

CAROLINA CROSSROADS, PHASE 2 WATER RELOCATIONS ALONG I-20 AND BROAD RIVER ROAD (24", 12", 8", AND 6") CONFLICTS 2000/2004, 2005, 2074, 2075 FACILITY 26, 27, 31, 32, 33, 34, 35, 37 AND 41



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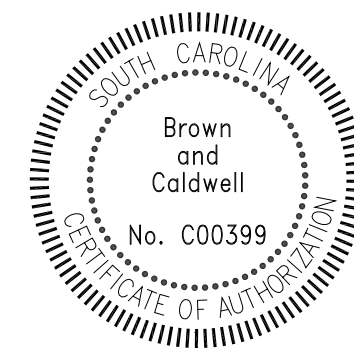
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DIRECTOR OF UTILITY OPERATIONS

WILLIAM FRANK ESKRIDGE, P.E.

DIRECTOR OF ENGINEERING

DANA R. HIGGINS, P.E.



This 100% submittal has been reviewed by the City of Columbia and is approved to be issued for construction.

John B. Hilbert, Utility Relocation Coordinator Date

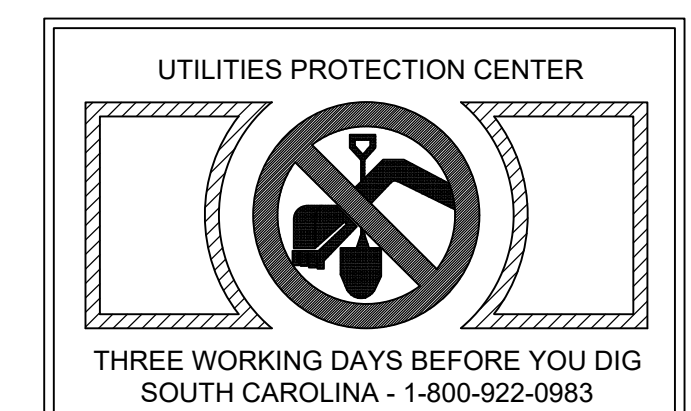
Dana R. Higgins, Director of Engineering Date

100% DESIGN DOCUMENTS
AUGUST 2023

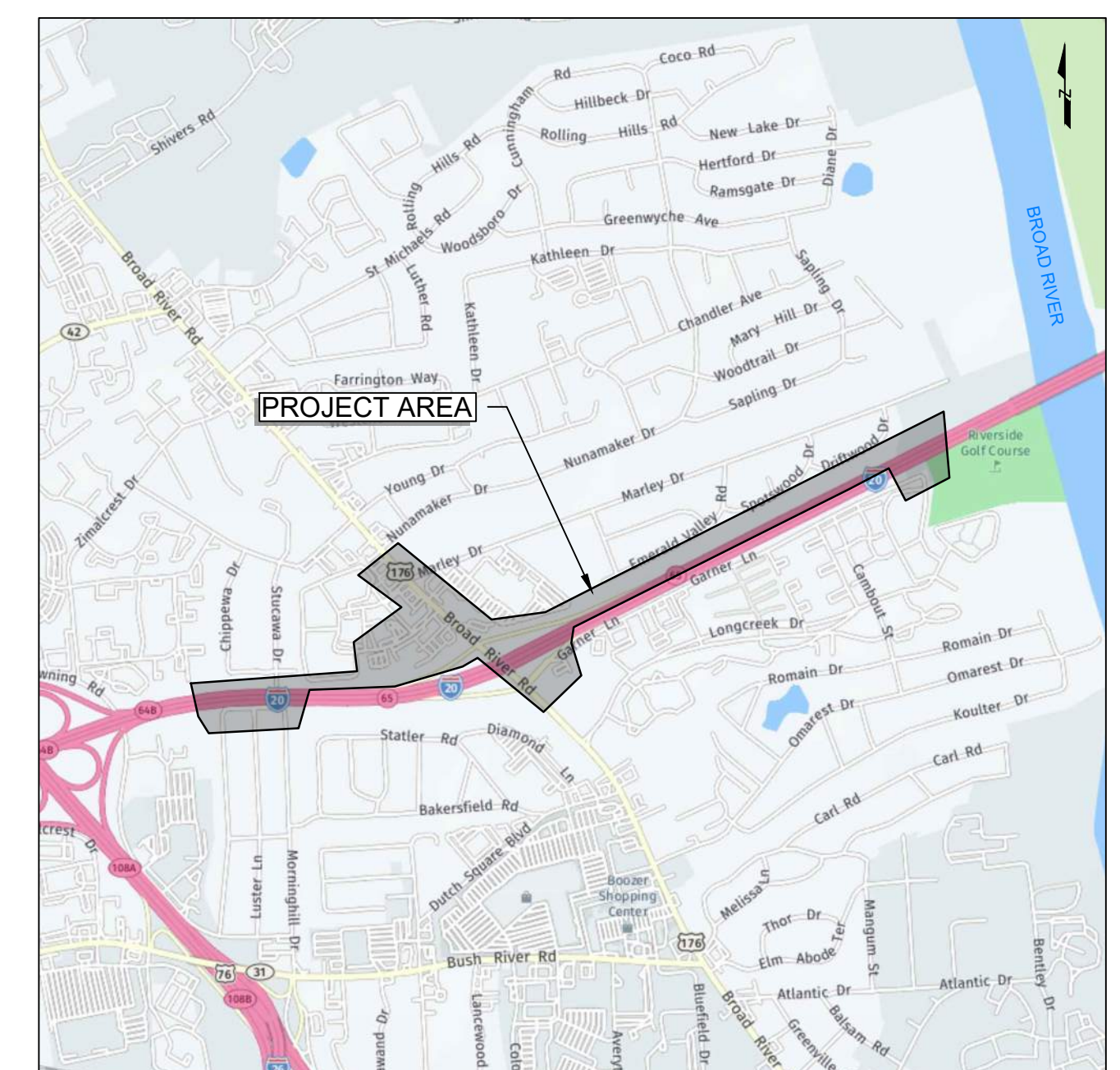
PREPARED BY:

Brown and Caldwell

Environmental Engineering and Consulting
250 Berryhill Road, Suite 104, Columbia, SC 29210 803-873-9701



UTILITY WARNING: THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE ENGINEER/SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER/SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE ENGINEER/SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



LOCATION MAP
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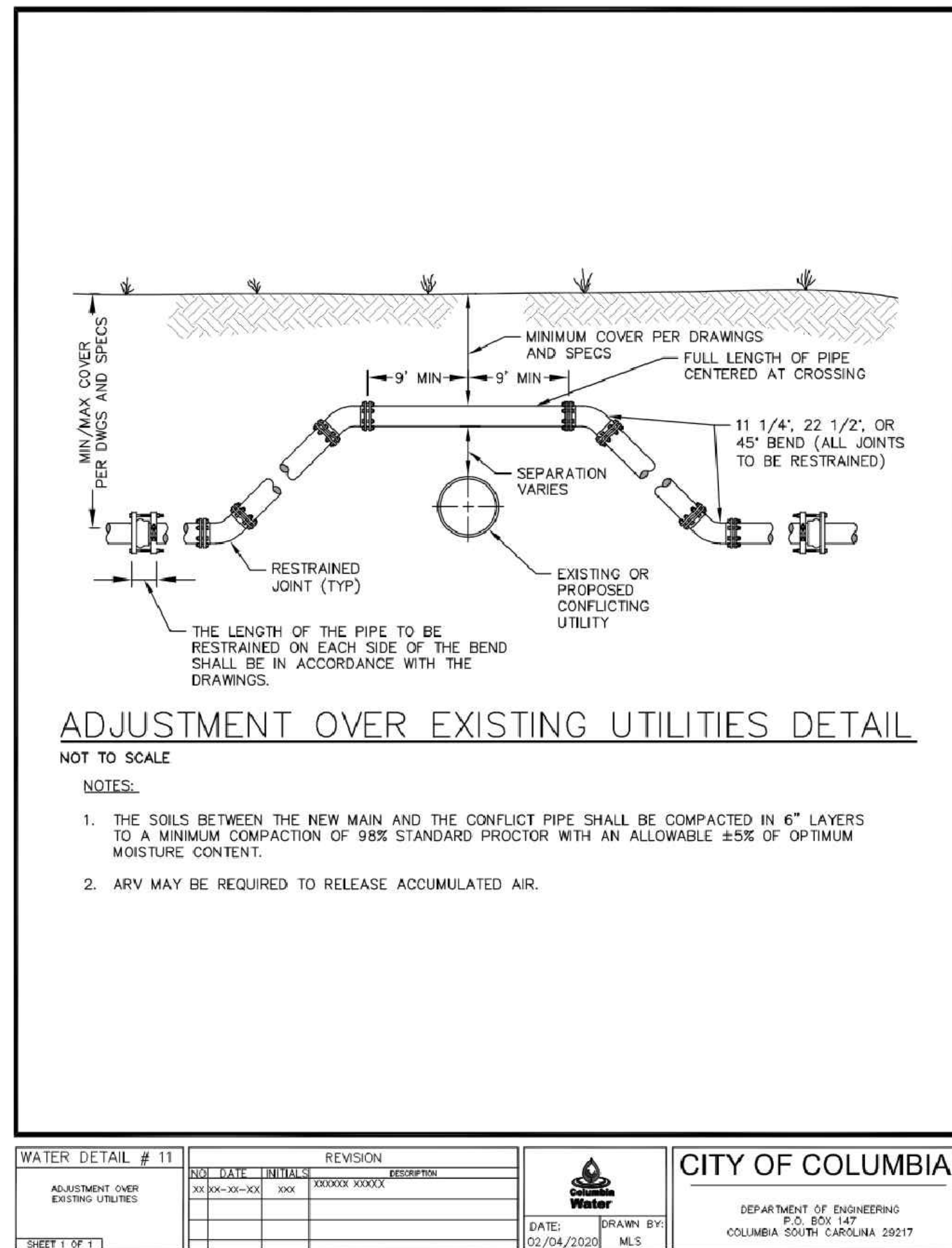
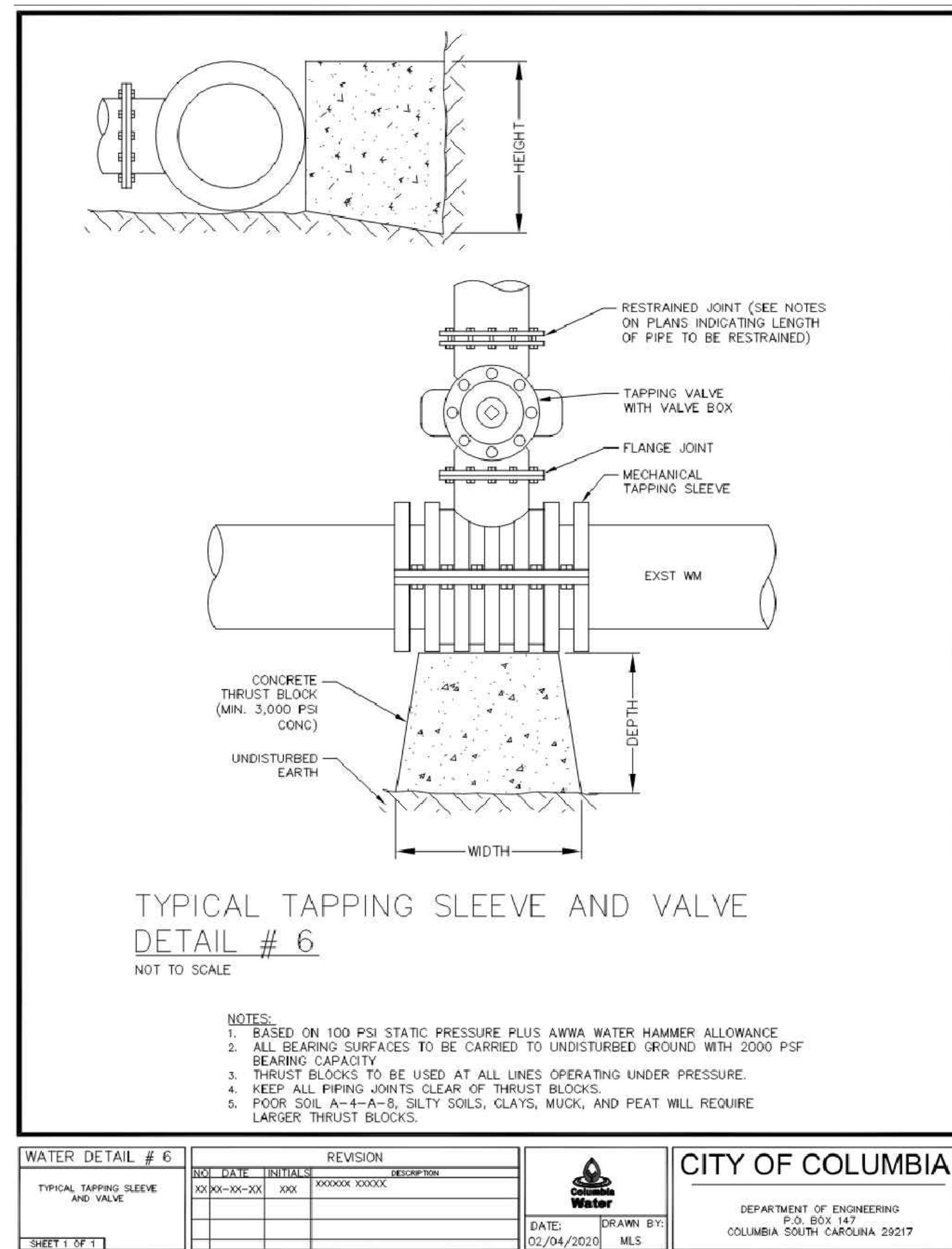
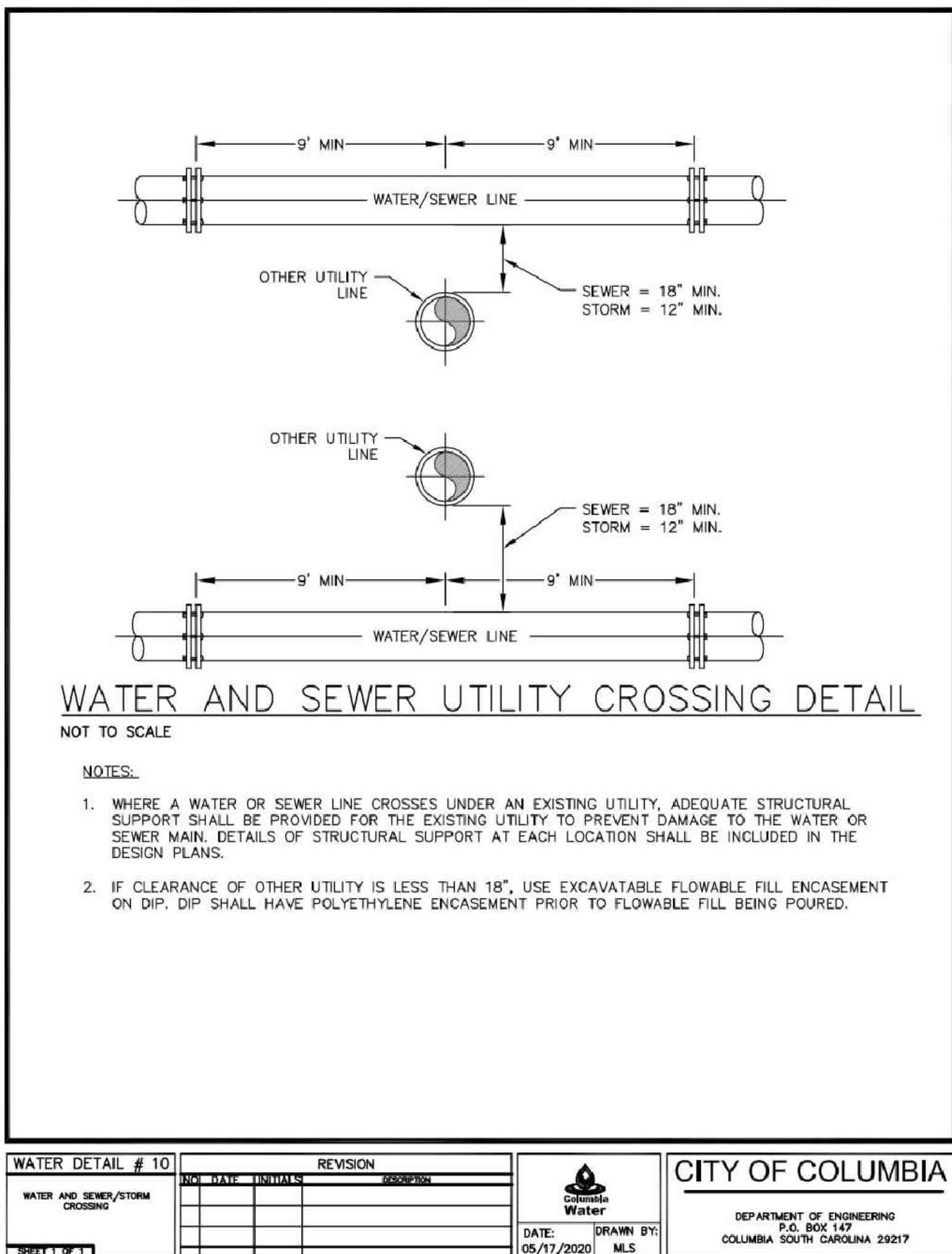
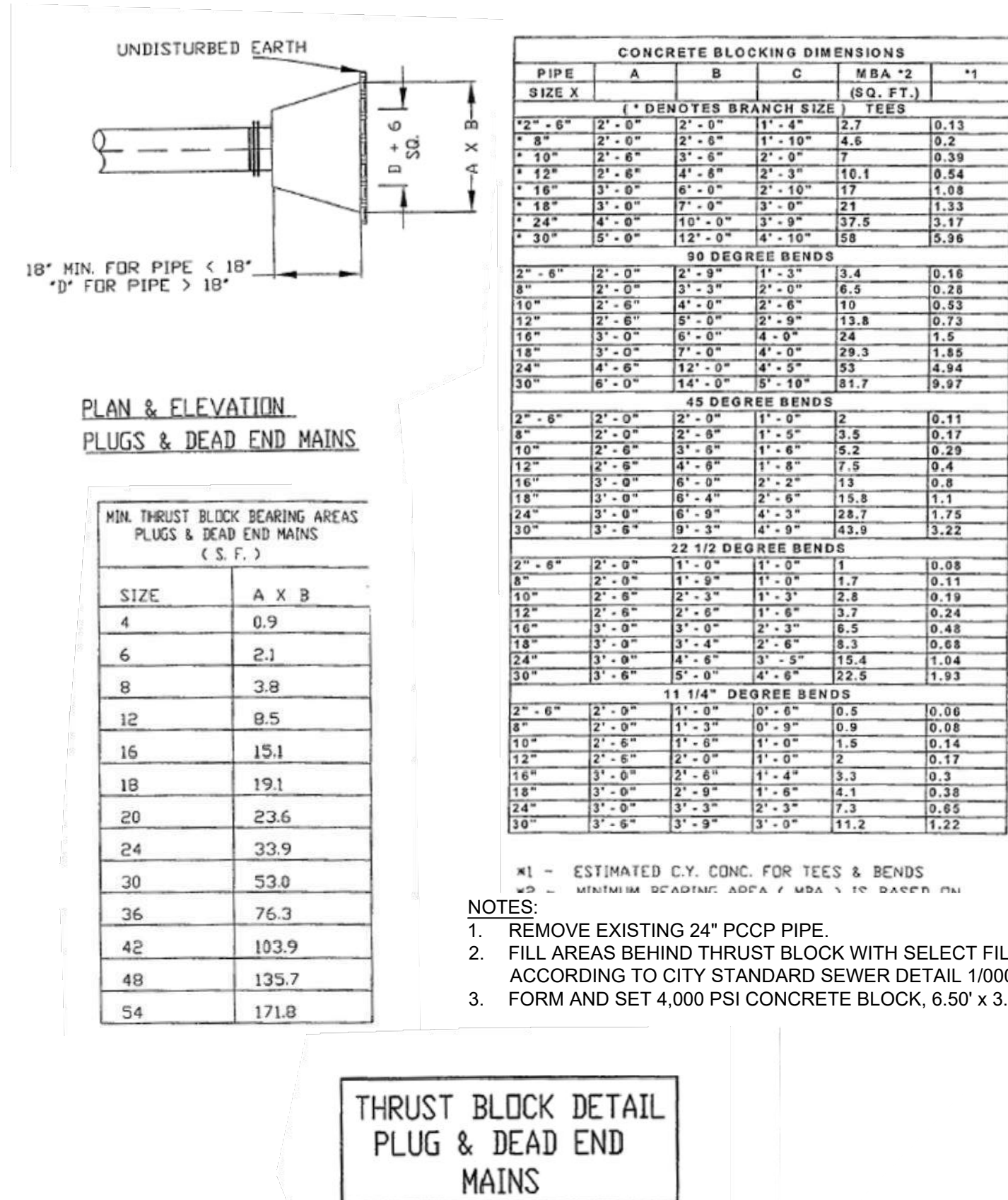
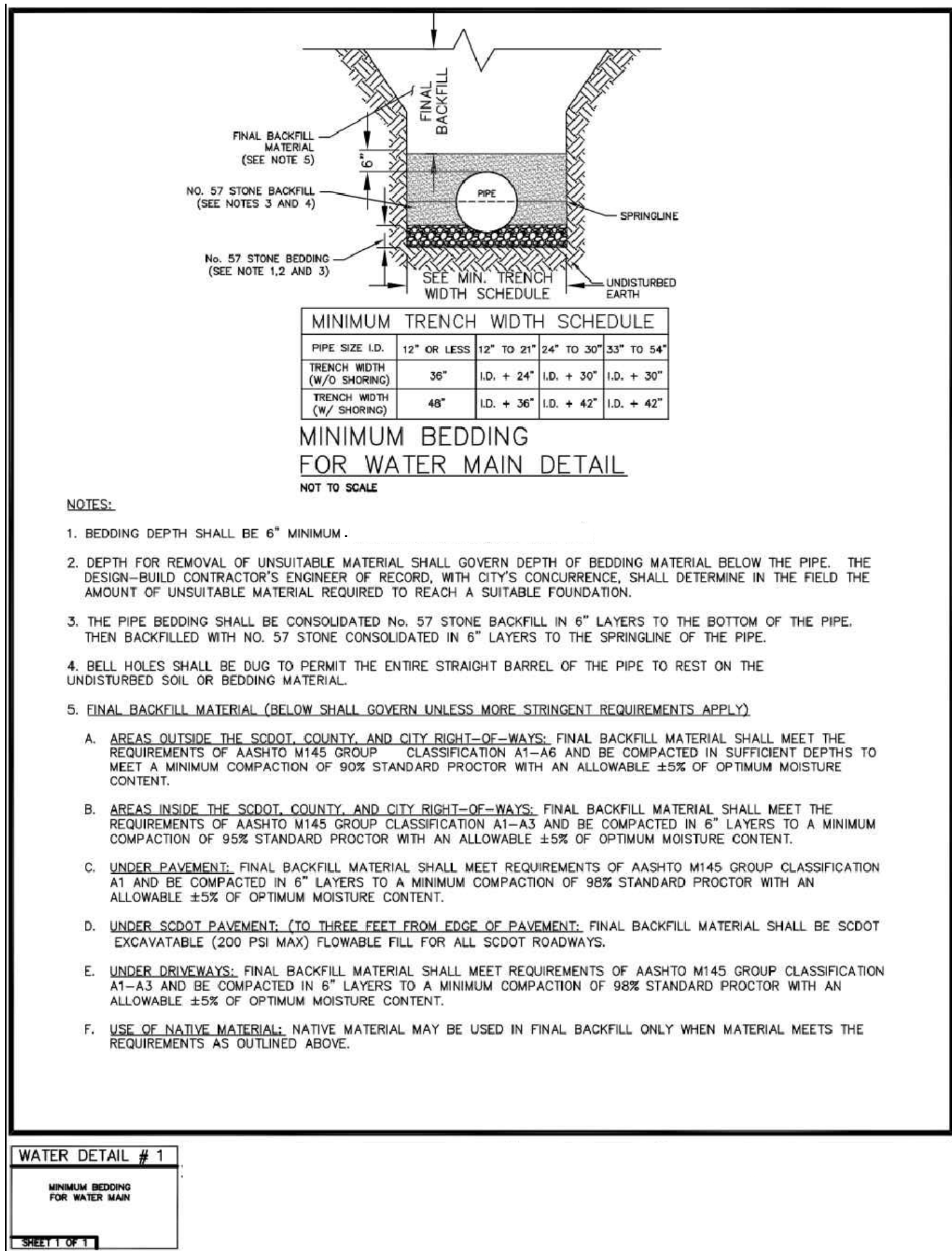
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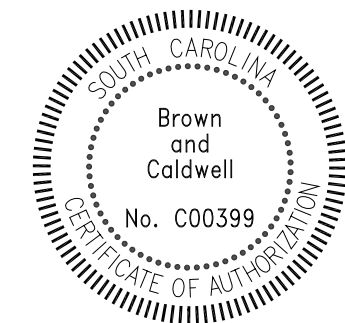
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Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA



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CAROLINA CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS		
REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

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BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

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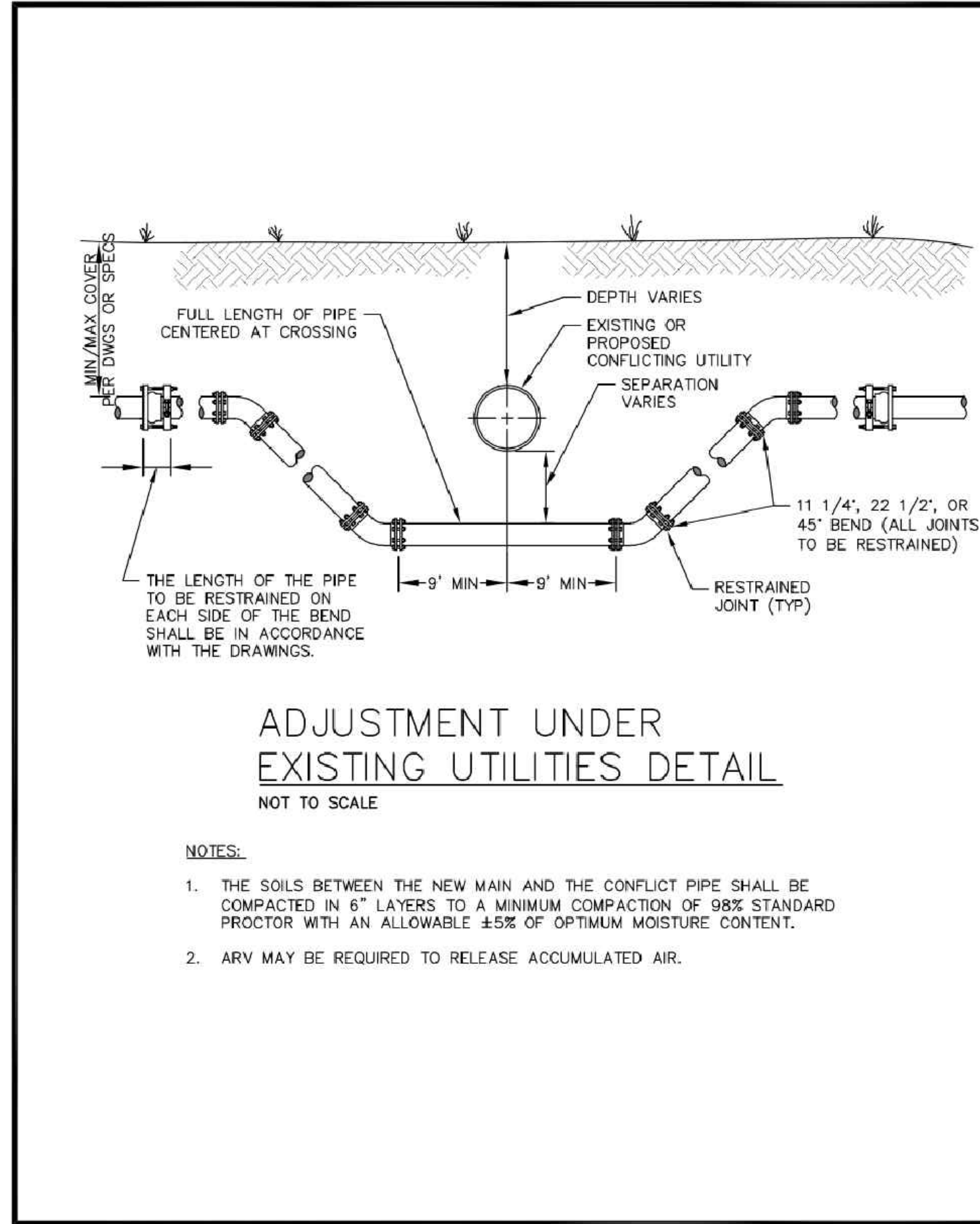
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DETAILS -1

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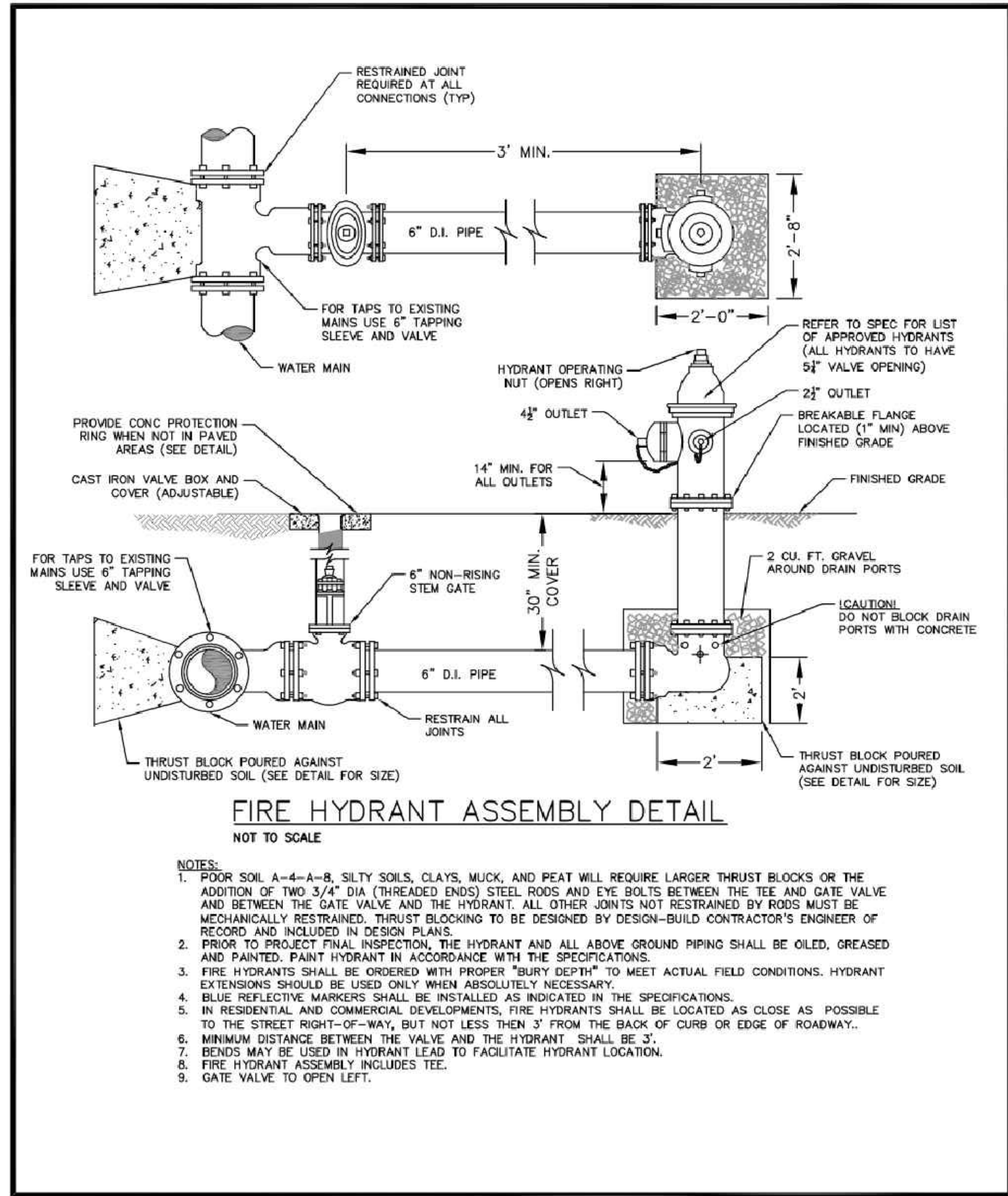
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3 OF 19

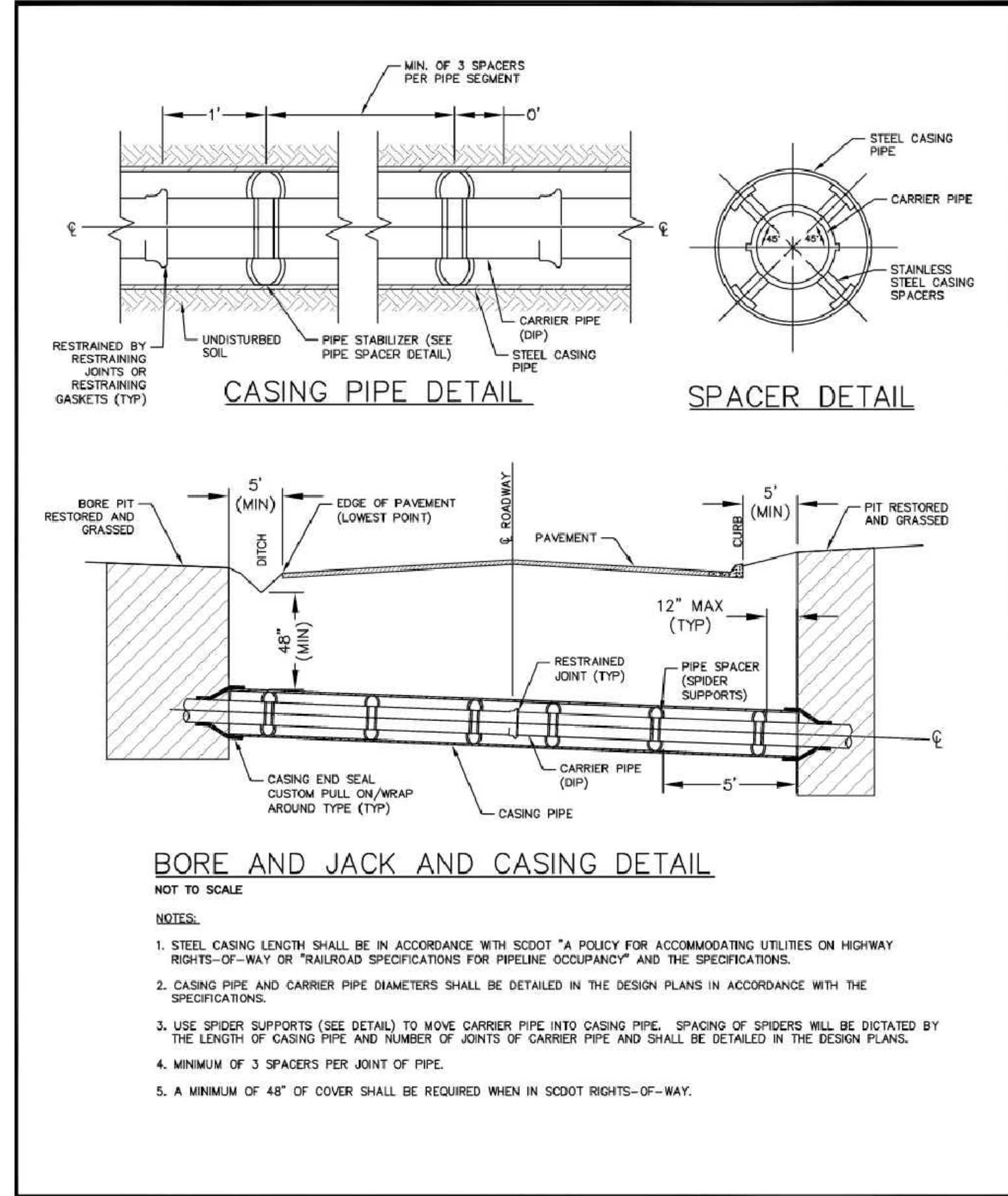
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WATER DETAIL #12		REVISION	
ADJUSTMENT UNDER EXISTING UTILITIES	DATE: 02/04/2020	INITIALS: MLS	DESCRIPTION: MLS
SHEET 1 OF 1		CITY OF COLUMBIA	
DEPARTMENT OF ENGINEERING		P.O. BOX 147	
COLUMBIA, SOUTH CAROLINA 29217		DATE: 02/04/2020	



WATER DETAIL #13		REVISION	
FIRE HYDRANT ASSEMBLY	DATE: 05/17/2020	INITIALS: MLS	DESCRIPTION: MLS
SHEET 1 OF 1		CITY OF COLUMBIA	
DEPARTMENT OF ENGINEERING		P.O. BOX 147	
COLUMBIA, SOUTH CAROLINA 29217		DATE: 05/17/2020	



WATER DETAIL #17		REVISION	
BORE AND JACK AND CASING	DATE: 05/17/2020	INITIALS: MLS	DESCRIPTION: MLS
SHEET 1 OF 1		CITY OF COLUMBIA	
DEPARTMENT OF ENGINEERING		P.O. BOX 147	
COLUMBIA, SOUTH CAROLINA 29217		DATE: 05/17/2020	

BUTTERFLY VALVE BOX DETAIL

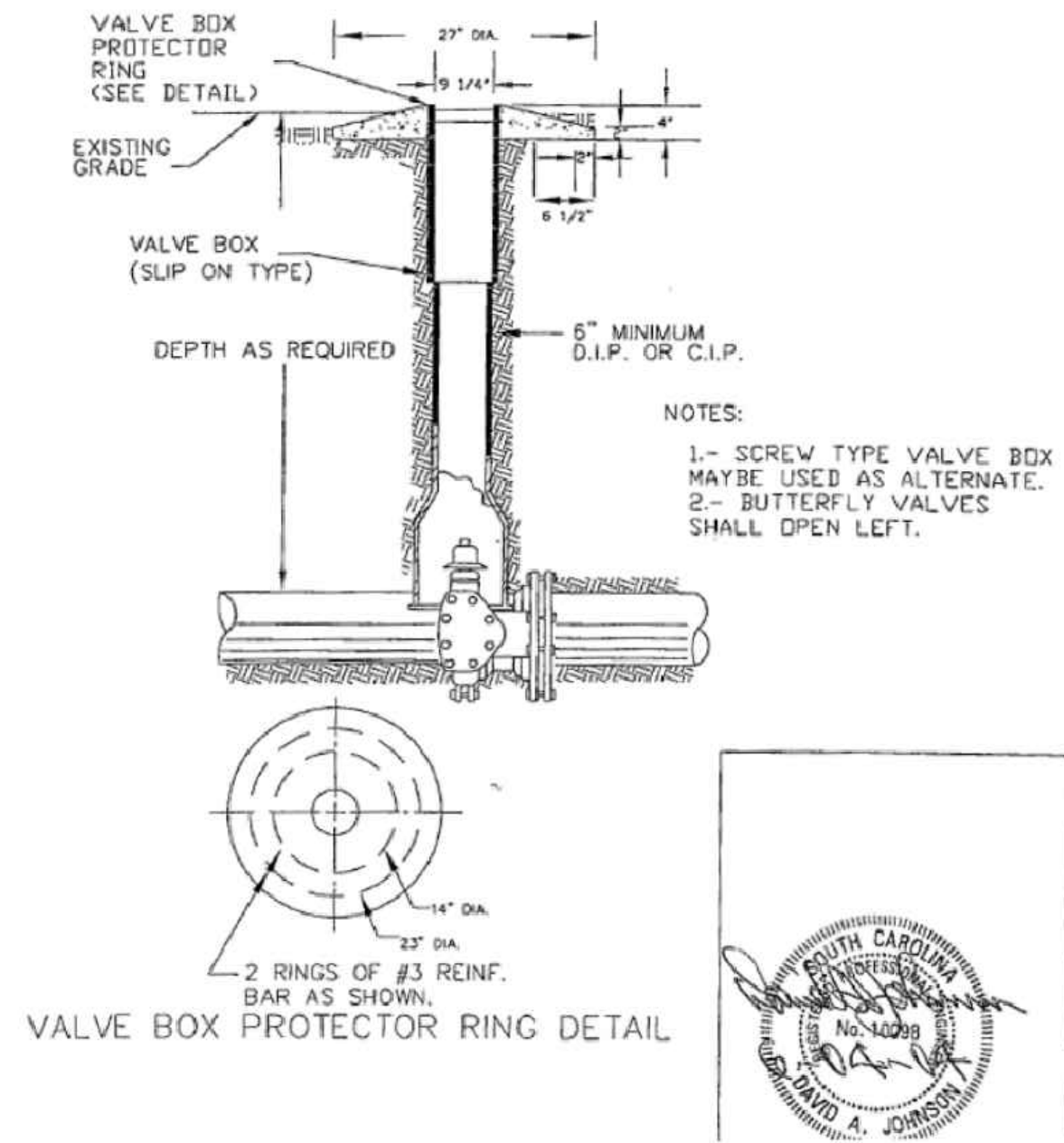


Figure 16-11. Butterfly Valve Box Detail

ROUTING OF TRACER WIRE INSIDE VALVE BOX

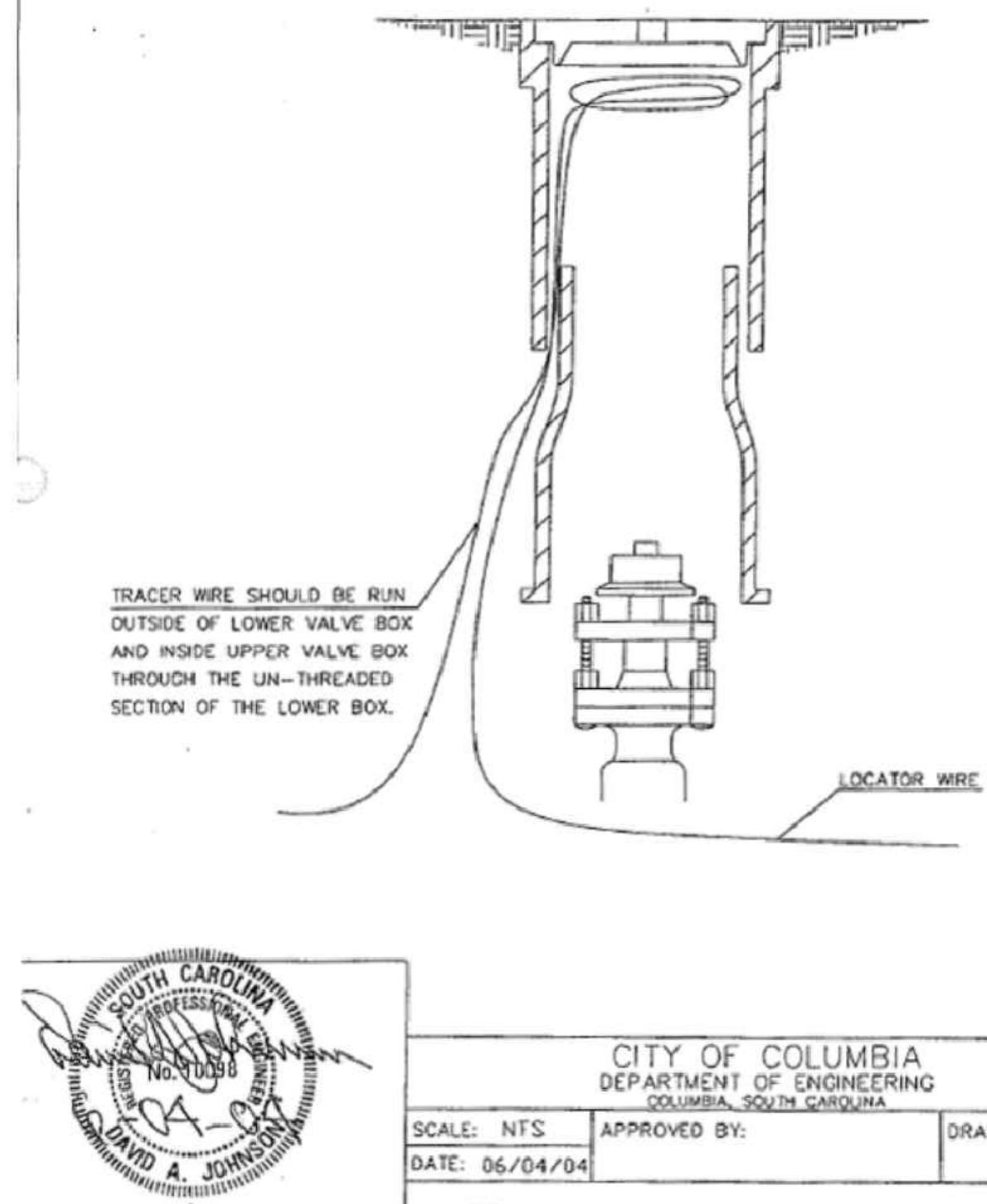
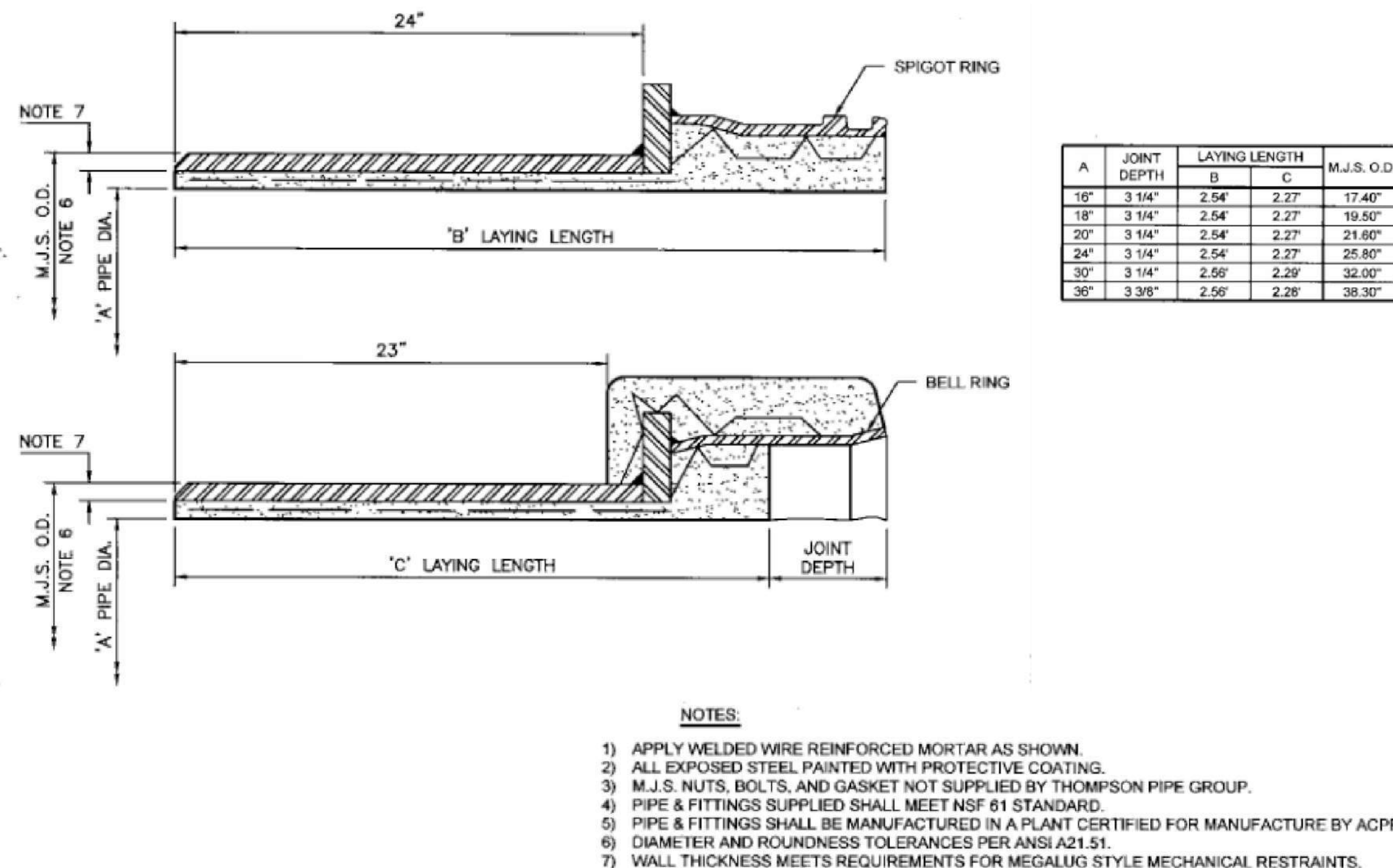


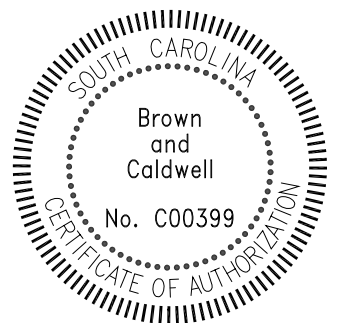
Figure 16-21. Routing of Tracer Wire Inside Valve Box



PCCP X DIP CONNECTION ADAPTER
DETAIL
SCALE: NONE

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COLUMBIA, SOUTH CAROLINA



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STANDARD
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DETAILS -2

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SHEET NUMBER
4 OF 19

CONSTRUCTION SEQUENCE AND MAINTENANCE PLAN

 SEDIMENT TUBE

2. THE ABOVE LISTING IS GENERAL IN NATURE. SOME PRACTICES MAY NOT BE REQUIRED ON THIS CONTRACT AND SOME PRACTICES NOT SHOWN MAY BE REQUIRED.

