



April 5, 2022

Letter No. 221063-DeKalb Co Water & Sewer-005

Juan Nunez
Staff Engineer Senior
DeKalb County Department of Watershed Management
4572 Memorial Drive.
Decatur, GA 30032

Reference: GDOT Project No. PI0017129
I-285 Eastside Bridge Replacements – Dekalb, County
AWC Job # 220163

Subject: Dekalb County Betterments – Covington Watermain Crossings R04

Dear Juan,

Archer Western is providing the following Utility Betterment Proposal as requested by Dekalb County Watershed Management for the crossings at the Covington Hwy Bridge and Glenwood Rd Bridge.

Archer Western is requesting approval of this proposal as soon as possible followed by an agreement set up to incorporate this betterment into the current project.

The following pricing is based on information provided by Dekalb County Water Management through the SUE Investigation process, AWC Investigations, and initial utility meetings to increase the watermain crossings at the bridge location (Covington Hwy).

Proposed betterment at Covington Hwy is priced at \$1,740,883 includes the current design to incorporate a 16inch uncased watermain to be hung across the new Covington Hwy bridge. This pricing considers that there is not currently an active watermain crossing I-285 at this location. This price also includes 12inch watermain on the west side of Covington Hwy Bridge that is not indicated on the plans as replacement but upon field investigations proves to not be installed currently. The pricing does not include rock excavation.

Proposed betterment includes AWC Site Investigation costs, design fees for Utility Design and Roadway/Bridge Design priced at \$58,932. If DeKalb Co Water & Sewer opts out of the Betterment pricing, AWC will request the Escalation pricing, Design pricing, and Site Investigation pricing to the total of \$183,932 as this will required to re-design and procurement processes.

The total Betterments price is **\$1,740,883**. This is a Lump Sum Price to complete all work listed.

Note the following exclusions:

- We have excluded the cost of new meter vaults for meter relocations and considered reusing the existing boxes. If new boxes or vaults are required, then the cost of the new boxes or vaults will be billed costs plus 15%.
- New water meters are to be by others otherwise we have considered reusing the existing meter where meters are shown to be relocated.

- We have considered that existing fire hydrants will be able to be reused where fire hydrants are relocated. If a new fire hydrant is required, then the new fire hydrant will be billed costs plus 15%.
- We exclude any cost associated with hazardous or contaminated material.
- Standard excavations using trench boxes. Engineered Excavation Support outside of trench boxes not including in the provided pricing.

Note: This pricing is good for the Waterline Betterments requested and has not factored in any betterments associated with the sewer line.

Please feel free to contact the undersigned at (404) 516-0395 if you have any questions.

Sincerely,



Michael Gantt
Project Manager

CC:

Juan Nunez – Dekalb County

Iheanachor Njoku – GDOT

Aparajita Pothula – HNTB

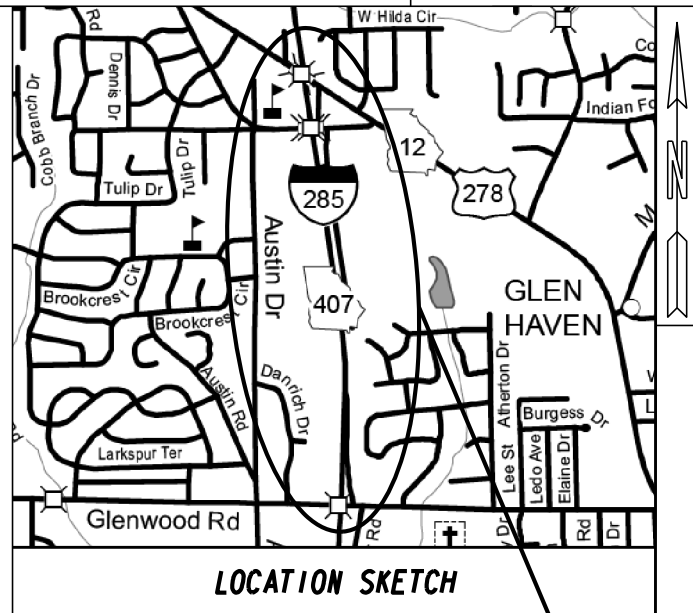
Rob Bird - AWC

Zach Folmar – AWC

Jake French - AWC

DeKalb Co Water & Sewer Betterments Unit Price Breakdown 4.5.22

Location	Dwg #	Contractor	Activity	Qty	Unit	Total \$ Per Work Type	All In Unit Price	Betterment Totals
Covington Hwy	WL4	Ruby Collins	16 Inch Suspended On Bridge		380 FT			
Covington Hwy	WL4	Ruby Collins	16 Inch Expansion Sleeves	Inc				
Covington Hwy	WL4	Ruby Collins	16 Inch Gate Valve	Inc				
Covington Hwy	WL4	Ruby Collins	16 Megalugs	Inc				
Covington Hwy	WL4	Ruby Collins	30 Inch Open Cut Casing		60 FT			
Covington Hwy	WL4	Archer Western	Equipment		1 LS	\$ 974,620.99	\$ 2,564.79	
Covington Hwy	WL4	Archer Western	Bridge Hangers		1 LS			
Covington Hwy	WL4	Archer Western	MOT		1 LS			
Covington Hwy	WL4	Archer Western	QC Testing/Water/Erosion		1 LS			
Covington Hwy	WL4	Archer Western	OH Support & STS		1 LS			\$ 1,740,882.98
Covington Hwy	WL4	Ruby Collins	12 Inch Open Cut Water Line		750 FT			
Covington Hwy	WL4	Ruby Collins	12 Inch Gate Valves	Inc				
Covington Hwy	WL4	Ruby Collins	12 45 Bends	Inc				
Covington Hwy	WL4	Ruby Collins	Cut and Cap 12 Inch Line	Inc				
Covington Hwy	WL4	Archer Western	Equipment		1 LS	\$ 766,261.99	\$ 1,021.68	
Covington Hwy	WL4	Archer Western	MOT		1 LS			
Covington Hwy	WL4	Archer Western	QC Testing/Water/Erosion		1 LS			
Covington Hwy	WL4	Archer Western	Grading Support		1 LS			
Covington Hwy	WL4	Archer Western	OH Support & STS		1 LS			
Covington Hwy		Archer Western	Site Investigation		1 EA	\$ 25,932.00	Incl above	Incl above
BOTH		Archer Western	Design Fees		1 EA	\$ 34,000.00	Incl above	Incl above



