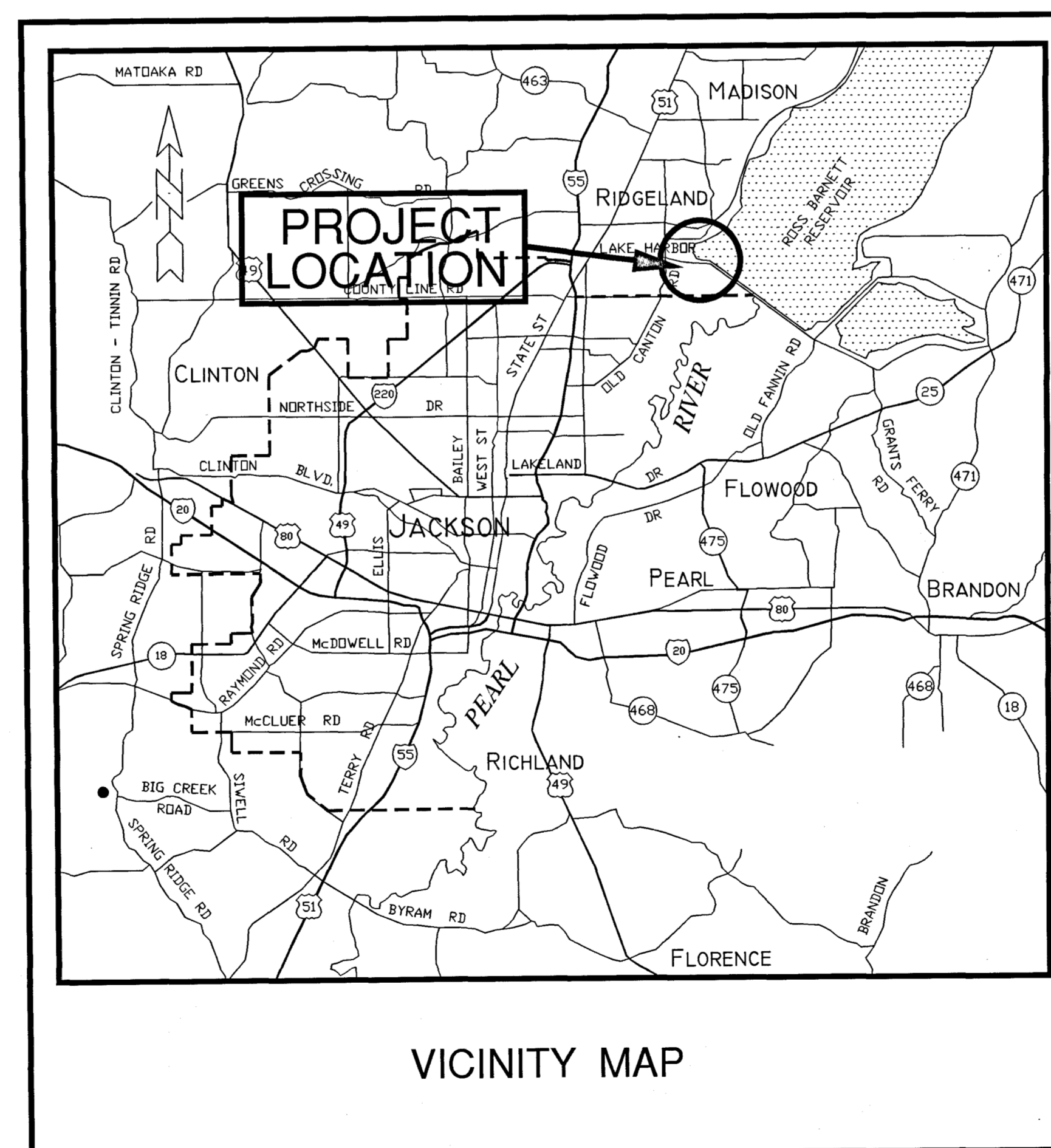


# MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY

## 30" WATER TRANSMISSION LINE

### O.B. CURTIS WATER TREATMENT PLANT TO RICE ROAD CONSTRUCTION CONTRACT NO. 1

MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY	
ROBERT J. ROHLACK, JR., CECd EXECUTIVE DIRECTOR	
DR. C.R. (BUZZ) CANUP, PRESIDENT CANUP & ASSOCIATES, INC.	
CHAD A. WAGES, P.E., PROJECT MANAGER MENDROP-WAGES	
APPROVED BY _____	DATE _____



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<p><b>Southern Consultants, Inc.</b> CONSULTING ENGINEERS JACKSON, MISSISSIPPI <i>A Woman's Business Enterprise</i> IN ASSOCIATION WITH <b>NEEL SCHAFFER</b> engineers • planners • ecologists • landscape architects • surveyors</p>	
APPROVED BY _____	DATE 5/6/03