CERTIFY BY MY SIGNATURE BELOW THAT: a) FOR SITES THAT DISTURB 10 OR MORE ACRES, I PARTICIPATED IN A PRE-CONSTRUCTION CONFERENCE ONSITE OR, WHEN ALLOWED, OFFSITE WITH THE INDIVIDUAL WHO IS RESPONSIBLE FOR THE OPERATIONAL CONTROL OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP); AND b) I ACCEPT THE TERMS AND CONDITIONS OF SWPPP AS REQUIRED BY THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES PERMIT NUMBER SCR100000) ISSUED TO THE OWNER / OPERATOR OF THE CONSTRUCTION ACTIVITY FOR WHICH I HAVE BEEN CONTRACTED TO PERFORM CONSTRUCTION RELATED PROFESSIONAL SERVICES. FURTHER, BY MY SIGNATURE BELOW, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE WITH THE OWNER / OPERATOR AND OTHER CONTRACTORS THAT HAVE BECOME PERMITTEES TO THE GENERAL NPDES PERMIT ISSUED TO THE OWNER / OPERATOR OF THE FACILITY FOR WHICH I HAVE BEEN CONTRACTED TO PERFORM PROFESSIONAL CONSTRUCTION SERVICES. I CO-UNDERSTAND THAT I, AND MY COMPANY, AS THE CASE MAY BE, AM LEGALLY ACCOUNTABLE TO THE SC DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (DHEC), UNDER THE AUTHORITIES OF THE CWA AND THE SC POLLUTION CONTROL ACT, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE SWPPP. I ALSO UNDERSTAND THAT DHEC ENFORCEMENT ACTIONS MAY BE TAKEN AGAINST ANY SPECIFIC CO-PERMITTEE OR COMBINATION OF CO-PERMITTEES IF THE TERMS AND CONDITIONS OF THE SWPPP ARE NOT MET. THEREFORE, HAVING UNDERSTOOD THE ABOVE INFORMATION, I AM SIGNING THIS CERTIFICATION AND AM RECEIVING CO-PERMITTEE STATUS TO THE AFOREMENTIONED GENERAL NPDES PERMIT."

COMPANY NAME

3. A MINIMUM TEN FOOT BUFFER SHALL BE PROVIDED BETWEEN THE LAST ROW OF SILT FENCE AND THE WATERS OF THE STATE; OR, IF BUFFER CANNOT BE PROVIDED, THEN A STATEMENT FROM THE P.E. SHALL BE MADE ON PLANS INDICATING HOW SILT FENCE WILL BE INSTALLED AND MAINTAINED.

17. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED IMMEDIATELY AFTER THE UTILITY INSTALLATION.

33. PROPERLY SIGNED AND SEALED AS-BUILT DRAWINGS OF THE STORMWATER PLAN AND A SIGNED AND SEALED DETENTION BASIN AS-BUILT SHALL BE SUBMITTED TO THE CITY WITHIN 30 DAYS OF PERMANENT STABILIZATION AND PRIOR TO ISSUANCE OF PROJECT ACCEPTANCE BY THE CITY.

SEEDING SCHEDULE FOR AREAS IN THE UPPER STATE OF SOUTH CAROLINA

PERMANENT VEGETATION SCHEDULE (PER ACRE)

FROM MARCH 15 - AUGUST 14	FROM AUGUST 15 - MARCH 14
23 LBS. COMMON BERMUDA (HULLED)	50 LBS. KENTUCKY 31 FESCUE
10 LBS. WEEPING LOVEGRASS	30 LBS. COMMON BERMUDA (HULLED)
50 LBS. SERICEA LESPEDEZA (SCARIFIED)	10 LBS. WEEPING LOVEGRASS
50 LBS. KENTUCKY 31 FESCUE	80 LBS. SERICEA LESPEDEZA (UNHULLED)

TEMPORARY VEGETATION SCHEDULE (PER ACRE)

ANNUAL SUDAN GRASS	40 LBS.	APRIL 1 - AUGUST 15
BROWN TOP MILLET	50 LBS.	APRIL 1 - AUGUST 15
RYE GRAIN	55 LBS.	AUGUST 16 - MARCH 31

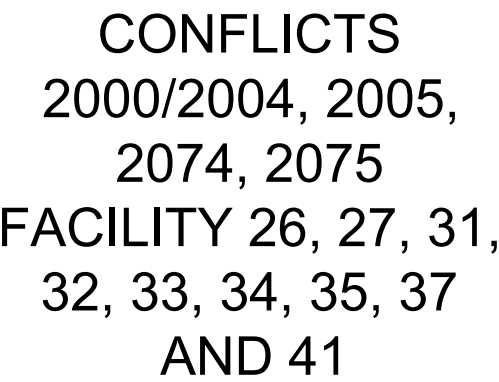
IF HYDROSEEDING USE 13 LBS. PER 1000 SQ. FT. OF LOW SALT FORMULATION OF 19-19-19 INSTEAD 10-10-10 TO GIVE LONG TERM FERTILIZATION BENEFITS.

LIQUID LIME IS NOT A SUBSTITUTE FOR AGRICULTURAL LIME. A FEW GALLONS OF LIQUID LIME RAISES SOIL pH, ONE POINT, BUT THIS EFFECT IS VERY TEMPORARY - USUALLY 45-50 WEEKS. LIQUID LIME MAY BE USED WITH AGRICULTURAL LIME TO GIVE QUICK RESULTS TOGETHER WITH THE LONG TERM BENEFITS OF AGRICULTURAL LIME.

GRAIN STRAW MULCH IS THE MOST IMPORTANT INGREDIENT IN THESE SEEDING RECOMMENDATIONS AND IS 90% OF THE REASON FOR SUCCESS. PAPER AND OTHER SYNTHETIC MULCHES MAY BE SUBSTITUTED FOR GRAIN STRAW WHEN A HYDROSEEDER IS USED, BUT NOT ON STEEP AREAS, AREAS WITH CONCENTRATED WATER RUNOFF, OR ON DEEP SANDY SOILS. (ALL SLOPES STEEPER THAN 2:1 MUST BE HYDROSEEDED AND MULCHED WITH GRAIN STRAW USING AN APPROVED ANCHORING METHOD SUCH AS GLUE TACKIFIER OR TRACTOR AND STRAIGHT DISK HARROW).

AROUND OFFICE BUILDINGS AND WITHIN SUBDIVISIONS USE 4 TO 6 OZ. CENTIPEDE SEED FOR 1000 SQ. FT.

GROWTH OF RYE MUST BE MOWED IN EARLY SPRING TO ENCOURAGE GROWTH OF THE PERMANENT GRASSES (BERMUDA AND CENTIPEDE GRASS).



REVISIONS		
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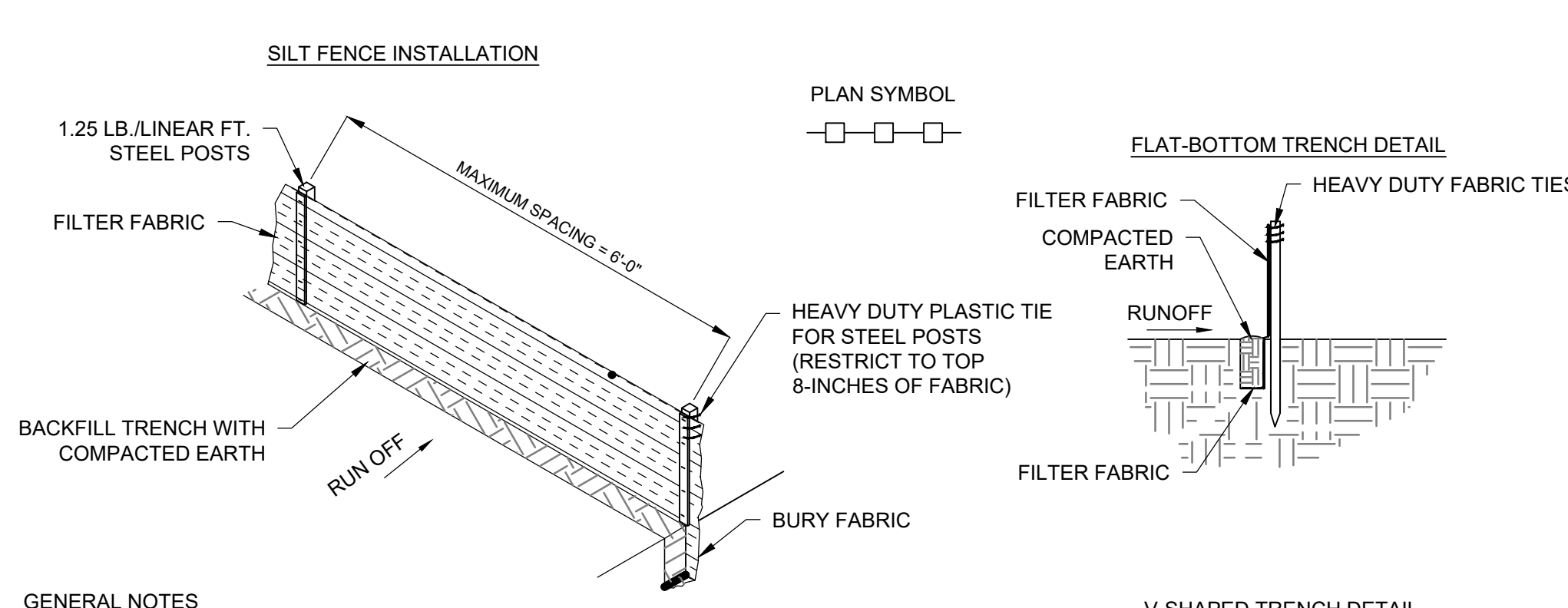
EROSION & SEDIMENTATION CONTROL DETAILS AND NOTES

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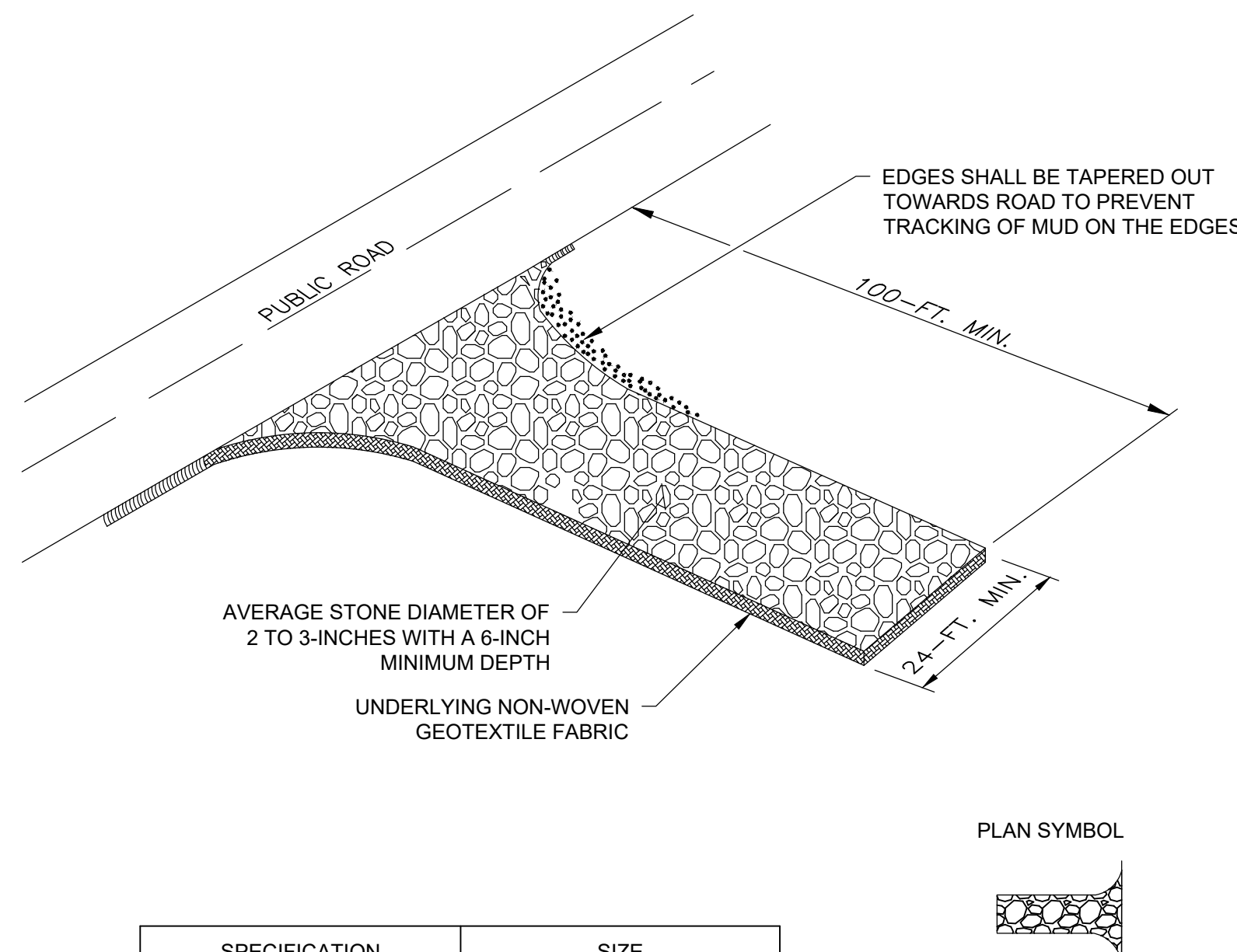
GENERAL NOTES

1. DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS. SILT FENCE SHOULD NOT BE USED AS A VELOCITY CONTROL BMP. CONCENTRATED FLOWS ARE ANY FLOWS GREATER THAN 0.5 CFS.

INSPECTION & MAINTENANCE

- THE KEY TO FUNCTIONAL SEDIMENT TUBES IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
- REGULAR INSPECTIONS OF SEDIMENT TUBES SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
 - ATTENTION TO SEDIMENT ACCUMULATIONS IN FRONT OF THE SEDIMENT TUBE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
 - REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SEDIMENT TUBE.
 - REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
 - LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED FROM IN FRONT OF TUBES WHEN FOUND.
 - IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR BELOW THE HEIGHT OF THE SEDIMENT TUBE, REPAIRS SHOULD BE MADE IMMEDIATELY TO PREVENT RUNOFF FROM BYPASSING TUBE.
 - SEDIMENT TUBES SHOULD BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETELY STABILIZED. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH SEDIMENT TUBES HAVE BEEN REMOVED.
- 21.
4. SILT FENCE JOINTS, WHEN NECESSARY, SHALL BE COMPLETED BY ONE OF THE FOLLOWING OPTIONS:
 - WRAP EACH FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 1-FOOT MINIMUM OVERLAP;
 - OVERLAP SILT FENCE BY INSTALLING 3-FEET PASSED THE SUPPORT POST TO WHICH THE NEW SILT FENCE ROLL IS ATTACHED. ATTACH OLD ROLL TO NEW ROLL WITH HEAVY-DUTY PLASTIC TIES; OR,
 - OVERLAP ENTIRE WIDTH OF EACH SILT FENCE ROLL FROM ONE SUPPORT POST TO THE NEXT SUPPORT POST.
 5. ATTACH FILTER FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED WITHIN THE TOP 8-INCHES OF THE FABRIC.
 6. INSTALL THE SILT FENCE PERPENDICULAR TO THE DIRECTION OF THE STORMWATER FLOW AND PLACE THE SILT FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.
 7. INSTALL SILT FENCE CHECKS (TIE-BACKS) EVERY 50-100 FEET, DEPENDENT ON SLOPE, ALONG SILT FENCE THAT IS INSTALLED WITH SLOPE AND WHERE CONCENTRATED FLOWS ARE EXPECTED OR ARE DOCUMENTED ALONG THE PROPOSED/INSTALLED SILT FENCE.
- SILT FENCE
DETAIL**

SCALE: NONE



GENERAL NOTES

1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL EGRESS/INGRESS A CONSTRUCTION SITE ONTO A PUBLIC ROAD OR ANY IMPERVIOUS SURFACES, SUCH AS PARKING LOTS
2. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.
3. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
4. THE ENTRANCE SHALL CONSIST OF 2-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES.
5. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.
6. THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING AT THE EDGE OF THE ENTRANCE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.
8. LIMESTONE MAY NOT BE USED FOR THE STONE PAD.

SCALE: NONE

1. SILT FENCE POSTS MUST BE 48-INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING PHYSICAL CHARACTERISTICS:
 - COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
 - INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND A NOMINAL "T" LENGTH OF 1.48-INCHES.
 - WEIGH 1.25 POUNDS PER FOOT ($\pm 8\%$)
2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC.
3. STEEL POSTS MAY NEED TO HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM WHEN INSTALLED ALONG STEEP SLOPES OR INSTALLED IN LOOSE SOILS. THE PLATE SHOULD HAVE A MINIMUM CROSS SECTION OF 17-SQUARE INCHES AND BE COMPOSED OF 15 GAUGE STEEL, AT A MINIMUM. THE METAL SOIL STABILIZATION PLATE SHOULD BE COMPLETELY BURIED.
4. INSTALL POSTS TO A MINIMUM OF 24-INCHES. A MINIMUM HEIGHT OF 1- TO 2- INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE GROUND.
5. POST SPACING SHALL BE AT A MAXIMUM OF 6-FEET ON CENTER.

1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS:
 - COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER;
 - FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION;
 - FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND,
 - HAVE A MINIMUM WIDTH OF 36-INCHES.
2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
3. 12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED.
4. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS.
5. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES ABOVE THE GROUND.

1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
3. ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE.
5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
6. CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL CHECKS/TIE-BACKS AND/OR REINSTALL SILT FENCE, AS NECESSARY.
7. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE, AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVED DAMAGED SILT FENCE AND REINSTALL NEW SILT FENCE IMMEDIATELY.
8. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE IT IS REMOVED, THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED.

1. THE KEY TO FUNCTIONAL CONSTRUCTION ENTRANCES IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF CONSTRUCTION ENTRANCES SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
3. DURING REGULAR INSPECTIONS, CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. INSPECTION FREQUENCIES MAY NEED TO BE MORE FREQUENT DURING LONG PERIODS OF WET WEATHER.
4. RESHAPE THE STONE PAD AS NECESSARY FOR DRAINAGE AND RUNOFF CONTROL.
5. WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY SITE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE THE AMOUNT OF MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE PAD.
6. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO ADJACENT IMPERVIOUS SURFACE. PERMITS REGULATION SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.
7. DURING MAINTENANCE ACTIVITIES, ANY BROKEN PAVEMENT SHOULD BE REPAIRED IMMEDIATELY.
8. CONSTRUCTION ENTRANCES SHOULD BE REMOVED AFTER THE SITE HAS REACHED FINAL STABILIZATION. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH CONSTRUCTION ENTRANCES HAVE BEEN REMOVED, UNLESS AREA WILL BE CONVERTED TO AN IMPERVIOUS SURFACE TO SERVE POST-CONSTRUCTION.



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EROSION & SEDIMENTATION CONTROL DETAILS

DRAWING NUMBER

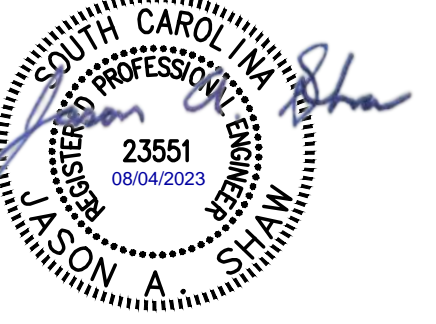
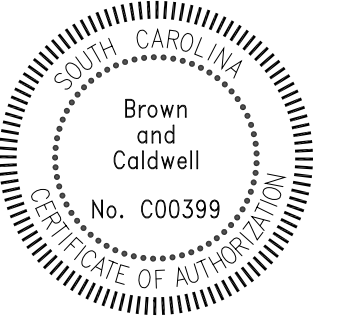
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SHEET NUMBER
7 OF 19

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COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS		
REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:
FILENAME 000-C-06.DWG
BC PROJECT NUMBER 156904
CLIENT PROJECT NUMBER SCDOT PROJECT ID P027662

GENERAL

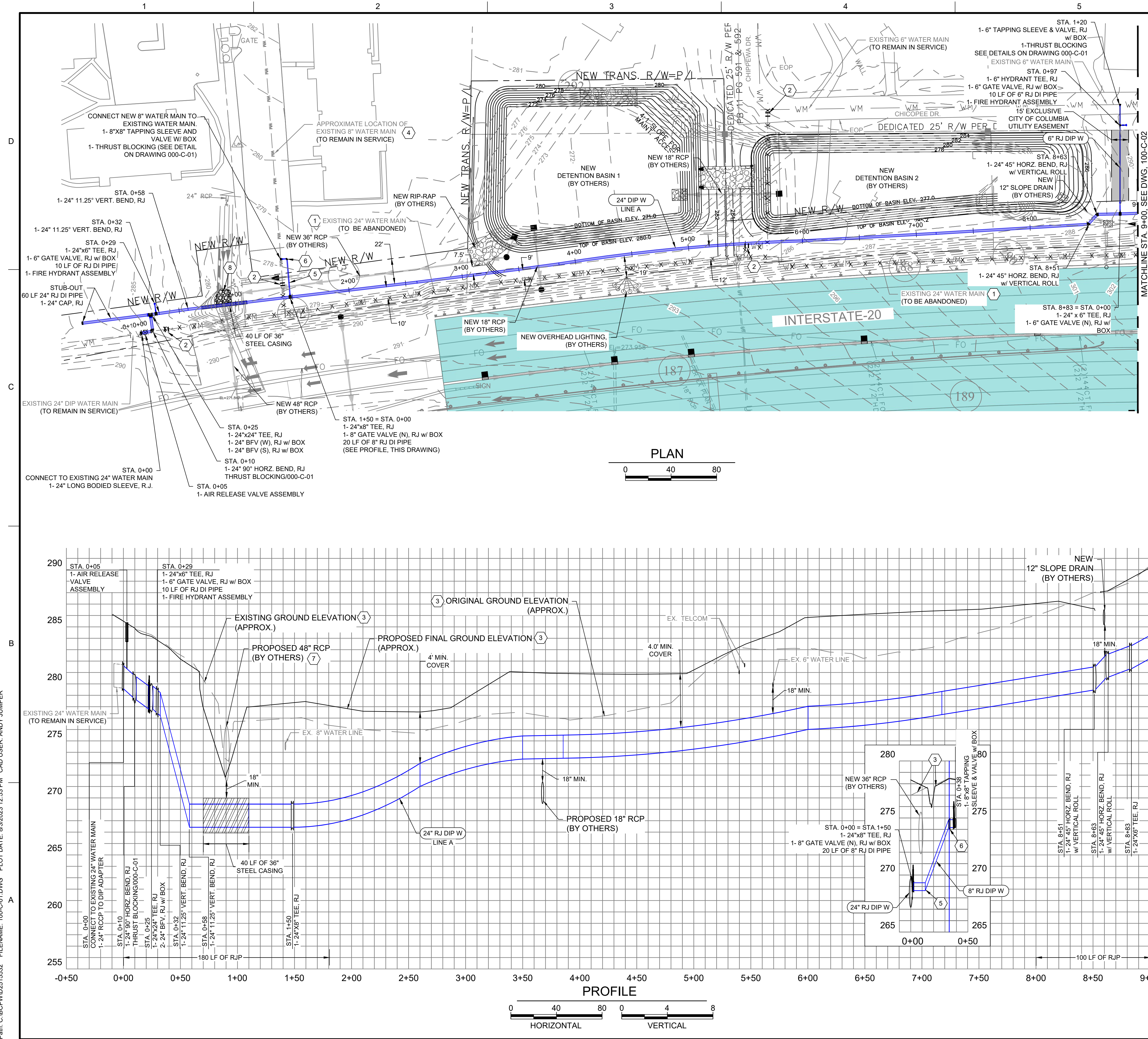
OVERALL
SHEET
LAYOUT

DRAWING NUMBER

000-C-06

SHEET NUMBER
8 OF 19

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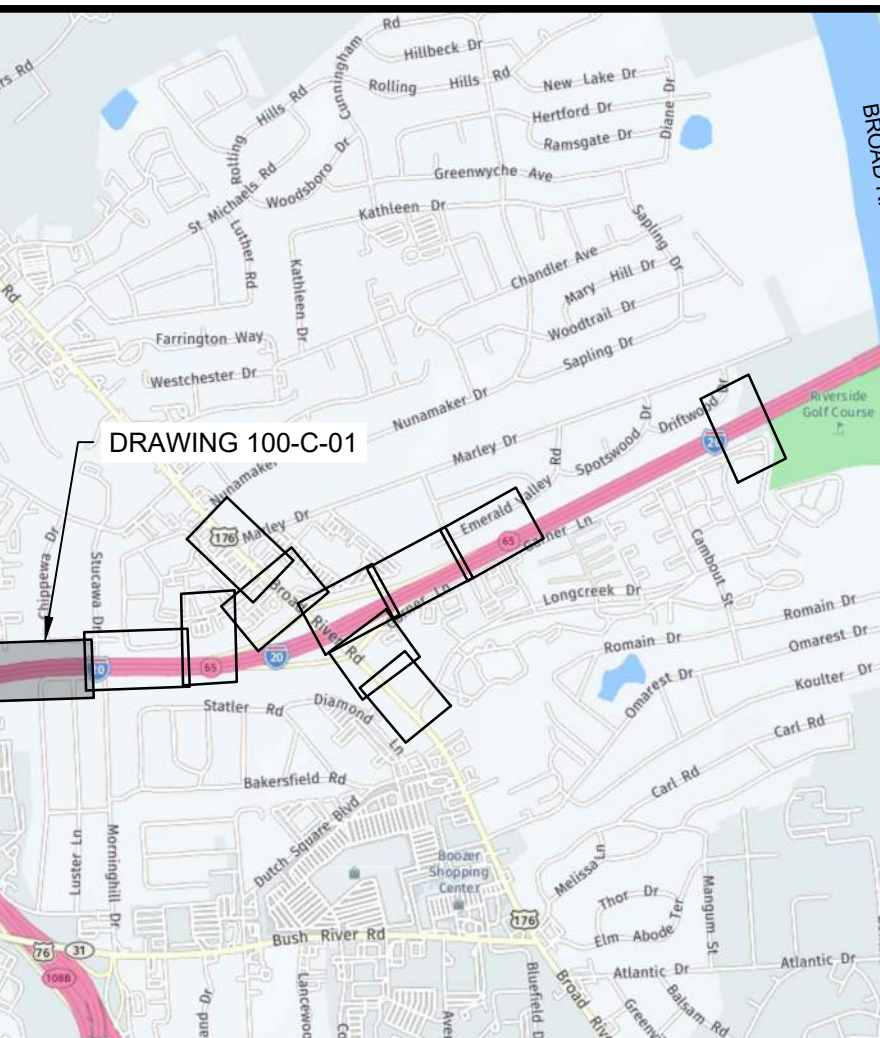