LOCATION SKETCH

PROJECT LOCATION

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

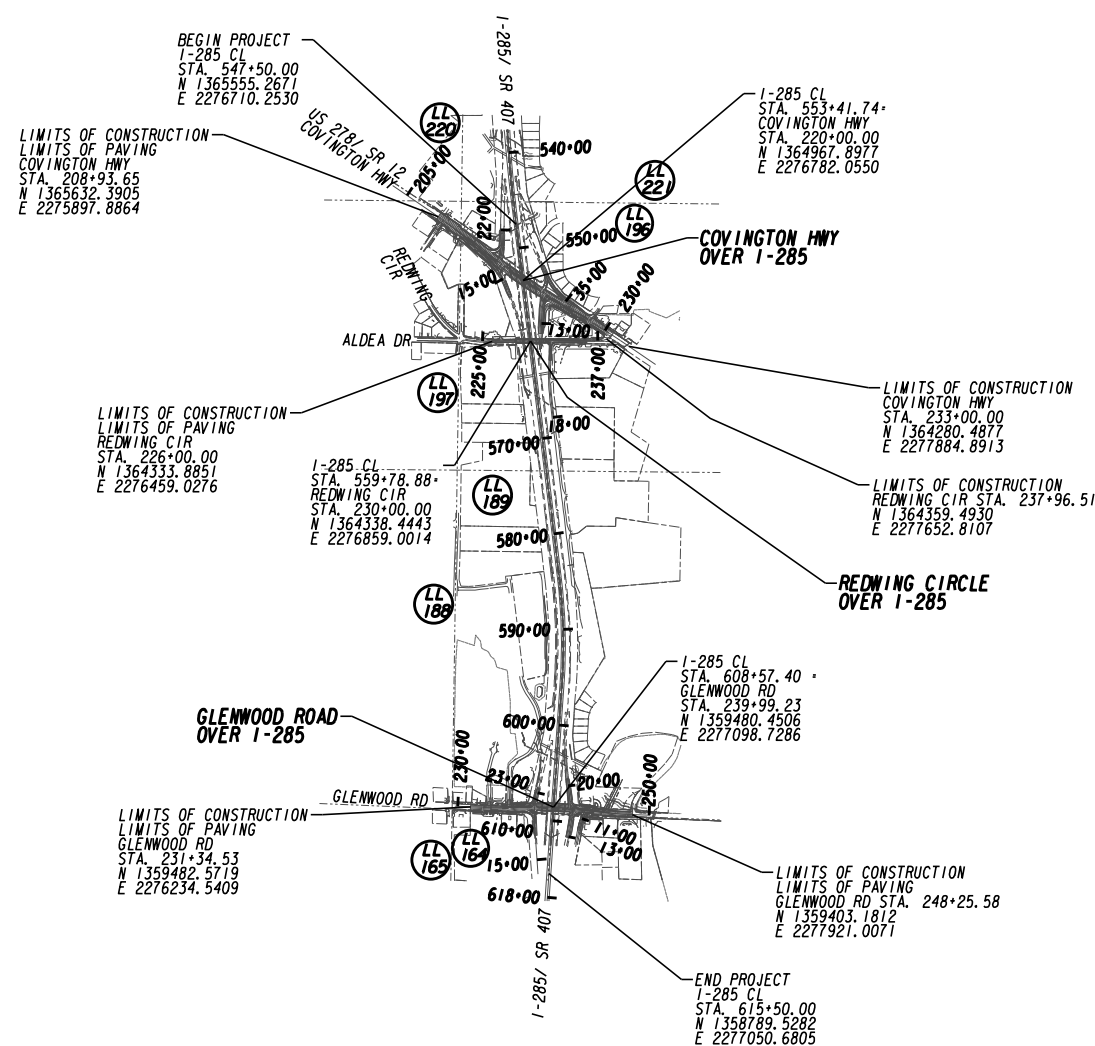
PLAN AND PROFILE OF PROPOSED DEKALB COUNTY UTILITY RELOCATIONS FOR I-285 EASTSIDE BRIDGE REPLACEMENTS @ REDWING CIR @ US 278/ SR 12/ COVINGTON HWY & @ GLENWOOD RD

WATER MAIN RELOCATIONS - PHASE I



**FEDERAL AID PROJECT
DEKALB COUNTY**

FEDERAL ROUTES: I-285 & US 278
STATE ROUTES: SR 407 & SR 12
P.I. NO. 0017129

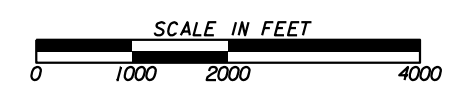


PLANS PREPARED BY:



DESIGN

RECOMMENDED FOR APPROVAL BY:



DATE	CHIEF ENGINEER
PLANS COMPLETED	- -
REVISIONS	

WATERLINE AND SANITARY SEWER INSTALLATION

OF MANHOLES: 5 LF OF SS: 1040

OF FIRE HYDRANTS: 9 LF OF WATER: 3156

OF AIR RELEASE VALVES: 0

RELOCATE/UPDATE # OF WATER METERS: 5

16. CONTRACTOR SHALL NOTIFY THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT PROJECT MANAGER JUAN NUNEZ AT (770) 621-7264 / JSNUNEZ@DEKALBCOUNT.GA.GOV 48 HOURS PRIOR TO START OF CONSTRUCTION.
17. **IN CASE OF EMERGENCY, CONTACT THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT AT (404) 270-6423 (24 HOURS A DAY)**
18. THE CONTRACTOR WILL COORDINATE WITH COUNTY COMMUNICATIONS OFFICE TO NOTIFY RESIDENTS OF WORK TO BE PERFORMED AND WATER SHUT OFFS. CONTRACTOR MUST PROVIDE TEN (10) DAYS NOTICE TO COUNTY COMMUNICATIONS OFFICE IN ADVANCE OF ANY DISRUPTION OF SERVICE TO RESIDENTS. DWM WILL PROVIDE NOTIFICATION TMEPLATE TO THE CONTRACTOR, THE CONTRACTOR SHALL BE IN CHARGE OF PRINTING AND DISTRIBUTING NOTIFICATIONS. CONTRACTOR SHALL DISTRIBUTE NOTIFICATIONS 3 DAYS PRIOR TO SHUT OFF.
19. ALL FIRE HYDRANTS TO BE REMOVED SHALL BE CLEANED AND RETURNED TO DEKALB COUNTY'S STORAGE FACILITY AT 1580 ROADHAVEN DRIVE BY APPOINTMENT ONLY. CONTACT JOHN MANN AT 770-414-6220.
20. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SUITABLE MATERIAL IN THE TRENCH AND OVER THE PIPE, AT NO ADDITIONAL COST (SEE DETAILS). THE COST OF SAWCUTTING, TRENCH EXCAVATION, BEDDING, BACKFILL AND TRENCH CAP SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN. NO SEPARATE MEASUREMENT WILL BE MADE, AND NO CLAIMS WILL BE CONSIDERED FOR EXTRA COST.
21. ALL FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING MAXIMUM DRY DENSITY, STANDARD PROCTOR:
 - a. UNPAVED AREAS OUTSIDE OF ROADWAY RIGHT-OF-WAY - 90% FOR ALL LIFTS
 - b. UNPAVED AREAS OF ROADWAY RIGHT-OF-WAY - 95% FOR ALL LIFTS
 - c. PAVED AREAS - 98% FOR ALL LIFTS
22. PLACE MATERIAL FROM EXCAVATION AWAY FROM DRIVEWAY CROSS DRAINS TO PREVENT OBSTRUCTION OF STORM DRAINAGE FLOW. NO EXCAVATION MATERIAL TO BE STOCKPILED IN GRASS AREAS.
23. NO SPOILS OR EXCAVATED MATERIAL SHALL BE PLACED ON THE PAVEMENT OR BEYOND THE CURB OR EDGE OF PAVEMENT AT ANY TIME DURING CONSTRUCTION. PAVEMENT SHALL BE CLEANED BY SWEEPING EACH DAY EXCAVATION OCCURS.
24. CONTRACTOR MAY STRING PIPE AS NECESSARY ALONG ROADWAY BETWEEN CURB/EDGE OF PAVEMENT AND RIGHT-OF-WAY. THE CONTRACTOR MAY NOT STRING MORE PIPE THAN WILL BE PLACED THAT DAY.
25. CONTRACTOR SHALL FILL IN ALL TRENCHES AT THE END OF EACH DAY TO ALLOW LOCAL TRAFFIC ACCESS. TRENCHES SHALL BE COVERED WITH PLATES IF PAVEMENT HAS NOT BEEN REPLACED.
26. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE AND MATERIAL OF ANY EXISTING WATER FACILITY PROPOSED FOR CONNECTION OR USE BY THIS PROJECT. THE RELOCATION OF ANY UTILITY REQUIRED TO AVOID ANY PART OF THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
27. FOR TAPS SMALLER THAN 20 INCHES, THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT WILL FURNISH THE TAPPING MACHINE, PROVIDE FOR WELDING, AND DO THE ACTUAL TAPPING OF THE MAIN.
28. ALL PLUGS SHALL BE INSTALLED PER DWM END OF WATER LINE PLUG DETAIL W-031.

