

BES Public Works Standard Notes

Instructions: General Notes are used on the cover sheet of BES Public Works (PW) Sewer projects. They are not used for joint BES PBOT PW projects without sewer pipe.

General Notes:

1. Errors and omissions are the responsibility of the "Engineer of Record". If errors or omissions are found after the permit has been issued, the permittee or its contractor shall contact the engineer of record (John Doe of ABC engineering at 503-555-1212) to have the corrections made. All changes will require the approval of the BES Chief Engineer prior to the work beginning.
2. All Construction shall conform to 2010 City of Portland Standard Construction Specifications (SCS). Contractor and/or subcontractor shall have a minimum of one set of approved plans and City of Portland Standard Construction Specifications on the job site at all times during construction.
3. Street restoration shall be per the requirements of the PBOT Street Opening Permit.
4. Elevations are based on City of Portland datum using benchmark(s) No. _____, Elevation _____, Located _____.
5. ATTENTION EXCAVATORS: Oregon Law requires you to follow rules adopted by Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 Through OAR 952-001-0090. You may obtain copies of these rules from the center by calling (503) 232-1987. If you have any questions about the rules, you may contact the call center. YOU MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. Call 811 or 1-800-332-2344.
6. Applicant/contractor to schedule a mandatory pre-construction meeting with BES construction services a minimum of 4 business days prior to commencement of construction. Call (503) 823-2415.
7. Locations of existing structures and utilities are for information purposes only. Applicant/contractor is responsible for verifying the location and depth (elevation) of existing utilities and other field conditions prior to construction.
8. Contractor to submit a Traffic Control Plan to BES Construction Services a minimum of 14-days prior to commencement of construction. Contact Ben Baldwin at Tri-Met 14-days prior to starting construction at 503-962-2140.
9. Contractor shall maintain flows in the existing system at all times. Contractor shall submit on method of construction necessary to maintain flows to BES Construction Services 14-days prior to starting work.
10. Site erosion control plans to be approved and controls in place prior to grading and working in the right of way. Applicant/contractor to put up all required erosion control signage prior to ground disturbance. A CD with all required erosion control signs will be provided at pre-construction meeting.
11. All Sewer trench lines and excavations shall be properly shored and braced to prevent caving as required by Oregon Occupational Safety and Health (OSHA) and Section 00405.41(f) of the City of Portland Standard Construction Specifications.

12. Excavated sewer trench spoil material shall be disposed of at a proper landfill, or applicant shall obtain a fill permit from the Bureau of Development Services before being disposed of on-site. A copy of the grading permit and plan shall be provided to the Bureau of Environmental Services for construction inspection at the pre-construction meeting. Any work outside the public right of way, including cuts fills grading and clearing may require permits from Bureau of Development Services.
13. Unanticipated contamination encountered during construction in City Right of Way.
 - A) The applicant is responsible for all costs associated with proper characterization, identification analysis, management and disposal of contaminated media encountered within the city right-of-way or on City property. The applicant is also responsible for all resultant delays.
 - B) The applicant will provide the City (Engineer and Inspectors) with copies of all disposal permits from the permitted disposal facility, analytical results used to gain acceptance of the contaminated media and disposal receipts/daily weigh slips. Daily weigh slips amounts shall be checked against inspector's Daily Reports. The applicant must use an Oregon Department of Environmental Quality- approved disposal facility for disposal of the contaminated media.
14. Foundation stabilization may be necessary as per City of Portland Standard Construction Specifications and approved by BES.
15. Maintain Minimum of 36" of cover over all pipe in unpaved easement areas.
16. The contractor shall install marker balls on all storm and sanitary sewer mainline pipe and laterals. See specification Section 00446.
17. Mark ends of all stub outs and laterals w/continuous pressure treated 2" x 4". Top 12' to be painted white and stenciled with black 'ST' for storm or painted green and stenciled black "SS" for sanitary and with pipe size, material type, and pipe depth. Bury 2" x 4" to i.e. of stub or lateral.
18. All storm and sanitary sewers will be air tested and shall be subject to other testing requirements as outlined in the City of Portland Standard Construction Specifications.
19. Sewer shall be video inspected (TV'd) at the sole expense of the applicant/contractor.
20. Mandrel testing is required on all HDPE and PVC pipe. A 30-day waiting period is required on all mandrel testing.
21. City of Portland maintenance of house branches end at the curb line in rights-of-way and at the end of the tee in easements.
22. Bureau of Development Services (BDS) Plumbing Division approvals and permits are required for privately maintained sewer, inlets, inlet leads & service laterals constructed outside of public right-of-way or sewer easement. All work approved under plumbing permits shall be privately owned and maintained.

Instructions: Additional Notes are use when an individual note applies to a project. They are added to the cover sheet notes on BES PW Projects. An exception is the final bulleted note that applies only to joint BES PBOT PW projects and is added to the cover sheet notes.

Additional Notes:

- All cost of sanitary sewer construction borne by all lots in (name of subdivision and/or legal description).
- Public street improvements, inlets and inlet leads to be constructed under Portland Office of Transportation Permit Job No. _____
- This project was reimbursed for legal description(s).
- Contractor to submit utility support plan to BES Construction Services 14-days prior to starting work.
- Contractor to submit engineered support plan for crossing the water line to BES Construction Services 14-days prior to starting work.
- Contractor to submit engineered shoring plan to BES Construction Services for excavations 20' deep or greater a minimum of 14 days prior to construction.

For joint BES BPOT PW Projects only

- Applicant/Contractor is responsible for the Operations & Maintenance of the stormwater facilities as prescribed in the approved O&M plan for 2 years after its completion and acceptance by the City.

Instructions: Sump Notes are added to a sheet with a proposed sump system.