GENERAL NOTES:

1. RELOCATED WATER MAINS SHALL BE CONSTRUCTED AND THEN APPROVED BY THE CITY OF COLUMBIA AND A PERMIT TO OPERATE RECEIVED FROM THE SCDHEC PRIOR TO THE DEMOLITION OR ABANDONMENT OF ANY EXISTING INFRASTRUCTURE.
2. NEW WATER MAINS SHALL BE INSTALLED, TESTED, AND APPROVED TO PLACE INTO OPERATION BEFORE CONNECTING TO EXISTING WATER MAINS AND INSTALLING SERVICES. CONTRACTOR SHALL ISOLATE EXISTING WATER MAIN AND CUT IN SLEEVE TO CONNECT NEW WATER MAIN
3. CONTRACTOR SHALL SET WATER METER BOXES AT EDGE OF NEW RIGHT OF WAY AND CONNECT NEW METER TO EXISTING SERVICE TO HOUSE. WATER METERS FROM EXISTING SERVICES SHALL BE SALVAGED, WHERE POSSIBLE.
4. TRACT NUMBERS 187, 188, 190,191, 192, 193, AND 194 ARE DEEDED PROPERTY OF SCDOT.
5. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

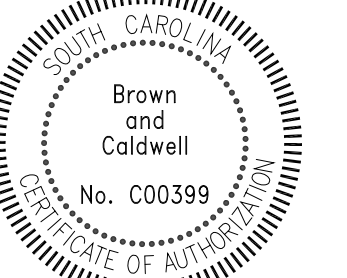
KEY NOTES:

- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT.
- 2 CUT AND CAP EXISTING WATER LINE, SEE DETAIL 3/000-C-03.
- 3 EXISTING GRADE, PROPOSED GRADE, AND ORIGINAL GRADE IN PROFILE WERE ALL ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 CONTRACTOR TO LOCATE AND VERIFY EXACT LOCATION OF EXISTING 8\"/>



Brown and Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

**CAROLINA CROSSROADS
PHASE 2**

**CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41**

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:

FILENAME
100-C-01.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

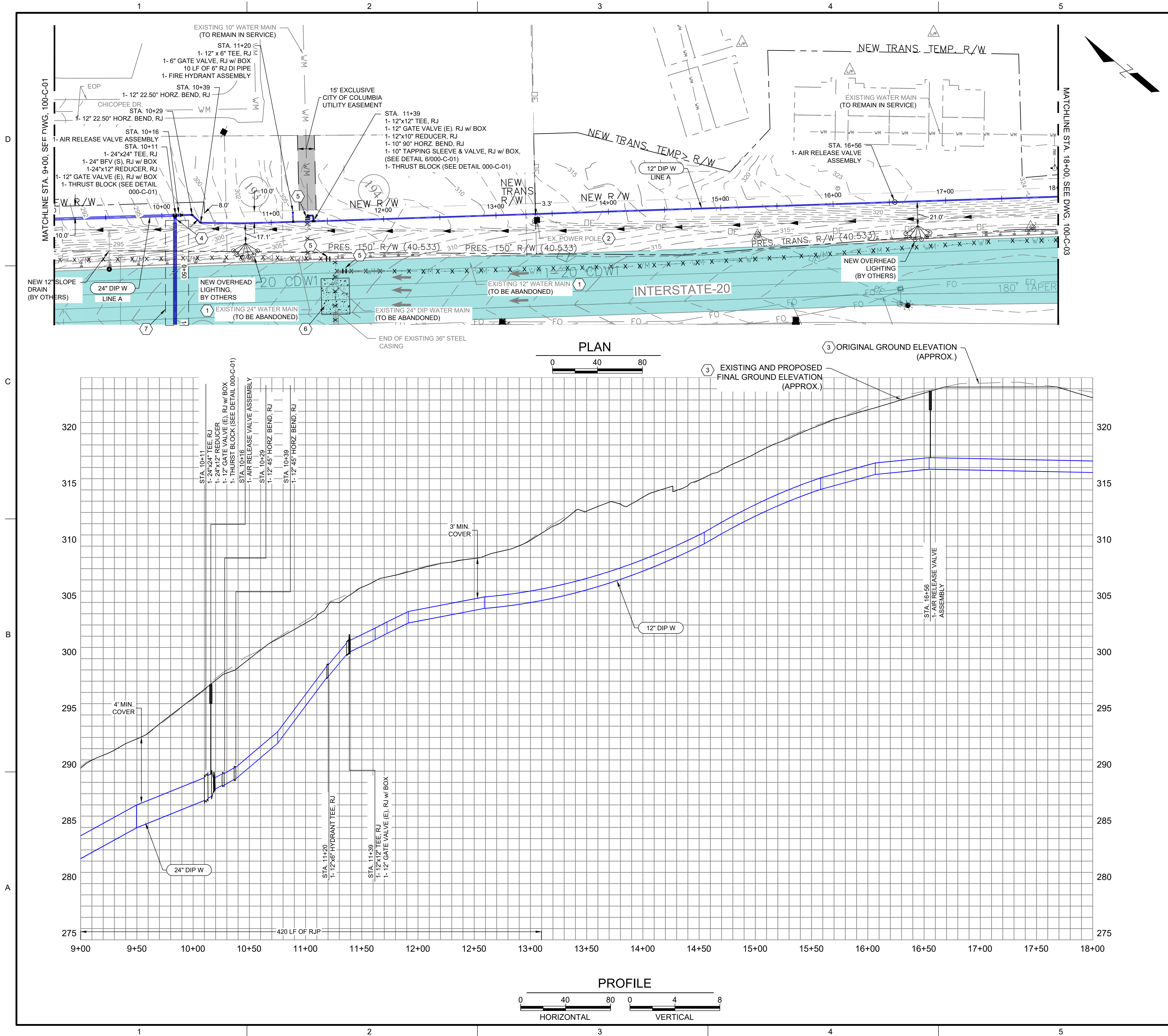
CIVIL

**WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 0+00 TO 9+00**

DRAWING NUMBER

100-C-01

SHEET NUMBER
9 OF 19

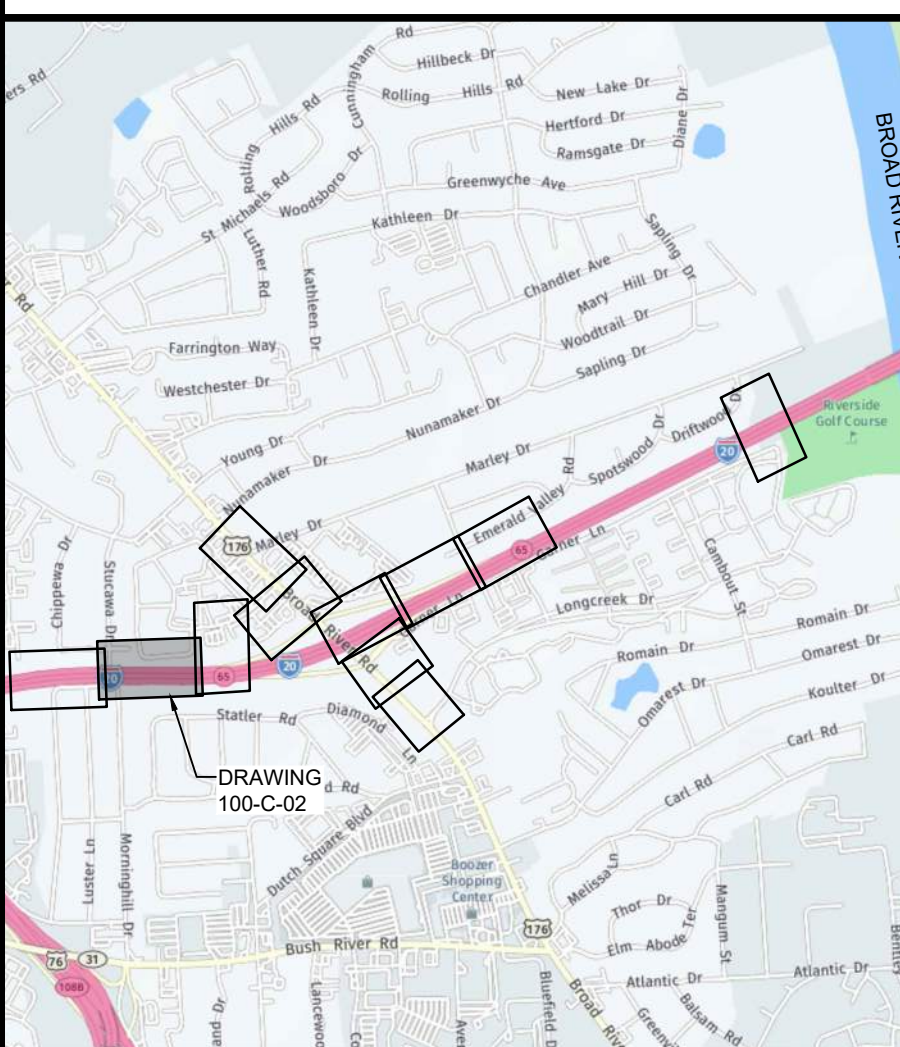


GENERAL NOTES:

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3. ALL STRUCTURES WITHIN THE NEW R/W WILL BE DEMOLISHED AND CLEARED (BY OTHERS) BEFORE CONSTRUCTION.
4. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT.
- 2 CONTRACTOR TO COORDINATE SUPPORT OF EXISTING POWER POLE DURING PIPE INSTALLATION. POWER POLE WILL BE REMOVED DURING CONSTRUCTION PHASE 2.
- 3 EXISTING GRADE, PROPOSED GRADE, AND ORIGINAL GRADE IN PROFILE WERE ALL ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 STUB-OUT LOCATION FOR FUTURE I-20 BORE. BORE PLANS WILL BE SUBMITTED AS A SEPARATE SUBMITTAL.
10 LF OF 24" DI PIPE
1- 24" BLIND FLANGE, RJ
- 5 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03.
- 6 32'x25' UTILITY PROTECTION CONCRETE SLAB (BY OTHERS)
- 7 FUTURE I-20 24-INCH WATER MAIN BORE. TO BE ISSUED UNDER SEPARATE PLAN SUBMITTAL.



KEY PLAN

SCALE: 1" = 200'

Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA

100% DESIGN SUBMITTAL

CAROLINA CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS		
REV	DATE	DESCRIPTION

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:

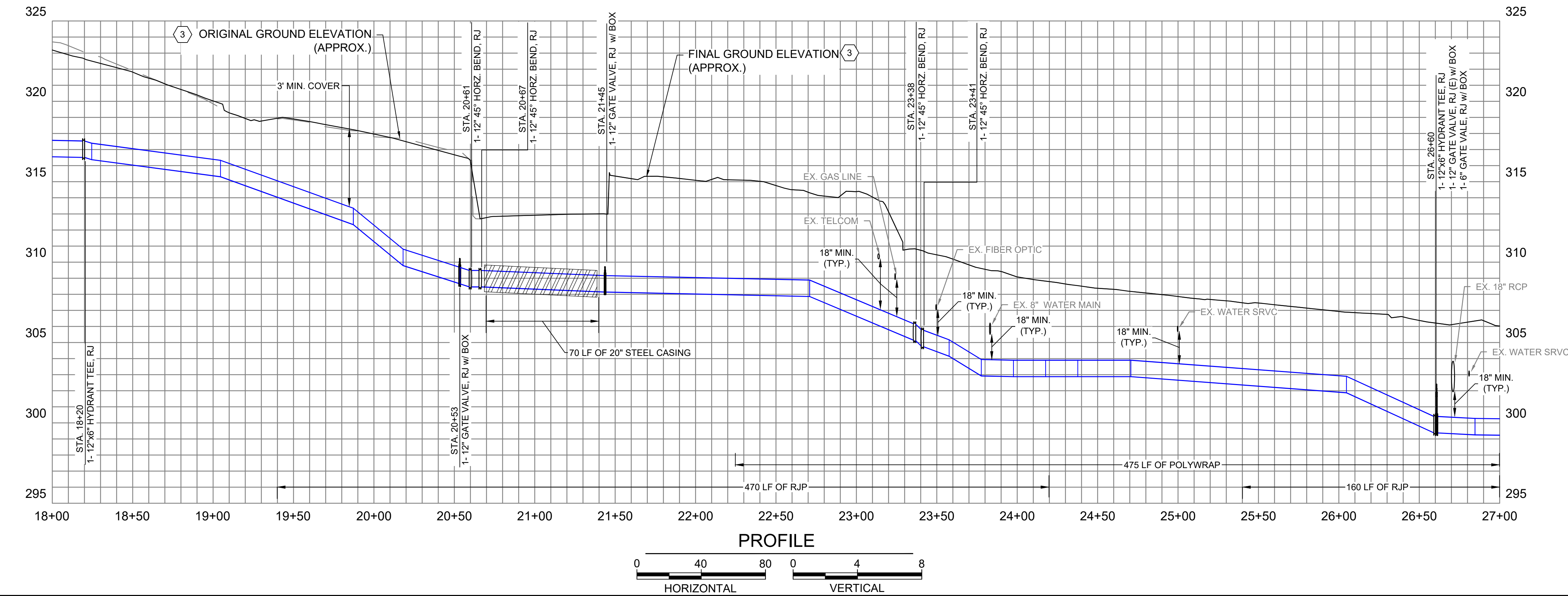
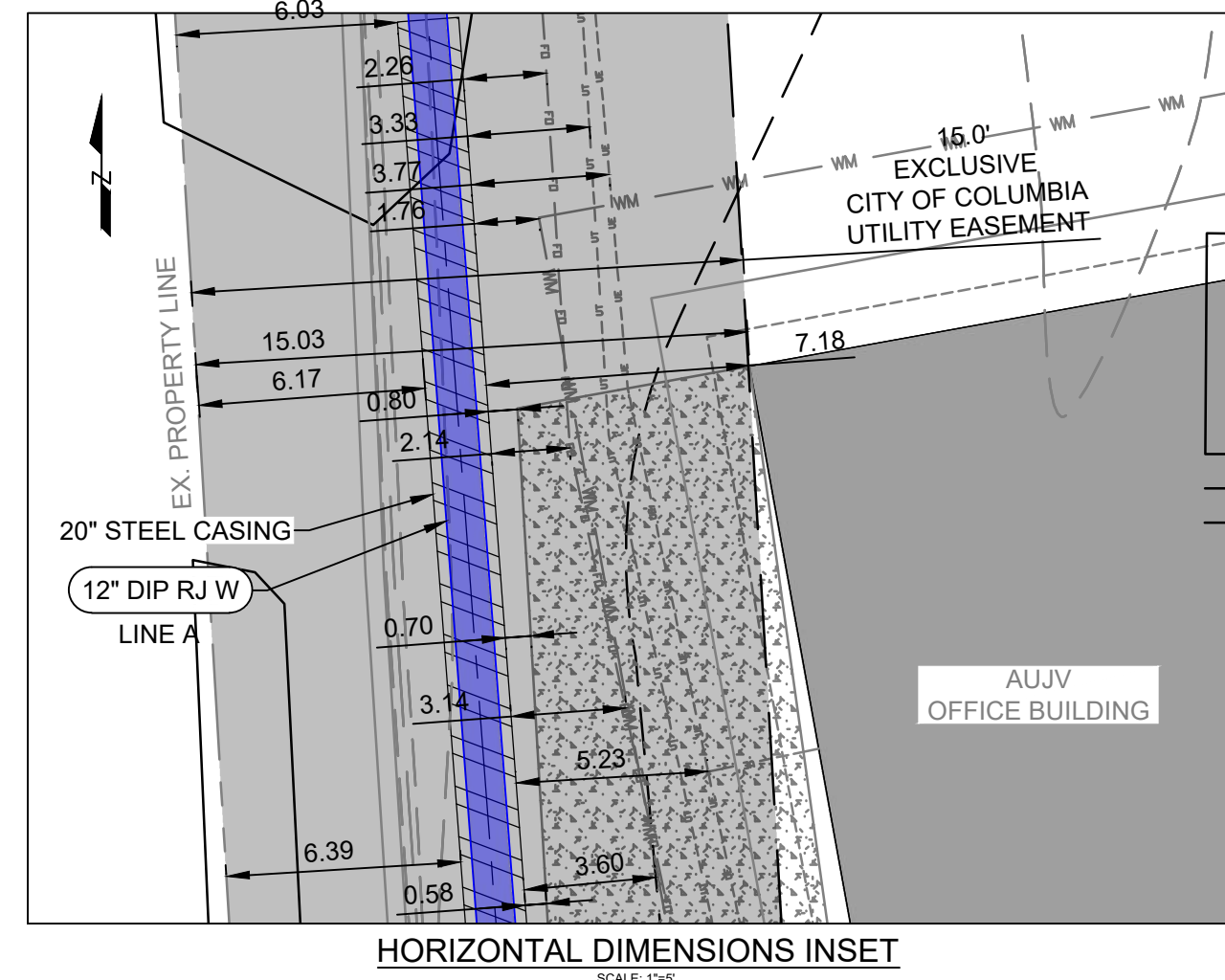
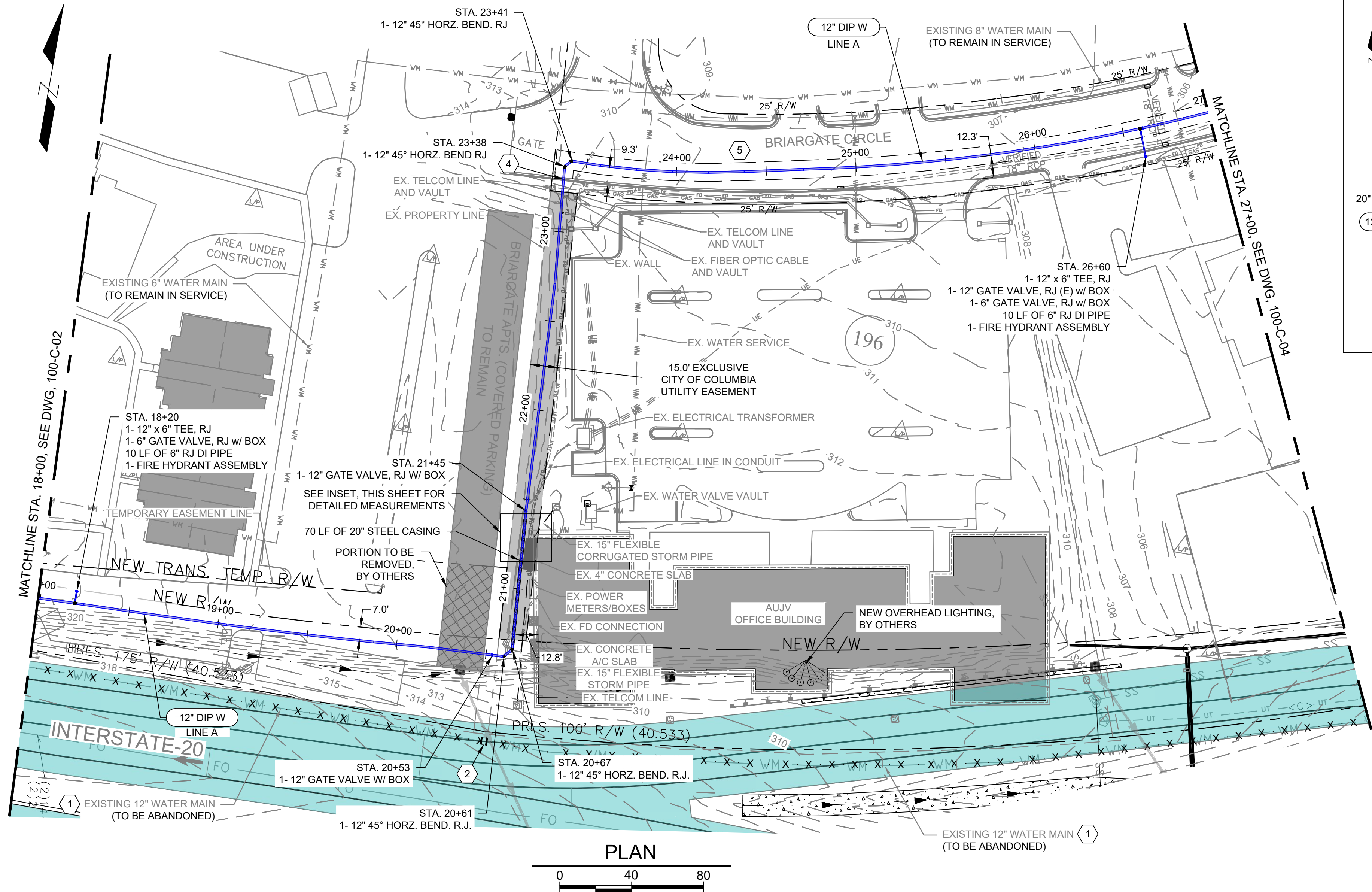
FILENAME
100-C-02.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

CIVIL

WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 9+00 TO 18+00

DRAWING NUMBER
100-C-02

SHEET NUMBER
10 OF 19

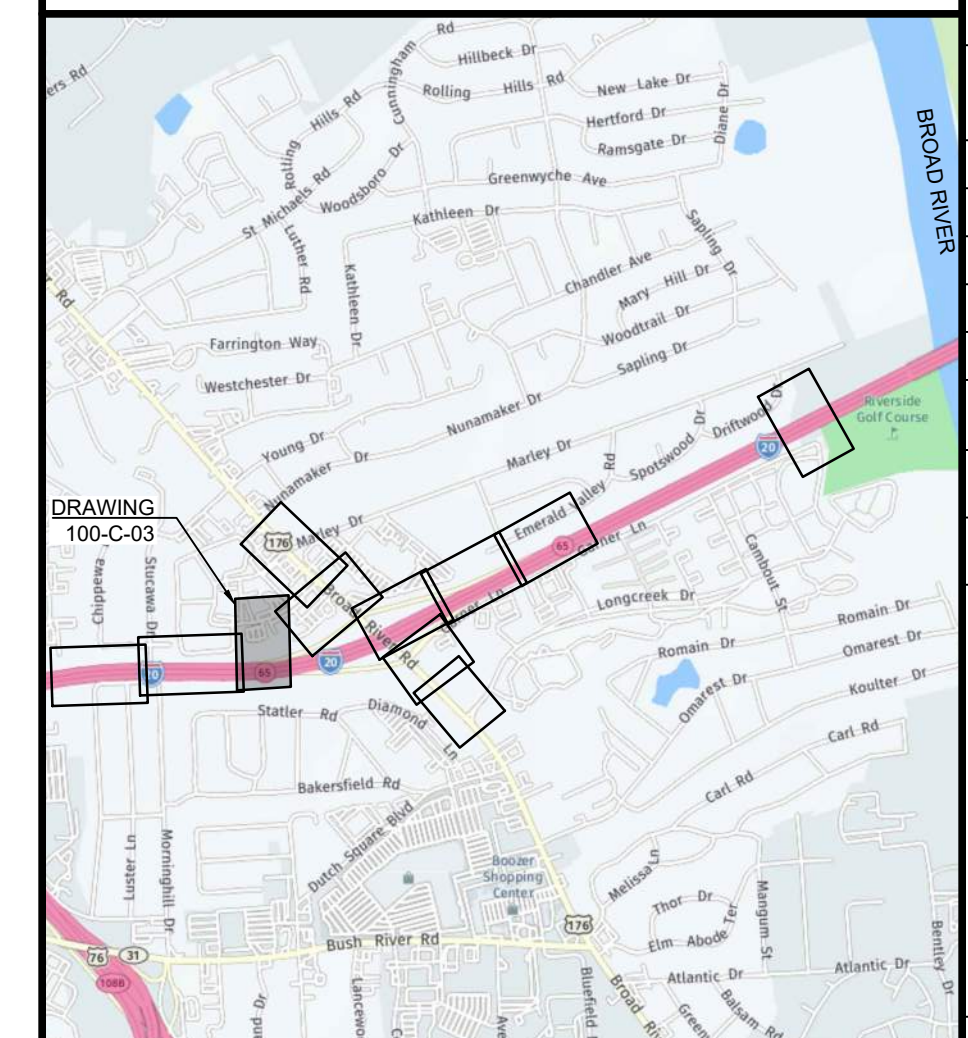


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4. PATCH ASPHALT ON BRIARGATE CIRCLE PER RICHLAND COUNTY ENCROACHMENT PERMIT REQUIREMENTS AND DETAIL ON DRAWING 000-C-03.
5. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

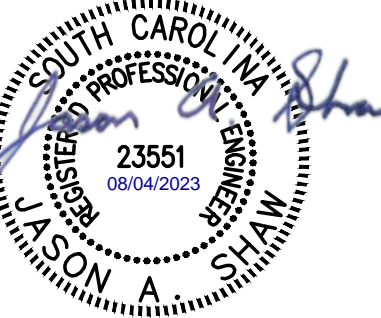
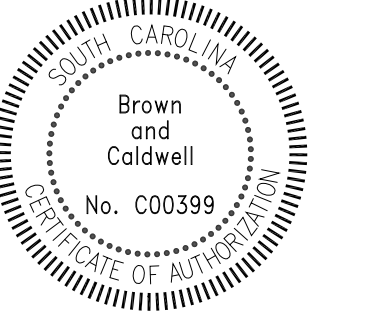
- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT.
- 2 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03.
- 3 FINAL GROUND AND ORIGINAL GROUND IN PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 SEE SCDOT STANDARD DETAIL 720-105-02 AS SHOWN ON DRAWING 4/000-C-03 FOR CURB CUT AND REPLACEMENT.
- 5 SEE PAVEMENT REPAIR DETAIL 4/000-C-03.