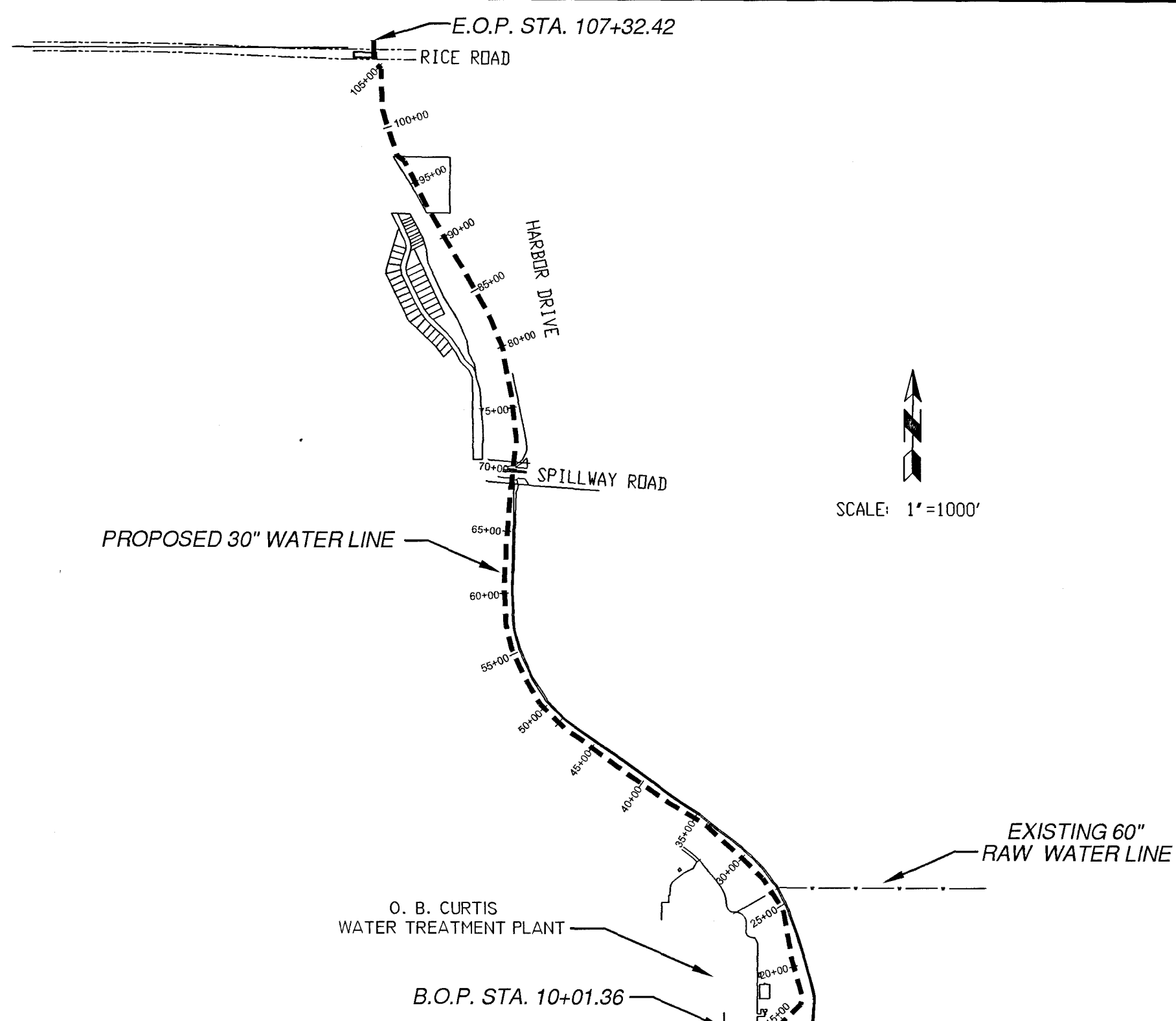
MAY 2, 2003

PWP-02025

# QUANTITY RE-CAP

ITEM NO.	BID QUANTITY	UNIT	ITEM DESCRIPTION
DS1	1	LS	MOBILIZATION / DEMOBILIZATION
DS2	1	LS	REMOVAL OF STRUCTURES AND OBSTRUCTIONS
DS3	11	AC	CLEARING AND GRUBBING
DS4-A	1,000	CY	UNDERCUT EXCAVATION (F.M.)
DS4-B	1,000	CY	BORROW EXCAVATION (F.M.)
DS7-A	50	LF	12" RCP, CLASS III
DS7-B	50	LF	18" RCP, CLASS III
DS7-C	50	LF	24" RCP, CLASS III
DS7-D	50	LF	30" RCP, CLASS III
DS7-E	50	LF	36" RCP, CLASS III
DS8-A	200	TN	6" ASPHALT BASE COURSE (BB-1)
DS8-B	100	TN	3" ASPHALT BASE COURSE (SC-1)
DS9-A	800	TN	RIP RAP (200 LB)
DS9-B	100	CY	GROUT FOR RIP RAP
DS9-C	1,000	SY	FILTER FABRIC
DS10-A	10	AC	SEEDING
DS10-B	2,000	SY	SOLID SOD
DS10-C	10	AC	FERTILIZER
DS11-A	150	LF	FENCE REPLACEMENT INCLUDING GATES
DS14-A	45	LF	48" DUCTILE IRON PIPE W/ POLYWRAP
DS14-B	9,750	LF	30" DUCTILE IRON PIPE W/ POLYWRAP
DS14-C	70	LF	12" DUCTILE IRON PIPE W/ POLYWRAP
DS14-E	45	LF	48" RESTRAINED JOINTS
DS14-F	2,550	LF	30" RESTRAINED JOINTS
DS14-G	70	LF	12" RESTRAINED JOINTS
DS14-H	15,000	LB	MISC. DUCTILE IRON FITTINGS, ALL SIZES AND TYPES
DS14-I	1	EA	48" BUTTERFLY VALVE ASSEMBLY COMPLETE
DS14-J	4	EA	30" BUTTERFLY VALVE ASSEMBLY COMPLETE
DS14-K	4	EA	12" GATE VALVE ASSEMBLY COMPLETE
DS14-L	9	EA	AIR RELEASE VALVE ASSEMBLY COMPLETE
DS14-M	6	EA	BLOW-OFF ASSEMBLY COMPLETE
DS14-P	2	EA	SAMPLE TAP COMPLETE
DS14-W	370	LF	48" STEEL CASING BORED, COMPLETE W/ SPACERS AND END CLOSURES
DS14-W(1)	60	LF	48" STEEL CASING CREEK CROSSING (OPEN CUT) COMPLETE W/ SPACERS AND END CLOSURES
DS14-W(2)	40	LF	84" STEEL CASING W/ WELDED END PLATES (OPEN CUT)
DS14-X	40	LF	30" DUCTILE IRON PIPE, BORED
DS14-Y	1	EA	48" TIE-IN COMPLETE
DS14-AA	1,100	CY	SELECT BEDDING (CRUSHED LIMESTONE) PLAN MEASURE
DS14-BB	1,000	CY	SELECT BACKFILL, ON-SITE MATERIAL, FIELD MEASURE
DS14-CC	9,000	CY	SELECT BACKFILL, CONTRACTOR FURNISHED, FIELD MEASURE
DS14-DD	1	EA	CATHODIC PROTECTION TEST STATION, CP-1
DS14-EE	5	EA	CATHODIC PROTECTION TEST STATION, CP-2
DS14-FF	10	EA	30" DUCTILE IRON PIPE INSULATING FLANGES
DS14-II	1	LS	12" MASTER METER W/ VAULT

# LAYOUT



# LEGEND

EXISTING LIGHT POLE	
EXISTING POLE POLE	
EXISTING COMMUNICATIONS POLE	
EXISTING UTILITY POLE WITH GUY WIRE	
EXISTING ELECTRIC BOX	
EXISTING TELEPHONE BOX	
EXISTING SANITARY SEWER MANHOLE	
EXISTING WATER VALVE	
EXISTING FIRE HYDRANT	
EXISTING WATER METER	
EXISTING ELECTRIC MANHOLE	
EXISTING SIGN POST	
EXISTING DECIDUOUS TREE	
EXISTING CONIFEROUS TREE	
EXISTING ELECTRIC LINE	
EXISTING TELEPHONE LINE	
EXISTING CATV LINE	
EXISTING GAS LINE	
SECTION LINE	
PROPERTY LINE	
EXISTING RIGHT-OF-WAY	
PERMANENT EASEMENT	
TEMPORARY EASEMENT	
EXISTING FENCE	
EXISTING STORM SEWER	
EXISTING SANITARY SEWER	
PROPOSED 30" WATER LINE	
PROPOSED AIR RELEASE VALVE AND M.H.	
PROPOSED BUTTERFLY VALVE	
PROPOSED GATE VALVE	
PROPOSED SAMPLE TAP	
PROPOSED BLOW OFF VALVE	

# GENERAL CONSTRUCTION NOTES

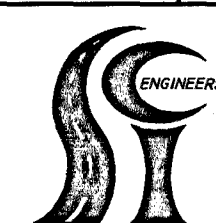
- THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES (POWER, GAS, WATER, SEWER, TELEPHONE, ETC.) WITH THE APPROPRIATE UTILITY COMPANY BEFORE BEGINNING CONSTRUCTION AT HIS EXPENSE.
- ANY UTILITY LINE OR SERVICE LINE ENCOUNTERED DURING CONSTRUCTION, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE PROTECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING HORIZONTAL AND VERTICAL CLEARANCES ON ALL UTILITY CROSSINGS BEFORE INSTALLATION OF ANY PART OF THE WORK.
- ALL AREAS WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT WHERE THE NATURAL VEGETATION WAS REMOVED OR DESTROYED DURING CONSTRUCTION SHALL BE SEED, MULCH AND FERTILIZED OR SODDED, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS AND CONSTRUCT TEMPORARY CULVERTS AS REQUIRED TO MAINTAIN THE DRAINAGE SYSTEM AND CAPACITY IN THE WORK AREA. (NOT A PAY ITEM) THE CONTRACTOR SHALL INSTALL STANDARD TEMPORARY EROSION MEASURES AS NECESSARY. (NOT A PAY ITEM)
- ANY AND ALL TEMPORARY STRUCTURES, EMBANKMENTS AND CULVERTS CONSTRUCTED DURING THE PROGRESS OF WORK SHALL BE REMOVED AND THE AREA RESTORED TO ITS ORIGINAL CONDITION, SEED, MULCH AND FERTILIZED UPON COMPLETION OF THE WORK.
- HORIZONTAL AND VERTICAL CONTROL POINTS ESTABLISHED BY THE ENGINEER SHALL BE PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF THE PROJECT FROM THESE CONTROL POINTS. TEMPORARY BENCH MARKS WILL BE ESTABLISHED BY THE ENGINEER PRIOR TO CONSTRUCTION ONE TIME ONLY.
- THE CONTRACTOR MUST FURNISH ELECTRIC POWER, GAS SERVICE, OR WATER SERVICE FOR HIS USE AT HIS EXPENSE. WATER FOR TESTING SHALL BE FURNISHED BY THE CONTRACTOR AT HIS EXPENSE.
- THE CONTRACTOR SHALL FURNISH, PLACE AND MAINTAIN ALL SHEETING, SHORING AND BRACING REQUIRED TO SUPPORT THE SIDES OF THE TRENCH EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUFFICIENCY OF ANY SUCH SUPPORTS TO PREVENT ANY MOVEMENT WHICH CAN IN ANY WAY DAMAGE OR DELAY THE WORK; ENDANGER OR CAUSE DAMAGE TO ADJACENT PAVEMENTS, BUILDINGS, OR OTHER STRUCTURES; OR CREATE UNDUPLICATE HAZARDS TO WORKMEN.
- WRITTEN DIMENSIONS AND ELEVATIONS SHALL GOVERN OVER SCALED DIMENSIONS AND ELEVATIONS.
- THE CONTRACTOR'S FIELD REPRESENTATIVE SHALL BE ON-SITE AT ANY TIME THAT ANY WORK IS BEING CONDUCTED.
- DAILY CLEANUP OF MATERIALS AND SUPPLIES WILL BE REQUIRED. THE JOB SITE SHALL BE MAINTAINED IN A NEAT AND ORDERLY FASHION.
- THE CONTRACTOR WILL BE REQUIRED TO REMOVE ALL SPOIL MATERIAL ON A DAILY BASIS.
- THE CONTRACTOR IS PROHIBITED FROM STOCKPILING ANY MATERIAL IN THE FLOODWAY OF STREAMS AND RIVERS.
- ALL FENCES REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER. (NOT A PAY ITEM UNLESS SHOWN ON THE DRAWINGS).
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN LOCAL ACCESS TO ALL ADJUTING PROPERTY DURING CONSTRUCTION.
- TEMPORARY FENCING REQUIRED WHERE APPLICABLE. (NOT A PAY ITEM)
- ALL VERTICAL CONTROL BASED ON M.S.L.
- MAXIMUM SLOPES OF EMBANKMENTS SHALL BE 3 HORIZONTAL TO 1 VERTICAL.
- ANY BEARINGS AND COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON ASSUMED COORDINATES FOR LAYOUT PURPOSES ONLY. THEY ARE NOT ASSOCIATED WITH THE MISSISSIPPI COORDINATE SYSTEM.
- ALL EXISTING UTILITIES REQUIRING ADJUSTMENT SHALL BE DONE BY THE APPROPRIATE UTILITY UNLESS SHOWN OTHERWISE ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- EXISTING FENCING REQUIRED TO BE TAKEN DOWN DURING CONSTRUCTION SHALL BE REINSTALLED AT THE CONCLUSION OF THE WORK. TEMPORARY FENCING REQUIRED FOR SECURITY OF THE WORK SITE AND TO PROTECT ADJACENT PROPERTY OWNERS SHALL BE PROVIDED. FENCE REMOVAL / REPLACEMENT AND TEMPORARY FENCING WILL NOT BE PAID FOR BUT SHALL BE CONSIDERED A SUBSIDIARY ITEM OF THE WORK UNLESS SHOWN OTHERWISE ON THE CONTRACT DRAWINGS.
- THE CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS, PUBLIC AGENCIES AND / OR MUNICIPALITIES 14 DAYS PRIOR TO BEGINNING WORK ON THEIR PROPERTY.
- THE O. B. CURTIS WATER TREATMENT PLANT IS A SECURED SITE. THE CONTRACTOR SHALL COORDINATE HIS OPERATION WITH WATER PLANT PERSONNEL AND REPRESENTATIVES OF THE JACKSON POLICE DEPARTMENT.
- CONTRACTOR SHALL INSTALL ALL NECESSARY AIR RELEASE DEVICES (SAME AS SAMPLE TAP) TO ADEQUATELY EXPEL ALL AIR DURING TESTING OPERATIONS. (NOT A PAY ITEM)
- CONTRACTOR SHALL COORDINATE ACCESS ALONG THE EXISTING GRAVEL ROAD SOUTH OF SPILLWAY ROAD WITH CITY OF JACKSON AND PRVSD PERSONNEL. CONTRACTOR SHALL SECURE A KEY TO THE GATE LOCATED AT STA. 67+70± FROM THE CITY OF JACKSON AND ENDEAVOR TO KEEP THE GATE CLOSED AND LOCKED AS MUCH AS POSSIBLE.
- TREES, SHRUBS, BRUSH AND OTHER DEBRIS SHALL BE REMOVED FROM THE PROJECT CONSTRUCTION LIMITS AND DISPOSED OF AT SUITABLE OFFSITE DISPOSAL SITES AT NO ADDITIONAL COSTS. BURNING WILL BE ALLOWED IN THE CITY'S BORROW AREA SOUTH AND EAST OF THE PROJECT SITE IF PRIOR APPROVAL IS GRANTED BY THE CITY OF JACKSON, THE PEARL RIVER VALLEY WATER SUPPLY DISTRICT AND THE CITY OF RIDGELAND. WRITTEN APPROVAL MUST BE SECURED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.

# UTILITY CONTACTS

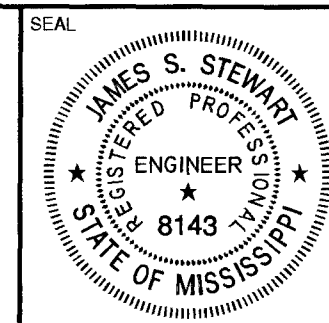
## PUBLIC UTILITIES

ENTERGY  
 MISSISSIPPI VALLEY GAS  
 BELLSOUTH  
 AT & T  
 TIME WARNER CABLE  
 WATER / SEWER, CITIES OF RIDGELAND AND JACKSON

REVISIONS				DESIGNED	DATE
NO.	DATE	NATURE	BY	APPD.	
				MAB	5-2-03
				MWH	
				JSS	RCL

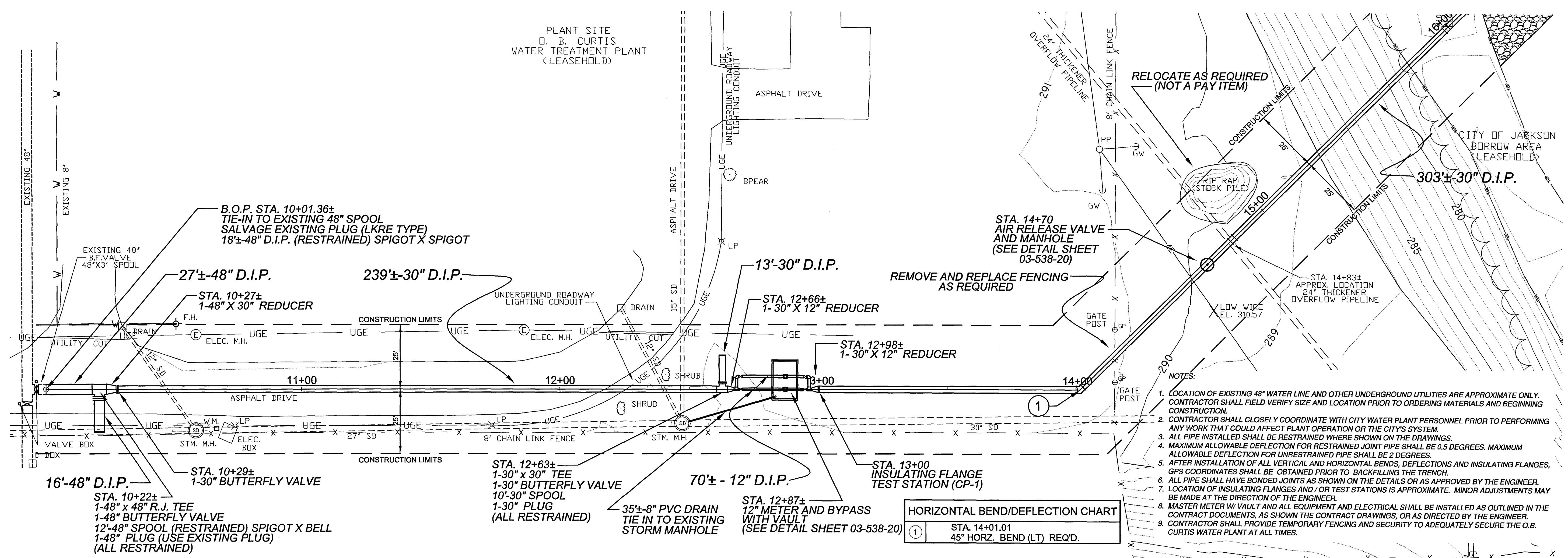


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PROJECT/CLIENT  
 MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
 CONSTRUCTION CONTRACT NO. 1  
 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

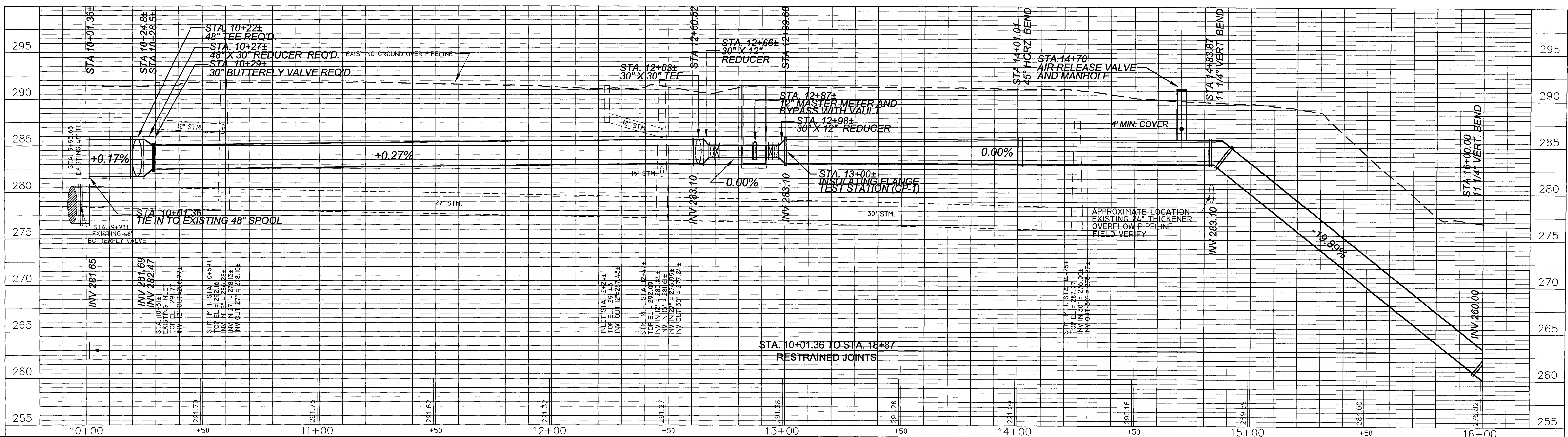
SHEET NAME  
**QUANTITY RECAP**  
**LAYOUT, LEGEND,**  
**GENERAL CONSTRUCTION NOTES**  
 SHEET NO.  
**03-538-2**