Sump Notes:

1. All sumps shall be tested by the contractor and approved by the BES inspector.
2. Contractor to notify BES construction office at (503)-823-5728 at least 48 hours prior to beginning sump testing. A BES representative must be present during all sump capacity tests.
3. Contractor shall contact the Portland Water Bureau, or applicable water district, to arrange for sump test water supply. Contractor shall be responsible for obtaining necessary permits, authorization, and any fees.
4. Contractor may lease sump testing equipment from BES Materials Testing Lab, subject to leasing conditions and fees. Contact lab, located at 1405 N River, at (503) 823-2340. Similar testing equipment, from any vendor, may be used as approved by BES.
5. Sump testing shall take place after sump construction is complete and prior to the construction of the sedimentation manhole. Should a sump test fail to verify adequate capacity, an additional sump, constructed in series with the first sump (A maximum of two sumps per system), shall be required, as approved by BES. Should a test of two sumps in series fail to verify adequate capacity, an alternative public stormwater disposal system shall be required, as approved by BES.
6. Provide water flow from fire hydrants to sump being tested using 8-inch nominal diameter pipe. Deliver clean water to sump. Introduction of sediment is not acceptable and may result in failure of sump capacity test and reconstruction of sump.
7. Fill sump with water at an initial rate of 300 gpm and record water elevation below sump manhole lid, every five minutes. When water surface reaches a constant elevation, increase flow rate to sump to 600 gpm. Record water surface elevations every five minutes. Continue to increase flow rate 300 gpm each time water surface elevation stabilizes until maximum capacity is reached.

8. Immediately upon completion of the sump test, provide BES inspector with recorded test data.
9. Location of closest fire hydrant available for sump testing. _____

***Instructions:** Stormwater Facility Notes are added to joint BES PBOT PW projects on the sheet with the vegetated facility details.*

Stormwater Facility Notes:

1. Stormwater facility construction to be inspected by BES construction inspector.
2. Contractor shall contact BES construction 48-hours prior to starting construction on the stormwater facility. Any work on the facility without inspections will be rejected.
3. Contractor shall provide BES Construction with testing data as per City of Portland Standard Construction Specifications section 01040.13 – Soil Testing 14 days prior to construction.
4. See City of Portland Standard Construction Specifications Section 01040.14(d) – Stormwater Facility Topsoil.
5. Install topsoil in a manner that ensures adequate infiltration. Place in two equal lifts. *(If no drain rock is specified, add the following note: Roto-till the first lift into native soil.)* Lifts should not be compacted, but rather placed in a manner to reduce excessive erosion or settlement. Lifts may be lightly watered to encourage natural compaction or, if necessary rolled with a water-filled landscape roller. Slightly overfill the facility above proposed finished grade to accommodate natural settlement.
6. After the stormwater facility construction starts, the BES inspector is required to check on the progress of the job as necessary until the facility has been planted. Construction delay will result in additional fees.
7. Following swale construction, planting shall occur between September 1 and November 1, or between February 1 and April 15. If construction is completed during these time periods, planting shall occur immediately. If construction is completed outside of these time periods, topsoil shall be covered entirely with North American Green C125BN erosion control fabric, secured with 12" wooden EcoStake (18" on-center). Plants shall be installed through holes cut in the erosion control fabric, and fabric shall be restaked securely for stability and soil coverage following planting.
8. Contractor to place Erosion Control fabric over stormwater facility and surrounding area to prevent erosion during wet weather conditions. Fabric shall be 100% biodegradable coir fabric (North American C125BN or approved equal).
9. Plants shall be inspected and approved by BES Revegetation Program prior to planting. Contact the BES Public Works Inspector.

OR

9. Seeding and planting installation shall be done by the BES Revegetation Program. Contact the BES Public Works Inspector.

Instructions: Erosion Control and Sediment Fence Notes are added to the erosion control sheet of both joint BES PBOT PW projects and BES sewer projects.

Erosion Control Notes:

1. Approval of this erosion sediment and pollution control plan (ESPCP) does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.)
2. The implementation of this ESPCP and the construction, maintenance, replacement and upgrading of these ESPCP facilities is the responsibility of the applicant/contractor until all construction is completed and approved, vegetation/landscaping is established.
3. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the applicant/contractor for the duration of construction.
4. The ESPCP facilities shown on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to insure that sediment and sediment laden water do not enter the drainage system roadways or violate applicable water standards.
5. The ESPCP facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESPCP facilities shall be upgraded as needed for unexpected storm events, and to ensure that sediment and sediment-laden water does not leave the site.
6. The ESPCP facilities shall be inspected daily by the applicant/contractor and maintained as necessary to ensure their continued functioning.
7. The ESPCP facilities on inactive sites shall be inspected and maintained a minimum of once a week or within the 24 hours following a storm event.
8. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to insure that all paved areas are kept clean for the duration of the project.
9. Applicant/ Contractor to put up all required erosion control signage prior to ground disturbance. A CD with all required erosion control signs will be provided at the pre-construction meeting.

Sedimentation Fence Notes:

1. The filter fabric fence shall be installed to follow the contours where feasible. The fence posts shall be spaced a maximum of 6' apart and driven securely into the ground a minimum of 24".
2. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6" overlap, and both ends securely fastened to the post, or overlap 2" x 2" posts and attach as shown on detail sheet 4-3A of the Erosion Control Manual.

3. The filter fabric shall have a minimum vertical burial of 6". All excavated material from filter fabric installation shall be backfilled and compacted along the entire disturbed area.
4. Standard or heavy-duty filter fabric fences shall have manufactured stitched loops for 2" x 2" post installation. Stitched loops shall be installed on the up hillside of the sloped area.
5. Filter fabric fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently protected and stabilized.
6. Filter fabric fences shall be inspected by applicant/contractor immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.