

UTILITY CONSTRUCTION

PROJECT REFERENCE NO. <i>U-3440</i>		SHEET NO. <i>UC-3</i>	
DESIGNED BY: JDM		DRAWN BY: RCC	
CHECKED BY:			
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		6/29/2016	
UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151		UTILITY CONSTRUCTION PLANS ONLY	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012.
2. THE EXISTING WATER AND SEWER LINES BELONG TO THE CITY OF KANNAPOLIS OR THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY (WSACC).
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.
6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

CITY OF KANNAPOLIS REQUIREMENTS

1. ALL WATER MAIN AND SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR WASTEWATER COLLECTION AND WATER DISTRIBUTION FOR THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY (WSACC). CONTRACTOR SHALL HAVE A COPY OF THESE SPECIFICATIONS ON SITE AT ALL TIMES.
2. ALL EXISTING WATER AND SEWER MAINS ARE OWNED AND OPERATED BY THE CITY OF KANNAPOLIS. THE SITE INSPECTOR MUST BE CONTACTED AT LEAST 48 HOURS PRIOR TO MAKING ANY CONNECTION TO THE EXISTING SYSTEM.
3. SANITARY SEWER LATERALS AND WATER METER LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO RELOCATION DUE TO FIELD LOCATIONS. UNDER NO CIRCUMSTANCE WILL CLEANOUTS AND METERS BE LOCATED IN DRIVEWAYS.
4. WATER METERS SHALL MEET CITY OF KANNAPOLIS STANDARDS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING METER BOXES AND PURCHASING METERS. CONTRACTOR SHALL COORDINATE WITH SITE INSPECTOR TO HAVE WATER METERS DELIVERED TO THE CITY OF KANNAPOLIS.
5. ALL 12-INCH AND SMALLER WATER VALVES ON PROJECT SHALL BE RESILIENT-SEATED GATE VALVES UNLESS NOTED OTHERWISE. ALL 24-INCH WATER VALVES ON PROJECT SHALL BE HORIZONTAL BEVEL GEAR RESILIENT-SEATED GATE VALVES UNLESS NOTED OTHERWISE.
6. THE DEVELOPER WILL BE RESPONSIBLE FOR PAYING APPLICABLE WATER AND SEWER CONNECTION FEES BEFORE THE FINAL PLAT CAN BE RECORDED.
7. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES ASSURING THAT UTILITIES ARE LOCATED PRIOR TO COMMENCEMENT OF CONSTRUCTION. CALL NORTH CAROLINA 811 (1-800-632-4949) FOR UTILITY LOCATING SERVICES AS REQUIRED BY LAW PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR SEWER OVERFLOWS THAT OCCUR DUE TO ACTIVITIES INITIATED BY THEM AND SHALL BE RESPONSIBLE FOR, BUT NOT LIMITED TO, THE COSTS ASSOCIATED WITH PERFORMING REMEDIAL WORK OF/FOR ENVIRONMENTAL IMPACTS AND/OR THE PAYING OF FINES ASSESSED BY REGULATORY AGENCIES AND/OR THIRD PARTY CLAIMS.
9. UNLESS OTHERWISE NOTED, WATER MAINS SHALL HAVE A MINIMUM COVER OF 36-INCHES.
10. BEDDING FOR THE SEWER MAINS SHOULD BE WSACC CLASS B BEDDING.
11. UNLESS OTHERWISE NOTED, WATERLINES SHALL BE PVC C900 FOR 6"-12" DIAMETER AND PVC SDR 13.5 FOR 2'-4" DIAMETER PER WSACC STANDARDS.
12. UNLESS OTHERWISE NOTED, SEWER MAINS SHALL BE PVC SDR 35 PER WSACC STANDARDS.
13. LATERALS SHALL HAVE A NO-HUB CAP AND STAINLESS STEEL NO-HUB BAND AT THE CLEAN OUT.
 - WATERLINE CROSSING UNDER SANITARY SEWER (FOR ANY CLEARANCE).
 - 18-INCH VERTICAL FOR WATERLINE INSTALLED ABOVE SEWER LINE.
 - 10-FOOT HORIZONTAL SEPARATION FOR WATERLINE PARALLEL TO SEWER LINE (OR 18-INCH VERTICAL SEPARATION IN SEPARATE DITCHES).
 - FOR WATERLINE, 18-INCH CLEARANCE WITH STORM DRAINS.
 - FOR WATERLINE, 12-INCH CLEARANCE WITH GAS MAINS, TELEPHONE DUCTS, AND UNDERGROUND CABLES.
 - FOR SANITARY SEWER, 24-INCH CLEARANCE WITH STORM DRAINS.
14. INITIAL CONNECTION TO THE EXISTING WATER MAIN SHALL BE IN ACCORDANCE WITH THE CITY OF KANNAPOLIS DETAIL FOR A TEMPORARY BY-PASS CONNECTION FOR FILLING NEW WATER MAINS. THE TEMPORARY JUMPER CONNECTION SHALL BE REMOVED AND THE WATERLINE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER THE PROPOSED SYSTEM HAS BEEN PRESSURE TESTED, CHLORINATED AND ACCEPTED BY THE CITY OF KANNAPOLIS. NO OTHER CONNECTIONS WILL BE ALLOWED TO THE EXISTING SYSTEM UNTIL THE PROPOSED SYSTEM HAS BEEN ACCEPTED.
15. NOTIFY THE CITY OF ANY WORK BEING PERFORMED ON THE WEEKENDS. NO WORK REQUIRING TESTING OR OBSERVATION BY THE CITY WILL BE PERMITTED WITHOUT WRITTEN PERMISSION.
16. NOISE ORDINANCE: 7:00AM TO 9:00PM - WEEKDAYS, 8:00AM TO 9:00PM WEEKENDS.