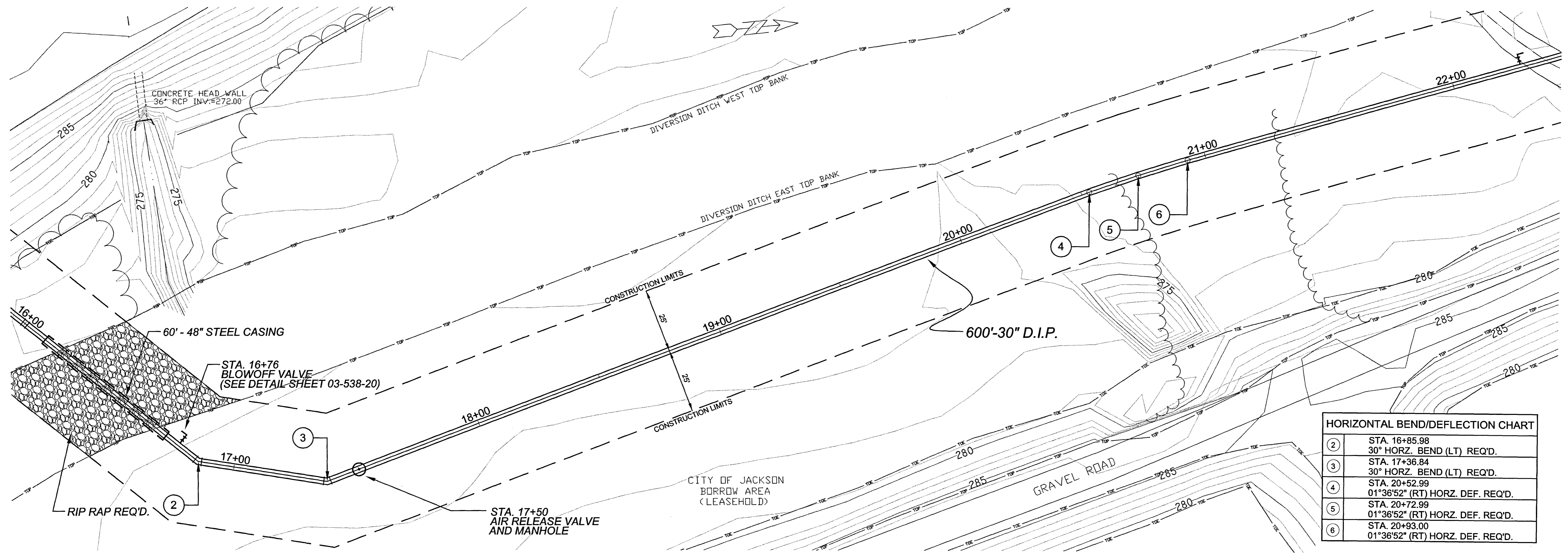
- NOTES:
1. LOCATION OF EXISTING 48" WATER LINE AND OTHER UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY SIZE AND LOCATION PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
  2. CONTRACTOR SHALL CLOSELY COORDINATE WITH CITY WATER PLANT PERSONNEL PRIOR TO PERFORMING ANY WORK THAT COULD AFFECT PLANT OPERATION OR THE CITY'S SYSTEM.
  3. ALL PIPE INSTALLED SHALL BE RESTRAINED WHERE SHOWN ON THE DRAWINGS.
  4. MAXIMUM ALLOWABLE DEFLECTION FOR RESTRAINED JOINT PIPE SHALL BE 0.5 DEGREES. MAXIMUM ALLOWABLE DEFLECTION FOR UNRESTRAINED PIPE SHALL BE 2 DEGREES.
  5. AFTER INSTALLATION OF ALL VERTICAL AND HORIZONTAL BENDS, DEFLECTIONS AND INSULATING FLANGES, GPS COORDINATES SHALL BE OBTAINED PRIOR TO BACKFILLING THE TRENCH.
  6. ALL PIPE SHALL HAVE BONDED JOINTS AS SHOWN ON THE DETAILS OR AS APPROVED BY THE ENGINEER.
  7. LOCATION OF INSULATING FLANGES AND / OR TEST STATIONS IS APPROXIMATE. MINOR ADJUSTMENTS MAY BE MADE AT THE DIRECTION OF THE ENGINEER.
  8. MASTER METER W/ VAULT AND ALL EQUIPMENT AND ELECTRICAL SHALL BE INSTALLED AS OUTLINED IN THE CONTRACT DOCUMENTS, AS SHOWN ON THE CONTRACT DRAWINGS, OR AS DIRECTED BY THE ENGINEER.
  9. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND SECURITY TO ADEQUATELY SECURE THE O.B. CURTIS WATER PLANT AT ALL TIMES.

HORIZONTAL BEND/DEFLECTION CHART

①	STA. 14+01.01	45° HORIZ. BEND (LT) REQ'D.
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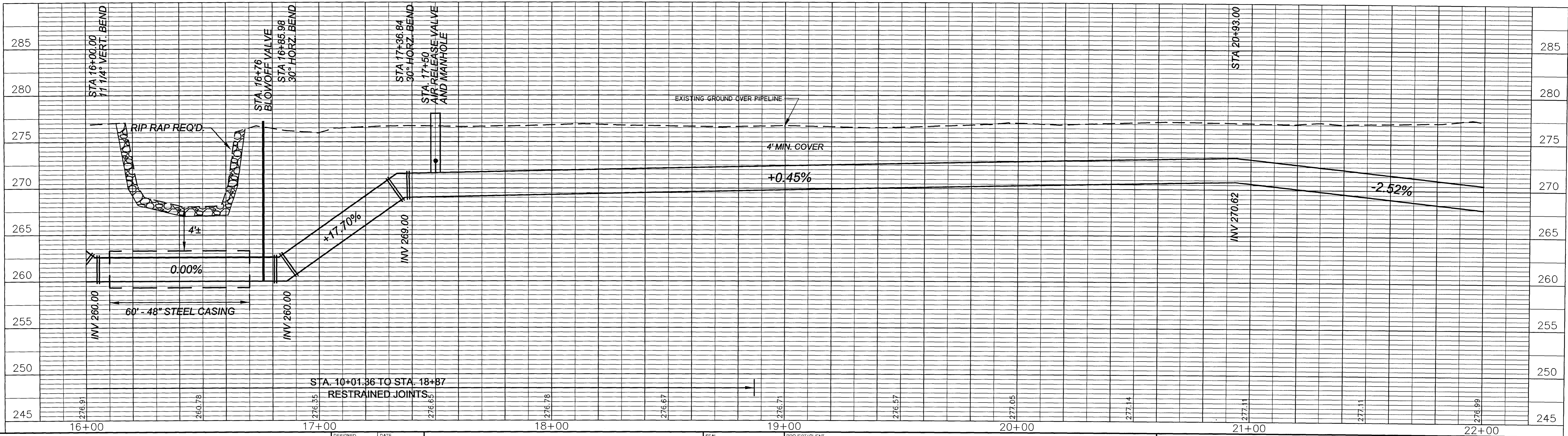


REVISIONS NO. DATE NATURE BY APPD.		DESIGNED: MAB DRAWN: MWH CHECKED: JSS	DATE: 5-2-03 SCALE: HZ: 1"=20' VT: 1"=5' APPROVED: RCL	<b>Southern Consultants, Inc.</b> CONSULTING ENGINEERS JACKSON, MISSISSIPPI <i>A Woman's Business Enterprise</i> IN ASSOCIATION WITH <b>NEEL SCHAFFER</b> engineers • planners • ecologists • landscape architects • surveyors	PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY <b>30" WATER TRANSMISSION LINE</b> CONSTRUCTION CONTRACT NO. 1 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD	SHEET NAME: PLAN / PROFILE B.O.P. TO STA. 16+00 SHEET NO.: 03-538-3
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HORIZONTAL BEND/DEFLECTION CHART	
②	STA. 16+85.98 30° HORZ. BEND (LT) REQ'D.
③	STA. 17+36.84 30° HORZ. BEND (LT) REQ'D.
④	STA. 20+52.99 01°36'52" (RT) HORZ. DEF. REQ'D.
⑤	STA. 20+72.99 01°36'52" (RT) HORZ. DEF. REQ'D.
⑥	STA. 20+93.00 01°36'52" (RT) HORZ. DEF. REQ'D.

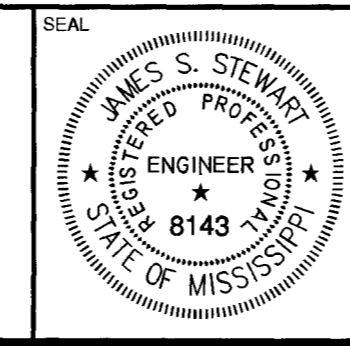
SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL

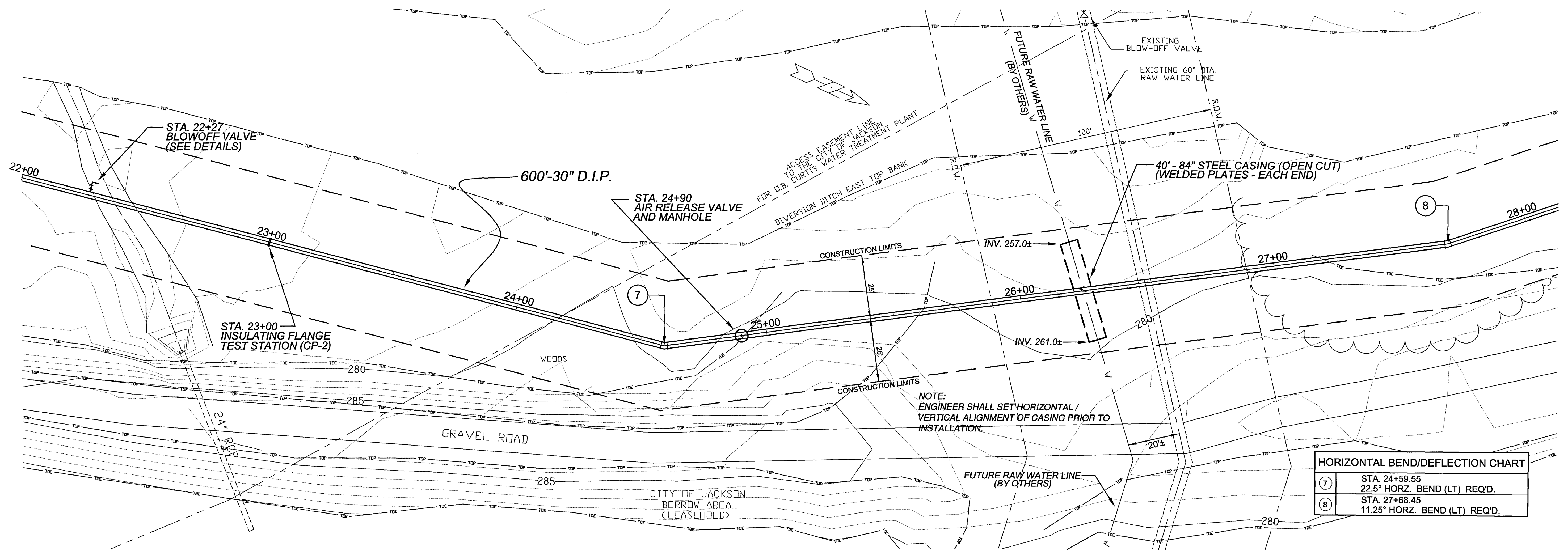

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engineers • planners • ecologists • landscape architects • surveyors



PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
 CONSTRUCTION CONTRACT NO. 1  
 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

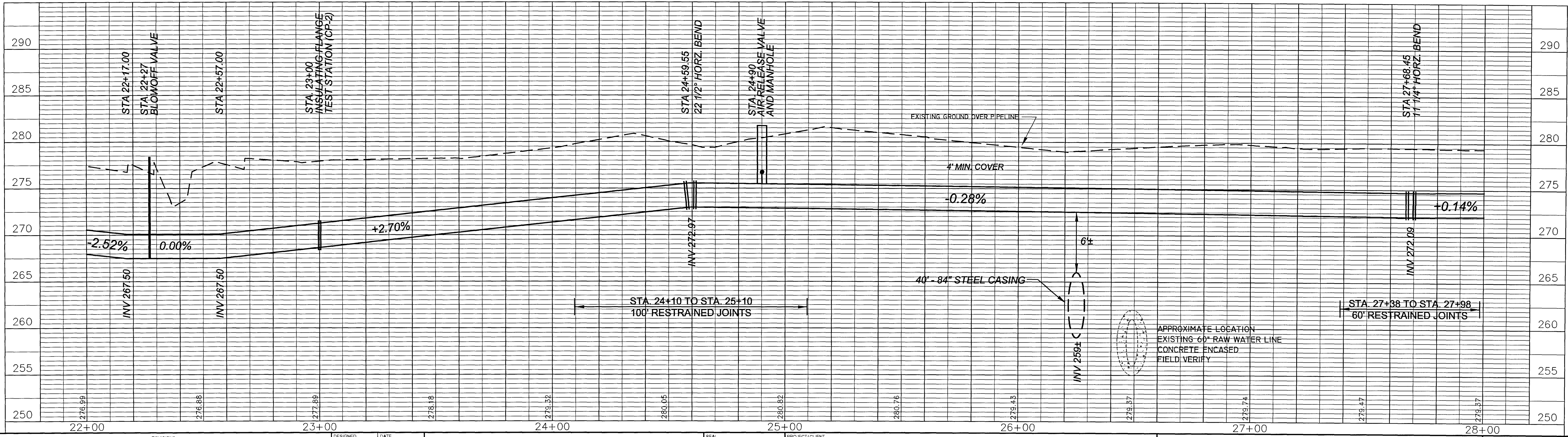
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**STA. 16+00 TO STA. 22+00**

SHEET NO.: **03-538-4**



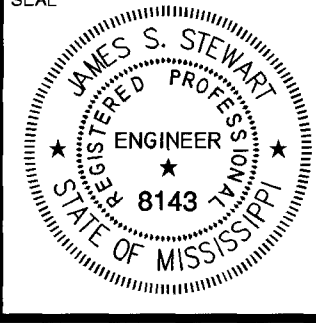
HORIZONTAL BEND/DEFLECTION CHART	
⑦	STA. 24+59.55 22.5° HORZ. BEND (LT) REQ'D.
⑧	STA. 27+68.45 11.25° HORZ. BEND (LT) REQ'D.

SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS	DESIGNED	DATE
		NATURE	MAB	5-2-03
			BY	
			APPD.	
			DRAWN	
			MWH	
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			APPROVED	
			RCL	

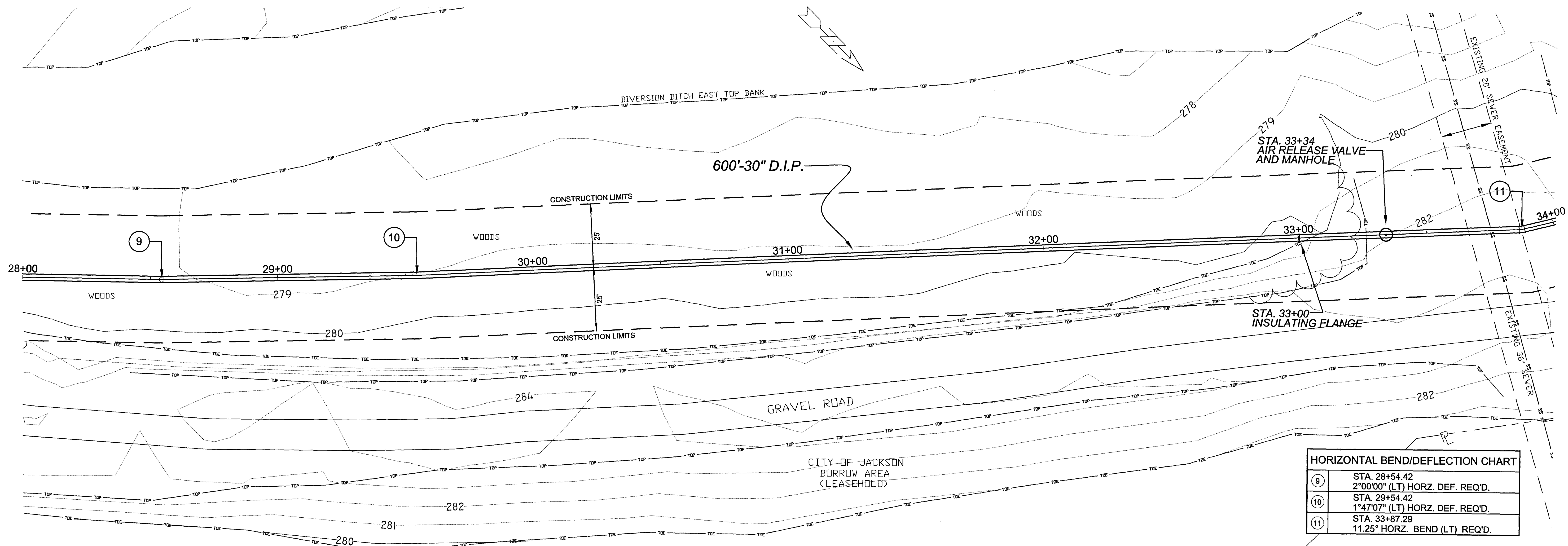

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PROJECT/CLIENT  
 MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
 CONSTRUCTION CONTRACT NO. 1  
 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

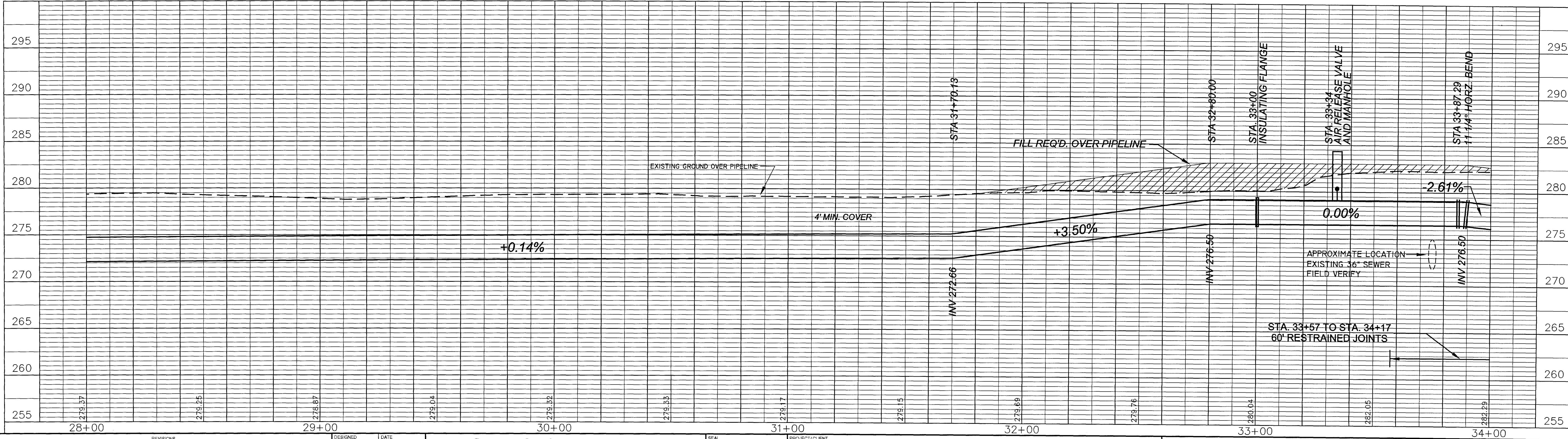
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**PLAN / PROFILE**  
**STA. 22+00 TO STA. 28+00**