29. ALL VALVE MARKERS IF MOVED SHALL BE REPLACED. ALL EXISTING DAMAGED VALVES WITHIN THE PROJECT LIMITS WILL BE REPLACED AS WELL.
30. REMOVE ALL ABANDONED VALVES WITHIN THE PROJECT LIMITS. CLEAN AND RETURN TO DEKALB COUNTY STORAGE FACILITY. (SEE NOTE 19)
31. FITTINGS SHALL BE INCLUDED IN THE COST OF THE WATER PIPE.
32. GATE VALVES PACKAGED WITH HYDRANTS AND HOT TAPS SHOWN ON DRAWINGS.
33. CONTRACTOR TO USE MECHANICALLY RESTRAINED JOINTS AT THE FITTING AND FIRST JOINT UP AND DOWN STREAM OF ALL BENDS, TEES WITHOUTH HYDRANTS, AND INLINE GATEVALVES, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
 - a. CONTRACTOR TO RESTRAIN ALL TEES WITH HYDRANTS IN ACCORDANCE TO DWM STANDAD DETAIL W-006
 - b. CONTRACTOR TO RESTRAIN ALL PLUGS IN ACCORDANCE WITH DWM STANDARD DETAIL W-024, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER
34. MINIMUM VERTICAL CLEARANCE REQUIRED BETWEEN UTILITIES IS 18 INCHES, UNLESS DIRECTED OR APPROVED BY THE ENGINEER.
35. MINIMUM HORIZONTAL CLEARANCE REQUIRED BETWEEN WATER AND SEWER LINES IS 10 FEET, UNLESS OTHERWISE DIRECTED OR APPROVED BY THE ENGINEER.
36. AFTER THE PIPE IS LAID, EACH SECTION, AS MAY BE DETERMINED OR DEFINED BY DCDWM, SHALL BE PROPERLY AND ADEQUATELY FLUSHED, THE AIR REMOVED AND THEN TESTED UNDER A HYDROSTATIC PRESSURE OF 200 PSI AS MEASURED AT THE LOWEST ELEVATION OF THE TEST SECTION. WHERE STATIC PRESSURE EXCEEDS 100 PSI, THE TEST PRESSURE, AS MEASURED AT THE LOWEST ELEVATION OF THE TEST SECTION SHALL BE EQUAL TO 150% OF THE NORMAL WORKING PRESSURE OR 100% OF THE PIPE'S RATED PRESSURE, WHICHEVER IS LESS. IF ELEVATION DIFFERENTIALS, WITHIN A TEST SECTION, VARY BY MORE THAN 45 FEET, THEN THE SECTION SHALL BE BROKEN INTO SHORTER LENGTHS BY THE INSERTION OF ADDITIONAL VALVES.
37. ALL WATER MAINS SHALL BE PRESSURE TESTED, DISINFECTED AND PASS THE BACTERIA TEST PRIOR TO CUSTOMER TIE IN. NO WATERLINE INSTALLATION WILL BE PAID FOR UNTIL LINE HAS SUCCESSFULLY BEEN PRESSURE AND BACTERIA TESTED.
38. FIRE HYDRANT LOCATIONS CAN BE ADJUSTED IN FIELD ONLY WHEN DIRECTED OR APPROVED BY THE DWM ENGINEER.
39. FIELD CHANGES DURING CONSTRUCTION MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER.
40. THE CONTRACTOR SHALL MAINTAIN RECORDS AS WORK PROGRESSES AND SUBMIT DIMENSIONAL SKETCHES WITH MONTHLY PAY ESTIMATES. AN AS-BUILT SET OF CONSTRUCTION PLANS IN HARD COPY AND ELECTRONIC FORMAT (PDF AND AUTOCAD OR MICROSTATION) SHALL BE SUBMITTED WITH FINAL PAY REQUEST. CONTRACTOR TO OBTAIN GPS COORDINATES AND ADD TO AS-BUILTS AT ALL BENDS, TEES, VALVES, FIRE HYDRANTS, PIPE DEFLECTIONS, AND PLUGS. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR WATER MAIN.
41. THE CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AVAILABLE FOR THE OWNER AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY COUNTY INSPECTORS.
42. ALL MANHOLES LOCATED WITHIN ROADWAYS SHALL BE INSTALLED WITH CONCRETE COLLARS AND TRAFFIC RATED MANHOLE FRAMES AND COVERS PER DETAILS S-007 AND S-008.
43. ALL EXISTING MANHOLE FRAMES AND COVERS ARE TO BE ADJUSTED TO NEW GRADES AS REQUIRED

SERVICE LINE INSTALL

44. ALL SERVICES SHALL BE CHANGED OVER TO THE NEW WATER MAIN IN AREAS WHERE THE WATER MAIN IS ABANDONED. PROPERTY OWNERS SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF CUTTING OFF THEIR SERVICE.
45. ALL SERVICE LINES SHALL BE 1" DIAMETER. WHERE TWO METERS ARE LOCATED SIDE BY SIDE, THE CONTRACTOR SHALL PROVIDE A SINGLE 1" DIAMETER SERVICE LINE FROM THE WATER MAIN WITH A WYE BRANCHING TO ¾" DIAMETER SERVICE LINES TO EACH METER. THE WYE SHALL BE PLACED IN CLOSE PROXIMITY TO THE METERS.



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REVISION DATES	

DEKALB CO. GENERAL NOTES			
1-285 EASTSIDE BRIDGE REPLACEMENTS			
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BACKCHECKED:	DATE:	44-0002	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

- 44. ALL SERVICE LATERALS SHALL BE FREE BORED. THE FREE BORE SHALL BE INCLUDED IN THE BID PRICE FOR "WATER SERVICE LINE." MEASUREMENT AND PAYMENT WILL BE MADE FOR IN-PLACE SERVICE LINES ONLY.
- 45. THE ENGINEER SHALL DETERMINE WHETHER EXISTING WATER METERS SHALL BE REPLACED. ALL NEW METERS SHALL BE SUPPLIED BY DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT. ANY METERS THAT ARE REMOVED SHALL BE RETURNED TO DEKALB COUNTY'S STORAGE FACILITY AT 1580 ROADHAVEN DRIVE BY APPOINTMENT ONLY. (SEE NOTE 19)
- 46. ANY METERS OR BACKFLOW DEVICES REMOVED DURING CONSTRUCTION SHALL BE REMOVED, RELOCATED AND REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE RESIDENTIAL WATER METER INSTALLATION DETAIL AND PAID FOR UNDER THE BID ITEM FOR "REPLACE WATER METER." METER BOXES REPLACED WHEN DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE BID PRICE FOR "REPLACE WATER METER."
- 47. ALL SERVICE CHANGE OVERS SHALL HAVE NEW MATERIAL FROM WATER MAIN TO METER, WHICH INCLUDES:
 - a. CORPORATION STOP: FORD F-600-4-NL, MUELLER H-15000N OR H-10003N, OR JAMES JONES E-1500 OR E-89 ONLY.
 - b. CURB STOP: FORD B21-233W-NL OR B21-334W-NL, A.Y. MCDONALD 76102-W, OR JAMES JONES E-1901 ONLY.
 - c. COPPER SERVICE LINE: TYPE 'K' IN ACCORDANCE WITH ASTM 688.
- 48. ALL FITTINGS AND PIPE SHALL BE NO LEAD. FITTINGS SHALL BE INCLUDED IN THE BID PRICE FOR "WATER SERVICE LINE."

WATERLINE ABANDONMENT

- 49. ALL CUT & PLUGS OF EXISTING WATER MAINS, INCLUDING ABANDONMENT OF VALVE BOXES, WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. NO SEPARATE PAYMENT FOR CUT AND PLUGS OR ASSOCIATED PAVEMENT REPAIR WILL BE MADE.
- 50. FOR WATER MAINS TO BE ABANDONED, CUT AND REMOVE A SMALL SECTION OF PIPE, PLUG BOTH SECTIONS, AND INSTALL THRUST BLOCK WHERE PLUG(S) MAY BE PRESSURIZED. ABANDONED WATER MAIN WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
- 51. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL INSTALL FLOWABLE FILL IN SECTIONS OF DIP PIPE UNDER PAVEMENT AND ALL ASBESTOS CEMENT AND CAST IRON PIPE TO BE ABANDONED. FLOWABLE FILL SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH "SECTION 600 - CONTROLLED LOW STRENGTH FLOWABLE FILL" OF THE GEORGIA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS, 2013 EDITION. MEASUREMENT AND PAYMENT WILL BE MADE BY THE LINEAR FEET OF PIPE ABANDONED AND FILLED WITH FLOWABLE FILL.
- 52. ALL ABANDONED VALVES SHALL HAVE THE LID AND TOP SECTION OF THE VALVE BOX REMOVED AND SHALL BE RETURNED TO DEKALB COUNTY'S STORAGE FACILITY AT 1580 ROAD HAVEN DRIVE, AND THE HOLE SHALL BE FILLED WITH CONCRETE FROM THE VALVE TO THE ROADWAY SURFACE. NO SEPARATE PAYMENT FOR VALVE ABANDONMENT WILL BE MADE.

DISTURBANCE OF ASBESTOS CONTAINING PIPE:

- 53. CONTRACTOR SHALL NOTIFY THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT INSPECTOR PRIOR TO ANY DISTURBANCE OF ASBESTOS-CONTAINING MATERIAL.

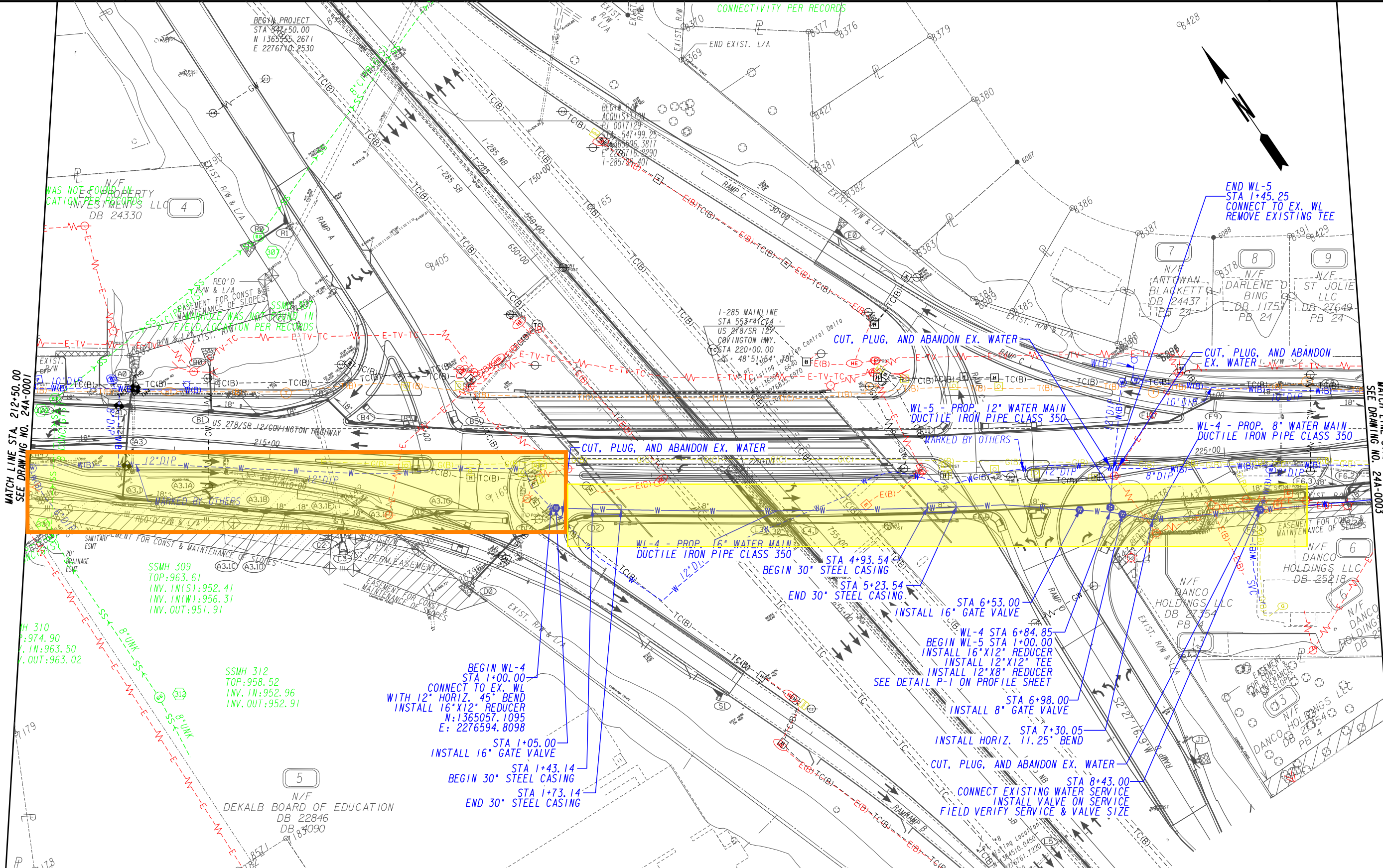
- 54. ANY WORK REQUIRING DISTURBANCE OF ASBESTOS-CONTAINING MATERIALS SHOULD BE PERFORMED TO COMPLY WITH:
 - a. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) ASBESTOS CONSTRUCTION STANDARD, 29 CFR 1926.1101.
 - b. ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHA) STANDARD 40 CFR 61, SUBPART M (ASBESTOS)
 - c. ADDITIONAL REQUIREMENTS ESTABLISHED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT), STATE OF GEORGIA EPD AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS GOVERNING THE DISTURBANCE OF ASBESTOS-CONTAINING MATERIAL.
- 55. ANY DISTURBANCE OF ASBESTOS-CONTAINING MATERIALS SHALL BE PERFORMED BY AN ASBESTOS ABATEMENT CONTRACTOR LICENSED IN GEORGIA AND SHALL MEET OTHER QUALIFICATION REQUIREMENTS SPECIFIED BY DEKALB COUNTY, THE STATE OF GEORGIA AND ALL APPLICABLE FEDERAL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND MAINTAIN A PROJECT SPECIFIC HEALTH, SAFETY AND SECURITY PLAN RELATED TO ALL ELEMENTS OF THE WORK BEING PERFORMED



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REVISION DATES		DEKALB CO. GENERAL NOTES	
		1-285 EASTSIDE BRIDGE REPLACEMENTS	
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CORRECTED:	DATE:		
VERIFIED:	DATE:		



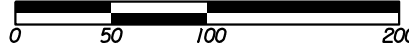
MATCH LINE STA. 212+50.00
SEE DRAWING NO. 24A-0001

MATCH LINE STA. 226+50.00
SEE DRAWING NO. 24A-0003

 Shown on the plans but not there upon field investigation. Included in the Betterment Pricing.

 Betterment Scope

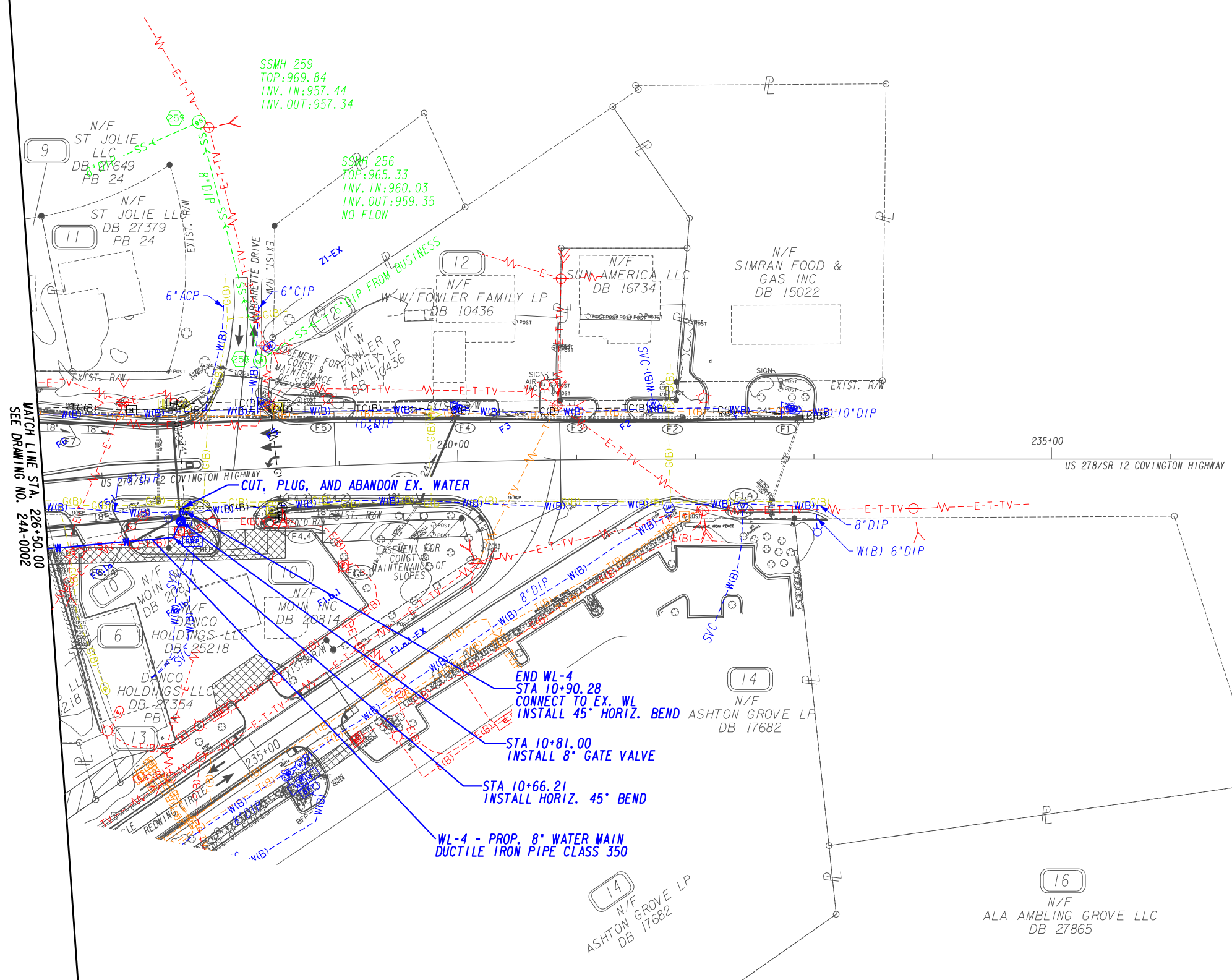
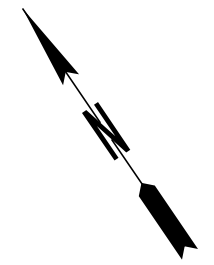