CITY OF KANNAPOLIS GENERAL NOTES

1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN IN PROFILES ARE APPROXIMATE.
2. EXISTING UTILITIES ARE ILLUSTRATED FOR INFORMATION PURPOSES ONLY. NCDOT WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF UTILITY LOCATIONS, SIZES, DEPTHS OR THE COMPLETENESS OF UTILITY INFORMATION. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY INFORMATION.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INTERRUPTION OF WATER SERVICE WITH AFFECTED BUSINESSES AND RESIDENTS AT LEAST 48 HOURS PRIOR TO THE PLANNED INTERRUPTION OF SERVICE.
4. CONTRACTOR SHALL PHASE WATER UTILITY CONSTRUCTION TO MINIMIZE THE FREQUENCY AND DURATION OF WATER SERVICE INTERRUPTIONS.
5. CONTRACTOR SHALL PERFORM WATER LINE ACCEPTANCE TESTING IN ACCORDANCE WITH WSACC AND NCDENR (DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION) REQUIREMENTS.
6. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS WHOSE FACILITIES WILL BE AFFECTED TO DETERMINE UTILITY LOCATIONS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING WATER AND SANITARY SEWER SERVICES AND ENSURING THAT ALL EXISTING SERVICES WITHIN THE LIMITS OF THE PROPOSED WATER AND SANITARY SEWER RELOCATION ARE RECONNECTED TO THE NEW MAINS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
8. CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS. CONTRACTOR SHALL HOLD THE NCDOT HARMLESS FOR ANY THIRD PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS.
9. CONTRACTOR SHALL ADJUST VALVE BOXES, MANHOLES AND OTHER UTILITIES TO THE FINISHED GRADE AS NECESSARY.
10. THE CONTRACTOR SHALL NOTE THAT GRAPHICAL REPRESENTATIONS OF VALVE, TEE, HYDRANT, METER, ETC. LOCATIONS SHOWN IN PLANS ARE APPROXIMATE ONLY.
11. EXISTING WATER METERS SHALL BE RELOCATED AS SHOWN IN THE PLANS WHERE FEASIBLE - OTHERWISE, NEW METERS SHALL BE INSTALLED.
12. INDIVIDUAL WATER AND SEWER SERVICE CONNECTIONS ARE SHOWN APPROXIMATELY. FINAL SERVICE CONNECTION LOCATIONS SHALL BE DETERMINED IN THE FIELD AND PROVIDED ON AS-BUILT PLANS FOR RECORD. ALL WATER AND SEWER SERVICES SHALL BE INSTALLED PER THE CITY OF KANNAPOLIS STANDARDS AND NCDENR REQUIREMENTS.

