

REVISIONS

GENERAL:

- 1. ALL 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. SECTIONS 3, 4, 7 AND 8 OF THE GREENVILLE UTILITIES COMMISSION (GUC) WATER AND WASTEWATER DESIGN MANUAL SHALL BE ADHERED TO WITH RESPECT TO MATERIALS AND SPECIFIC TECHNICAL REQUIREMENTS.
3. ALL EQUIPMENT AND MATERIALS SPECIFIED BY MANUFACTURER'S NAME SHALL BE CONSIDERED AS THE QUALITY STANDARD, AND APPROVED EQUALS FOR EACH WILL BE CONSIDERED.
4. THE EVALUATION OF AN APPROVED EQUAL SHALL BE THE RESPONSIBILITY OF THE ENGINEER.

DEWATERING (NON-CONTAMINATED GROUNDWATER):

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AS REQUIRED TO ACCOMMODATE UTILITIES INSTALLATION.
2. DEWATERING OF NON-CONTAMINATED GROUNDWATER SHALL BE INCIDENTAL TO THE PROJECT.
3. WATER PUMPED DURING DEWATERING OPERATIONS SHALL BE CONFINED TO EXISTING STORM DRAINAGE PIPES AND INLETS.
4. WATER SHALL NOT BE ALLOWED TO FLOW ACROSS PRIVATE PROPERTY.
5. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS REQUIRED FOR DEWATERING OPERATIONS.
6. ENGINEER MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY.

DEWATERING (NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED GROUNDWATER):

- 1. NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED GROUNDWATERS ARE IDENTIFIED ON CORRESPONDING PLAN SHEETS AND AT THE DIRECTION OF NCDOT'S SPECIALTY CONTRACTOR/CONSULTANT AS DESCRIBED BY THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING OF NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED GROUNDWATERS AS REQUIRED TO ACCOMMODATE UTILITIES INSTALLATION.
3. THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS SHALL GOVERN THE CONTRACTOR'S RESPONSIBILITIES FOR HANDLING NON-HAZARDOUS AND/OR HAZARDOUS CONTAMINATED GROUNDWATER.
4. DEWATERING OF NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED GROUNDWATER SHALL BE INCIDENTAL TO THE PROJECT.

NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED SOILS:

- 1. NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED SOILS ARE IDENTIFIED ON CORRESPONDING PLAN SHEETS AS DESCRIBED BY THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED SOILS AS REQUIRED TO ACCOMMODATE UTILITIES INSTALLATION.
3. THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS SHALL GOVERN THE CONTRACTOR'S RESPONSIBILITIES FOR HANDLING NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED SOILS.
4. EXCAVATION OF NON-HAZARDOUS AND /OR HAZARDOUS CONTAMINATED SOILS SHALL BE INCIDENTAL TO THE PROJECT.
5. PAYMENT FOR STOCKPILING OF NON-HAZARDOUS CONTAMINATED SOIL SHALL BE THE ACTUAL NUMBER OF CUBIC YARDS OF MATERIAL AS MEASURED AND DESCRIBED BY THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS.
6. PAYMENT FOR LOADING OF HAZARDOUS CONTAMINATED SOIL SHALL BE THE ACTUAL NUMBER OF CUBIC YARDS OF MATERIAL AS MEASURED AND DESCRIBED BY THE GEOENVIRONMENTAL PROJECT SPECIAL PROVISIONS.

HAZARDOUS CONTAMINATED MATERIALS:

- 1. EXISTING ASBESTOS CEMENT PIPE MATERIALS ARE IDENTIFIED ON THE DRAWINGS WHICH WILL REQUIRE PROPER REMOVAL AND DISPOSAL.
2. CONTRACTOR SHALL COMPLY WITH NCDOT STANDARD SPECIFICATIONS SECTION 107-25 HAZARDOUS CONTAMINATED AND TOXIC MATERIALS FOR HANDLING, DISPOSAL AND PAYMENT FOR SUCH MATERIALS.

