

Private Development - Construction Drawings Water and Sanitary Sewer Main Drawing Requirements Checklist

Jurisdictional Statement: These requirements shall be required for projects within the Parker Water & Sanitation District's (PWSD) jurisdiction. (Please ensure your project is within PWSD as there are several water districts located within the Town of Parker).

FOR PWSD USE ONLY: Parker Water & Sanitation District Engineering Department

Project name: _____ Project Number: _____
Reviewed by: _____ Phone number: _____ Date: _____

Before Starting Your Project: Refer to Parker Water & Sanitation District Standards & Specifications Manual, District Master Plan, and District Rules & Regulations to Ensure Compliance of PWSD's Requirements.

This checklist provides PWSD's expectations and requirements for the ENGINEER and CONTRACTOR's design for construction of public water and sewer infrastructure. The checklist serves to minimize redline comments and maintain consistency among reviewers on public water/ sewer infrastructure construction in the public rights-of-way (ROW) or PWSD's Utility Easements. Approval and the issuing of permits are dependent upon compliance with the review comments made on the construction drawings, this checklist, in accordance with the PWSD Rules & Regulations and the PWSD Standards & Specifications Manual.

Please return this checklist with a review set of construction drawings and applicable fees with your submittal. Construction drawings will not be accepted for review if all items are not included as part of the first submittal. Do not leave any item unmarked. Place checkmark for completed item, or N/A for item not applicable.

General Requirements

- Construction Drawing Size = 24" x 36".
- PWSD Details shall be used as basis unless otherwise approved by PWSD.
- Plan Sheets must include North arrow point to top or left of page.
- Each sheet shall have sheet number, project name, match lines.
- Drawings and figures shall meet requirements for as-built drawing submittals per PWSD Standards & Specifications Manual.
- All sheets shall be sufficiently clear (1/8-inch minimum for lettering and symbols).
- Building tap fee must be paid prior to pre-construction meeting for Commercial and Multi-Family developments.
- Irrigation tap fee must be paid prior to pre-construction meeting.

Cover Sheet Requirements (1-2 Pages)

- Project title block with project name and address on all sheets.
- Developer's name, address, and telephone number.
- Engineer's name, address, and telephone number includes professional seal and signature.
- Signature Blocks for PWSD and South Metro Fire Rescue Authority approvals (In lower right corner).
- Vicinity and location maps.
- UNCC notification decal affixed.
- Sheet Index and Agency Contact List.
- Materials List.
- Project datum information.

Overall Utility Drawing (Water and/or Sanitary)

- Required notes (see general, water and/or sanitary sewer notes required by PWSD in Chapter 1 of PWSD Standards and Specifications Manual).
- All streets, alleys, easements, tracts, parcels, lots, and blocks shall be identified or shown "unsubdivided".
- North Arrow and graphic scale and scale factor (1" = 50' preferred).
Alternate sizes in order of preference include (1" = 100'; 1"=200'; or 1" <= 30').
- Indicate individual sheet numbers for specific sections to be shown on following sheets.
- Legible key map and Legend.
- A list of quantities for water and sanitary improvements.
- Title Block shall include project title, date, designed by, drawn by, and checked by fields.
- Identification of Proposed and Existing infrastructure: Water mains and production facilities (tanks, boosters, etc.); identify all pressure zones Sanitary mains and production facilities (lift stations, etc.); identify all pressure zones.
- Each Valve, Fire Hydrant, Air Release Valve, Blow Off, Pressure Reducing Valve, Manhole, and Etc. must be called out and numbered in logical and sequential approach.
- Water and sewer hydraulic data including depths, slopes, and peak flow factors.

Overall Water and Sanitary Sewer Plan and Profile Sheets

- North Arrow and graphic scale and scale factor (1" = 50' preferred). Alternative sizes if practical include (1" <= 30').
- Legible key map and Legend.
- Title Block shall include project title, date, designed by, drawn by, and checked by fields.
- Locations must be shown by stationing (in plan and profile views) and dimensioning from clearly indicated point of reference (monument lines, lot lines, property lines, or in their absence, easement references). No dimensioning from points of curvature or tangency is acceptable.
- Applicable design notes.
- Location, by dimensions, all existing and proposed utilities, structures, paving, and other topographic features affected by construction.
- Show all easements call out as "Exclusive 30' PWSD Easement" or "Non-exclusive 50' PWSD Easement". Thirty-foot exclusive easements for water lines and sanitary sewer lines, and 50-foot easements for non-exclusive PWSD utility easements. All easements will be called out on Plat as well as executed by separate document.
- Show all existing and proposed utilities (water, sanitary sewer, fire taps and service connections and irrigation services) with size, material, and location in right-of-way or easements and dimensioned or stationed from the monument line. Proposed water and sewer to be in standard utility locations.
- Each Valve, flow meter, hydrant, air release valve, pressure reducing valve, manhole, sampling stations, etc. must be called out and numbered in logical and sequential approach. Call out all tees and bends.
- Show and call out 4.5' min. cover over top of pipe and 1.5' min. clearance between pipes.
- At MH call out station number, rim, invert in, and invert out elevations. Numbering shall be sequential and logical; begin with the subdivision abbreviation.
- Profile should include grade elevation, flow direction, manhole numbers, pipe slope.
- Fire hydrant placements to be per South Metro Fire Protection Authority.
- Distances between piping: Minimum 5-foot horizontal clearance between water services. Min. 10-foot horiz. clearance between water and sewer services, and between mains and utilities. Minimum 5-foot clearance from easement line to water/ sewer mains.
- Irrigation meter pit locations must be out of traveled roadway/walk/driveway. They may be located in planter areas, parking lot islands, etc., and shall be set sufficiently above finished grade to minimize flooding. Meter locations shall be easily accessible from a street or traveled way and must be located in right-of-way or easements.

Items Required for Final Construction Drawing Approval

- Standard Improvement Agreement.
- Engineer's Estimate.
- Letter of Credit.
- Easement Agreements.
- Water and sanitary sewer Master Plans, as applicable.
- Grease, sand/oil interceptor worksheets.
- Landscape Plans and Irrigation Worksheet.
- Plumbing Plans with Engineer's Fixture Count Worksheet.

**Before Submitting Refer to Parker Water & Sanitation District Specifications
and Master Plan, please complete this information:**

Project Name:

Owner/Developer Signature:

Engineer Signature:

Submittal Date: