

UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES (CONTINUED):

- 16. ALL HYDRANTS, PROPOSED OR RELOCATED, SHALL BE INSTALLED 2 FEET BEHIND THE SIDEWALK, OR AS NOTED PER THE HYDRANT DETAIL, OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 17. EXISTING WATER SERVICE LINES BETWEEN THE EXISTING WATER LINE AND THE REMOVED WATER METER SHALL BE ABANDONED IN PLACE OR REMOVED AS NEEDED AS PER SECTION 1530 OF THE NCDOT SPECIFICATIONS OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 18. WATER SERVICE PIPE SHALL BE TYPE K SOFT COPPER CONFORMING TO ASTM B-88 OR CLASS 200 SP WATER SERVICE TUBING (C.T.S. - O.D.) MEETING THE REQUIREMENTS OF TYPE III, GRADE 3, CLASS C MATERIAL FOR POLYETHYLENE (PE) PLASTIC PIPE (SDR-PR), ASTM D-2239.
- 19. ALL WATER SERVICE FITTINGS, COMPRESSION JOINTS, END CONNECTORS, AND COUPLINGS SHALL BE IN ACCORDANCE WITH AWWA C800.
- 20. ALL WATER METER BOXES SHALL BE CAST IRON BODY WITH BITUMINOUS COATED, CAST IRON BASE, INNER BARREL, AND OUTER BARREL WITH 1-7/8" TOUCH-READ HOLE IN LID.
- 21. WATER METER BOXES SHALL NOT BE INSTALLED WITHIN PAVED OR SIDEWALK AREA UNLESS APPROVED BY UTILITY OWNER.
- 22. SANITARY GRAVITY SEWER PIPE SHALL BE EITHER PVC OR DUCTILE IRON PIPE.
- 23. ALL PVC SANITARY GRAVITY SEWER PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF FOUR (4) FEET. WHERE COVER IS LESS THAN FOUR (4) FEET, CONTRACTOR SHALL USE DUCTILE IRON PIPE UNLESS OTHERWISE DIRECTED BY THE UTILITY OWNER AND/OR THE RESIDENT ENGINEER.

- 24. PVC SANITARY GRAVITY SEWER PIPE 4-INCH TO 24-INCH SHALL ONLY BE USED ON DEPTHS OF COVER NOT TO EXCEED 22 FEET.
- 25. PVC PIPE SHALL HAVE PUSH-ON TYPE JOINTS CONFORMING TO ASTM D3212 OR D3139 WITH ELASTOMERIC GASKETS CONFORMING TO ASTM F477.
- 26. DUCTILE IRON PIPE FOR GRAVITY SEWER SHALL CONFORM TO AWWA C150 AND C151 WITH A MINIMUM PRESSURE CLASS OF 350 AND THICKNESS CLASS 50. PIPE SHALL BE BITUMINOUS COATED OUTSIDE AND CEMENT MORTAR LINED CONFORMING TO ANSI / AWWA STANDARD C104 / A21.4.
- 27. ALL SANITARY GRAVITY SEWER PIPE SHALL BE CONSTRUCTED IN A STRAIGHT LINE BETWEEN MANHOLES.
- 28. CONTRACTOR SHALL EMPLOY A PUMP AND HAUL METHOD TO BYPASS SECTIONS OF GRAVITY SEWER MAIN UNDER CONSTRUCTION. CONTRACOTR SHALL PUMP WASTE FROM A MANHOLE UPSTREAM OF THE CONSTRUCTION INTO A TANKER TRUCK AND REINTRODUCE THE WASTE BACK INTO THE SAME SYSTEM AT A MANHOLE DOWNSTREAM OF THE CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL ASPECTS OF THIS OPERATION WITH THE UTILITY OWNER PRIOR TO BEGINNING ANY SAID WORK. ALL TRANSPORTING OF WASTEWATER SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF NCDOT, THE LOCAL MUNICIPALITY, AND OTHER AGENCIES WITH JURISDICTION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS ASSOCIATED WITH PROPOSED PUMP AND HAUL OPERATIONS.

PROJECT REFERENCE NO. U-3330	SHEET NO. UC-3A
DESIGNED BY: GJB	
DRAWN BY: GJB	
CHECKED BY: KCZ	
APPROVED BY: KCZ	
REVISED:	
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UTILITY CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
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PROJECT QUANTITIES

ITEM NUMBER	DESCRIPTION	QUANTITY	
5319000000-E	CLASS B CONCRETE FOR ENCASING UTILITY LINES	2	CY
5325600000-E	6" WATER LINE	429	LF
5325800000-E	8" WATER LINE	302	LF
5326600000-E	16" WATER LINE	178	LF
5327000000-E	20" WATER LINE	1079	LF
5327400000-E	24" WATER LINE	1502	LF
5329000000-E	DUCTILE IRON WATER PIPE FITTINGS	25175	LBS
5540000000-E	6" VALVE	2	EA
5546000000-E	8" VALVE	1	EA
5559000000-E	20" VALVE	2	EA
5606000000-N	2" BLOW OFF	2	EA
5648000000-N	RELOCATE WATER METER	9	EA
5649000000-N	RECONNECT WATER METER	14	EA
5666000000-N	FIRE HYDRANT	2	EA
5672000000-N	RELOCATE FIRE HYDRANT	4	EA
5691300000-E	8" SANITARY GRAVITY SEWER	380	LF
5691400000-E	10" SANITARY GRAVITY SEWER	175	LF
5691900000-E	24" SANITARY GRAVITY SEWER	260	LF
5775000000-E	4' DIA UTILITY MANHOLE	3	EA
5776000000-E	5' DIA UTILITY MANHOLE	4	EA
5781000000-E	UTILITY MANHOLE WALL, 4' DIA	12.3	LF
5782000000-E	UTILITY MANHOLE WALL, 5' DIA	22.2	LF
5800000000-E	ABANDON 6" UTILITY PIPE	502	LF
5801000000-E	ABANDON 8" UTILITY PIPE	712	LF
5804000000-E	ABANDON 12" UTILITY PIPE	490	LF
5810000000-E	ABANDON 16" UTILITY PIPE	162	LF
5812000000-E	ABANDON 20" UTILITY PIPE	1063	LF
5813000000-E	ABANDON 24" UTILITY PIPE	1715	LF
5815500000-N	REMOVE FIRE HYDRANT	2	EA
5828000000-N	REMOVE UTILITY MANHOLE	1	EA
5835700000-E	16" ENCASEMENT PIPE	155	LF
5835800000-E	18" ENCASEMENT PIPE	65	LF
5836400000-E	36" ENCASEMENT PIPE	497	LF
5871900000-E	TRENCHLESS INSTALLATION OF 16" IN SOIL	78	LF
5871910000-E	TRENCHLESS INSTALLATION OF 16" NOT IN SOIL	77	LF
5872000000-E	TRENCHLESS INSTALLATION OF 18" IN SOIL	33	LF
5872010000-E	TRENCHLESS INSTALLATION OF 18" NOT IN SOIL	32	LF
5872100000-E	TRENCHLESS INSTALLATION OF 20" IN SOIL	323	LF
5872110000-E	TRENCHLESS INSTALLATION OF 20" NOT IN SOIL	323	LF
5872400000-E	TRENCHLESS INSTALLATION OF 36" IN SOIL	93	LF
5872410000-E	TRENCHLESS INSTALLATION OF 36" NOT IN SOIL	92	LF