SPECIAL REQUIREMENTS FOR ASBESTOS CEMENT PIPE

1. CONSTRUCTION ACTIVITIES WILL REQUIRE CUTTING, MODIFYING, REMOVAL AND DISPOSAL OF EXISTING ASBESTOS CEMENT (AC) PIPE.
2. WHERE RECORDS ARE AVAILABLE, EXISTING AC PIPE MATERIALS ARE LABELED ON THE PLANS. THE CONTRACTOR SHALL ANTICIPATE ENCOUNTERING AC PIPE THAT MAY NOT BE LABELED.
3. ALL EXISTING AC PIPE SHOWN "TO BE ABANDONED" SHALL BE ABANDONED IN PLACE UNLESS SPECIFICALLY LABELED TO BE REMOVED.
4. AC PIPE TO BE ABANDONED IN PLACE SHALL NOT BE CRUSHED BY MACHINERY. IF AC PIPE IS CRUSHED, THE SITE SHALL BE CONSIDERED A REGULATED ASBESTOS CONTAINING MATERIALS (RCM) SITE AND CONSIDERED AN ACTIVE WASTE DISPOSAL SITE. THE CRUSHED PIPE AND CONTAMINATED SOIL SHALL BE REMOVED, HANDLED, AND DISPOSED OF BY A LICENSED ASBESTOS REMOVAL CONTRACTOR FOLLOWING REQUIRED PROTOCOLS FOR HANDLING AND DISPOSAL OF ASBESTOS.
5. WHERE EXCAVATIONS OR GRADING REQUIRED FOR CONSTRUCTION EXPOSES EXISTING AC PIPES, THE WORK SITE SHALL BE MARKED WITH SIGNAGE WARNING OF ASBESTOS. EXPOSED PIPE, WHETHER INTACT OR NOT, SHALL BE HANDLED AND DISPOSED OF BY A LICENSED ASBESTOS REMOVAL CONTRACTOR.
6. ALL WORK REQUIRING HANDLING, REMOVAL OR DISPOSAL OF AC PIPE SHALL BE DONE IN STRICT ACCORDANCE WITH NCGS CHAPTER 130A PUBLIC HEALTH ARTICLE 19: ASBESTOS HAZARD MANAGEMENT PROGRAM.
7. WORKER TRAINING AND WORKPLACE RULES AND PROCEDURES SHALL MEET THE MINIMUM REQUIREMENTS OF NC AND FEDERAL OSHA RULES.
8. WHERE THE WORK REQUIRES CONNECTING INTO EXISTING AC PIPING, THE FOLLOWING REQUIREMENTS SHALL APPLY:
 - a. ALL PERSONNEL INVOLVED IN THE WORK SHALL RECEIVE TRAINING IN PROPER PROCEDURES FOR HANDLING AND WORKING WITH AC PIPE.
 - b. ALL PERSONNEL SHALL BE EQUIPPED WITH APPROVED PERSONAL PROTECTIVE EQUIPMENT (PPE) INCLUDING SHOES, CLOTHING AND BREATHING EQUIPMENT.
 - c. THE CONTRACTOR SHALL DESIGNATE A "PERSON IN CHARGE" WHO SHALL BE PRESENT AT ALL TIMES WHEN A PIPE IS BEING MODIFIED.
 - d. ALL PIPE CUTTING SHALL BE BY APPROVED "SNAP CUTTERS". THE USE OF SAWS OR GRINDERS EMPLOYING CARBIDE BLADES IS STRICTLY PROHIBITED.
 - e. COMPRESSED AIR SHALL NEVER BE USED TO BLOW OR CLEAN PIPE CUTS WHERE NEW PIPES ARE TO BE CONNECTED TO EXISTING AC PIPE.
 - f. MODIFIED WATER CONTAINING SURFACTANTS SHALL BE USED TO LUBRICATE AND WET ALL PIPE CUTS TO MINIMIZE PRODUCTION OF DUST.
 - g. WORK SITES SHALL BE ROPED OFF AND SIGNS WARNING OF ASBESTOS SHALL BE POSTED.
 - h. ALL SECTIONS OF AC PIPE CUT OUT FOR CONNECTIONS OF NEW PIPING SHALL BE REMOVED FROM THE EXCAVATION, DOUBLE BAGGED IN HEAVY PLASTIC WRAP, LABELED AS "ASBESTOS" AND PLACED IN A SECURE STORAGE AREA PENDING TRANSPORT AND DISPOSAL TO A LICENSED ASBESTOS DISPOSAL LANDFILL.
 - i. WHERE THE WORK REQUIRES PREPARING THE CUT END OF AN EXISTING AC PIPE FOR CONNECTION OF A NEW PIPE, ONLY TOOLS APPROVED FOR THIS WORK SHALL BE USED. PIPE SHALL BE CONTINUOUSLY LUBRICATED WITH "MODIFIED WATER" TO LIMIT DUST.
 - j. CLEAN UP AT WORK SITES SHALL NEVER EMPLOY COMPRESSED AIR, BLOWERS, MECHANICAL BROOMS OR OTHER DEVICES THAT WILL PRODUCE DUST.
 - k. AT THE END OF EACH WORK DAY WHERE PIPE IS CUT, HANDLED, MODIFIED OR REMOVED, ALL WORKERS' PERSONAL PROTECTION EQUIPMENT (PPE) SHALL BE STORED AT A SUITABLE LOCATION FOR CLEANING, DECONTAMINATION, DISPOSAL, OR FUTURE USE. WORKERS INVOLVED IN CUTTING, REMOVAL AND DISPOSAL OF AC PIPE SHALL NOT BE ALLOWED TO REMOVE PPE FROM THE WORK SITE.

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