SHEET NO.  
**03-538-5**

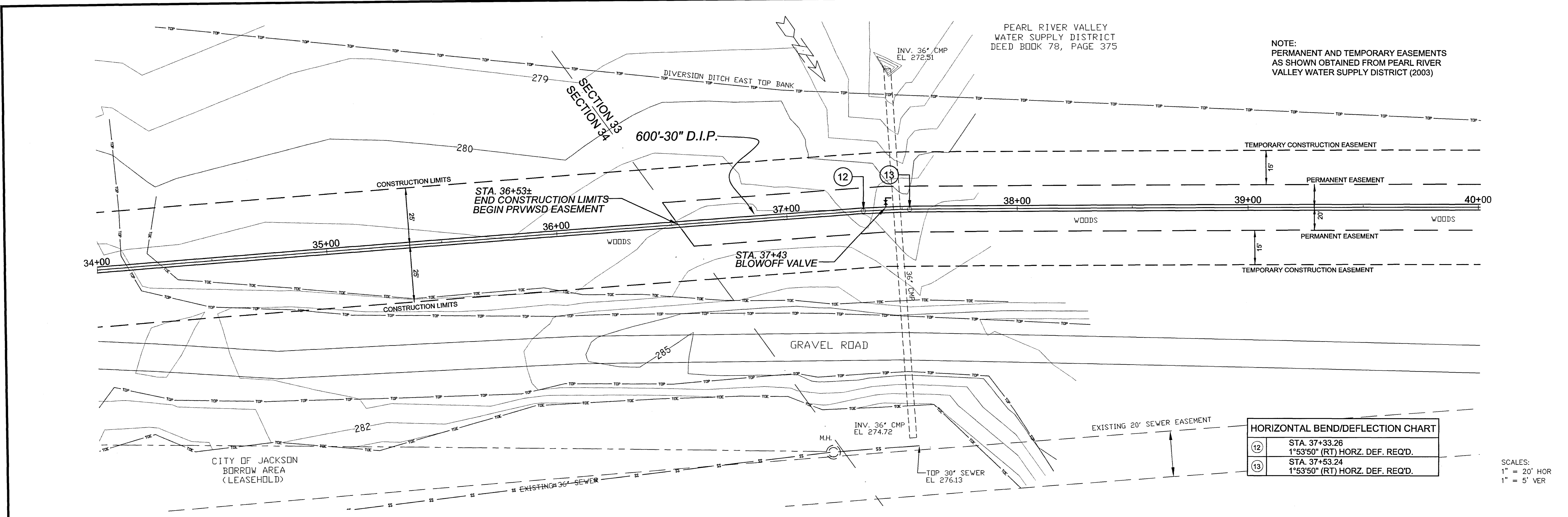


HORIZONTAL BEND/DEFLECTION CHART	
9	STA. 28+54.42 2°00'00" (LT) HORZ. DEF. REQ'D.
10	STA. 29+54.42 1°47'07" (LT) HORZ. DEF. REQ'D.
11	STA. 33+87.29 11.25° HORZ. BEND (LT) REQ'D.

SCALES:  
1" = 20' HOR  
1" = 5' VER



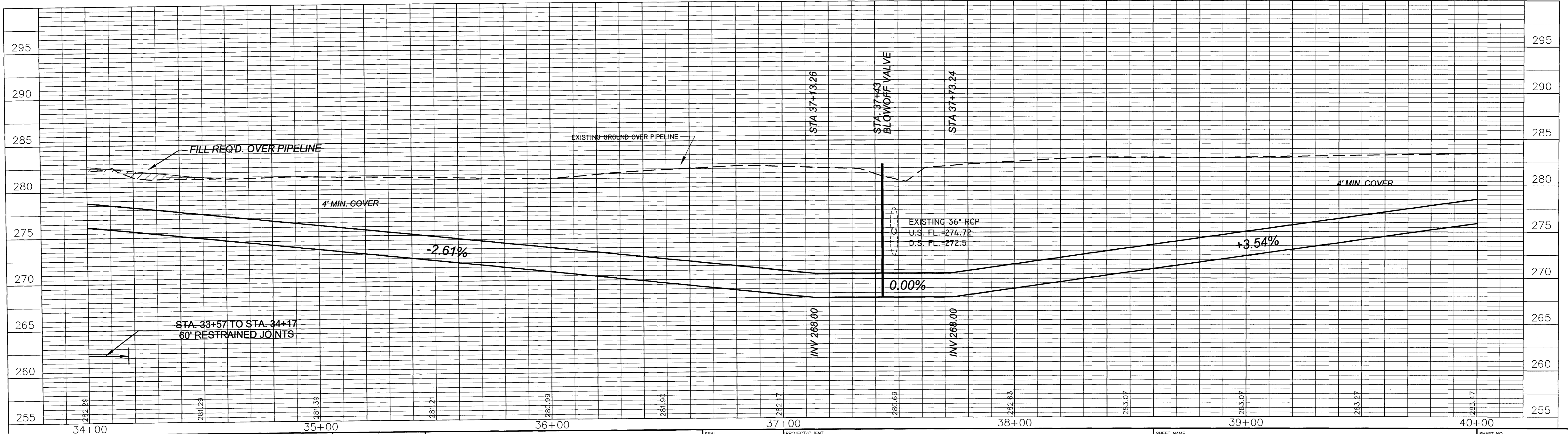
REVISIONS NO. DATE NATURE BY APPD.		DESIGNED: MAB DRAWN: MWH CHECKED: JSS	DATE: 5-2-03 SCALE: HZ: 1"=20' VT: 1"=5' APPROVED: RCL	<b>Southern Consultants, Inc.</b> CONSULTING ENGINEERS JACKSON, MISSISSIPPI <i>A Woman's Business Enterprise</i> IN ASSOCIATION WITH <b>NEEL SCHAFFER</b> engineers • planners • ecologists • landscape architects • surveyors	SEAL: JAMES S. STEWART REGISTERED PROFESSIONAL ENGINEER 8143 STATE OF MISSISSIPPI	PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY <b>30" WATER TRANSMISSION LINE</b> CONSTRUCTION CONTRACT NO. 1 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD	SHEET NAME: PLAN / PROFILE STA. 28+00 TO STA. 34+00	SHEET NO.: 03-538-6
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NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)

HORIZONTAL BEND/DEFLECTION CHART	
⑫	STA. 37+33.26 1°53'50" (RT) HORZ. DEF. REQ'D.
⑬	STA. 37+53.24 1°53'50" (RT) HORZ. DEF. REQ'D.

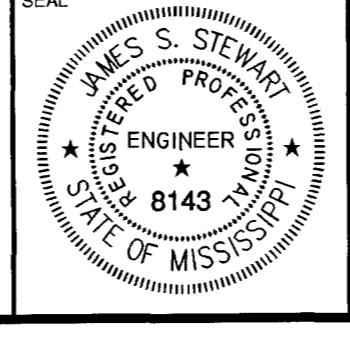
SCALES:  
1" = 20' HOR  
1" = 5' VER



REVISIONS				
NO.	DATE	NATURE	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL

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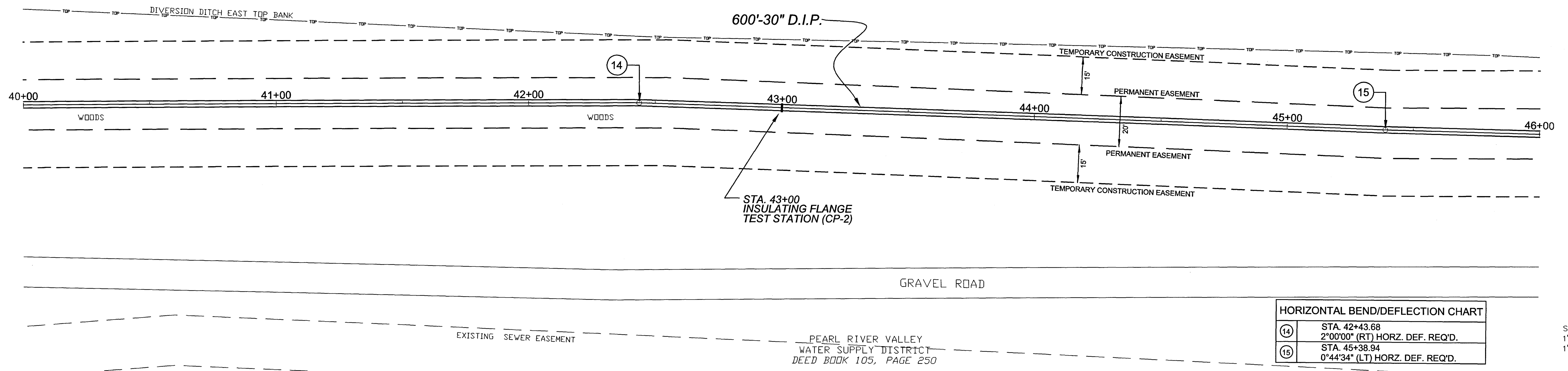
PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME  
**PLAN / PROFILE**  
STA. 34+00 TO STA. 40+00

