

Boxelder Sanitation District Construction Notes (to be included on the general notes sheet of any set of construction plans)

The following information is condensed from the current "Standard Construction Specification for Sewer Mains" as adopted by the Boxelder Sanitation District (District) and is to be considered as such. In the event of any question the full document shall take precedence.

1. Existing Utility Locates: It shall be the responsibility of the Contractor to coordinate field locates of all existing utilities prior to commencement of any construction. Contractor shall also notify all affected utility companies prior to commencing construction. In the event of damage to any existing utility, the contractor shall immediately notify the owner of the utility involved and unless authorized in writing by the owner of the subject utility, shall not attempt to make repairs. The cost of repairs shall be the responsibility of the Contractor.
2. District Owned Easement Pictures: Contractor to provide sequential digital pictures spaced at no more than 300 feet detailing conditions of the off-site Boxelder Owned Easement Conditions and any structures that could be affected, to the District and the property owner prior to the start of **any** off-site work. These pictures shall include all existing fence, ditches, ditch structures, out buildings, water troughs, trees and all other landscaping. Pictures are to be placed at no more than four (4) pictures on a 11x8 sheet of photo paper inserted into transparent sleeves and delivered with the drawings of record in a three (3) ring binder.
3. Protection of Property: Contractor shall continuously maintain adequate protection from damage of all public and private property through which the work is done.
4. Safety: All sewer main installation within the District shall be subject to current (Occupational Safety and Health Association (OSHA) and the Colorado Safety Association, (CSA) safety requirements. Contractor shall also comply with any and all requirements and regulations as set forth by City, County, State and Federal agencies having applicable authority.
5. Start of Construction: No construction shall begin without prior design review of the District. The District shall be notified 48 hours in advance of starting construction or testing to allow for scheduling.
6. Road Excavation Permits: In event that State, County or City road excavation permit(s) are required, the Contractor is responsible for obtaining all road permits which may be required.
7. Other Permits: The Contractor shall be responsible for obtaining all permits required for construction.
8. Revisions: No verbal authorization for field revision shall be given. All requests for field revision shall be made in writing accompanied by proposed change indicated on copy of the approved design drawings. Any field revision approved and installed shall also be accurately documented on the Drawings of Record.

9. Materials: Plastic Pipe –All gravity sanitary sewer piping shall be Polyvinyl Chloride (PVC) unless otherwise noted on the approved drawings. Pipe 15” and smaller shall conform to ASTM D3034, Type PSM, and SDR 35. Pipe 18” and larger shall conform to ASTM F679. All fittings shall be (PVC) unless otherwise noted.
10. Pipe Cover: A minimum cover of 3-1/2 feet of cover shall be maintained throughout the sewer line and service line installation.
11. Bedding: All sewer main installation shall include bedding. Bedding shall be ¾” washed rock uniformly graded and compacted. Refer to force main design for force main bedding requirements. Trench shall be excavated to a depth below established grade equal to ¼ of pipe diameter (min. 4”). Bell depressions shall be provided for all joints. In event that unstable trench conditions are encountered at pipeline grade 1-1/2” uniformly graded washed rock shall be used for stabilization. Bedding material shall be placed and compacted under and around sides of the pipe. Place bedding in such a manner as to provide solid, uniform bearing surface for full length of barrel. Minimum 30” initial lift above pipe before other than hand compaction equipment is to be used. Note maximum trench width detail.
12. Backfill: Backfilling of trench shall be performed as soon as practical, subsequent to inspection and approval. Backfilling of acceptable material shall not be placed in lifts of greater than one (1) foot. Backfill shall be compacted to 95% of optimum density in roadway and residential areas and 90% in all off-site easement areas unless otherwise noted. Compaction testing of bedding and back fill shall be at least five tests per 1,000 feet and at varying depths and locations in accordance with the requirements of the applicable authority or as required in project specific specifications.
13. Concrete: All concrete construction shall be completed utilizing 3,000 psi at twenty-eight (28) days or equal concrete.
14. Pavement or Other Repairs: In event that asphalt or concrete pavement, sidewalks, storm sewers, waterline or any other public or privately owned property is damaged or requires reconstruction due to the work, repairs or replacement will be made in accordance with the requirements of the appropriate governing authority. Private property will be returned to its original condition or as close to original condition as reasonably possible, unless otherwise noted on the drawings.
15. Service Taps on Existing Lines: All taps made on existing lines shall be completed at developer’s expense by District personnel or the District’s authorized contractor with no exception.
16. Inspection: Construction shall conform to District Standards and Specifications or project specific specifications at all times. The District shall inspect the construction as necessary and shall observe all line testing. The District shall have the authority to ascertain that all construction of facilities is equal to or better than minimum construction requirements as set forth in

17. Testing: All lines shall be pressure tested and flushed by the Contractor in accordance with District Standards and Specifications and under the District's supervision. Upon passing, copies of all passing test results including soils compaction in the area of sewer main construction shall be provided to the District.
18. Acceptance: Upon completion of all utility construction (sewer and other) and fulfillment of all District requirements, preliminary acceptance of new sewer system improvements will occur in accordance with District's acceptance procedure.
19. Warranty: The Contractor shall warrant the materials, installation, workmanship and surface restoration for a period of two years from date of preliminary acceptance. During this warranty period the Developer shall promptly repair any defects in the work and maintain the work area. At the close of the two-year warranty period the District will make a field inspection. Upon satisfactory correction of any deficiencies noted the District would make final acceptance of the lines and work. The lines and the appurtenances shall then become the sole property and responsibility of Boxelder Sanitation District.
20. Drawings of Record and Total Costs: Within 90 days of preliminary acceptance of the new facilities, the District shall be provided with acceptable Drawings of Record of the complete system consisting of two sets of full size reproduced prints, two sets of 1/2-size reproduced prints, one set of 6 mil double matted reproducible mylars and one complete digital file equivalent (software and version to be confirmed at time of delivery). Written confirmation of the total cost of all sewer system improvements shall also be submitted with the Drawings of Record.