UTILITY CONFLICTS:

- 1. IN GENERAL, IT IS THE INTENT OF THE DESIGN DOCUMENTS TO MINIMIZE HORIZONTAL AND VERTICAL CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES, EXISTING AND PROPOSED STORM DRAINAGE AND OTHER EXISTING AND PROPOSED ROADWAY ELEMENTS TO THE EXTENT PRACTICAL.
2. CONTRACTOR SHALL PROSPECT FOR EXISTING WATER AND SEWER SERVICES IN ADVANCE OF DRAINAGE AND UTILITY INSTALLATION TO IDENTIFY AND MINIMIZE POTENTIAL CONFLICTS.
3. CONTRACTOR SHALL PROSPECT TO VERIFY SIZE AND LOCATION OF EXISTING UTILITIES AT LEAST 200 FT AHEAD OF INSTALLED PIPING, SUCH THAT ADEQUATE DISTANCE IS ALLOWED FOR HORIZONTAL OR VERTICAL DEVIATION OF PIPING AT LOCATIONS OF POTENTIAL CONFLICT.
4. NOTIFY THE ENGINEER IMMEDIATELY IF A POTENTIAL CONFLICT ARISES BETWEEN THE EXISTING AND PROPOSED UTILITIES, EXISTING AND PROPOSED STORM DRAINAGE, EXISTING OR PROPOSED ROADWAY ELEMENTS.
5. IN THE EVENT OF UNDERGROUND UTILITIES CONFLICTS, CONTRACTOR MAY ELECT TO PROPOSE AN ALTERNATE ALIGNMENT FOR ENGINEER AND GUC APPROVAL. THE ALTERNATE SHALL RESULT IN NO INCREASED COST TO THE OWNER.
6. CONFLICT BOXES SHALL BE USED AS A LAST RESORT FOR UNAVOIDABLE VERTICAL CONFLICTS BETWEEN SANITARY SEWER MAINS /SANITARY SEWER SERVICES AND STORM DRAINAGE PIPES. DUCTILE IRON CARRIER PIPE SHALL BE INSTALLED THROUGH STEEL CASINGS WITHIN THE STORM DRAIN CONFLICT BOX. THE FOLLOWING MINIMUM SIZE CASINGS ARE REQUIRED:

Table with 2 columns: DIP CARRIER and STEEL CASING. Rows show 4", 6", 8", and 10" dip carriers and their corresponding steel casing sizes (8", 12", 16", 18").

UTILITY ADJUSTMENT:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENT OF EXISTING AND PROPOSED UTILITIES TO FINAL GRADE WITHIN THE PROJECT LIMITS.
2. UTILITY APPURTENANCES THAT MAY REQUIRE ADJUSTMENT INCLUDE SANITARY SEWER MANHOLES, SEWER CLEAN OUTS, VALVE BOXES, WATER METER BOXES, FIRE HYDRANTS, ETC.
3. FINAL UTILITY ELEVATION SHALL MATCH THE PROPOSED FINISHED GRADE OF ROADWAY, CURB & GUTTER, SIDEWALK AND SHOULDERS.
4. INSTALL UTILITIES TO READILY ACCOMMODATE FINAL ADJUSTMENT.
5. NO MORE THAN TWO (2) GRADE RINGS (4" IN HEIGHT) WILL BE ALLOWED ON A MANHOLE.
6. CLEAN OUTS LOCATED IN TRAFFIC OR PAVED AREAS SHALL BE INSTALLED WITH A SEWER CLEANOUT BOX SET TO FINISHED GRADE.
7. VALVE BOXES SHALL BE INSTALLED SO THAT A MINIMUM OF 4" OF UPWARD AND 4" OF DOWNWARD (TOTAL OF 8") VERTICAL ADJUSTMENT IS AVAILABLE WITHOUT DISTURBING THE BASE OR REMOVING ANY BOX SECTION.
8. VALVE BOX EXTENSION SHALL BE PROVIDED AS REQUIRED BASED ON FINAL VALVE DEPTH.
9. WATER METER BOXES SHALL BE SET FLUSH WITH FINISHED GRADE AT THE STREET RIGHT OF WAY LINE.
10. WATER METER BOXES SHALL NOT BE LOCATED WITHIN DRIVEWAYS, SIDEWALKS, OR ANY PAVED AREA SUBJECT TO VEHICULAR TRAFFIC.
11. WATER METER BOXES SHALL NOT BE INSTALLED WITHIN A DITCH SLOPE.
12. FIRE HYDRANTS SHALL BE SET SUCH THAT THE PUMPER NOZZLE CENTERLINE IS A MINIMUM OF 18" AND A MAXIMUM OF 24" ABOVE FINISHED GRADE.