SHEET NO.  
**03-538-7**

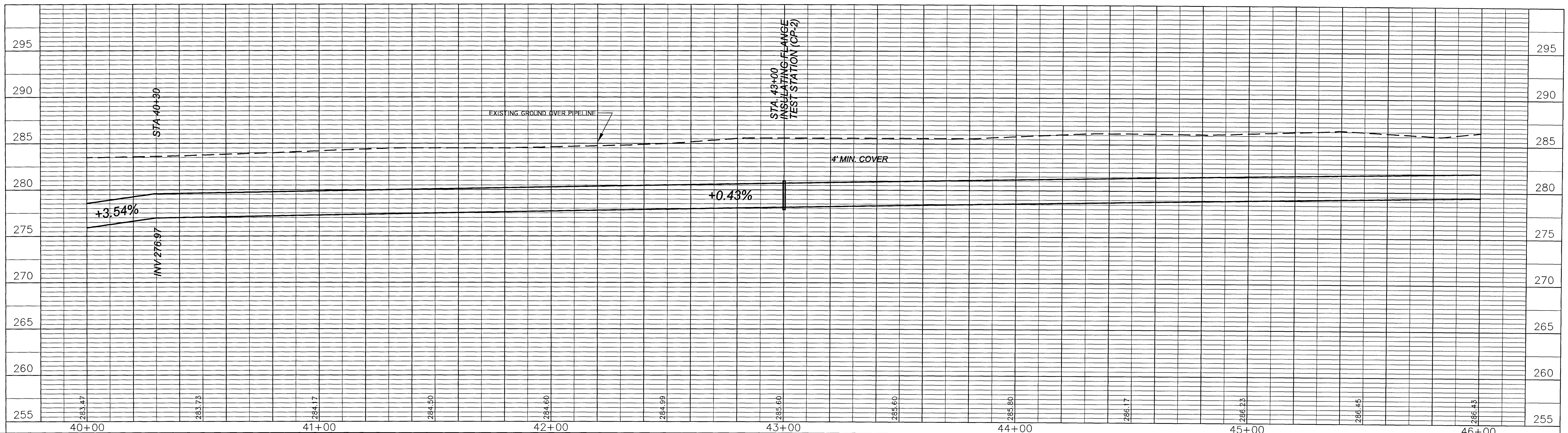
PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



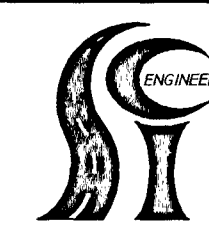
HORIZONTAL BEND/DEFLECTION CHART	
⑭	STA. 42+43.68 2°00'00" (RT) HORZ. DEF. REQ'D.
⑮	STA. 45+38.94 0°44'34" (LT) HORZ. DEF. REQ'D.

SCALES:  
1" = 20' HOR  
1" = 5' VER

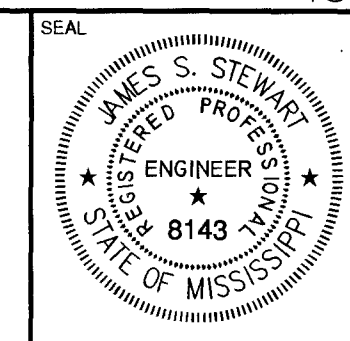


NO.	DATE	NATURE	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL



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PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

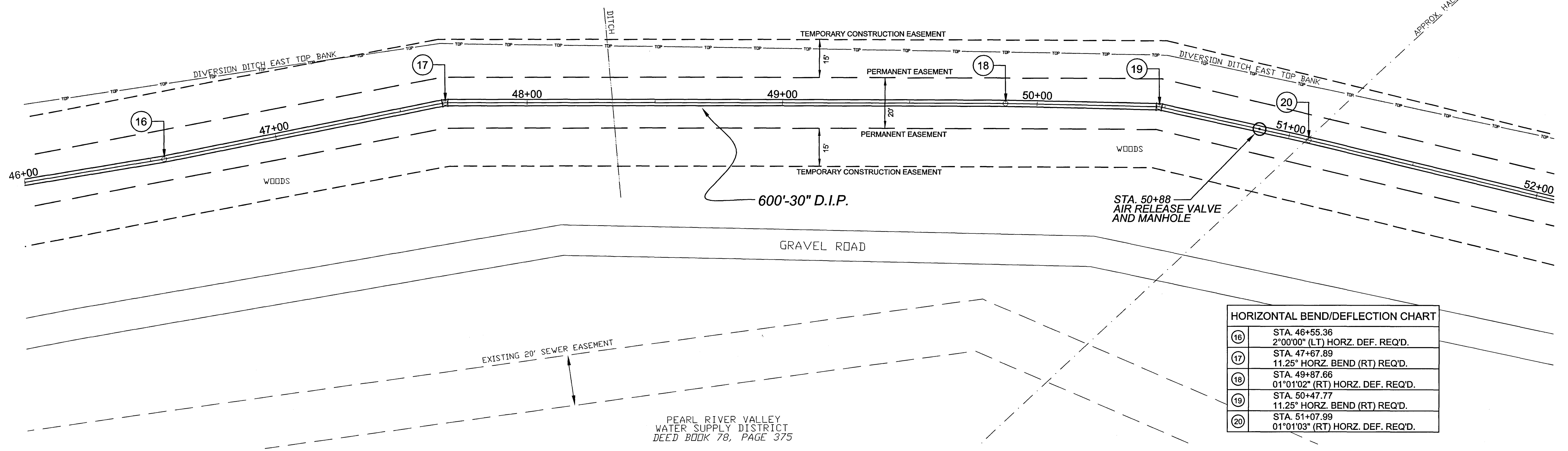
SHEET NAME  
**PLAN / PROFILE**  
STA. 40+00 TO STA. 46+00

SHEET NO.  
**03-538-8**



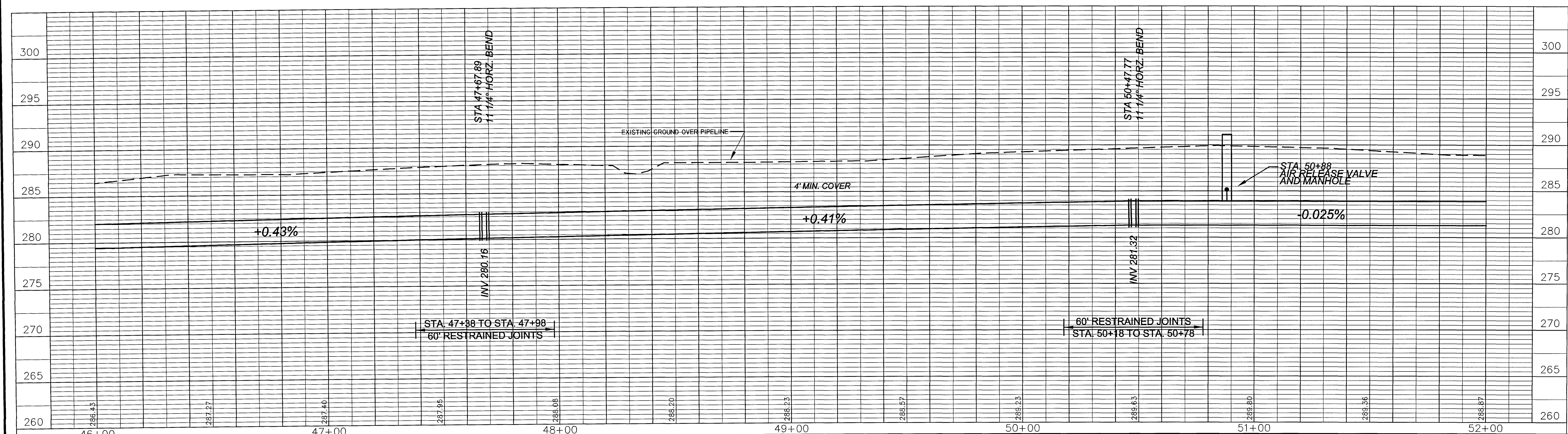
PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



