

UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES:

1. DARE COUNTY WATER DEPARTMENT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY CONSTRUCTION, TIE-INS, OR TESTING OF WATER LINES.

2. CONTRACTOR SHALL NOT OPERATE ANY EXISTING VALVES. CONTRACTOR SHALL COORDINATE WITH OWNER TO HAVE EXISTING VALVES OPENED/CLOSED.

3. THE UTILITY CONTRACTOR SHALL PROVIDE THE DARE COUNTY WATER DEPARTMENT WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE AND ASSOCIATED WATER SERVICES IN DARE COUNTY.

4. THE EXISTING 8" AC WATER LINE, ON THE SOUTH SIDE OF COLINGTON ROAD, IS TO REMAIN IN SERVICE DURING THE CONSTRUCTION OF THE PROPOSED 12" PVC WATER LINE. THE CONTRACTOR IS RESPONSIBLE TO PROTECT THE EXISTING WATER LINE AND TO MAINTAIN SERVICE DURING CONSTRUCTION.

5. AFTER COMPLETION OF THE PROPOSED 12" PVC WATER LINE, THE EXISTING 8" AC WATER LINE IS TO BE ABANDONED IN PLACE AND FILLED WITH GROUT FROM -L- STA. 41+83 TO -L- STA. 211+55.

6. WORK ON OR TO ASBESTOS CEMENT (AC) PIPE SHALL BE DONE IN ACCORDANCE WITH ALL STATE AND FEDERAL REGULATIONS. DISPOSAL OF AC PIPE SHALL BE AT A PERMITTED FACILITY AS REQUIRED BY NC LAW.

7. UNLESS OTHERWISE INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL SUSTAIN IN THEIR PLACES AND PROTECT FROM DIRECT OR INDIRECT DAMAGE ALL PIPES, CONDUIT, TRACKS, UTILITY POLES, GUIDE RAILS, GUARD POSTS, WALLS, FOUNDATIONS, BUILDINGS, AND OTHER STRUCTURES OR PROPERTY IN THE GROUND, OR THAT MAY APPEAR IN THE TRENCH. PIPES AND UNDERGROUND CONDUITS EXPOSED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE ADEQUATELY SUPPORTED ALONG THEIR ENTIRE EXPOSED LENGTHS.

8. UNLESS OTHERWISE NOTED, ALL PROPOSED WATER LINE SHALL BE 12" C900 PVC, PRESSURE CLASS DR 18 RATED FOR AT LEAST 235 PSI. PVC PIPE JOINTS SHALL BE PUSH ON TYPE HAVING BELLS MADE AS AN INTEGRAL PART OF THE PIPE.

9. WATER LINE PIPING JOINT DEFLECTION SHALL BE LIMITED TO 75% OF THE MANUFACTURER'S ALLOWABLE DEFLECTION.

10. ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT, CLASS 350, AWWA C110 OR AWWA C153.

11. ALL FITTING AND VALVE INSTALLATIONS ON TRANSMISSION AND DISTRIBUTION PIPING SHALL HAVE RESTRAINED JOINTS. REFER TO THE RESTRAINED JOINT DETAIL ON SHEET UC-3GFOR RESTRAINED JOINT LENGTHS.

12. CONNECTIONS TO EXISTING WATER LINE TO BE RESTRAINED BY THRUST COLLARS. SEE DETAIL A ON SHEET UC-3E.

13. ALL WATER MAIN PIPING SHALL BE INSTALLED WITH A MINIMUM DEPTH OF THREE (3) FEET OF COVER. INSTALLATION SHALL PROVIDE CONTINUOUS POSITIVE SLOPE TO AIR RELEASE VALVES OR FIRE HYDRANTS. FIRE HYDRANTS SHOWN ON THE DRAWINGS SHALL BE POSITIONED AT HIGH POINTS WHERE POSSIBLE. LOCATIONS AND NUMBER OF AIR RELEASE VALVES ARE SHOWN FOR BIDDING PURPOSES. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AIR RELEASE VALVES AT ALL HIGH POINTS, UNLESS THE HIGH POINT IS NEAR FIRE HYDRANT, BASED ON THE INSTALLED PROFILE INCLUDING ADDITIONAL HIGH POINTS CREATED BY THE CONTRACTOR.

14. MAINTAIN MINIMUM 18" VERTICAL SEPARATION BETWEEN TRAVERSE CROSSINGS OF THE PROPOSED WATER MAIN AND ALL SEWER LINES.

15. ALL VALVES ON WATER MAINS, INCLUDING HYDRANT LATERALS, SHALL OPEN IN THE LEFT DIRECTION THROUGHOUT THE ENTIRE SYSTEM.

16. OPEN ENDS OF PIPE SHALL BE SECURED WITH WATER TIGHT PLUGS AT THE END OF EACH WORK DAY TO PREVENT CONTAMINATION.

17. ALL WATER LINES ARE TO BE PRESSURE TESTED, CHLORINATED, AND CHECKED FOR BACTERIA IN ACCORDANCE WITH DARE COUNTY'S STANDARD SPECIFICATIONS AND NCDEQ REGULATIONS.