BYPASS PUMPING:

- 1. CONTRACTOR IS RESPONSIBLE FOR FURNISHING BYPASS PUMPING FOR EXISTING SANITARY SEWER MAINS OR SERVICES AS NECESSARY DURING CONSTRUCTION. CONTRACTOR SHALL GIVE GUC A MINIMUM OF 48 HOURS NOTICE PRIOR TO BEGINNING SUCH CONSTRUCTION.
2. TRAFFIC CONTROL MEASURES, ROAD RAMPS, ETC. SHALL BE PROVIDED AS REQUIRED TO ACCOMMODATE BYPASS OPERATIONS.

JOINT RESTRAINT WATER MAINS:

- 1. PROVIDE APPROVED RESTRAINED JOINT PIPE OR DEVICES AT EACH HORIZONTAL AND VERTICAL CHANGE IN DIRECTION FOR NEW WATER MAINS.
2. ADHERE TO THE REQUIREMENTS OF THE GUC STANDARD DESIGN MANUAL SECTION 7.2.6 FOR MATERIAL AND EQUIPMENT REQUIREMENTS AND SECTION 3.4.6.9.1 FOR RESTRAINED LENGTH REQUIREMENTS.
3. THRUST BLOCKING WILL BE REQUIRED AT THE INTERFACE OF NEW PIPING TO EXISTING PIPING SYSTEMS

CONSTRUCTION SEQUENCE:

A) GENERAL:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR PLANNING AND COORDINATING CONSTRUCTION ACTIVITIES AND SEQUENCES TO FACILITATE TIMELY AND SIMULTANEOUS PROGRESSION OF OTHER PARTS OF THE WORK WHILE MINIMIZING CUSTOMER SERVICE DISRUPTIONS.
2. CONTRACTOR SHALL SCHEDULE AND COORDINATE UTILITY MAIN RELOCATION TO ACCOMMODATE INSTALLATION OF DRAINAGE AND ROADWAY CONSTRUCTION.
3. IN GENERAL, IT IS THE INTENT OF THE DESIGN DOCUMENTS THAT EXISTING UTILITY MAINS WILL BE LEFT IN SERVICE WHILE THE NEW UTILITY MAINS ARE INSTALLED TO PROVIDE UNINTERRUPTED SERVICE TO EXISTING UTILITY CUSTOMERS.
4. PROVIDE 48 HOURS NOTICE TO GUC FOR CUSTOMER NOTIFICATION PRIOR TO INITIATING CONSTRUCTION ACTIVITIES THAT MAY NEGATIVELY IMPACT CUSTOMER'S NORMAL LEVEL OF SERVICE.
5. THE FOLLOWING SEQUENCES ARE SUGGESTED; HOWEVER, THE CONTRACTOR MAY SUGGEST ALTERNATES, SUBJECT TO APPROVAL BY THE ENGINEER AND GUC.
6. INSTALLATION OF SANITARY SEWER IMPROVEMENTS BENEATH CSX RAILROAD MUST BE ACCOMPLISHED PRIOR TO INSTALLATION OF WATER IMPROVEMENTS IN ORDER TO ACCOMMODATE JACK & BORE OPERATIONS AND TO UTILIZE WATER CASING TO TEMPORARILY ROUTE SANITARY SEWER BYPASS PUMP DISCHARGE HOSE BENEATH RAILROAD.