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SCALE IN FEET


REVISION DATES	

UTILITY PLANS - WATER
 I-285 EASTSIDE BRIDGE REPLACEMENTS
 COVINGTON HIGHWAY SITE
 I-285 @ US 278/SR 12 COVINGTON HWY

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BACKCHECKED:	DATE:	24A-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



MATCH LINE STA. 226+50.00
SEE DRAWING NO. 24A-0002

US 278/SR 12 COVINGTON HIGHWAY

US 278/SR 12 COVINGTON HIGHWAY

CUT, PLUG, AND ABANDON EX. WATER

END WL-4
STA 10+90.28
CONNECT TO EX. WL
INSTALL 45° HORIZ. BEND

STA 10+81.00
INSTALL 8" GATE VALVE

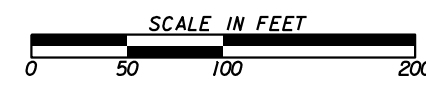
STA 10+66.21
INSTALL HORIZ. 45° BEND

WL-4 - PROP. 8" WATER MAIN
DUCTILE IRON PIPE CLASS 350

14
N/F
ASHTON GROVE LP
DB 17682

16
N/F
ALA AMBLING GROVE LLC
DB 27865

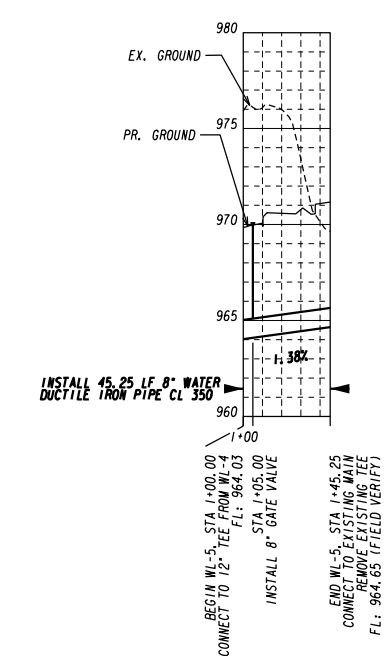
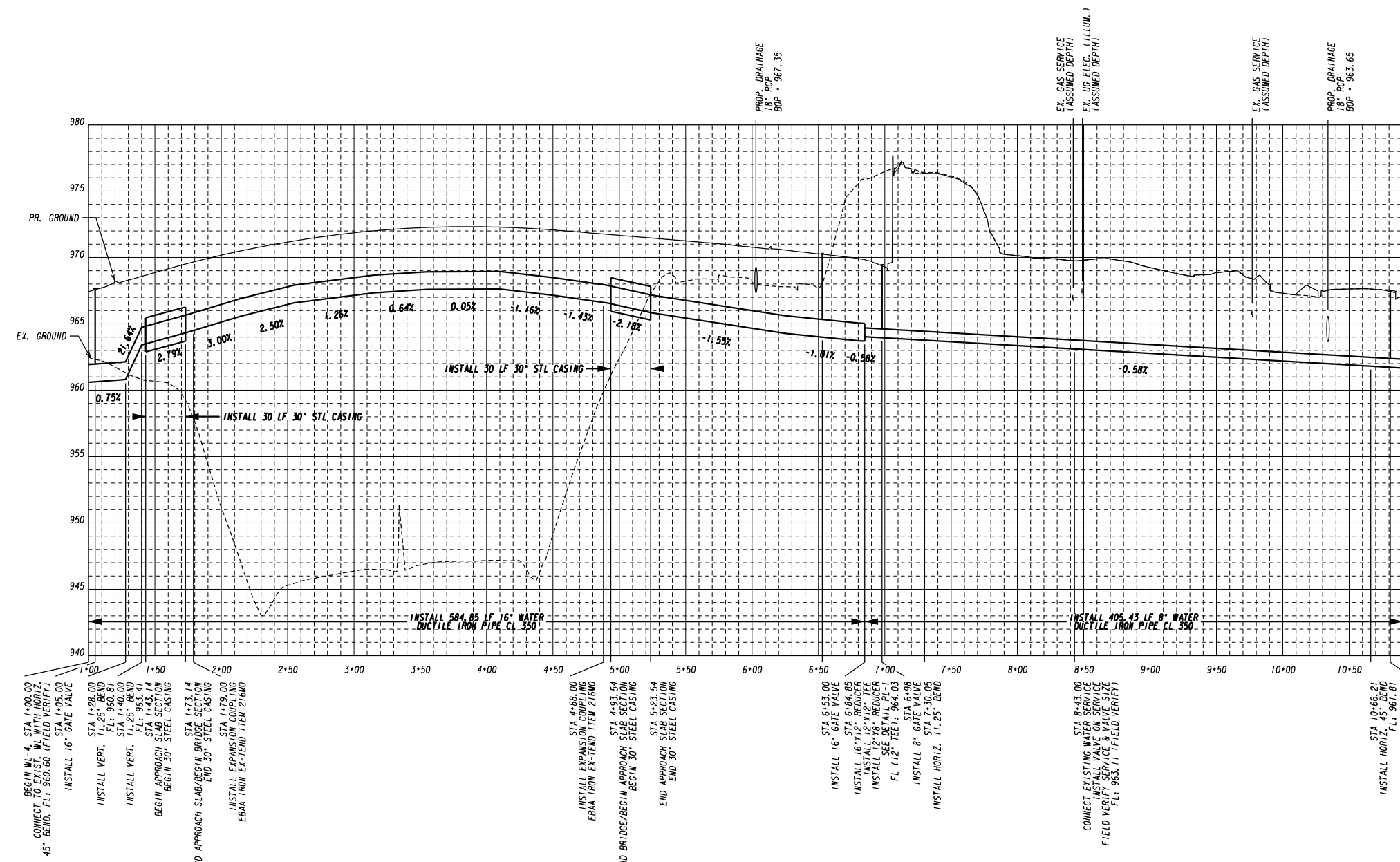
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REVISION DATES	

UTILITY PLANS - WATER
1-285 EASTSIDE BRIDGE REPLACEMENTS
COVINGTON HIGHWAY SITE
1-285 @ US 278/SR 12 COVINGTON HWY

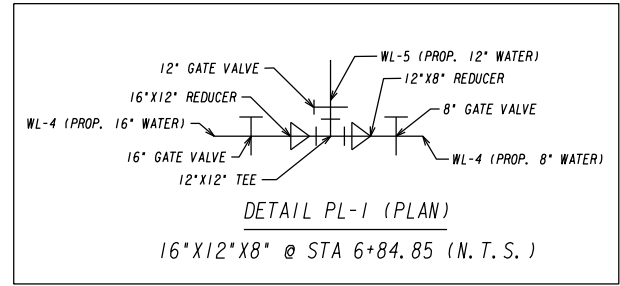
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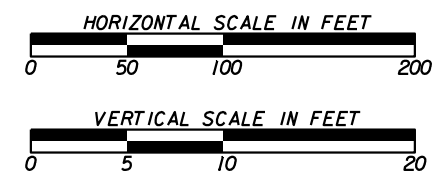
LINE WL-5
(PLAN SHEET 24A-0002)

- NOTES:
- PIPE HANGING FROM BRIDGE AND PIPE WITHIN STEEL CASING SHALL HAVE RESTRAINED JOINTS.
 - SEE COVINGTON HWY. BRIDGE SHEETS FOR HANGER LOCATIONS, DIMENSIONING, AND DETAILS.
 - ANY MANUFACTURER AND/OR MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY DEKALB COUNTY.