KEY PLAN
SCALE: 1" = 200'

Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

DESIGNED:

DRAWN:

CHECKED:

CHECKED:

APPROVED:

FILENAME
100-C-03.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

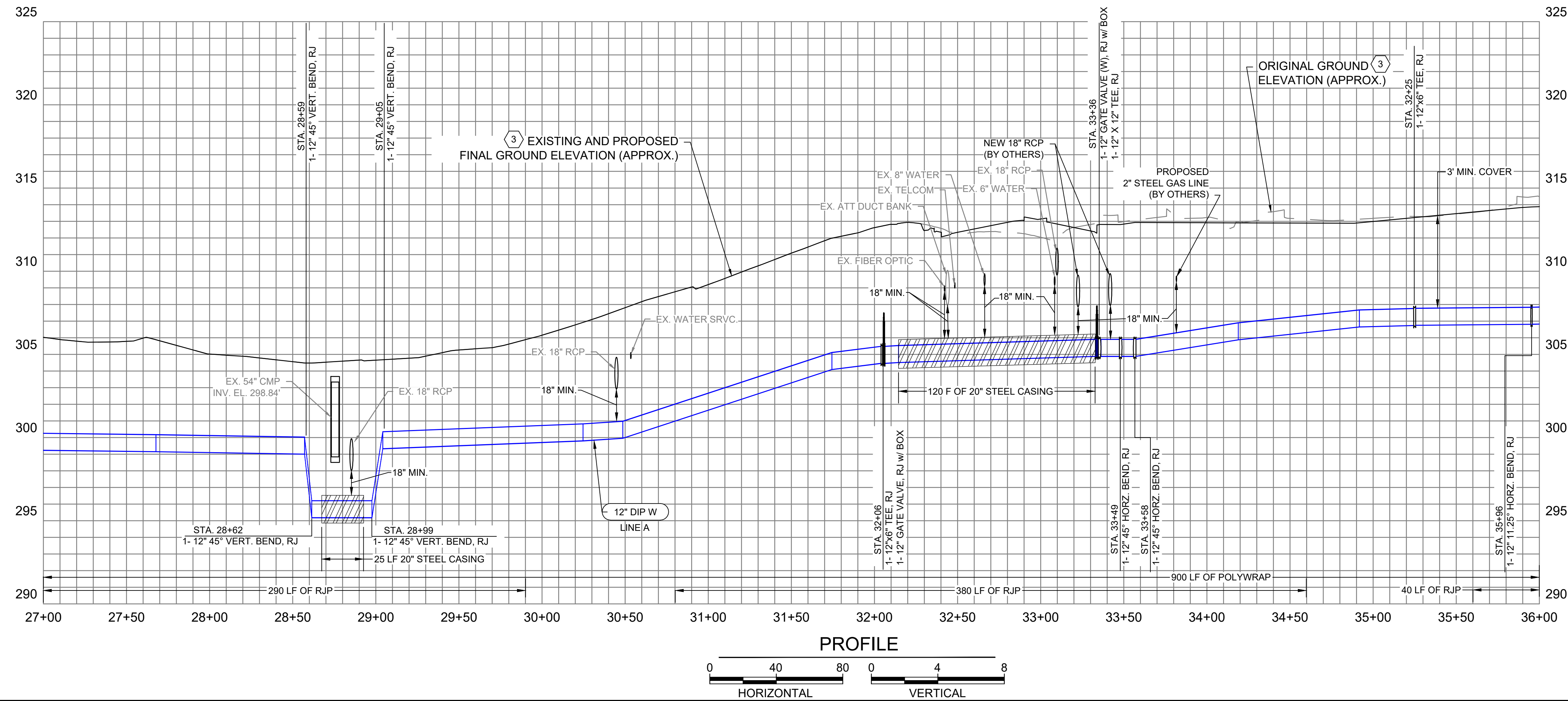
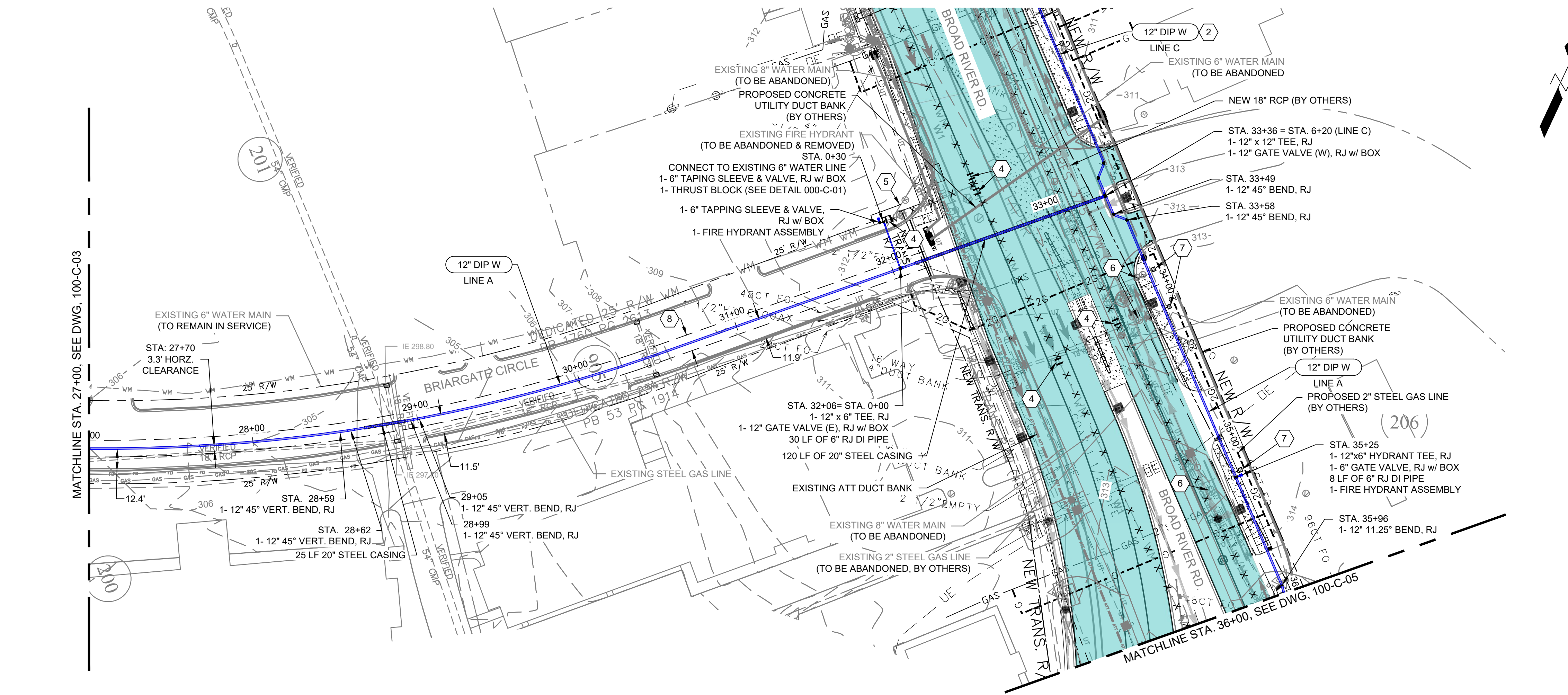
CIVIL

WATER MAIN
RELOCATION-LINEA
PLAN & PROFILE
STA. 18+00 TO 27+00

DRAWING NUMBER

100-C-03

SHEET NUMBER
11 OF 19

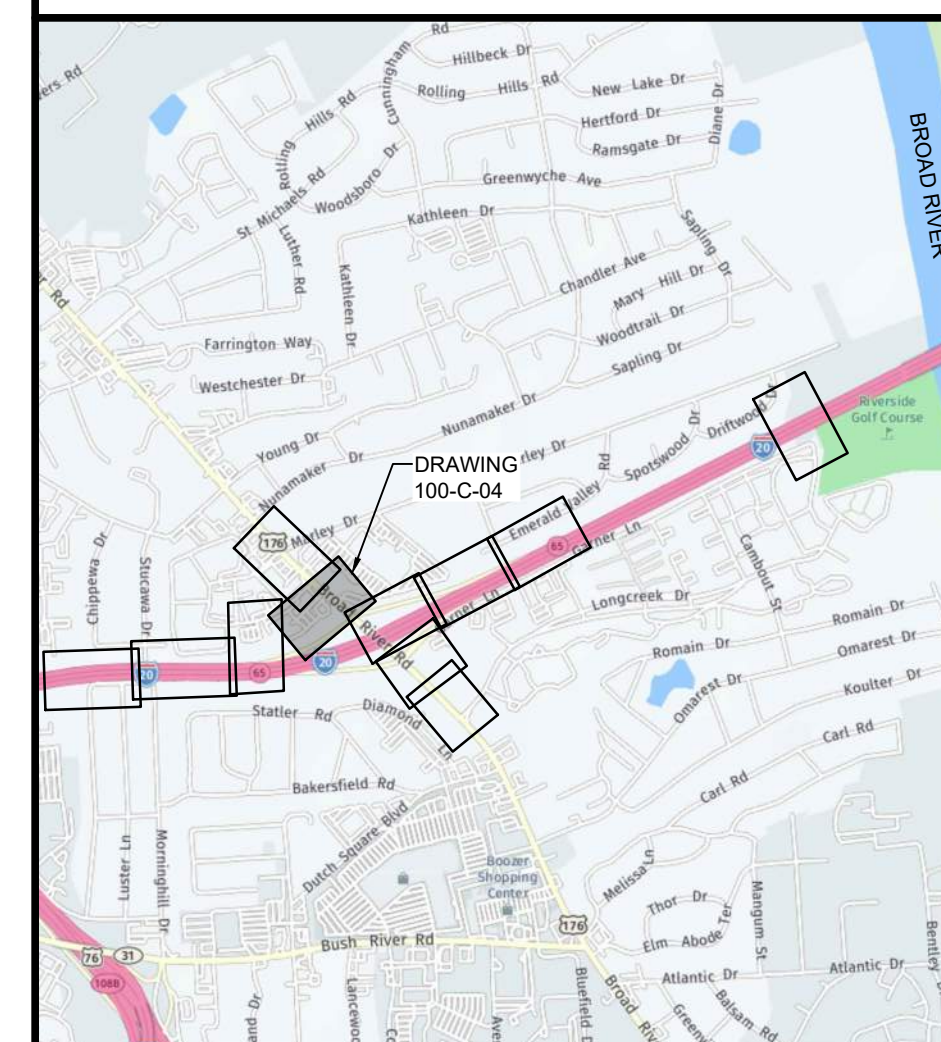


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4. PATCH ASPHALT ON BRIARGATE CIRCLE PER RICHLAND COUNTY ENCROACHMENT PERMIT REQUIREMENTS AND DETAIL ON DRAWING 000-C-03.
5. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

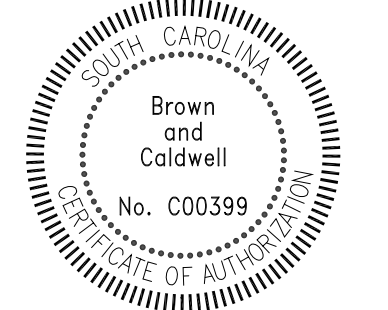
KEY NOTES:

- 1 REFER TO DRAWING 000-C-06 FOR OVERALL PLAN LAYOUT.
- 2 SEE DRAWING 200-C-01.
- 3 EXISTING GRADE, PROPOSED GRADE, AND ORIGINAL GRADE IN PROFILE WERE ALL ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03.
- 5 ROUTE NEW 1" WATER SERVICE TO EXISTING METER.
- 6 EXISTING WATER METER TO BE ABANDONED
- 7 NEW 1" WATER METER TO BE RECONNECTED TO EXISTING WATER SERVICE LINE.
- 8 SEE PAVEMENT REPAIR DETAIL 4/000-C-03.



Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

DESIGNED:

DRAWN:

CHECKED:

CHECKED:

APPROVED:

CIVIL

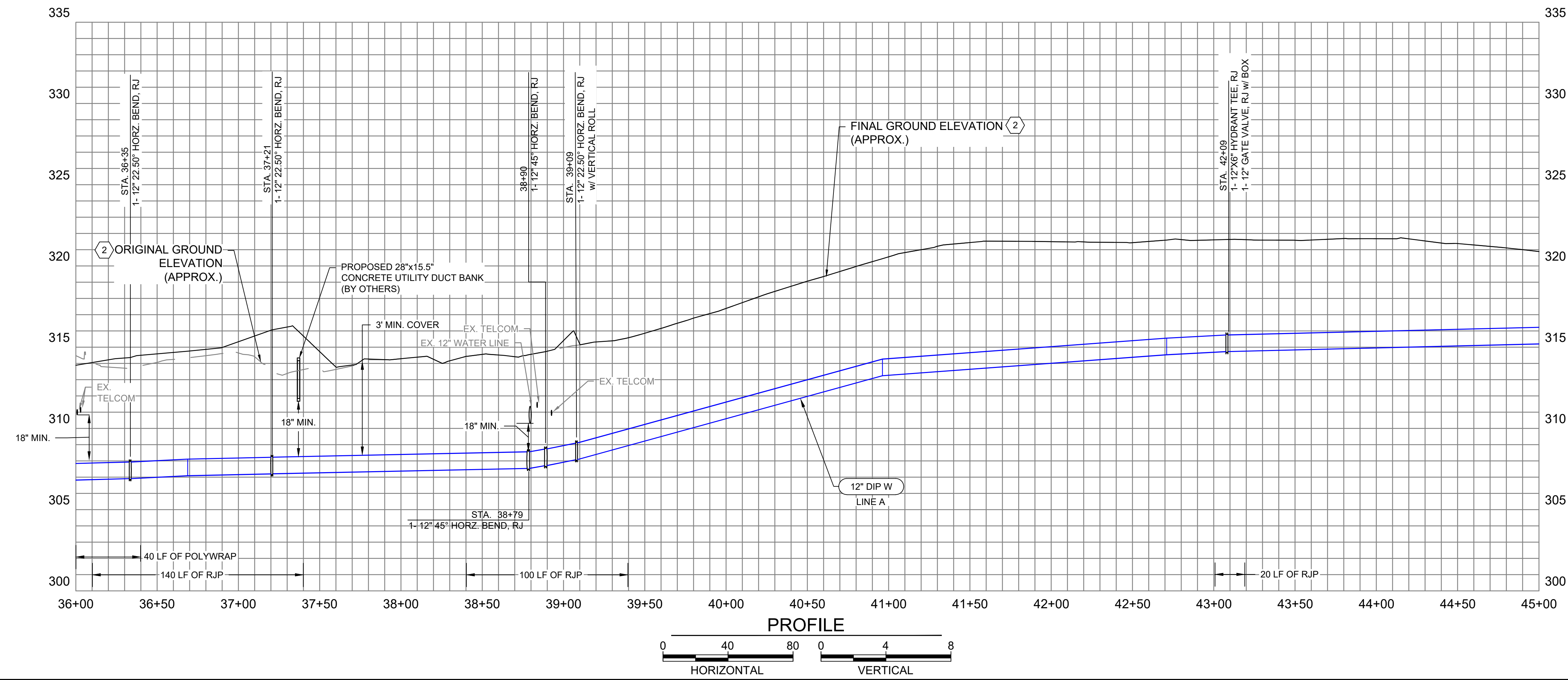
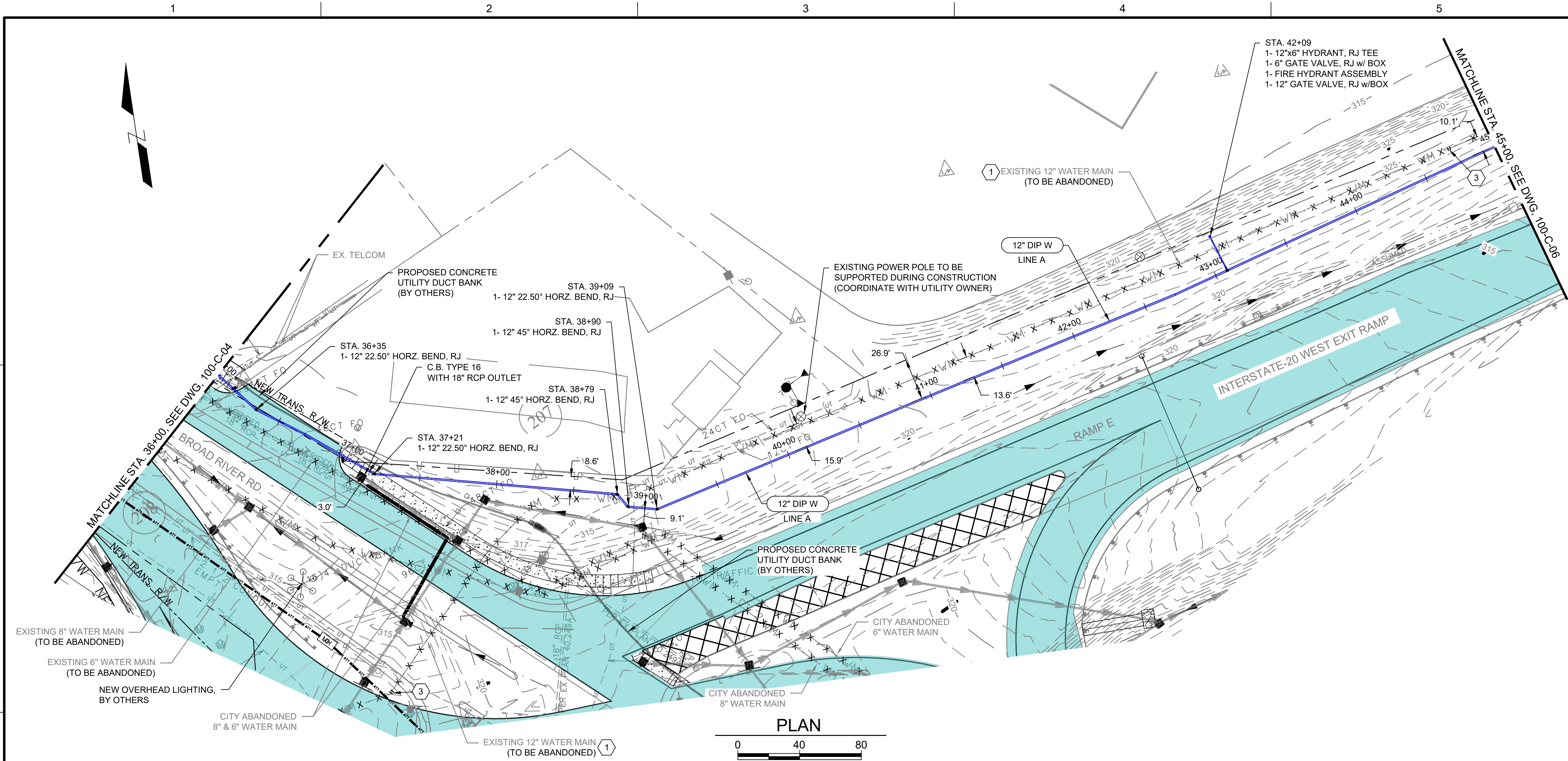
WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 27+00 TO 36+00

DRAWING NUMBER

100-C-04

SHEET NUMBER
12 OF 19

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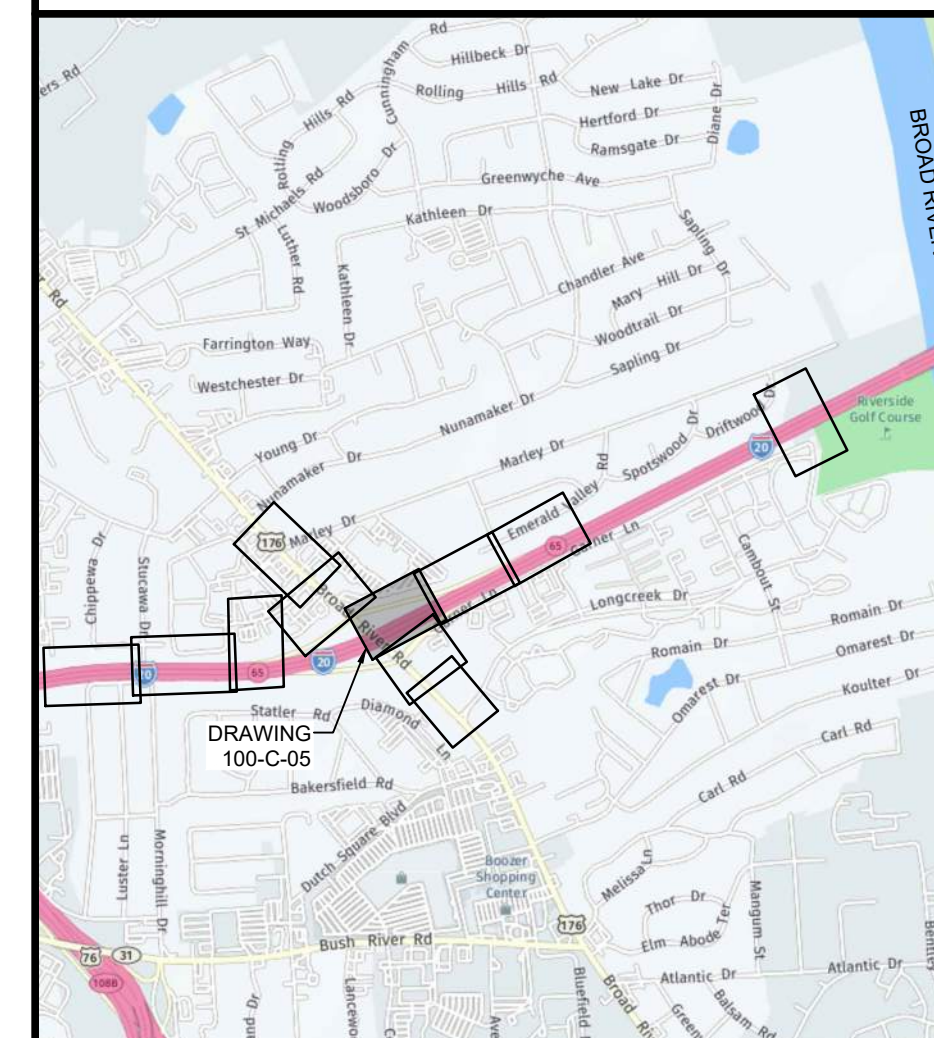