B) SANITARY SEWER:

- 7. MOST OF THE EXISTING SANITARY SEWER MAINS WILL REMAIN IN PERMANENT SERVICE.
8. REMOVE OR ABANDON EXISTING SEWER MAINS, MANHOLES AND SERVICES DESIGNATED TO BE REMOVED /ABANDONED AS INDICATED ON THE DRAWINGS AND IN "UTILITIES ABANDONMENT /REMOVAL" BELOW.
9. ISOLATE 8" AND 12" WATER MAINS ON GRANDE AVENUE NEAR ITS INTERSECTION WITH DICKINSON AVENUE AND CSX RAILROAD.
10. CUT, PLUG, REMOVE AND /OR ABANDON 8" AND 12" MAINS ON GRANDE AVENUE AS REQUIRED TO ACCOMMODATE BORE RIG AND ENTRY PIT ON THE NORTHWEST SIDE OF CSX RAILROAD.
11. BYPASS PUMP SANITARY SEWER FROM EXISTING MH-48 TO EXISTING MH-50.
12. CUT, REMOVE AND TEMPORARILY PLUG EXISTING SEWER MAIN BETWEEN MH-48 AND MH-50 AT SOUTHEAST END OF WATER AND SEWER CASING PIPES.
13. EXCAVATE EXIT PIT ON SOUTHEAST SIDE OF CSX RAILROAD IN DICKINSON AVENUE.
14. INSTALL NEW WATER CASING BENEATH CSX RAILROAD BY JACK AND BORE FROM WEST TO EAST PER REQUIREMENTS OF THE ENCRoACHMENT AGREEMENT.
15. TEMPORARILY PLUG DOWNSTREAM SEWER AT EXISTING MANHOLE LOCATED AT CHESTNUT STREET AND GRANDE AVENUE.
16. BYPASS PUMP SANITARY SEWER FROM CHESTNUT/GRANDE MANHOLE TO MH-48 OR MH-50.
17. INSTALL NEW SEWER CASING BENEATH CSX RAILROAD BY JACK AND BORE FROM WEST TO EAST PER REQUIREMENTS OF THE ENCRoACHMENT AGREEMENT.
18. CUT-IN AND SET NEW MANHOLE AND REPLACE SEWER MAINS ON DOWNSTREAM SIDE OF CSX RAILROAD.
19. INSTALL NEW SANITARY SEWER CARRIER PIPE THROUGH CASING AND CONNECT TO NEW DOWNSTREAM MANHOLE.
20. CUT-IN AND SET NEW MANHOLE LOCATED UPSTREAM OF CSX RAILROAD.
21. TIE IN EXISTING UPSTREAM SEWER MAIN AND NEW DOWNSTREAM SEWER MAIN TO NEW UPSTREAM MANHOLE ON NORTHWEST SIDE OF CSX RAILROAD.
22. REMOVE TEMPORARY SANITARY SEWER PLUGS AND BYPASS PUMPING EQUIPMENT.
23. RESTORE GRAVITY SEWER FLOW THROUGH NEW MANHOLES AND MAIN.
24. RESTORE POTABLE WATER SUPPLY TO EXISTING MAINS ON GRANDE AVENUE AND DICKINSON AVENUE AS INDICATED BELOW.

C) WATER:

- 25. INSTALL WL-1, WL-2, AND WL-3, INCLUDING NEW TAPPING TEES & VALVES AND LATERAL TEES & VALVES, CASINGS, ETC., AS DEPICTED ON THE DRAWINGS.
26. INSTALL TEMPORARY BLOW OFF ASSEMBLIES WHERE REQUIRED TO FACILITATE FLUSHING, PRESSURE TESTING AND DISINFECTION.
27. FOLLOWING SUCCESSFUL BACTII SAMPLE, PLACE WL-1, WL-2 AND WL-3 INTO PARALLEL SERVICE WITH EXISTING MAINS.
28. RELOCATE AND /OR RECONNECT EXISTING WATER SERVICES FROM THE EXISTING MAINS TO WL-1, WL-2 AND WL-3 WHERE APPLICABLE.
29. INSTALL ALL NEW LATERAL WATER MAINS FROM WL-3 JUST SHORT OF THE EXISTING LATERAL WATER MAIN.
30. INSTALL TEMPORARY PLUGS AND BLOWOFF ASSEMBLIES TO FACILITATE FLUSHING, PRESSURE TESTING AND DISINFECTION.
31. FOLLOWING SUCCESSFUL BACTII SAMPLE, ISOLATE EXISTING UTILITY SYSTEM SEGMENTS AS REQUIRED TO ALLOW CONNECTION OF THE NEW MAIN TO THE EXISTING.
32. SWAB DISINFECT PIPING AND FITTINGS TO CONNECT THE NEW MAIN TO THE EXISTING.
33. RESTORE WATER SERVICE.
34. OBSERVE CONNECTIONS FOR LEAKS.
35. REPAIR AS NECESSARY.
36. PLUG AND ABANDON EXISTING RESIDUAL WATER MAINS AS INDICATED ON THE DRAWINGS AND IN "UTILITIES ABANDONMENT /REMOVAL" BELOW.

