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 UTILITIES BELONG TO CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 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.
- 10. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
- 11.WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.

- 12. MAINTAIN 18" MIN. VERTICAL
 SEPARATION AT ALL WATERMAIN & RCP STORM
 DRAIN CROSSINGS; MAINTAIN 24" MIN.
 VERTICAL SEPARATION AT ALL SANITARY
 SEWER SEWER & RCP STORM DRAIN
 CROSSINGS. WHERE ADEQUATE SEPARATIONS
 CANNOT BE ACHIEVED, SPECIFY DIP
 MATERIALS & A CONCRETE CRADLE HAVING 6"
 MIN CLEARANCE AS SHOWN IN THE STANDARD
 DETAIL.
- 13.ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- 14.ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- 15.CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 16. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.

PROJECT SPECIFIC NOTES:

- 1. PROPOSED WATER LINE SHALL BE DIP OF THE SAME PRESSURE CLASS AND THICKNESS AS THE EXISTING WATER LINE.
- 2. ALL PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED WITH RESTRAINED JOINTS. IN ADDITION, THRUST BLOCKING SHALL BE PROVIDED AS SHOWN IN THE STANDARD DETAILS.
- 3. CONTRACTOR SHALL ENSURE THAT THE CONNECTION BETWEEN EXISTING AND PROPOSED WATER LINE SHALL BE AT TIMES MOST CONVENIENT TO THE PUBLIC AND UTILITY OWNER.
- 4. CONTRACTOR SHALL COORDINATE WITH THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT STAFF 72 HOURS PRIOR TO THE SHUTDOWN OF THE EXISTING WATER LINE.

PROJECT REFERENCE NO. SHEET NO.

U-5826

DESIGNED BY: DK

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APPROVED BY:

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- 5. CONTRACTOR SHALL REMOVE EXISTING 16" WATER LINE AS NECESSARY TO MAKE CONNECTION WITH THE NEW WATERLINE.
- 6. CONTRACTOR SHALL PLACE FOUNDATION CONDITIONING MATERIALS AND GEOTEXTILE IN ALL PROPOSED WATERLINE TRENCHES.
- 7. CONTRACTOR AND RALEIGH WATER WILL EXCHANGE ALL NECESSARY CONTACTS / PHONE NUMBERS AT THE PRE CONSTRUCTION CONFERENCE
- 8. RALEIGH WATER WILL STAGE A VALVE CREW AT THE EM JOHNSON WATER TREATMENT PLANT DURING CONSTRUCTION TO RESPOND TO CONTRACTOR REQUESTS AS NECESSARY.
- 9. UPON EXPOSING ANY OF RALEIGH WATER'S ASSETS, CONTRACTOR SHALL IMMEDIATELY NOTIFY RALEIGH WATER ASSET MANAGEMENT TO PERFORM CONDITION ASSESSMENT OF THE ASSET WHILE EXPOSED.
- 10. CONTRACTOR SHALL PROVIDE A 2-DAY NOTIFICATION TO RALEIGH WATER PRIOR TO ANYTIME CONTRACTOR WILL EXCAVATE WITHIN 10 FEET OF ANY RALEIGH WATER MAIN.
- 11. ALL NEW WATER INFRASTRUCTURE SHALL BE IN COMPLIANCE WITH THE CITY OF RALEIGH PUBLIC UTILITIES HANDBOOK.

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