UTILITY CONSTRUCTION

PROJECT REFERENCE NO. PREPARED IN THE OFFICE OF: U-2729 Wooten DESIGNED BY: JPM DRAWN BY: BTH CHECKED BY: JPM APPROVED BY: JCG VERTICAL SCALE HORIZONTAL SCALE WATER LINE AND SEWER LINE

CONSTRUCTION

SHOWN ON THIS SHEET

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SHEET NO. UC-3

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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 2018.
- 2. THE EXISTING WATER & SEWER UTILITIES BELONG TO CITY OF WINSTON-SALEM.
- 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 AND 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 DEPARTMENT. 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. CONTRACTOR SHALL 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 WITHOUT ENDANGERING THE UTILITY SERVICE AND IN ACCORDANCE WITH UTILITY OWNER'S REQUIREMENTS. ALL EXISTING WATER MAINS MUST REMAIN ACTIVE AT ALL TIMES DURING CONSTRUCTION. EXISTING WATER MAINS SHALL NOT BE TAKEN OUT OF SERVICE UNTIL NEW MAINS HAVE BEEN TESTED, DISINFECTED AND CERTIFIED. ALL SEWER MAINS AND SERVICES MUST REMAIN ACTIVE DURING CONSTRUCTION. CONTRACTOR SHALL BYPASS PUMP OR UTILIZE OTHER MEANS TO ENSURE NO SANITARY SEWER OVERFLOWS OCCUR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ADEQUATE SEQUENCING AND BYPASS PUMPING.
- 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. NEW WATER MAIN AND APPURTENANCES MUST BE CONSTRUCTED, TESTED, APPROVED FOR SERVICE PRIOR TO EXISTING WATER MAIN BEING TAKEN OUT OF SERVICE.
- 2. NEW WATER MAIN AND SANITARY SEWER MAY BE CONSTRUCTED IN PHASES TO FACILITATE ROADWAY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION OF A PHASING PLAN CLEARLY IDENTIFYING EACH PHASE AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. EACH COMPLETED PHASE MUST RECEIVE NCDEQ FINAL APPROVAL PRIOR TO BEING PLACED INTO SERVICE.
- 3. ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF THE CITY OF WINSTON-SALEM STANDARD SPECIFICATIONS FOR WATER & SEWER LINE CONSTRUCTION.
- 4. UNLESS OTHERWISE NOTED: PIPE FOR PROPOSED WATER MAINS 4" THRU 16" DIAMATER SHALL BE DUCTILE IRON. PC 350. PIPE FOR PROPOSED WATER MAINS 18" THRU 36" DIAMATER SHALL BE DUCTILE IRON. PC 250. PIPE FOR PROPOSED SANITARY SEWER SHALL BE DUCTILE IRON, MAXIMUM THICKNESS CLASS 50.
- 5. WATER LINE VALVES SHALL BE RESILIENT-SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509 OR ANSI/AWWA C515, AND SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI.
- 6. THE INTERIOR OF PROPOSED SANITARY SEWER LINES SHALL BE LINED WITH A MINIMUM OF 40 MILS OF CORROSION-RESISTANT CERAMIC EPOXY COATING AS DESCRIBED IN THE UC PROJECT SPECIAL PROVISIONS. ALL BELLS AND SPIGOTS FOR SANITARY SEWER PIPE MUST BE LINED WITH A MINIMUM OF 8 MILS OF JOINT COMPOUND.

- 7. TEMPORARY BYPASS PUMPING OF FLOW IN SOME EXISTING SEWER LINES WILL BE REQUIRED WHEN INSTALLING NEW SEWER LINES IN THE SAME HORIZONTAL ALIGNMENT AS THE EXISTING SEWER LINES, AND WHEN TYING PROPOSED MANHOLES INTO EXISTING SEWER LINES. SEE DIVISION 15, SECTION 1520-3-A-1 OF THE NCDOT STANDARD SPECIFICATIONS. COSTS FOR TEMPORARY BYPASS PUMPING SHALL BE INCIDENTAL TO THE CONTRACT.
- 8. THE CONTRACTOR SHALL COORDINATE WITH THE WINSTON-SALEM / FORSYTH COUNTY UTILITIES STAFF CONCERNING THE TIMING AND SCHEDULE OF REQUIRED SHUT-DOWNS OF ANY EXISTING WATER OR SEWER MAINS.
- 9. SEWER SERVICE CLEANOUTS ARE BEING RELOCATED TO THE PROPOSED R/W OR PUE. THE ALIGNMENT OF THE EXISTING SEWER SERVICE IS NOT KNOWN, SO CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE PROPOSED CLEANOUT ON THE EXISTING SEWER SERVICE LINE AND REPLACING THE SERVICE LINE FROM THAT POINT BACK TO WHERE THE EXISTING CLEANOUT IS LOCATED. NOTATIONS ON THE DRAWINGS REFLECT ESTIMATED LENGTHS OF SERVICE LINE AND ASSUMED LOCATION OF SEWER SERVICE.
- 10. THE TOPS OF ALL VALVE BOXES AND MANHOLES REMAINING IN PAVED AREAS SHALL BE ADJUSTED TO MATCH FINAL PAVEMENT ELEVATION. THESE ADJUSTMENTS SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM ONLY ONCE EVEN IF THE ELEVATION MUST BE ADJUSTED MULTIPLE TIMES DURING THE PROJECT.
- 11. WHERE EXTENDING SEWER SERVICE, REMOVE EXISTING CLEAN OUT AND CONNECT PROP. SANITARY SEWER SERVICE LINE TO EXISTING SERVICE. EXTEND TO NOTED LOCATION OF PROP. SSCO AND CONNECT TO EXISTING SEWER SERVICE TOWARD BUILDING.
- 12. WHERE EXTENDING WATER SERVICE. REMOVE EXISTING METER COMPONENTS AND BACKFLOW PREVENTER (WHERE APPLICABLE). CONNECT NEW SERVICE LINE TO EXISTING SERVICE LINE AND EXTEND TO RELOCATED WATER METER AND BACKFLOW PREVENTER. CONNECT TO EXISTING WATER SERVICE TOWARD BUILDING.