D) GAS:

- 37. INSTALL GL-101, 8" WRAPPED STEEL GAS MAIN ON MEMORIAL DRIVE, INCLUDING LATERAL TEES & VALVES, AS DEPICTED ON THE DRAWINGS.
38. INSTALL TEMPORARY PLUGS, VENT, ETC. TO ACCOMMODATE PRESSURE TESTING AND PURGING.
39. ISOLATE EXISTING 8" GAS MAIN TO ALLOW CONNECTION OF THE NEW MAIN TO THE EXISTING.
40. PURGE THE SYSTEM OF AIR AND PLACE THE NEW MAIN IN SERVICE BY INTRODUCING NATURAL GAS.
41. RELOCATE AND /OR RECONNECT EXISTING GAS SERVICE(S) FROM THE EXISTING MAIN TO GL-101 WHERE APPLICABLE.
42. PLUG AND ABANDON EXISTING RESIDUAL GAS MAINS AS INDICATED ON THE DRAWINGS AND IN "UTILITIES ABANDONMENT /REMOVAL" BELOW.
43. INSTALL GL-100, 4" MDPE ON STANTONSURG ROAD, INCLUDING ASSOCIATED TEES & VALVES AS DEPICTED ON THE DRAWINGS.
44. INSTALL TEMPORARY PLUGS, VENT, ETC. TO ACCOMMODATE PRESSURE TESTING AND PURGING.
45. ISOLATE EXISTING 4" GAS MAIN TO ALLOW CONNECTION OF THE NEW MAIN TO THE EXISTING.
46. PURGE THE SYSTEM OF AIR AND PLACE THE NEW MAIN IN SERVICE BY INTRODUCING NATURAL GAS.
47. RELOCATE AND /OR RECONNECT EXISTING GAS SERVICE(S) FROM THE EXISTING MAIN TO GL-100 WHERE APPLICABLE.
48. INSTALL THE FOLLOWING GAS MAIN SEGMENTS, INCLUDING ASSOCIATED TEES & VALVES AS DEPICTED ON THE DRAWINGS:
A. GL-102A, 2" MDPE ON W. 10TH STREET FROM MEMORIAL DRIVE TO BANCROFT AVENUE
B. GL-102B, 2" MDPE ON W. 10TH STREET FROM 14TH STREET TO CHESTNUT STREET
C. GL-102C, 2" MDPE ON W. 10TH STREET FROM WASHINGTON STREET TO FORBES STREET
49. INSTALL TEMPORARY PLUGS, VENT, ETC. TO ACCOMMODATE PRESSURE TESTING AND PURGING.
50. ISOLATE EXISTING 2" GAS MAINS TO ALLOW CONNECTIONS OF THE NEW SEGMENTS TO THE EXISTING SYSTEM.
51. PURGE THE SYSTEM OF AIR AND PLACE THE NEW MAIN IN SERVICE BY INTRODUCING NATURAL GAS.
52. RELOCATE AND /OR RECONNECT EXISTING GAS SERVICE(S) FROM THE EXISTING MAINS TO THE NEW SEGMENTS WHERE APPLICABLE.
53. INSTALL ALL NEW LATERAL GAS MAINS FROM GL-102A, GL-102B & GL-102C JUST SHORT OF THE EXISTING LATERAL GAS MAIN SEGMENTS.
54. INSTALL TEMPORARY PLUGS, VENT, ETC. TO ACCOMMODATE PRESSURE TESTING AND PURGING.
55. ISOLATE EXISTING GAS MAINS TO ALLOW CONNECTIONS OF THE NEW MAINS TO THE EXISTING.
56. RESTORE GAS SERVICE.
57. RELOCATE AND /OR RECONNECT ANY REMAINING EXISTING GAS SERVICE(S) WHERE APPLICABLE.