LINE WL-4
(PLAN SHEETS 24A-0002, 24A-0003)



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REVISION DATES		UTILITY PROFILES - WATER	
		1-285 EASTSIDE BRIDGE REPLACEMENTS COVINGTON HIGHWAY SITE 1-285 @ COVINGTON HIGHWAY (US 278/SR 12)	
CHECKED:	DATE:	DRAWING No.	
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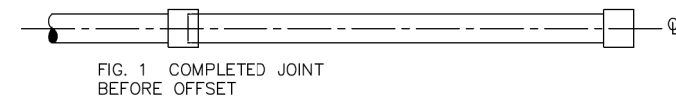


FIG. 1 COMPLETED JOINT BEFORE OFFSET

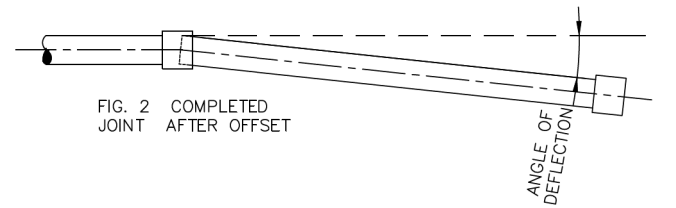


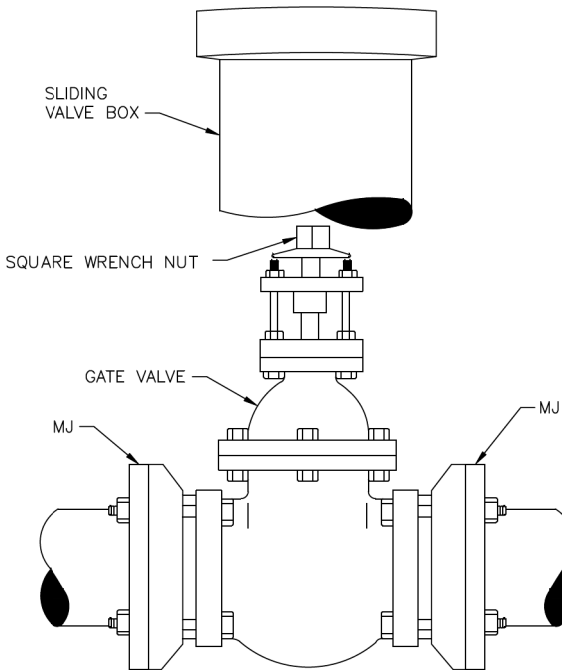
FIG. 2 COMPLETED JOINT AFTER OFFSET

ANGLE OF DEFLECTION

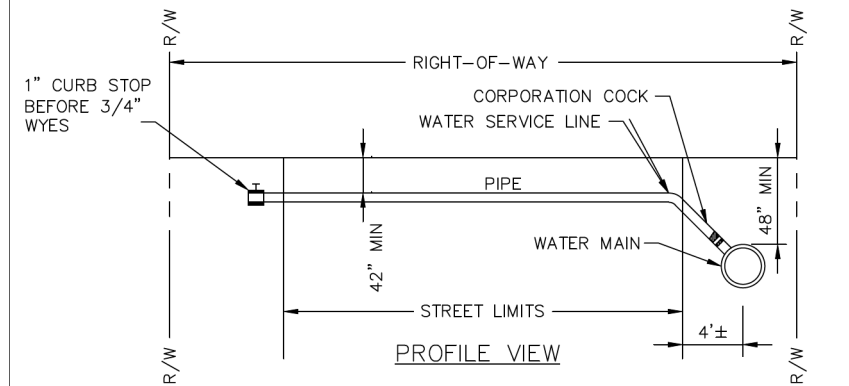
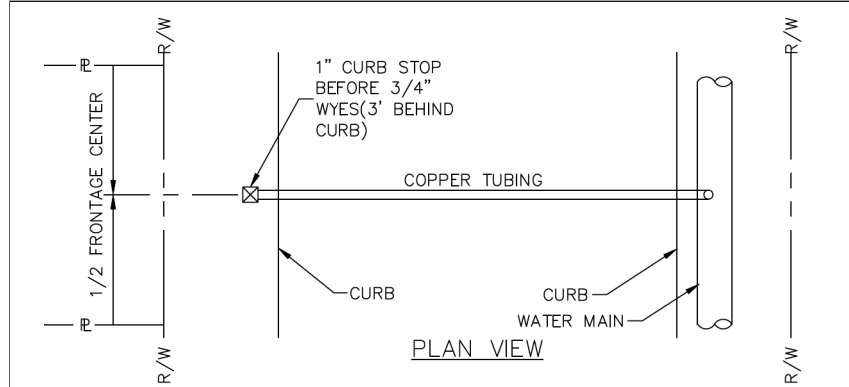
NOTES:

1. ALL JOINTS MUST BE ASSEMBLED AS SHOWN IN FIG. 1 BEFORE MAKING DEFLECTION.
2. ALL DEFLECTION ANGLES SHALL BE LESS THAN THE PIPE MANUFACTURERS MAXIMUM.

	STANDARD DETAILS	09/17
	Maximum Allowable Offsets and Deflections NOT TO SCALE	 DETAIL NO. W-005



	STANDARD DETAILS	02/19
	Typical Gate Valve Installation For 16-Inches and Below NOT TO SCALE	 DETAIL NO. W-007



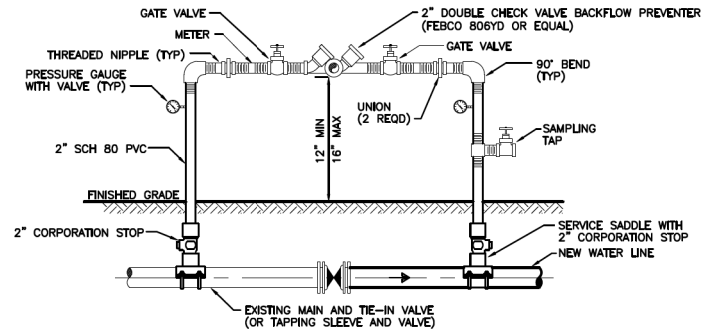
NOTES:

1. SERVICE LINES 1 INCH AND SMALLER SHALL BE INSTALLED USING COPPER TUBING WITH FLARE X MIPT.
2. LARGER SERVICE LINE MATERIAL SHALL BE AS SPECIFIED ON THE DRAWING, AND REQUIRES COUNTY APPROVAL.

