

APPENDIX C

East Cherry Creek Valley Water and Sanitation District

GENERAL NOTES FOR WATER SYSTEM PLANS

1. All water lines and system plans and construction shall conform with the East Cherry Creek Valley Water and Sanitation District (the District) Specifications and shall be subject to construction observation by District personnel or representatives. Copies of the District Technical Specifications may be obtained from the District Manager. The Owner, his Engineer or Contractor, shall schedule a preconstruction meeting with the District Manager and District Engineer at least 48 hours prior to the start of construction. Accepted construction plans reviewed and signed by the District Manager and District Engineer, will be distributed at the preconstruction meeting. No construction will be permitted until all easements are signed and recorded and the preconstruction meeting has been held.
2. The Contractor shall be responsible for the protection of all utility lines whether shown on the plans or not. The Contractor shall coordinate his activities with the affected utility companies and shall notify the Utility Notification Center, phone number: 303-534-6700, 48 hours prior to starting construction.
3. Distance for water lines is the horizontal distance between center of fitting to center of valve, meter, etc. Therefore, distances shown on the plans are approximate and could vary due to vertical alignment and fitting dimensions.
4. Contractor shall have in his possession at all times one (1) signed copy of plans approved by the District Manager and the District Engineer.
5. As-built drawings as required in the specifications are to be submitted by the Contractor prior to probationary acceptance of the construction.
6. The Contractor shall be responsible for removing and replacing any existing signs, structures, fences, etc., encountered on the job and restoring them to their original condition.
7. The Contractor is responsible for:
 - A. notifying the District 48 hours in advance of any need to shut down any portion of the existing water system.
 - B. notifying the District 48 hours in advance for observations.
 - C. in case of an emergency after working hours, call the District office at 693-3800 for recorded instructions.
8. Prior to installation of water mains, road construction must have progressed to at least the "subgrade" stage. Subgrade is defined as an elevation of no more than eight inches below the finished street grade. All valve boxes and fire hydrants will be adjusted to the final finished grade by the Contractor.

9. The pipe specified by the Owner or his Engineer for the water lines in the project is Class _____ pipe. All water lines shall have a minimum of four and one-half (4½) feet of cover and be located a minimum of ten (10) feet from the sanitary sewer, and three (3) feet from the edge of concrete curb and gutter pan.
10. Probationary acceptance of the new water lines is contingent upon receiving copies of:
 - A. water line trench compaction test results,
 - B. record drawings, and
 - C. Health Department tests (chlorine and/or clear water as required).
11. Theoretical static water pressures are estimated to range from _____ PSI at USGS elevation _____ to _____ PSI at USGS elevation _____, based upon hydraulic gradient of USGS elevation _____. The District has provided only the hydraulic gradient elevation. This hydraulic gradient, which was provided at the time of plan review, may change in the future as overall water system operations warrant.
12. All water line valves shall be set at the intersection of the extended property line and water line, except where that point falls in the flow line of a concrete cross pan. In that case, the valve shall be located so that surface drainage does not infiltrate the valve box. Valve boxes shall be set at an elevation in accordance with City/County paving requirements.
13. Polyethylene wrapping shall be installed around a II ductile iron pipe, fittings, valves, fire hydrant barrels, and rods and clamps. The polyethylene shall have a minimum thickness of eight (8) mils.
14. All water lines shall be chlorinated in accordance with A.W.W.A. C-651, "Disinfecting Water Mains." The preferred method is to use sufficient chlorine tablets to produce a 50 MG/L solution. The tablets shall be adhered to the top of the pipe with Permatex Clear RTV 66B. The chlorination of the water line shall be performed prior to the hydrostatic testing.
15. All water lines shall be hydrostatically tested in accordance with A.W.W.A. C-600 Section 4, "Hydrostatic Testing." All water lines shall be tested to a minimum of 150 psi. The test shall be scheduled by the District and coordinated with any other reviewing or approving agency. The allowable leakage rates are as follows:

ALLOWABLE LEAKAGE PER HOUR	
Pipe Size (inches)	Leakage Per 1000 feet of Pipe (gallons)
4	0.33
6	0.50
8	0.66
12	0.99
16	1.32
20	1.66

16. Existing valves in the District may only be operated by District personnel.
17. The District, its representative and/or the District Engineer, is not a guarantor of the constructing Contractor's obligations and performance of contract.
18. It shall be the Design Engineer's responsibility to resolve construction problems with the District due to changed conditions encountered by the Contractor during the progress of any portion of the proposed work. If, in the opinion of the District, proposed alterations to the signed construction plans involves significant changes to the character of the work, or to the future contiguous public or private improvements, the Design Engineer shall be responsible for submitting revised plans to the District for review prior to any further construction related to that portion of the work.
19. The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall apply continuously, and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold harmless from any and all liability, real or alleged, in connection with the performance or work on this project, excepting for liability arising from the sole negligence of the Owner, the Engineer, or the County.
20. The Owner is responsible for all costs associated with plan review and construction observation.
21. Observations of work in progress and on-site visits are not to be construed as a guarantee by the District or District Engineer of the Contractor's contractual commitment.
22. The District and/or District Engineer is not responsible for safety in, on, or about the project site, nor for compliance by the appropriate party of any regulations relating thereto.
23. The District and/or District Engineer exercises no control of the safety or adequacy of the equipment, building components, scaffolding, forms or any other work aids used in or about the project, or in the superintending of the same.
24. The Contractor shall be responsible for removing any groundwater encountered during the construction of any portion of this project. Groundwater shall be

pumped, piped, removed, and disposed of in a manner which does not cause flooding of existing streets nor erosion.

25. The Constructor shall provide the required insurance certificates to the District before beginning construction.