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4. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

- 1 REFER TO DRAWING 000-C-06 FOR OVERALL ABANDONMENT AND DEMOLITION PLANS.
- 2 EXISTING GROUND AND ORIGINAL GROUND IN PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 3 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03

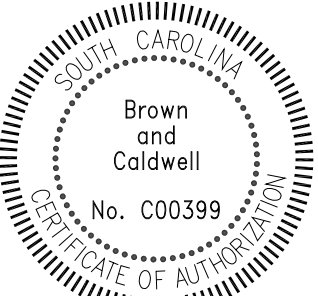


KEY PLAN
SCALE: 1" = 2000'



Brown and Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:
FILENAME
100-C-05.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

CIVIL

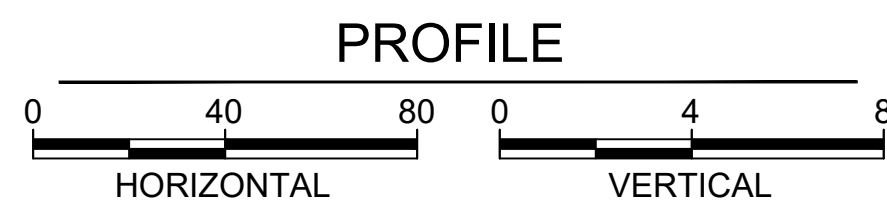
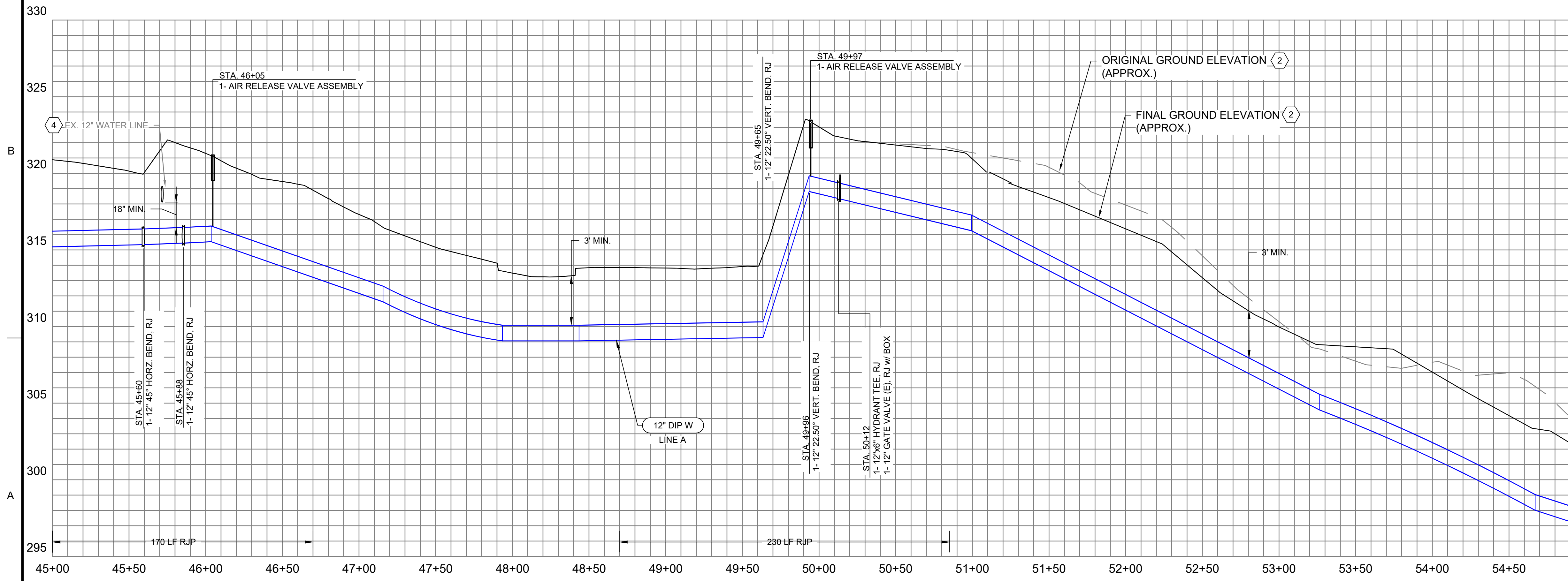
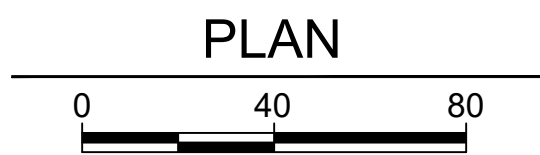
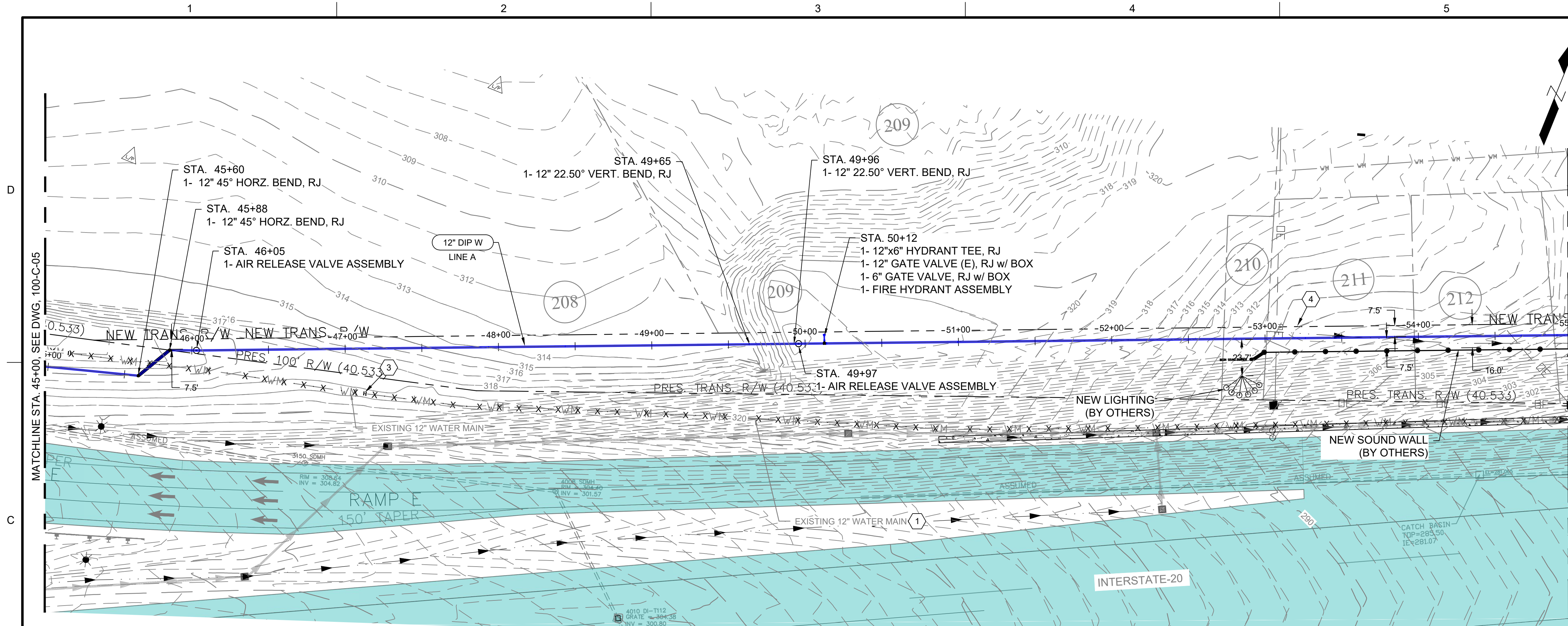
WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 36+00 TO 45+00

DRAWING NUMBER

100-C-05

SHEET NUMBER
13 OF 19

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GENERAL NOTES:

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4. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

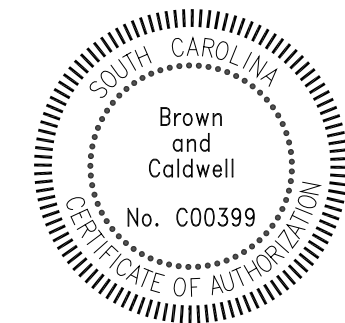
- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT.
- 2 FINAL GROUND AND ORIGINAL GROUND IN PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 3 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03.
- 4 APPROXIMATE LOCATION OF ACCESS GATE ON PROPERTY 211 (OWNED BY SCDOT). THIS GATE DESIGN AND INSTALLATION WILL BY BY OTHERS. (GATE TO BE 12' WIDE MINIMUM)



KEY PLAN
SCALE: 1" = 200'



COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:

DRAWN:

CHECKED:

CHECKED:

APPROVED:

FILENAME
100-C-06.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

CIVIL

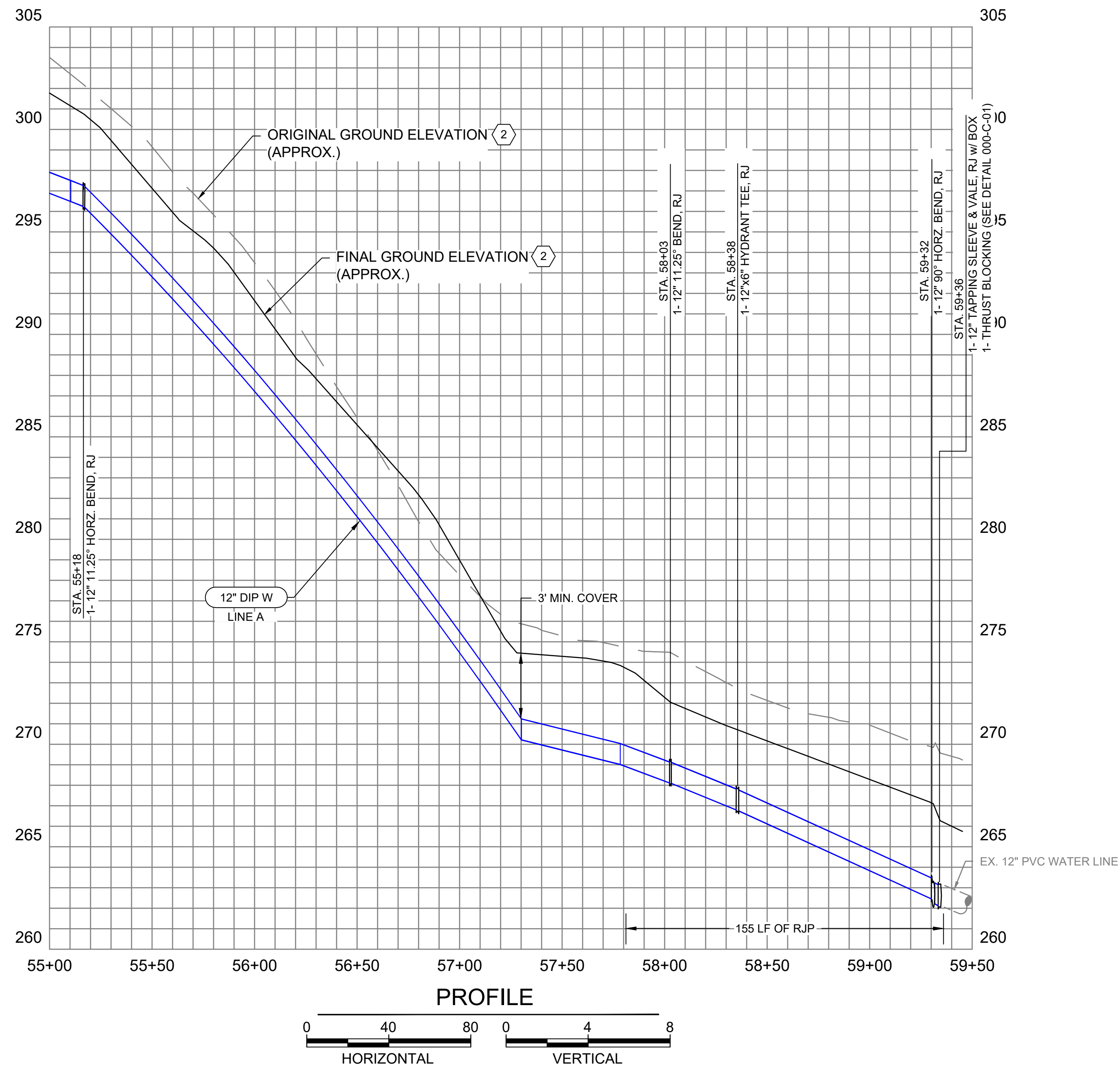
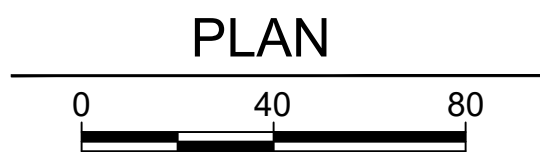
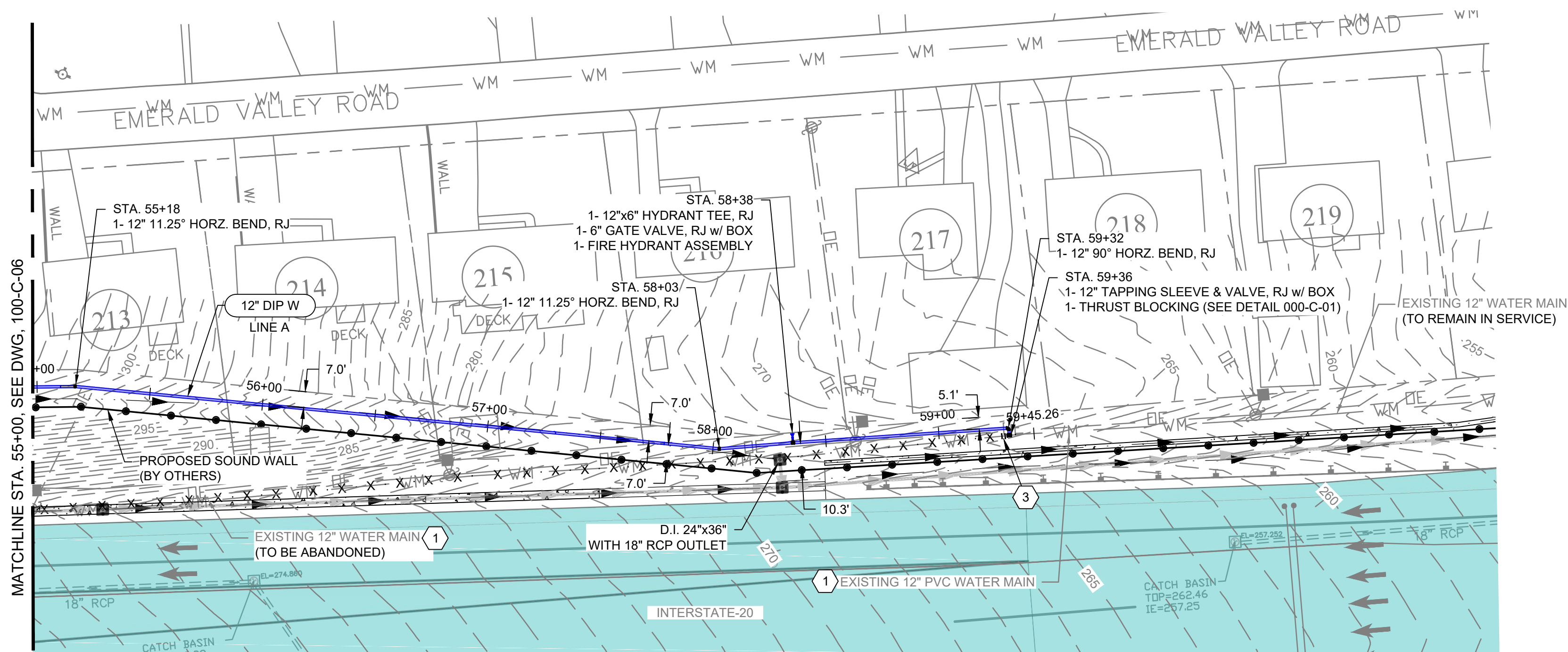
WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 45+00 TO 55+00

DRAWING NUMBER

100-C-06

SHEET NUMBER
14 OF 19

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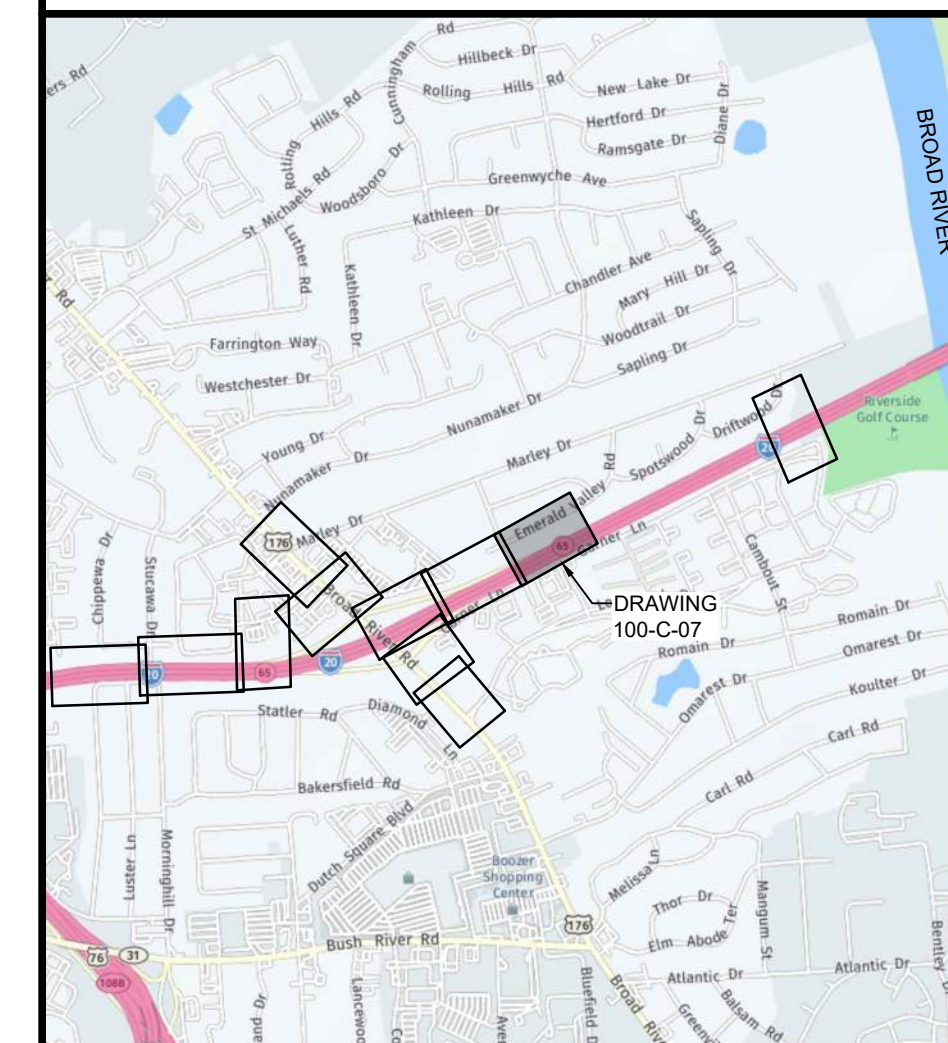


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4. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT.
- 2 EXISTING GROUND AND ORIGINAL GROUND IN PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 3 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03

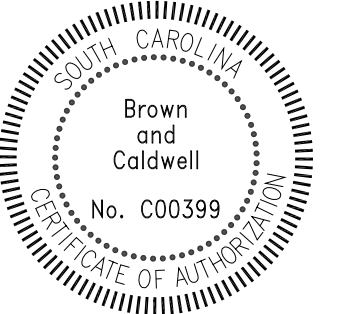


KEY PLAN
SCALE: 1" = 2000'



Brown and Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:

