

WATERLINE CONSTRUCTION NOTES

(ISSUE DATE: 7/25/08)

1. ALIGNMENT, CENTERLINE CURVE DATA, AND STATIONING TO BE DETERMINED FROM APPROVED AND/OR RECORDED SUBDIVISION OR ROAD RIGHT-OF-WAY PLAT.
2. ALL WATERLINE CONSTRUCTION TO BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS.
3. ALL WATERLINES TO BE LOCATED INSIDE PUBLIC ROAD RIGHT-OF-WAYS AND PUBLIC EASEMENTS. CITY REPRESENTATIVE TO INSPECT & APPROVE PRIOR TO BACKFILL.
4. ALL WATER MAINS TO BE CLASS 150 (DR-18). PVC (AWWA C-900).
5. TWELVE (12) INCH OR SMALLER WATERMAINS TO HAVE A MINIMUM COVER OF FOUR (4) FEET. VARY FLOW LINE UNIFORMLY FROM DEPTH AND LOCATION SHOWN IN PLANS.
6. WATERLINE FITTINGS TO BE CAST OR DUCTILE IRON WITH POLYETHYLENE WRAP AS SPECIFIED UNLESS OTHERWISE NOTED.
7. MAINTAIN 12-INCH MINIMUM CLEARANCE AT CROSSINGS BETWEEN ALL WATERLINES AND ALL UTILITIES INCLUDING STORM SEWERS AND CULVERTS UNLESS OTHERWISE NOTED.
8. WATERLINES SHALL BE SAND-BEDDED AS SHOWN IN THE CITY OF TOMBALL DETAILS. (COT-37) ALL WATER LINES TO BE INSPECTED BY CITY OF TOMBALL PRIOR TO BACKFILL.
9. WATERLINE TRENCHES UNDER OR WITHIN ONE (1) FOOT OF PROPOSED OR FUTURE PAVEMENT SHALL BE BACKFILLED PER THE CITY OF TOMBALL DETAILS (COT-37).
10. ALL 2 " THRU 12" GATE VALVES FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH AWWA C509 AND BE MANUFACTURED BY MUELLER, AMERICAN-DARLING, OR APPROVED EQUAL RESILIENT SEAT GATE VALVES AND SHALL OPEN IN A COUNTER CLOCKWISE DIRECTION ONLY. VALVES ON ALL TAPPING SLEEVES ARE TO BE OF THE SAME TYPE.
11. VALVES TO BE LOCATED OPPOSITE PROPERTY CORNER WHERE APPROPRIATE.
12. ALL VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADE AFTER PAVNG IS COMPLETE.
13. ALL FIRE HYDRANTS SHALL BE MANUFACTURED BY MUELLER OR AMERICAN-DARLING. EQUIP EACH FIRE HYDRANT WITH TWO (2) TWO AND ONE-HALF (2 ½) INCH NOMINAL INSIDE DIAMETER HOSE NOZZLES AND ONE (1) FOUR AND ONE-HALF (4 ½) INCH NOMINAL INSIDE DIAMETER PUMPER NOZZLE WITH NATIONAL STANDARD THREADS ON EACH NOZZLE. SUPPLY STORTZ CONNECTOR & PRESSURE CAP FOR PUMPER NOZZLE.
14. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING TO WITHSTAND TEST PRESSURES SPECIFIED BY THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION AND THE CITY OF TOMBALL.
15. ALL WATERLINE TESTING SHALL BE WITNESSED AND APPROVED BY THE CITY OF TOMBALL.
16. 14 GAUGE LOCATOR WIRE TO BE INSTALLED ON ALL WATER AND GAS LINES & FORCE MAINS. TO BE ACCESSIBLE AT VALVE STACKS.
17. ALL TS&V SHALL BE FULL BODY – CAST IRON OR DUCTILE IRON.

18. 1 WATER SAMPLE PER 1000 FEET SHALL BE SUBMITTED TO A TEXAS DEPARTMENT OF HEALTH APPROVED LABORATORY AND SHALL BE FREE OF ANY CONTAMINATES, PRIOR TO BEING PUT IN SERVICE.
19. DISINFECTION OF NEW AND REPAIRED WATER MAINS SHALL BE IN CONFORMANCE WITH AWWA C651. ALL NEW WATER MAINS SHALL BE DISINFECTED BEFORE THEY ARE PLACED IN SERVICE. ALL WATER MAINS TAKEN OUT OF SERVICE FOR INSPECTING, REPAIRING OR OTHER ACTIVITY, WHICH MIGHT LEAD TO CONTAMINATION OF WATER, SHALL BE DISINFECTED BEFORE THEY ARE RETURNED TO SERVICE. (NO SEP. PAY)
20. CONTRACTOR TO INSTALL 4" X 4" BLUE RELECTORIZED PAVEMENT MARKERS 6" OFF CENTER OF ROADWAY ON FIRE HYDRANT SIDE OF STREET. RAY-O-LITE OR EQUAL.
21. WATERLINE 8" OR GREATER SHALL BE CONSTRUCTED SUCH THAT ALL CROSSINGS WITH SANITARY SEWER OR SANITARY SEWER LEADS SHALL CENTER ONE FULL SECTION OF WATERLINE AT THE SANITARY SEWER CROSSING. WATERLINE SHALL BE AT LEAST 2 FEET ABOVE SANTIARY LINE. WHERE WATERLINE CORSSSES UNDER SANITARY SEWER LINES. WATERLINE SEGMENT SHALL BE ENCASED IN PIPE AT LEAST TWO NOMINAL PIPE DIAMETERS LATFER THAN WATERLINE AND MAINTAIN 1 FOOT VERTICAL CLEARANCE FROM SANITARY LINE.
22. WHERE WATERLINE CROSSES UNDER SANITARY SEWER LINE, BOTH SEGMENTS MUST PASS A PRESSURE AND LEAKAGE TEST AS SPECIFIED IN AWWA C600 STANDARDS.
23. ALL VALVE BOXES SHALL BE ERECTED PLUMBED & BE FREE OF DEBRIS.