18. CONNECTIONS TO EXISTING WATER MAIN SHALL BE MADE AT TIMES OF LOW DEMANDS, AND COORDINATED WITH THE OWNER. ALL SUCH WORK SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER, AND THE CONTRACTOR SHALL GIVE AT LEAST 72 HOURS NOTICE TO ALL PARTIES CONCERNED PRIOR TO BEGINNING WORK. ALL WATER MAINS SHALL BE TESTED, CLEANED, AND DISINFECTED IN ACCORDANCE WITH DARE COUNTY'S STANDARD SPECIFICATIONS PRIOR TO CONNECTING NEW SERVICES OR EXISTING MAINS.

19. FOR ALL TIE-IN PIPING, CROSSINGS, OR VALVES, CONTRACTOR SHALL VERIFY ALL EXISTING PIPELINE ELEVATIONS, LOCATIONS, DIAMETERS, AND MATERIALS PRIOR TO SHOP DRAWING SUBMITTALS, NOTIFYING THE OWNER OF ANY CONFLICTS. CRITICAL TIE-INS SHALL REQUIRE COORDINATION MEETINGS PRIOR TO SCHEDULED SHUT DOWNS AND CONNECTIONS.

20. WATER AND SEWER LATERALS SERVING RESIDENCES AND BUSINESSES ARE SHOWN IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND RECORD ON RECORD DRAWINGS. CONTRACTOR IS WARNED THAT NOT ALL LATERALS OR SERVICES ARE SHOWN. CONTRACTOR IS TO PROTECT OR REPLACE LATERALS WHETHER SHOWN OR NOT.

21. LOCATIONS AND NUMBER OF WATER SERVICES ARE SHOWN FOR BIDDING PURPOSES. ACTUAL SERVICE INSTALLATION WILL BE DETERMINED IN THE FIELD EITHER BY THE GENERAL LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER. RECORD ALL SERVICE LOCATIONS ON THE RECORD DRAWINGS.

22. TRENCHLESS LONG SERVICE CONNECTIONS SHALL BE INSTALLED BY A NCDOT APPROVED TRENCHLESS METHOD. A 2" PVC ENCASEMENT PIPE (200 PSI) SHALL BE UTILIZED UNDER THE ROADWAY EXTENDING 5' BEYOND THE EDGE OF PAVEMENT ON EACH SIDE.

23. PROFILE DOES NOT SHOW EXISTING PARALLEL UTILITIES. ONLY KNOWN EXISTING UTILITY CROSSINGS ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

24. THE UTILITY CONTRACTOR SHALL PROVIDE THE DARE COUNTY WATER DEPARTMENT WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR THE PROJECT. THE RED LINE DRAWINGS SHALL IDENTIFY THE MATERIALS, PIPE SIZES AND DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S). THE RED LINE DRAWINGS SHALL CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS.

25. RETURN TO DARE COUNTY WATER DEPARTMENT ANY EXISTING VALVES OR HYDRANTS THAT ARE REMOVED OR REPLACED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE VALVES AND HYDRANTS FROM DIRECT OR INDIRECT DAMAGE DURING REMOVAL, TEMPORARY STORAGE, AND WHILE TRANSPORTING THEM TO THE OWNER.

26. UNLESS OTHERWISE NOTED, ALL EXISTING WATER LINE IS ASSUMED TO BE ASBESTOS CEMENT (AC). CONNECTIONS TO AC PIPE ARE TO BE MADE WITH A TRANSITION COUPLING MANUFACTURED BY ROMAC INDUSTRIES, E.J. PRESCOTT INC., DRESSER, OR APPROVED EQUAL. TRANSITION COUPLINGS ARE NOT REQUIRED AND SHOULD NOT BE INSTALLED AT CONNECTIONS WITH DUCTILE IRON OR PVC PIPE, UNLESS APPROVED BY THE ENGINEER AND OWNER.

27. DUCTILE IRON WATER LINE SHALL BE UTILIZED FOR CONCRETE ENCASEMENT, CONCRETE CRADLES, THRUST COLLARS, AND WHEN DEPTH OF COVER IS LESS THAN THREE (3) FEET. BELLS FOR PUSH-ON JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ANSI STANDARD A21.51, SUCH AS "FASTITE", "TYTON", "BELL-TITE", OR APPROVED EQUAL.

28. ALL VALVE LOCATIONS AND BLOW OFFS SHALL BE MARKED WITH A CONCRETE VALVE MARKER WITH A METAL COIN ON TOP SHOWING VALVE SIZE, DISTANCE, AND DIRECTION.

29. THE CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF EACH HYDRANT WITH DARE COUNTY.

PROJECT REFERENCE NO. R-5014	SHEET NO. UC-3A
DESIGNED BY: DMD	
DRAWN BY: DMD/MNG	
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