FILENAME
100-C-07.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

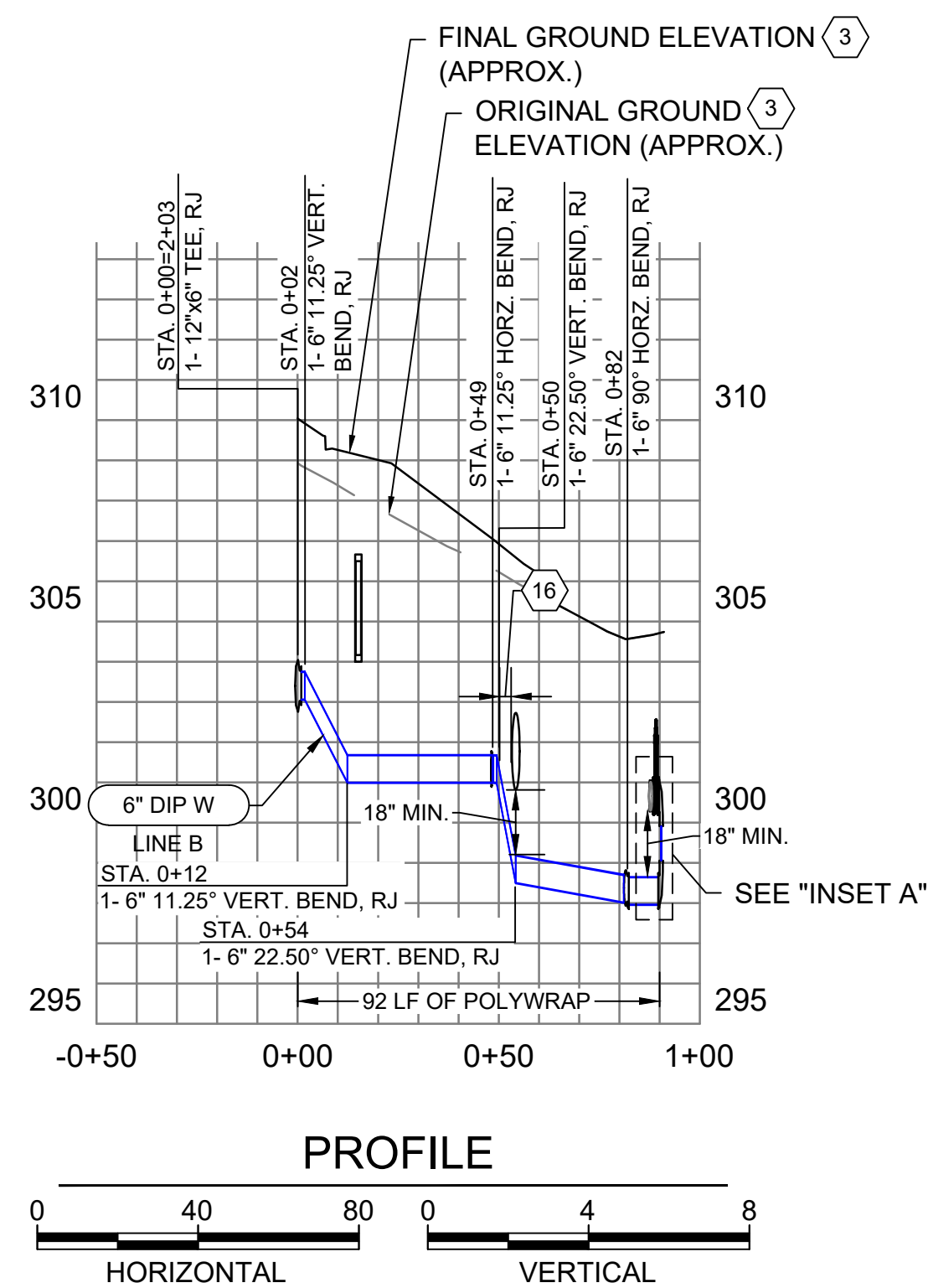
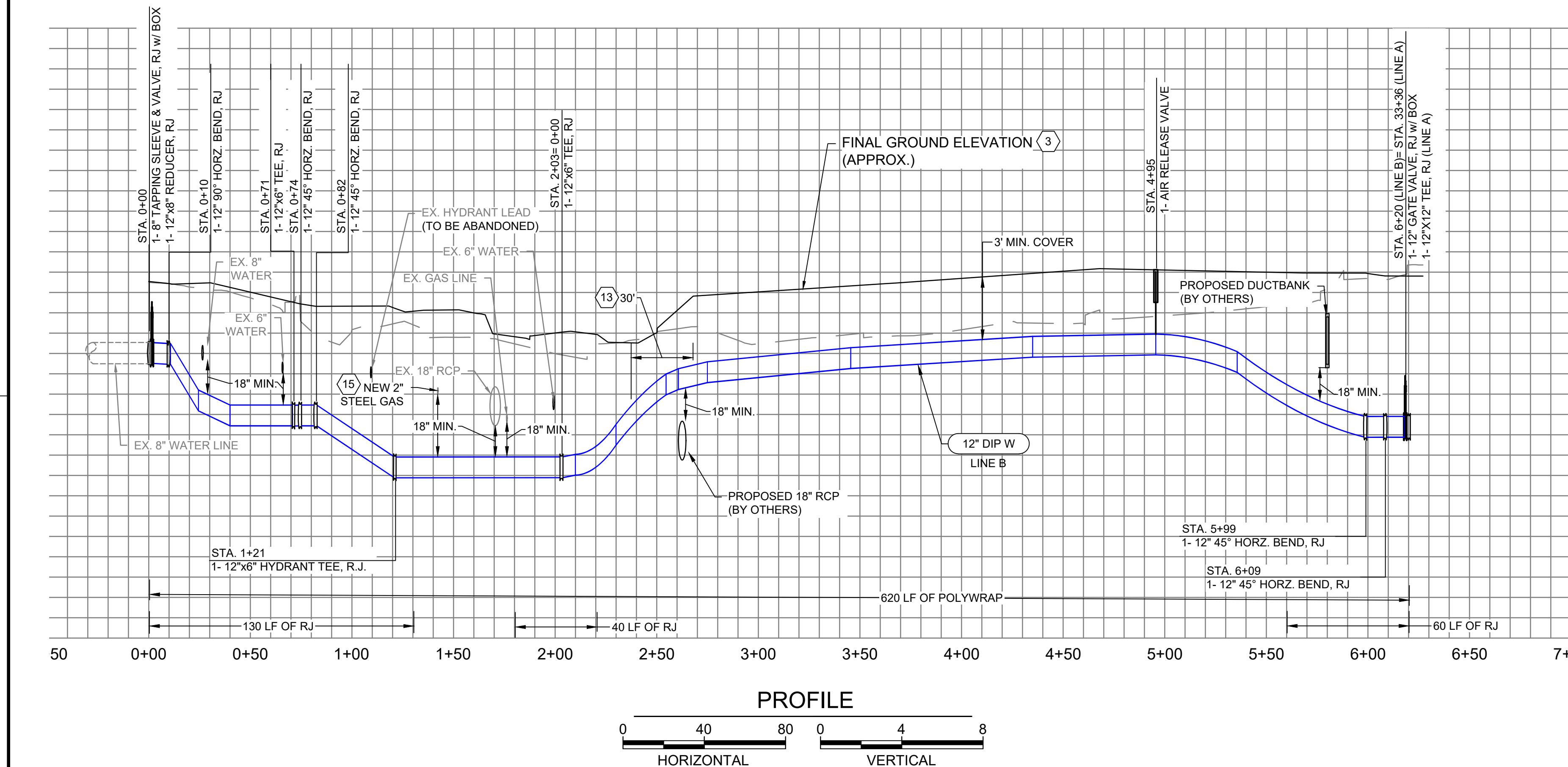
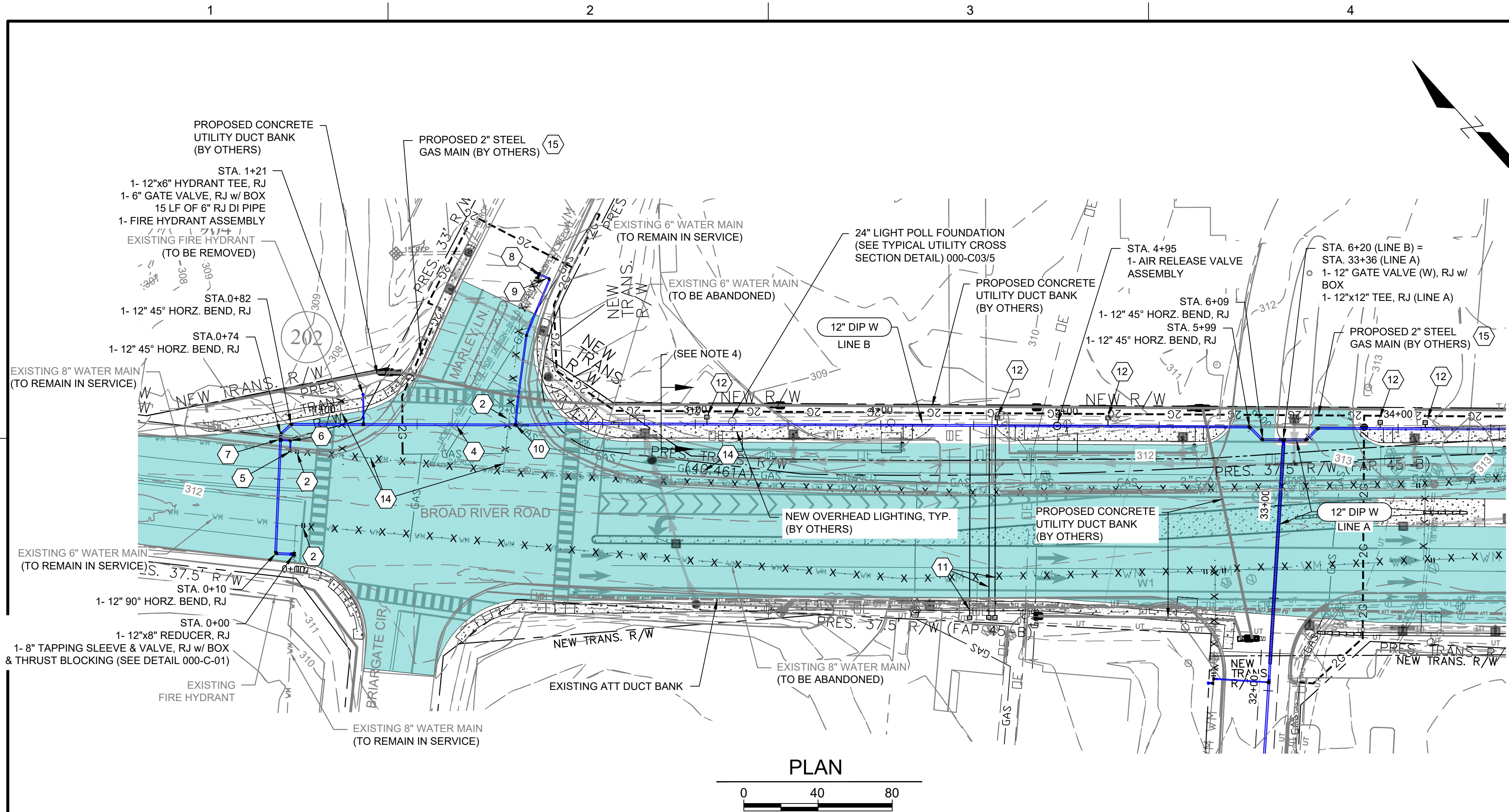
CIVIL

WATER MAIN
RELOCATION-LINE A
PLAN & PROFILE
STA. 55+00 TO 59+36

DRAWING NUMBER

100-C-07

SHEET NUMBER
15 OF 19

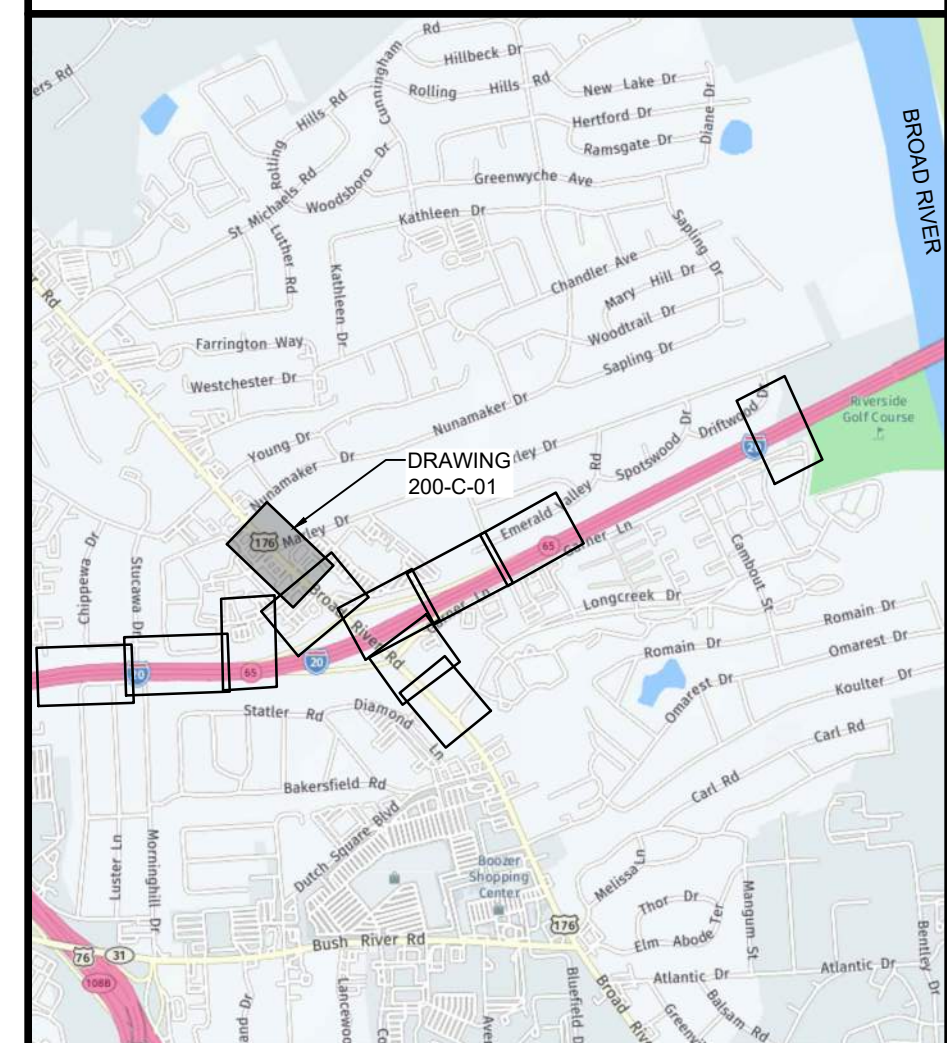


GENERAL NOTES:

1. RELOCATED WATER MAINS SHALL BE CONSTRUCTED AND THEN APPROVED BY THE CITY OF COLUMBIA AND A PERMIT TO OPERATE RECEIVED FROM THE SCDHEC PRIOR TO THE DEMOLITION OR ABANDONMENT OF ANY EXISTING INFRASTRUCTURE.
2. NEW WATER MAINS SHALL BE INSTALLED, TESTED, AND APPROVED TO PLACE INTO OPERATION BEFORE CONNECTING TO EXISTING WATER MAINS AND INSTALLING SERVICES. CONTRACTOR SHALL ISOLATE EXISTING WATER MAIN AND CUT IN SLEEVE TO CONNECT NEW WATER MAIN
3. CONTRACTOR SHALL SET WATER METER BOXES AT EDGE OF NEW RIGHT OF WAY AND CONNECT NEW METER TO EXISTING SERVICE TO HOUSE. WATER METERS FROM EXISTING SERVICES SHALL BE SALVAGED, WHERE POSSIBLE.
4. REFER TO DRAWING 000-C-03 FOR TYPICAL SECTION OF NEW UTILITY CORRIDOR.
5. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

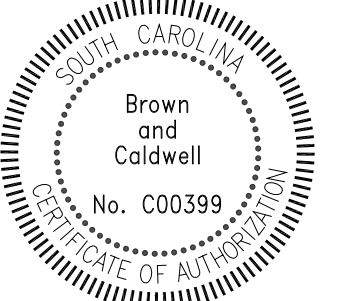
- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT PLANS.
- 2 CUT AND CAP EXISTING WATER LINE, SEE 3/000-C-03.
- 3 FINAL GROUND IN PROFILE WAS ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 CONTRACTOR TO VERIFY EXACT LOCATION AND DEPTH OF EXISTING STORM PIPES BEFORE CONSTRUCTION BEGINS.
- 5 1-6\" TAPPING SLEEVE & VALVE, RJ W/ BOX
- 6 1-6\" 90° BEND, RJ
- 7 STA. 0+71
1-12\"x6\" TEE, RJ
- 8 STA. 0+49
1-8\" 90° BEND, RJ
- 9 STA. 0+82
1-8\" TAPPING SLEEVE & VALVE, RJ W/ BOX
- 10 STA. 2+03 = 0+00
1-12\"x8\" TEE, RJ
- 11 RECONNECT EXISTING WATER METERS WITH 1\" SERVICE LINE CONNECTIONS, TYP.
- 12 RELOCATE EXISTING METER LOCATION WITH NEW METER AND CONNECT TO NEW WATER LINE. CONTRACTOR TO COORDINATE WITH CITY OF COLUMBIA AND PROPERTY OWNER.
- 13 THREE FOOT MINIMUM COVER REQUIREMENT OVER WATERMAIN FROM STATION 2+38 TO STATION 2+68 CANNOT BE MAINTAINED DUE TO CONFLICT WITH EXISTING AND PROPOSED UTILITIES. WATER MAIN INSTALLATION WITH LESS THAN 3-FOOT OF COVER TO BE INSTALLED UNDER CONCRETE SIDEWALK FOR ADDITIONAL PROTECTION. A FORMAL VARIANCE REQUEST WILL BE SUBMITTED WITH 100% PLAN SUBMITTAL.
- 14 VALVE / METER DEMOLITION. COORDINATE WITH CITY OF COLUMBIA STAFF ENSURE VALVES ARE IN THE CLOSED POSITION. REMOVE TOP VALVE BOX / METER BOX COVER AND TOP SECTION OF VALVE / METER BOX. FILL VALVE / METER BOX WITH FLOWABLE FILL PER SCDOT REQUIREMENTS. PATCH ASPHALT PAVEMENT. SEE DETAIL 000-C-03/4.
- 15 PROPOSED GAS WILL BE CONSTRUCTED BY OTHERS AFTER NEW WATER MAIN IS INSTALLED.
- 16 MAINTAIN A MIN. OF 30\" HORIZONTAL SEPARATION.



KEY PLAN
SCALE: 1\" = 200'

Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

**CAROLINA CROSSROADS
PHASE 2**

**CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41**

REVISIONS		
REV	DATE	DESCRIPTION

DESIGNED:	
DRAWN:	
CHECKED:	
CHECKED:	
APPROVED:	
FILENAME	200-C-01.DWG
BC PROJECT NUMBER	156904
CLIENT PROJECT NUMBER	SCDOT PROJECT ID P027662

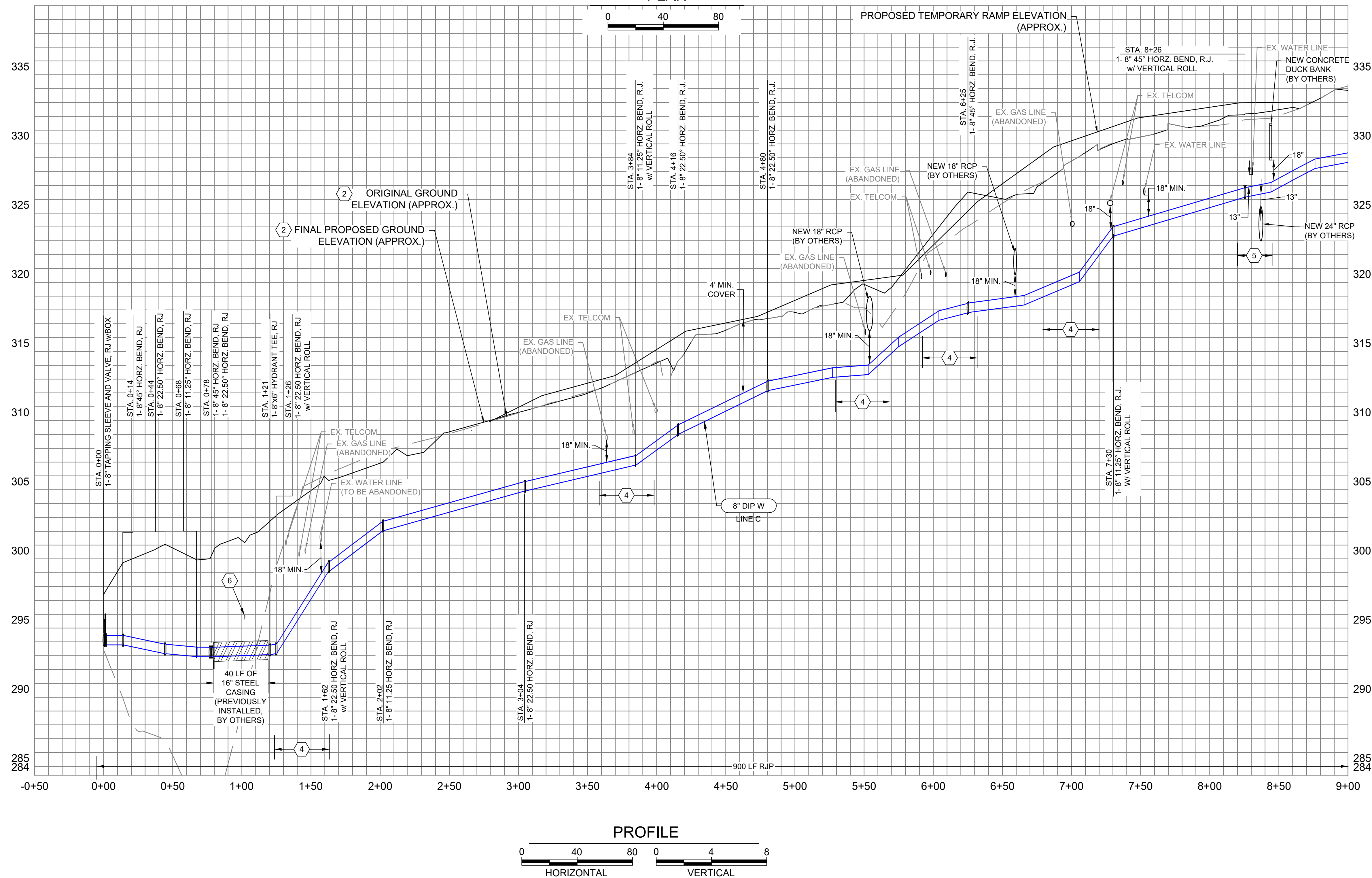
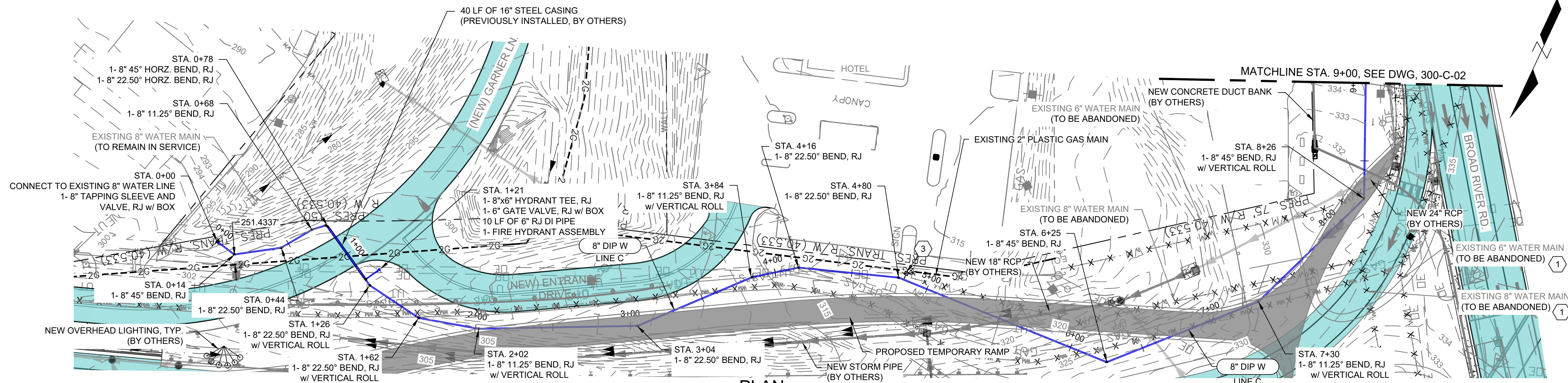
CIVIL

**WATER MAIN
RELOCATION-LINE B
PLAN & PROFILE
STA. 0+00 TO 6+21**

DRAWING NUMBER

200-C-01

SHEET NUMBER
16 OF 19

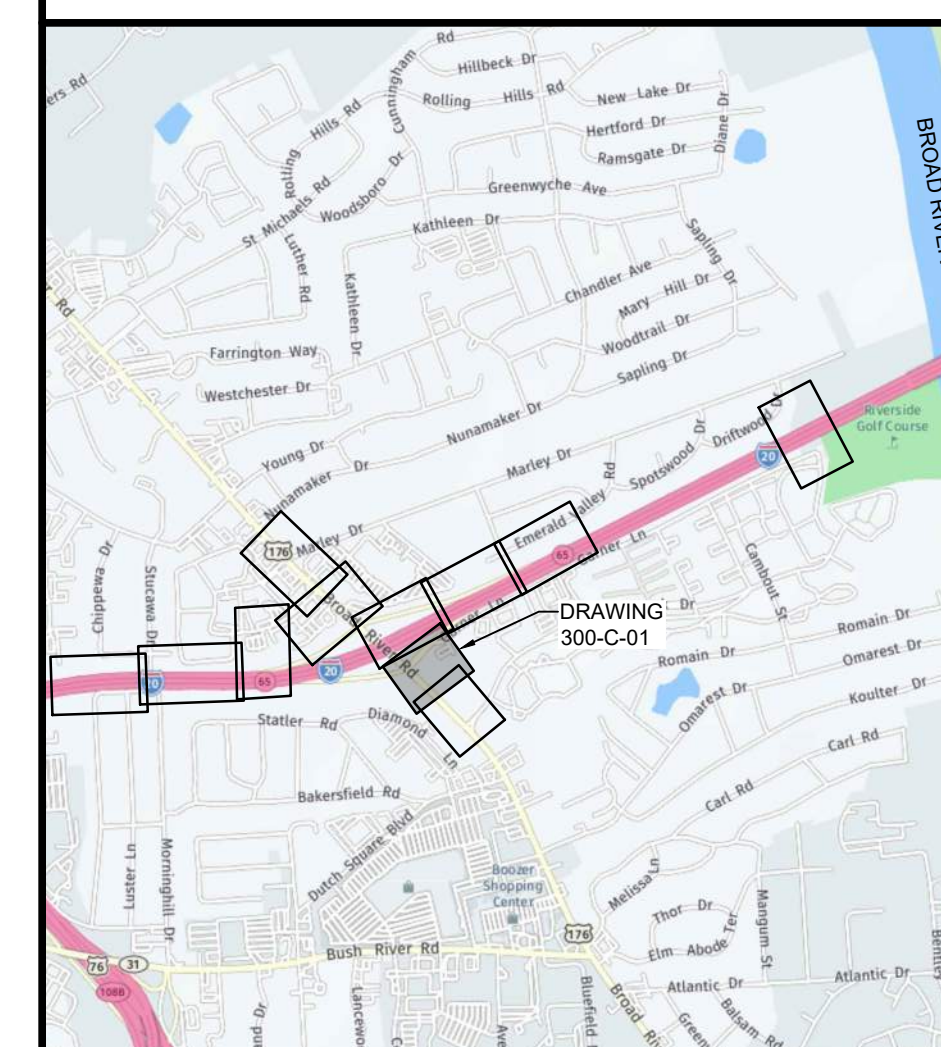


GENERAL NOTES:

- RELOCATED WATER MAINS SHALL BE CONSTRUCTED AND THEN APPROVED BY THE CITY OF COLUMBIA AND A PERMIT TO OPERATE RECEIVED FROM THE SCDHEC PRIOR TO THE DEMOLITION OR ABANDONMENT OF ANY EXISTING INFRASTRUCTURE.
- NEW WATER MAINS SHALL BE INSTALLED, TESTED, AND APPROVED TO PLACE INTO OPERATION BEFORE CONNECTING TO EXISTING WATER MAINS AND INSTALLING SERVICES. CONTRACTOR SHALL ISOLATE EXISTING WATER MAIN AND CUT IN SLEEVE TO CONNECT NEW WATER MAIN
- CONTRACTOR SHALL SET WATER METER BOXES AT EDGE OF NEW RIGHT OF WAY AND CONNECT NEW METER TO EXISTING SERVICE TO HOUSE. WATER METERS FROM EXISTING SERVICES SHALL BE SALVAGED, WHERE POSSIBLE.
- CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.
- IN AREAS WHERE PROPOSED UTILITIES AND STORM DRAINS ARE CROSSING PROPOSED WATER MAIN, AUJV TO COORDINATE CONSTRUCTION OF THE OTHER PROPOSED UTILITIES AND STORM DRAINS TO ALLOW FOR PROPER INSTALLATION OF THE PROPOSED WATER MAINS PER THE CITY OF COLUMBIA APPROVED CONSTRUCTION DRAWINGS, SPECIFICATIONS, AND CALCULATIONS.