UTILITIES ABANDONMENT /REMOVAL:

A) PIPES:

- 1. NCDOT STANDARD SPECIFICATIONS SECTION 1530 SHALL GOVERN MATERIALS, METHODS AND PAYMENT FOR ABANDONMENT OR REMOVAL OF UTILITIES. THE FOLLOWING NOTES PROVIDE ADDITIONAL INFORMATION REGARDING THE INTENT OF THE DESIGN FOR THIS PROJECT.
2. ALL EXISTING UTILITY PIPES DESIGNATED TO BE ABANDONED ARE INTENDED TO REMAIN IN PLACE UNLESS OTHER WORK (I.E. PROPOSED UTILITY, PROPOSED DRAINAGE OR PROPOSED ROADWAY CONSTRUCTION) REQUIRES THEIR REMOVAL.
3. EXISTING UTILITY PIPE THAT IS REMOVED BY OTHER WORK OF THE CONTRACT WILL BE INCIDENTAL TO THE OTHER WORK. NO ADDITIONAL COMPENSATION WILL BE MADE.
4. EXISTING UTILITY PIPES DESIGNATED TO BE ABANDONED SHALL BE TREATED AS FOLLOWS:
A. UTILITY PIPE LINES LESS THAN 6" DIAMETER SHALL BE EMPTIED OF THEIR CONTENTS WITH OPEN ENDS PLUGGED WITH GROUT OR FLOWABLE FILL.
B. UTILITY PIPE LINES THAT ARE 6" AND LARGER IN DIAMETER SHALL BE EMPTIED OF THEIR CONTENTS AND FILLED WITH GROUT OR FLOWABLE FILL TO AT LEAST 90% FULL (100% FULL WHEN ON RAILROAD RIGHT OF WAY).
5. EXISTING UTILITY PIPE THAT IS ABANDONED BY PLUGGING THE ENDS ONLY AND LEAVING IN PLACE WILL NOT BE MEASURED OR PAID. GROUT USED FOR PLUGGING OF OPEN PIPE ENDS IS INCIDENTAL TO THE WORK PERFORMED.
6. EXISTING UTILITY PIPE THAT IS ABANDONED BY FILLING WITH GROUT OR FLOWABLE FILL WILL BE PAID BY THE LINEAR FOOT FOR THE SIZE OF PIPE. SUCH PIPE ABANDONMENT IS CALLED OUT BY LENGTH AND SIZE ON THE DRAWING SHEETS.
7. CONTRACTOR MAY ELECT TO REMOVE AN EXISTING UTILITY PIPE IN LIEU OF ABANDONING BY THE METHODS DESCRIBED ABOVE. NO ADDITIONAL COMPENSATION WILL BE MADE FOR REMOVAL IN LIEU OF ABANDONING AS DESCRIBED ABOVE.
8. REMOVE ANY ABANDONED UTILITY PIPE EXPOSED BY GRADING OPERATIONS TO A MINIMUM DEPTH OF 12" BELOW SUBGRADE ELEVATION.
9. UTILITY PIPE THAT IS REMOVED DUE TO MINIMAL COVER WILL BE MEASURED AND PAID BY THE LINEAR FOOT FOR THE SIZE OF PIPE.

Project header information including logos for Rivers & Associates, Inc., Kimb-Horn and Associates, Inc., project reference number U-3315, sheet number UC-3, and a professional engineer seal for Gregory J. Churchill, dated 5/4/2015.

