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PROJECT REFERENCE NO.	SHEET NO.
R-5771	UC-3

DESIGNED BY: GJB
DRAWN BY: GJB
CHECKED BY: KCZ
APPROVED BY: KCZ
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

HWY DIVISION 14 - DIST. 1
PHONE:(828)891-7911
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NORTH CAROLINA PROFESSIONAL SEAL ENGINEER KEVIN C. ZAK 23611

DocuSigned by: SEAL
Kevin C. Zak
3/28/2017

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

M A Engineering Consultants, Inc.
598 East Chatham Street - Suite 137
Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221
NC License: F-0160

DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

UTILITY CONSTRUCTION

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 LINE UTILITIES BELONG TO THE CITY OF ASHEVILLE.

CONTACT: SONIA SALGADO, PE
PHONE: 828-259-5534

THE EXISTING SANITARY GRAVITY SEWER UTILITIES BELONG TO HENDERSON COUNTY.

CONTACT: GREG WIGGINS
PHONE: 828-694-6608

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 ENVIRONMENTAL HEALTH.

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 OPPROTUNITY 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 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 ADDITONAL 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.

10. CONTRACTOR SHALL NOT OPERATE ANY VALVES ON THE EXISTING UTILITY SYSTEMS. CONTRACTOR SHALL CONTACT THE UTILITY OWNER TO CONDUCT STRATEGIC OPERATION OF VALVES FOR SERVICE INTERRUPTION IN ORDER TO PERFORM SPECIFIC WORK.

PROJECT SPECIFIC NOTES:

1. PROPOSED 12" STEEL ENCASEMENT PIPE IS A BETTERMENT FOR NCSU AGRICULTURE. CONTRACTOR SHALL ONLY INSTALL THE ENCASEMENT PIPE AND SEAL THE ENDS WITH A REMOVABLE PLUG. NCSU SHALL INSTALL WATER LINE AT A FUTURE DATE.

2. PROPOSED 24" STEEL ENCASEMENT PIPE IS A BETTERMENT FOR THE CITY OF ASHEVILLE. CONTRACTOR SHALL ONLY INSTALL THE ENCASEMENT PIPE AND SEAL THE ENDS WITH A REMOVABLE PLUG. THE CITY OF ASHEVILLE SHALL INSTALL WATER LINE AT A FUTURE DATE.

3. THE CITY OF ASHEVILLE SHALL SUPPLY THE 24" ENCASEMENT PIPE AND DELIVER IT TO THE PROJECT SITE. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ASHEVILLE CONTACT FOR DELIVERY.

4. PROPOSED 12" STEEL ENCASEMENT PIPE SHALL BE 12.75" OUTSIDE DIAMETER WITH 0.250" WALL THICKNESS.

5. PROPOSED 24" STEEL ENCASEMENT PIPE SHALL BE 24.00" OUTSIDE DIAMETER WITH 0.250" WALL THICKNESS.

6. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, STREAM, CREEK, WETLANDS, OR BUFFER ZONES.

PROJECT QUANTITIES

ITEM NUMBER	DESCRIPTION	QUANTITY	
5781000000-E	UTILITY MANHOLE WALL, 4' DIA.	6.2	LF
5835600000-E	12" ENCASEMENT PIPE	124	LF
5836000000-E	24" ENCASEMENT PIPE	84	LF
5872200000-E	TRENCHLESS INSTALLATION OF 24" IN SOIL	21	LF
5872210000-E	TRENCHLESS INSTALLATION OF 24" NOT IN SOIL	21	LF

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