KEY NOTES:

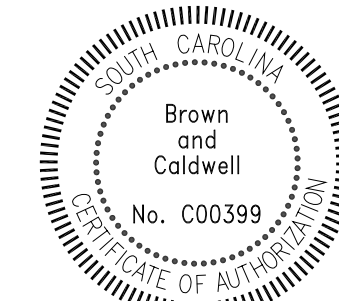
- REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT PLANS.
- FINAL GRADE AND PROPOSED GRADE IN PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- SET NEW WATER METER FOR EXISTING HOTEL WATER SERVICE LINE AND RECONNECT ONCE NEW WATER LINE IS IN SERVICE.
- 40 LF OF POLYWRAP (20 LF EACH WAY) UNDER GAS MAIN.
- 18-INCH VERTICAL SEPARATION REQUIREMENT FROM EXISTING AND PROPOSED UTILITIES FROM STATION 8+20 TO 8+45 CANNOT BE MAINTAINED WITHOUT ROUTING PROPOSED WATER MAIN UNDER ALL THE UTILITY CROSSINGS SHOWN THUS CAUSING THE PROPOSED WATER MAIN TO BE GREATER THAN 10 FT DEEP. A FORMAL VARIANCE REQUEST WILL BE SUBMITTED WITH 100% PLAN SUBMITTAL. INSTALL NEOPRENE PAD BETWEEN THE EXISTING WATER MAIN, PROPOSED RCP, AND THE NEW 8-INCH WATER MAIN AS AN ADDITIONAL MEASURE OF PROTECTION.
- EXISTING 2" PLASTIC GAS MAIN



KEY PLAN
SCALE: 1" = 200'

Brown and Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

**CAROLINA CROSSROADS
PHASE 2**

CONFLICTS
2000/2004, 2005,
2074, 2075
**FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41**

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:

FILENAME
300-C-01.DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

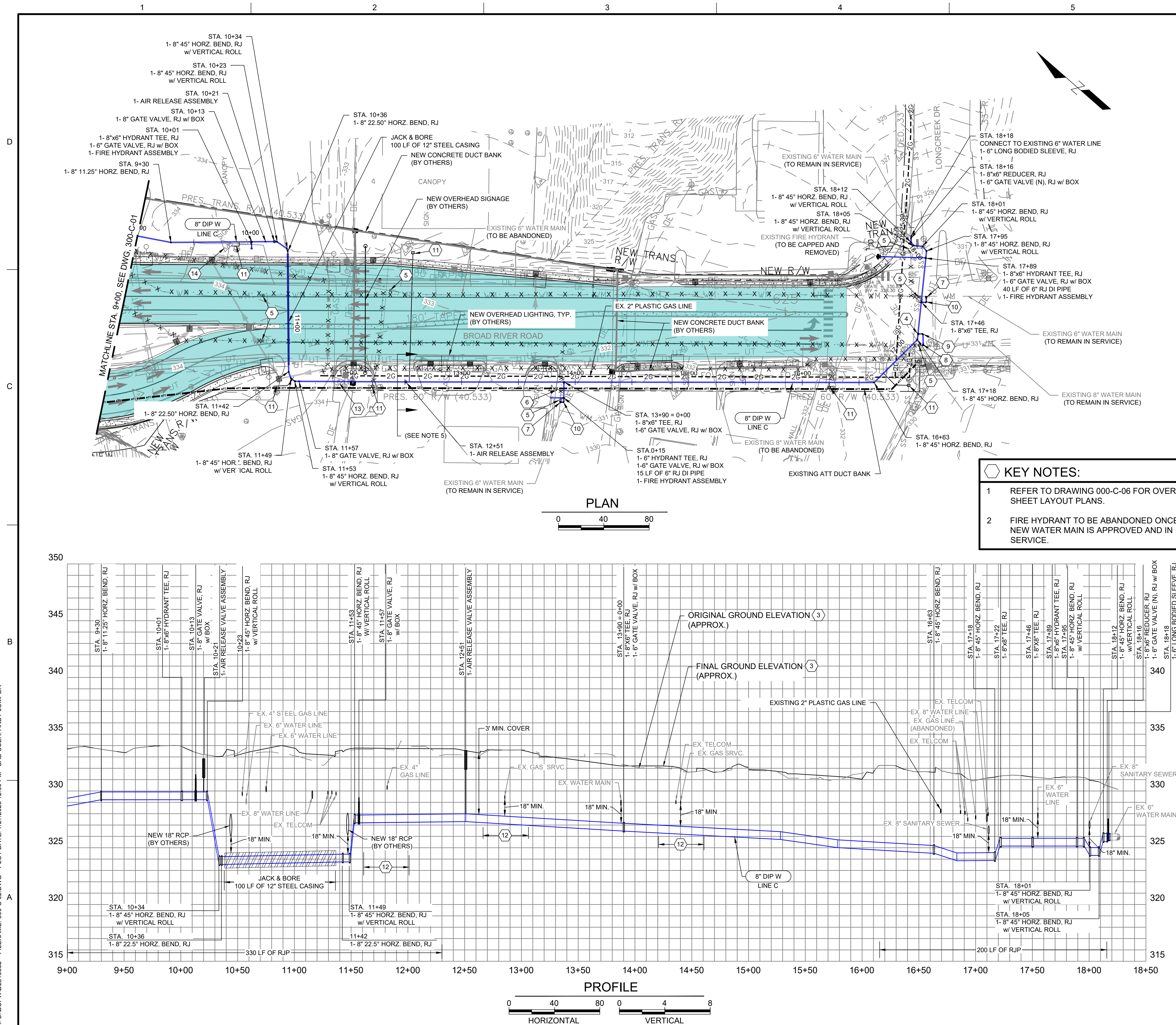
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**WATER MAIN
RELOCATION-LINE C
PLAN & PROFILE
STA. 0+00 TO 9+00**

DRAWING NUMBER

300-C-01

SHEET NUMBER
17 OF 19

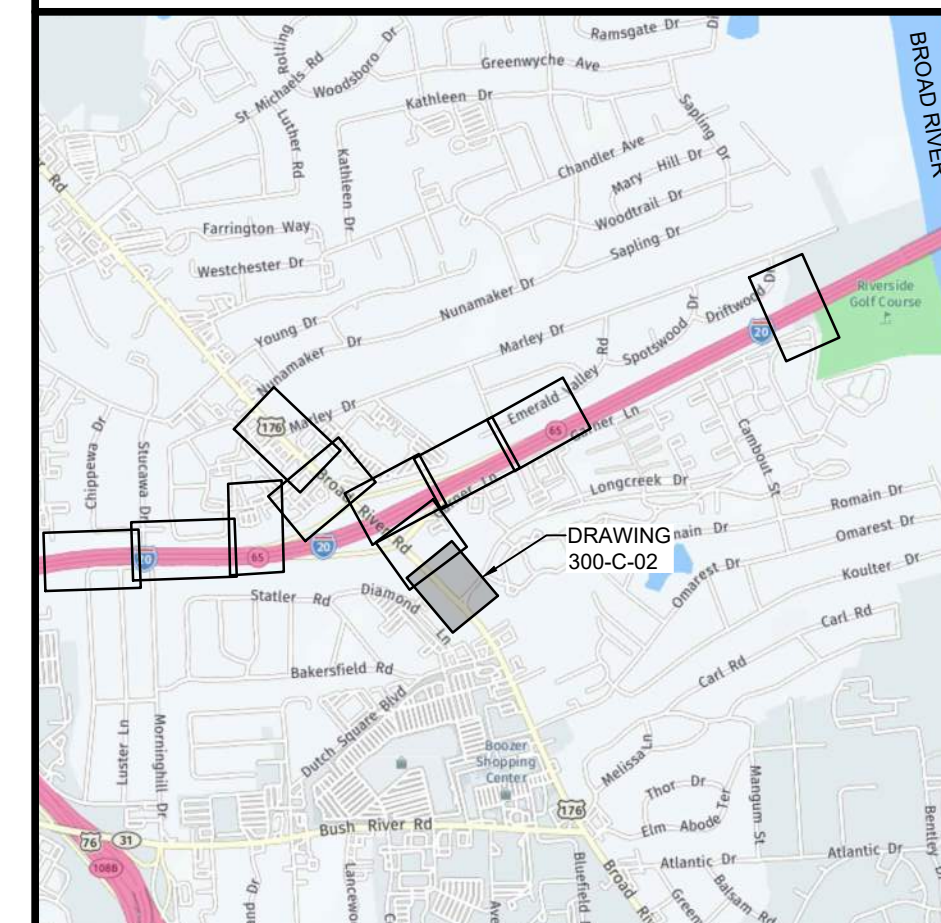


GENERAL NOTES:

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3. CONTRACTOR SHALL SET WATER METER BOXES AT EDGE OF NEW RIGHT OF WAY AND CONNECT NEW METER TO EXISTING SERVICE TO HOUSE. WATER METERS FROM EXISTING SERVICES SHALL BE SALVAGED, WHERE POSSIBLE.
4. ANY ABOVE GROUND APPURTENANCES THAT WILL BE ABANDON SHALL BE REMOVED AND RETURNED TO THE OWNER.
5. REFER TO DRAWING 000-C-03 FOR TYPICAL SECTION OF NEW UTILITY CORRIDOR.
6. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.

KEY NOTES:

- 3 IN EXISTING GROUND AND ORIGINAL GROUND PROFILE WERE BOTH ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 STA. 17+22
1-8"x8" TEE, RJ
20 LF 8" RJ DI PIPE
- 5 6" CUT AND CAP, RJ EXISTING WATER LINE
- 6 CAP EXISTING FH LEG (SEE NOTE 4)
- 7 STA. 0+22
CONNECT TO EXISTING 6" WATER LINE
1-6" TAPPING SLEEVE AND VALVE, RJ w/ BOX
- 8 CONNECT TO EXISTING 8" WATER LINE
1-8" TAPPING SLEEVE AND VALVE, RJ w/ BOX
- 9 8" 90° HORZ. BEND, RJ
- 10 STA. 0+18
6" 90° HORZ. BEND, RJ
- 11 RECONNECT EXISTING WATER METERS WITH 1" SERVICE LINE CONNECTIONS, TYP.
- 12 40 LF OF POLYWRAP (20 LF EACH WAY) UNDER GAS MAIN.
- 13 EXISTING POLES TO BE REMOVED BY OTHERS BEFORE WATER LINE CONSTRUCTION BEGINS.
- 14 EXISTING LIGHT POLE WILL BE REMOVED BEFORE CONSTRUCTION OF NEW WATER MAIN.



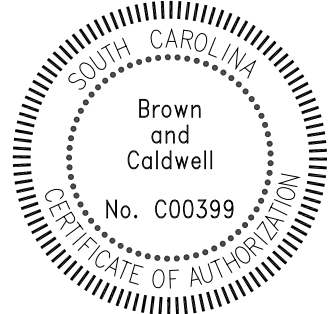
KEY PLAN

SCALE: 1" = 200'



Brown and Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:

DRAWN:

CHECKED:

CHECKED:

APPROVED:

FILENAME
300-C-02.DWG

BC PROJECT NUMBER

156904

CLIENT PROJECT NUMBER

SCDOT PROJECT ID P027662

CIVIL

WATER MAIN
RELOCATION-LINE B
PLAN & PROFILE
STA. 9+00 TO 18+18

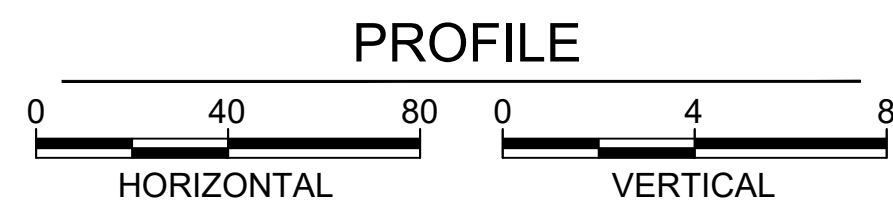
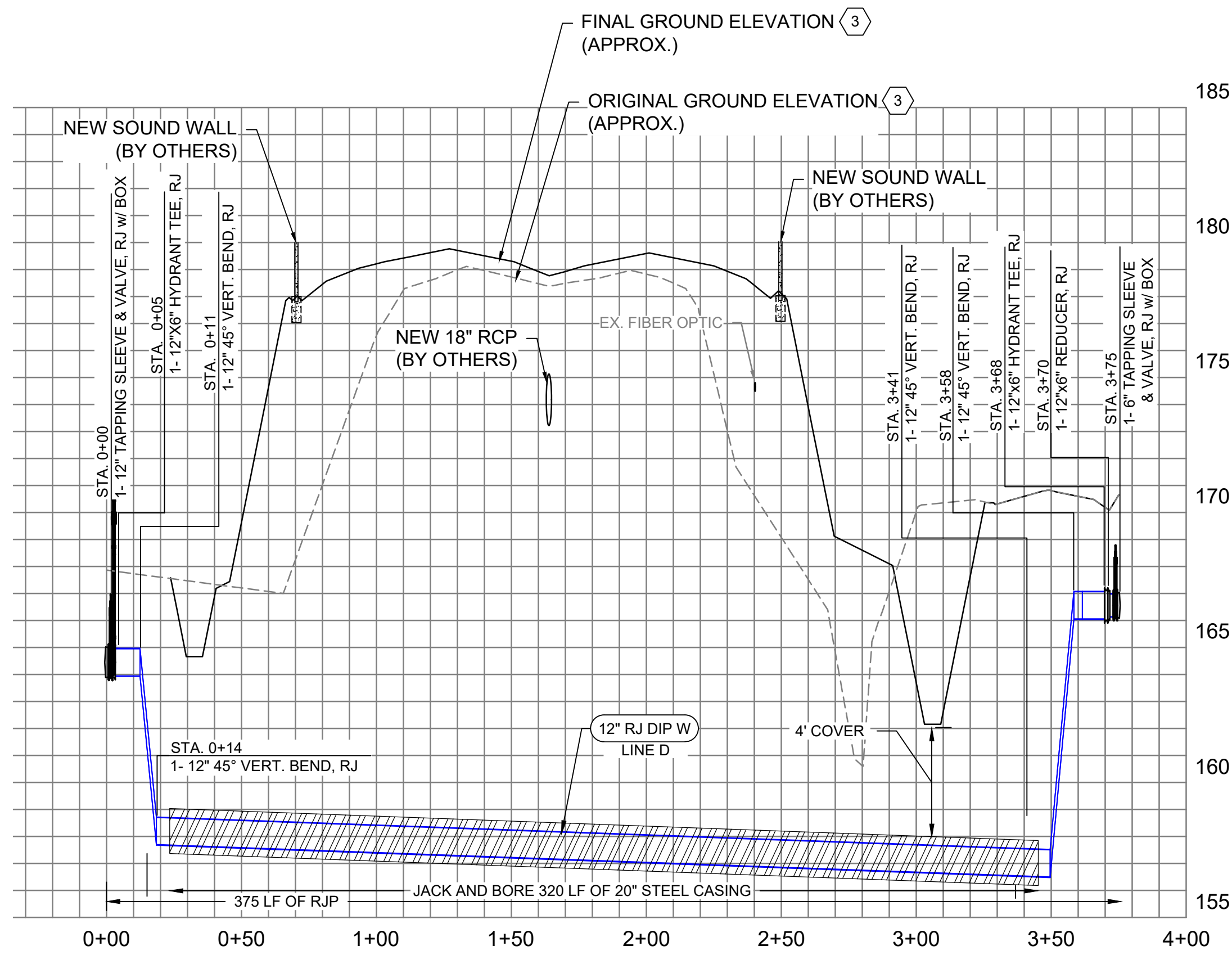
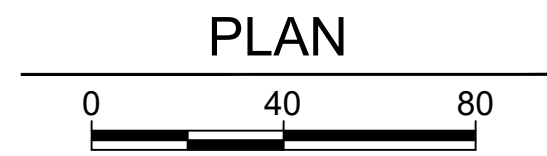
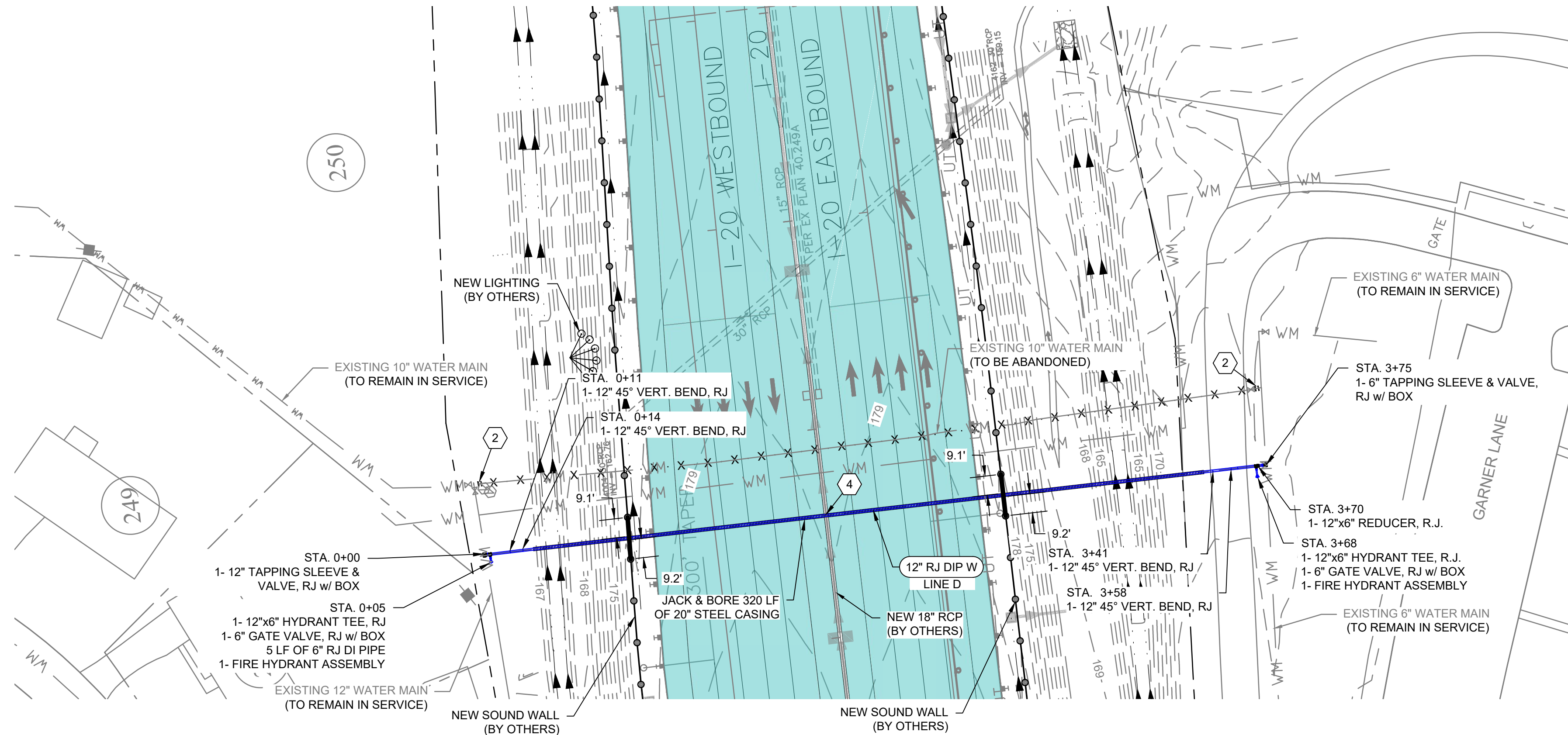
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SHEET NUMBER

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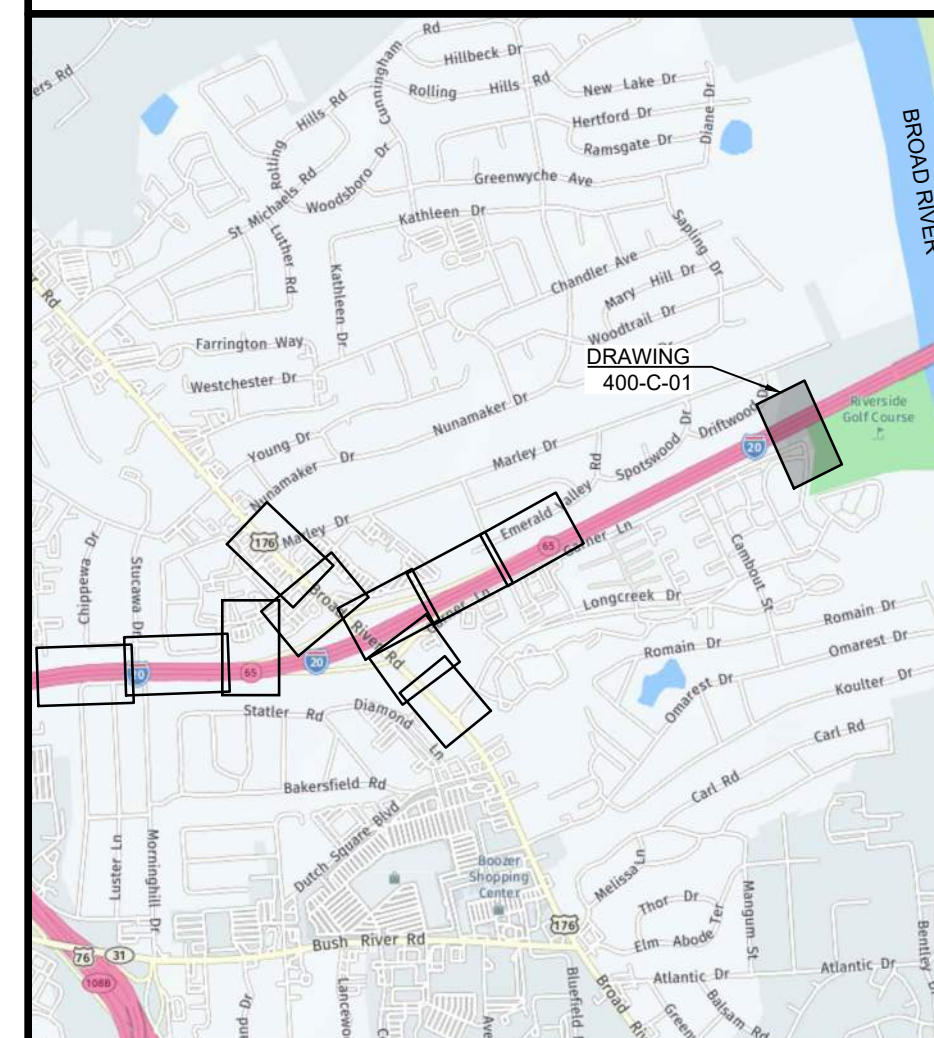


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3. CONTOUR LINES IN PLAN VIEW REPRESENT FINAL GRADE.
4. CONTRACTOR TO FIELD LOCATE BORE PIT LOCATIONS IN COORDINATION WITH AUJV STAFF.

KEY NOTES:

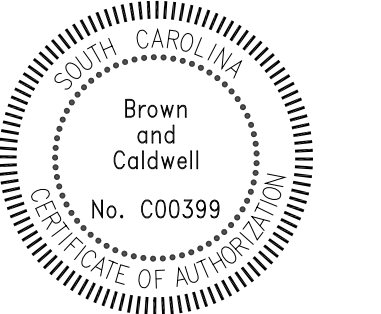
- 1 REFER TO DRAWING 000-C-06 FOR OVERALL SHEET LAYOUT PLANS.
- 2 CUT AND CAP EXISTING WATER MAIN.
- 3 EXISTING GRADE, PROPOSED GRADE, AND ORIGINAL GRADE IN PROFILE WERE ALL ESTABLISHED ALONG THE CENTERLINE OF THE WATER LINE.
- 4 PROPOSED WATER MAIN BORE CROSSING I-20 AT SCDOT ROADWAY STATION 251+59.



KEY PLAN
SCALE: 1" = 2000'

Brown AND Caldwell

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA
CROSSROADS
PHASE 2

CONFLICTS
2000/2004, 2005,
2074, 2075
FACILITY 26, 27, 31,
32, 33, 34, 35, 37
AND 41

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

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DRAWN:
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FILENAME
400-C-01X (2).DWG
BC PROJECT NUMBER
156904
CLIENT PROJECT NUMBER
SCDOT PROJECT ID P027662

CIVIL

WATER MAIN
RELOCATION-LINE D
PLAN & PROFILE
STA. 0+00 TO STA.3+75

DRAWING NUMBER

400-C-01

SHEET NUMBER
19 OF 19