact email and phone number.

CE Wastewater Involved Capital Improvement Project (CIP) Requirements:

- As-builts are to be prepared by a Colorado licensed PE.
- Submit CI letter from third-party if third-party inspections were required.
- Reference as-built minimum requirements for required information.
- General notes and/or SUDP permit conditions may include additional requirements. These permit notes specify how to submit as-builts for review.
Sample Certificate of Inspection Letter:

Engineering Company Letterhead

DATE: Day/Month/Year
TO: Right of Way Services - CE Wastewater
   2000 W. 3rd Avenue, 2nd Floor
   Denver, CO 80223
RE: Certificate of Inspection for: Project Name and Address
SSPR Permit Number: ______________________

I, __________, a registered Professional Engineer in the State of Colorado, PE No. ______, in accordance with Sections 5.3 of the Bylaws and Rules of the State Board of Registration for Professional Engineers and Professional Land Surveyors, do hereby certify that I performed or supervised construction observations for the following:

(Check all that apply)

☐ Public Storm Sewers  ☐ Public Sanitary Sewers  ☐ Outlet Structures
☐ Private Storm Sewers  ☐ Private Sanitary Sewers  ☐ Storm Drainage Features
☐ Detention System     ☐ Detention/Retention Pond  ☐ Water Quality Features

Based on field observations, it is my professional opinion that all work has been installed and is in substantial compliance with DOTI WW specifications and the approved construction drawings.

Sincerely,

_____________________________
Engineer’s Signature

PE stamp/date
Clarification of Certificate of Inspection Letter Language:

- **Public Sanitary Sewers:**
  - A sanitary sewer used by the public for the collection and transportation of sanitary sewage for treatment or disposal.

- **Private Sanitary Sewers:**
  - The privately owned pipe and fittings laid on a property and to convey sanitary waste from the property to a sanitary connection along the mainline.

- **Public Storm Sewers:**
  - A system which mainly collects and conveys runoff from a variety of properties and is publicly maintained by the governing body.

- **Private Storm Sewers:**
  - A system which mainly collects and conveys runoff from a single property and is privately maintained by the property owner.

- **Detention/Retention Pond:**
  - A detention pond has an orifice level at the bottom of the basin and does not have a permanent pool of water. A retention basin or pond has a riser and orifice at a higher point and therefore retains a permanent pool of water.

- **Detention System:**
  - A structure built or installed to detain and release stormwater.

- **Outlet Structures:**
  - Structures that allow water to exit detention systems in a controlled manner.

- **Storm Drainage Features:**
  - A feature that collects, conveys, or stores surface water or storm water runoff: such as a channel, swale, trickle channel, curb drain, area drain, etc.

- **Water Quality Features:**
  - Structures which aide in the reduction of concentration of dissolved oxygen, bacteria levels, the salinity, or turbidity. Items such as sand filters, rain gardens, bioretention ponds, etc.