B) METERS:

- 10. EXISTING WATER METERS DESIGNATED TO BE ABANDONED ARE INDICATED BY PARCEL NUMBER ON THE DRAWING SHEETS.
11. EXISTING WATER METERS DESIGNATED TO BE ABANDONED DUE TO THE SUPPLY MAIN BEING ABANDONED REQUIRE NO SPECIAL ABANDONMENT TECHNIQUES. DISPOSAL OF EXISTING METER BOXES SHALL BE INCIDENTAL TO THE WORK PERFORMED.
12. EXISTING WATER METERS DESIGNATED TO BE ABANDONED ON A LIVE SUPPLY MAIN ARE NOT ANTICIPATED.
13. EXISTING WATER METERS DESIGNATED TO BE RELOCATED WILL BE PHYSICALLY MOVED TO A NEW LOCATION OR ELEVATION. METERS THAT ARE TO BE CONNECTED TO AND SUPPLIED BY THE PROPOSED REPLACEMENT WATER MAIN WILL BE INSTALLED BY THE CONTRACTOR. PAYMENT WILL BE PER EACH RELOCATED METER REGARDLESS OF LENGTH OF SERVICE TUBING REQUIRED.
14. METERS THAT WILL CONTINUE TO BE SUPPLIED BY THE EXISTING WATER MAIN SHALL BE RELOCATED BY GUC TO ACCOMMODATE INSTALLATION OF A PROPOSED STORM DRAIN PIPE. CONTRACTOR SHALL SCHEDULE AND COORDINATE THE WORK WITH GUC TO MINIMIZE DISRUPTION TO THE CUSTOMER.
15. EXISTING WATER METERS DESIGNATED TO BE RECONNECTED WILL BE TRANSFERRED FROM AN ABANDONED WATER MAIN TO A NEW WATER MAIN WHEN RELOCATION OF THE METER IS NOT REQUIRED. PAYMENT WILL BE PER EACH RECONNECTED METER.

C) FIRE HYDRANTS:

- 16. EXISTING FIRE HYDRANTS DESIGNATED TO BE REMOVED ARE INDICATED ON THE DRAWING SHEETS.
17. REMOVE THE FIRE HYDRANT BY DISCONNECTING THE HYDRANT LEG AS CLOSE TO THE MAIN AS POSSIBLE.
18. IF THE HYDRANT VALVE IS WITHIN 4 FT OF THE MAIN, CLOSE THE VALVE, PLUG THE OUTLET SIDE OF THE VALVE, AND REMOVE THE VALVE BOX.
19. RETURN THE FIRE HYDRANT TO GREENVILLE UTILITIES COMMISSION OPERATIONS CENTER AT 801 MUMFORD ROAD.
20. PROPERLY DISPOSE OF PIPING, VALVE BOX, ETC.

D) MANHOLES:

- 21. EXISTING MANHOLES DESIGNATED FOR REMOVAL ARE INDICATED ON THE DRAWING SHEETS.
22. EXISTING MANHOLES DESIGNATED FOR REMOVAL WILL BE PAID PER EACH REGARDLESS OF DIAMETER AND DEPTH.
23. PLUG CONNECTING UTILITY PIPES BEFORE REMOVING EXISTING MANHOLES.
24. EXISTING MANHOLES DESIGNATED TO BE REMOVED SHALL REQUIRE COMPLETE DEMOLITION AND REMOVAL OF THE CONE, RISER AND BASE.
25. PROPERLY DISPOSE OF THE MANHOLE FRAMES AND COVERS.
26. SANITARY SEWER MAINS OR SERVICES DESIGNATED FOR ABANDONMENT THAT DISCHARGE TO A RECEIVING MANHOLE DESIGNATED TO BE RETAINED SHALL BE CUT ADJACENT TO THE MANHOLE WALL.
27. PLUG OPEN ENDS OF THE PIPING WITH GROUT OR FLOWABLE FILL PER UTILITY PIPE ABANDONMENT REQUIREMENTS.
28. PLUG THE RESIDUAL OPENING IN THE MANHOLE WALL WITH NON-SHRINK GROUT ON THE INTERIOR AND EXTERIOR GROUT USED FOR PLUGGING RESIDUAL MANHOLE OPENINGS IS INCIDENTAL TO THE WORK PERFORMED.

Table titled 'WEST 10TH STREET EXISTING SANITARY MANHOLE ADJUSTMENT'. Columns include SHEET NO., STREET LOCATION, MANHOLE NO., EXIST. TOP ELEVATION, PROPOSED TOP ELEVATION, and CHANGE IN HEIGHT (FT). Rows list manholes from MH-01 to MH-53 along various streets like Memorial Drive, W. 10th Street, Spruce Street, Myrtle Street, etc.