DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. SHEET NO. I - 5000 DESIGNED BY: BCH DRAWN BY: BCH CHECKED BY: JLT APPROVED BY: JES REVISED: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151 DC - 3 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 11/7/2016 UTILITY CONSTRUCTION PLANS ONLY

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 UTILITIES BELONG TO THE CITY OF GASTONIA.
- 3. ALL WATER LINES TO BE INSTALLED
 WITHIN COMPLIANCE OF THE RULES AND
 REGULATIONS OF THE NORTH CAROLINA
 DEPARTMENT OF ENVIRONMENTAL QUALITY,
 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 QUALITY, 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 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:

- 1. ALL PROPOSED WATER LINE AND FORCE MAIN SEWER LINE 8-INCHES TRHOUGH 24-INCHES IN DIAMETER SHALL BE DUCTILE IRON THICKNESS CLASS 51.
- 2. ALL WATER LINE FITTINGS 8-INCHES THROUGH 24- INCHES IN DIAMETER, SHALL BE PRESSURE CLASS 350 DUCTILE IRON RESTRAINED JOINT IN ACCORDANCE WITH ANSI A21.10 / AWWA C110 AND ANSI A21.4 / AWWA C104.
- 3. ALL PROPOSED GRAVITY SEWER LINE 8-INCHES THROUGH 24-INCHES SHALL BE DUCTILE IRON THICKNESS CLASS 51.
- 4. NITRILE GASKETS SHALL BE USED IF PETROLEUM CONTAMINATED SOILS ARE ENCOUNTERED DURING CONSTRUCTION.
- 5. ALL VALVES 12" AND UNDER SHALL BE RESILIENT WEDGE GATE VALVES.
- 6. ALL VALVES 14" AND LARGER SHALL BE BUTTERFLY VALVES.
- 7. ALL ENCASEMENT PIPES SHALL BE 1/2-INCH THICK STEEL.
- 8. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
- 9. PROPOSED WATER LINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT FOR 10' EACH SIDE OF GAS LINE CROSSINGS AND WHERE THE WATER LINE AND GAS LINE ARE WITHIN 10 FEET OF EACH OTHER.
- 10. CONTRACTOR SHALL RETURN ALL REMOVED WATER METERS TO THE UTILITY OWNER.
- 11. PROVIDE THRUST RESTRAINT ON THE EXISTING WATER LINE WHERE TIE-INS ARE MADE AS NECESSARY.
- 12. 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.

- UTILITY CONSTRUCTION
- 13. ANY BENDS OF PVC WATER PIPE NOT SPECIFICALLY CALLED OUT WITH A 90, 45, 22.5, OR 11.25 DEGREE BEND FITTING, SHALL BE CONSTRUCTED BY A RADIAL BEND OF THE PIPE AS NOTED ON THE PLANS OR IN ACCORDANCE WITH PIPE MANUFACTURER'S SPECIFICATIONS (WHICHEVER IS MORE STRINGENT) OR A COMBINATION OF BEND FITTINGS AND A RADIAL BEND OF THE PIPE. DEFLECTION OF THE PIPE JOINTS ON PVC PIPE MATERIAL IS NOT AN ACCEPTABLE METHOD OF PIPE BENDING.
- 14. THE CONTRACTOR SHALL COORDINATE WITH THE DIVISION CONSTRUCTION ENGINEER AND THE CITY OF GASTONIA DURING CONSTRUCTION TO ENSURE ACCESS TO EXISTING AND PROPOSED SANITARY SEWER MANHOLES IS NOT RESTRICTED UPON COMPLETION OF THE PROJECT. THIS MAY INCLUDE ADJUSTING GUARDRAIL POST SPACING AT PREDETERMINED LOCATIONS.

2016 poiltann 11 potes 11603 & details 116(03a-03c) psh dan