	STANDARD DETAILS	09/17
	Typical Service Line Installation NOT TO SCALE	 DETAIL NO. W-008

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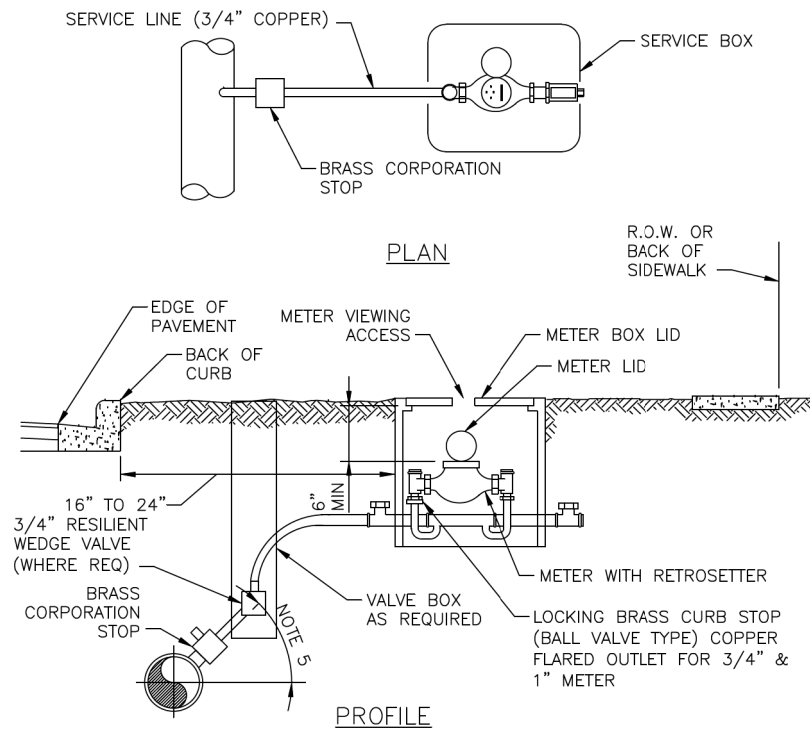
REVISION DATES		WATER DESIGN STANDARDS I-285 EASTSIDE BRIDGE REPLACEMENTS	
CHECKED:	DATE:	CHECKED:	DATE:
BACKCHECKED:	DATE:	CORRECTED:	DATE:
CORRECTED:	DATE:	VERIFIED:	DATE:
		DRAWING No.	
		24S-0001	



NOTES:

- A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED WATER MAINS.
- THIS DETAIL IS TO BE USED FOR FILLING ANY NEW WATER MAIN AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY), AND FOR BACTERIOLOGICAL SAMPLING POINTS AT THE ENDS OF THE PROPOSED MAINS. THE JUMPER CONNECTIONS SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING, AND DISINFECTION OF THE PROPOSED MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE DCDWM HAS BEEN RECEIVED. THIS JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE PROPOSED MAINS AFTER DISINFECTION AND UNTIL THE CLEARANCE LETTER IS OBTAINED.
- FLUSHING OF THE 10" DIAMETER AND LARGER WATER MAIN MAY BE DONE THROUGH THE TIE-IN VALVE UNDER VERY CONTROLLED CONDITIONS, AS FOLLOWS:
 - THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF DCDWM AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO TIE-IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED.
 - THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW MAIN AND FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE DCDWM PERMIT.
 - FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAINS.
 - ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TIE-IN VALVE.
 - MONITOR THE PRESSURE AT THE TIE-IN POINT. THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 PSI.
 - TIE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 PSI.
 - THE TIE-IN VALVE SHALL BE LOCKED CLOSED UNTIL FLUSHING BEGINS.
 - THE TIE-IN VALVE SHALL BE OPENED ONLY FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE DCDWM.
 - AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION.
- THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE DOUBLE CHECK VALVE BACKFLOW PREVENTION DEVICE HAS BEEN TESTED AND IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION.
- EXCEPT AS REQUIRED TO FLUSH LINES GREATER THAN 8" IN DIAMETER, THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY ALL PERTINENT AGENCIES.
- UPON RECEIPT OF CLEARANCE FOR USE FROM DCDWM, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
- ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE, FITTINGS, VALVE, ETC. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

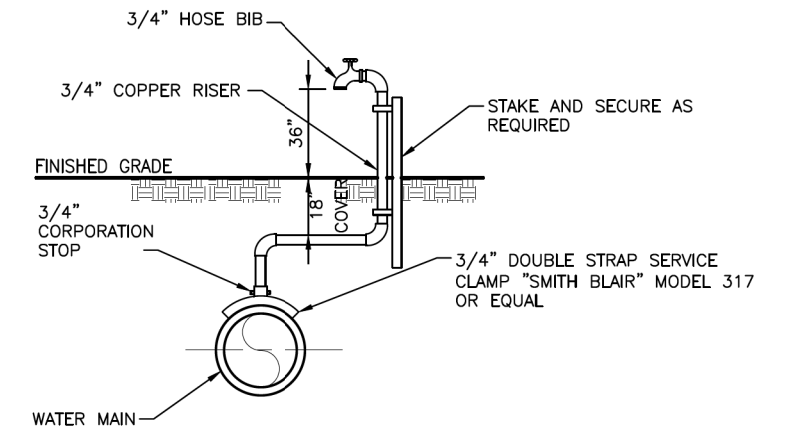
	STANDARD DETAILS	09/17
	Temporary Disinfection Jumper Installation Detail	
NOT TO SCALE		DETAIL NO. W-015



NOTES:

- METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
- ALL POTABLE WATER IRRIGATION METERS REQUIRE AN APPROVED BACKFLOW PREVENTER.
- ALL PROPERTIES WITH ALTERNATIVE WATER SYSTEMS (WELL, ETC.) REQUIRE BACKFLOW PREVENTERS.
- SERVICE LINES SHALL NOT BE LESS THAN METER SIZE.
- SERVICE TAP SHALL BE BETWEEN 10:00 O'CLOCK AND 2:00 O'CLOCK WITHOUT SADDLE TAP.

	STANDARD DETAILS	09/17
	Residential Water Meter Installation Detail	
NOT TO SCALE		DETAIL NO. W-021



NOTES:

- CONTRACTOR SHALL REMOVE SAMPLE POINT ASSEMBLY TO 3/4" CORPORATION STOP AND PLUG UPON WRITTEN ACCEPTANCE OF DISINFECTION BY DCDWM.

	STANDARD DETAILS	09/17
	Temporary Water Sample Station Detail	
NOT TO SCALE		DETAIL NO. W-022

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REVISION DATES		WATER DESIGN STANDARDS	
		I-285 EASTSIDE BRIDGE REPLACEMENTS	
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	24S-0002	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