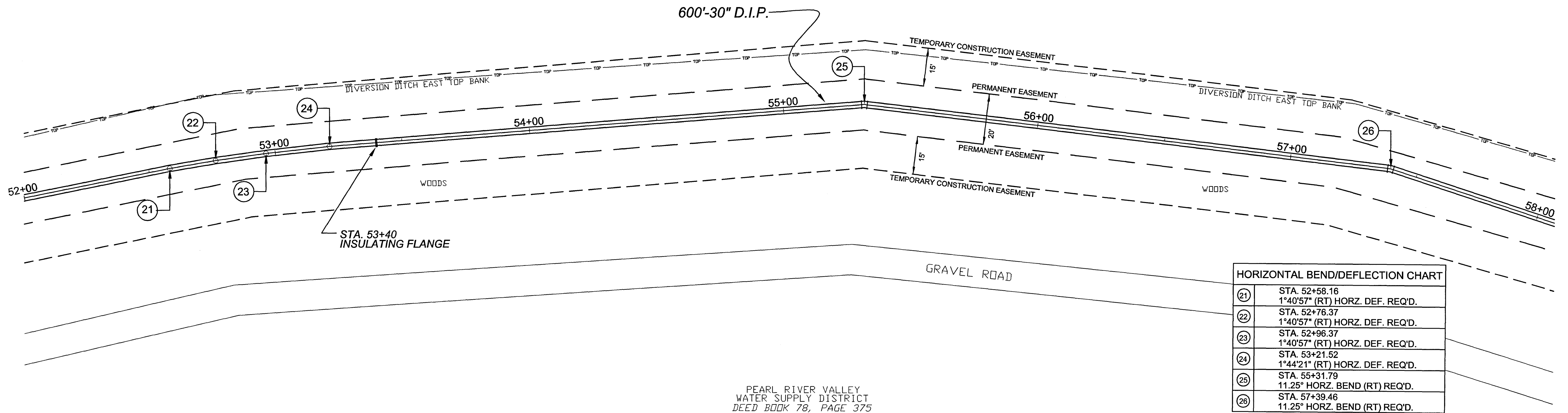
HORIZONTAL BEND/DEFLECTION CHART	
16	STA. 46+55.36 2°00'00" (LT) HORZ. DEF. REQ'D.
17	STA. 47+67.89 11.25° HORZ. BEND (RT) REQ'D.
18	STA. 49+87.66 01°01'02" (RT) HORZ. DEF. REQ'D.
19	STA. 50+47.77 11.25° HORZ. BEND (RT) REQ'D.
20	STA. 51+07.99 01°01'03" (RT) HORZ. DEF. REQ'D.

SCALES:  
1" = 20' HOR  
1" = 5' VER



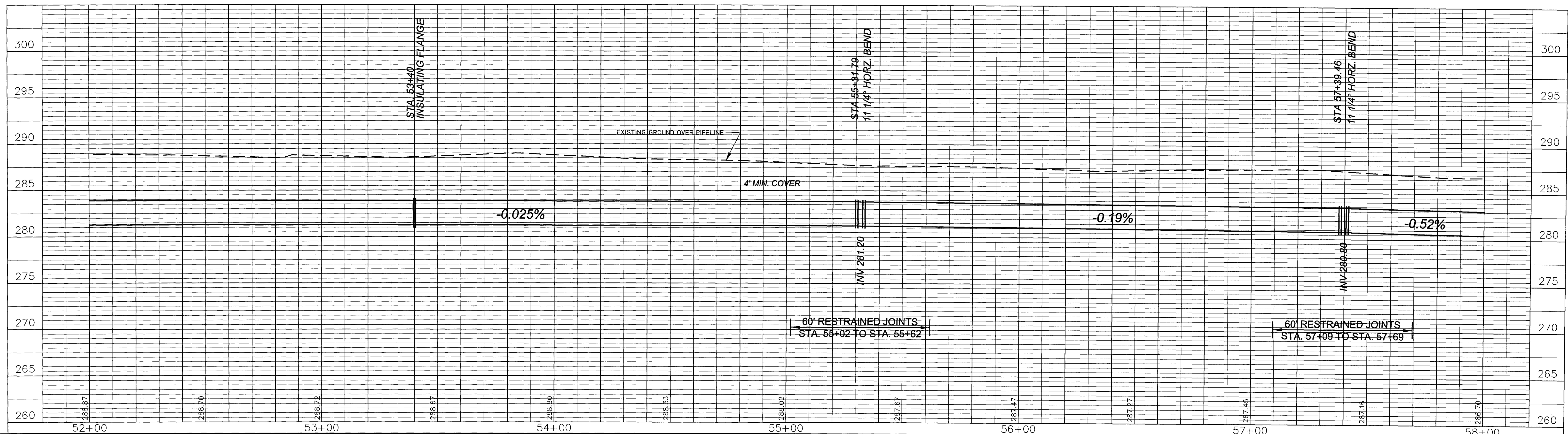
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS NATURE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	REVISIONS NATURE										<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>DESIGNED MAB</td> <td>DATE 5-2-03</td> </tr> <tr> <td>DRAWN MWH</td> <td>SCALE HZ: 1"=20' VT: 1"=5'</td> </tr> <tr> <td>CHECKED JSS</td> <td>APPROVED RCL</td> </tr> </table>	DESIGNED MAB	DATE 5-2-03	DRAWN MWH	SCALE HZ: 1"=20' VT: 1"=5'	CHECKED JSS	APPROVED RCL	<p><b>Southern Consultants, Inc.</b> CONSULTING ENGINEERS JACKSON, MISSISSIPPI <i>A Woman's Business Enterprise</i> IN ASSOCIATION WITH <b>NEEL SCHAFER</b> engineers • planners • ecologists • landscape architects • surveyors</p>		<p>PROJECT/CLIENT MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY <b>30" WATER TRANSMISSION LINE</b> CONSTRUCTION CONTRACT NO. 1 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD</p>	<p>SHEET NAME <b>PLAN / PROFILE</b> STA. 46+00 TO STA. 52+00</p>	<p>SHEET NO. <b>03-538-9</b></p>
NO.	DATE	REVISIONS NATURE																						
DESIGNED MAB	DATE 5-2-03																							
DRAWN MWH	SCALE HZ: 1"=20' VT: 1"=5'																							
CHECKED JSS	APPROVED RCL																							

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
21	STA. 52+58.16 1°40'57" (RT) HORZ. DEF. REQ'D.
22	STA. 52+76.37 1°40'57" (RT) HORZ. DEF. REQ'D.
23	STA. 52+96.37 1°40'57" (RT) HORZ. DEF. REQ'D.
24	STA. 53+21.52 1°44'21" (RT) HORZ. DEF. REQ'D.
25	STA. 55+31.79 11.25° HORZ. BEND (RT) REQ'D.
26	STA. 57+39.46 11.25° HORZ. BEND (RT) REQ'D.

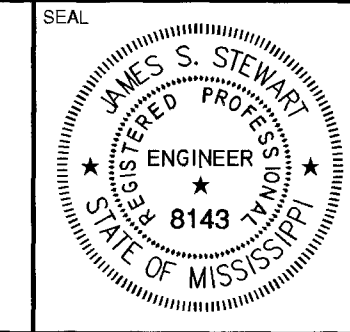
SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS NATURE	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL

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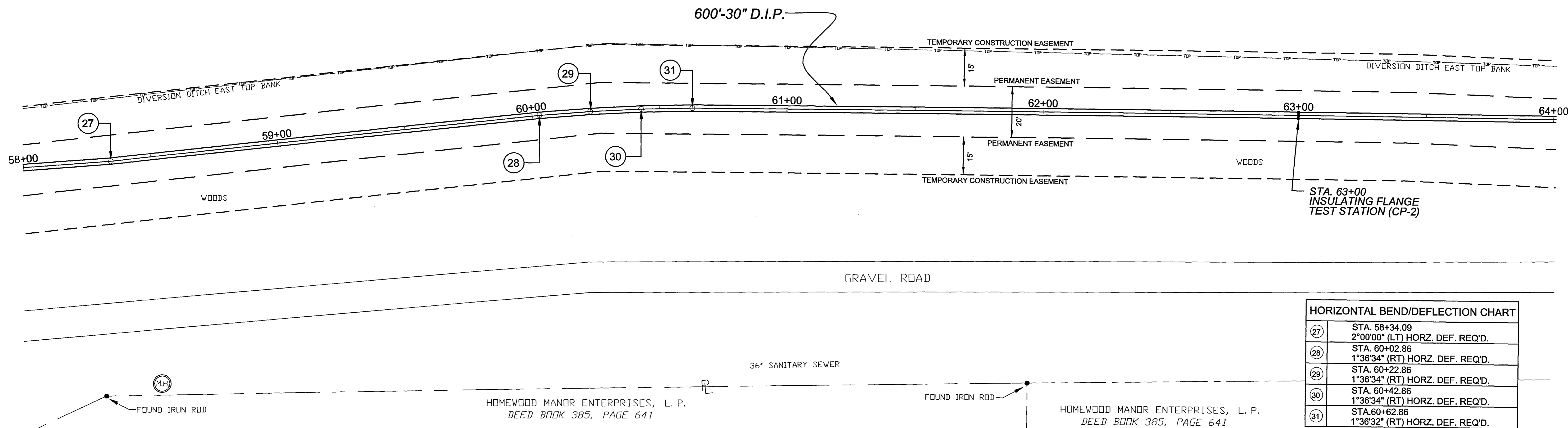


PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME  
**PLAN / PROFILE**  
STA. 52+00 TO STA. 58+00

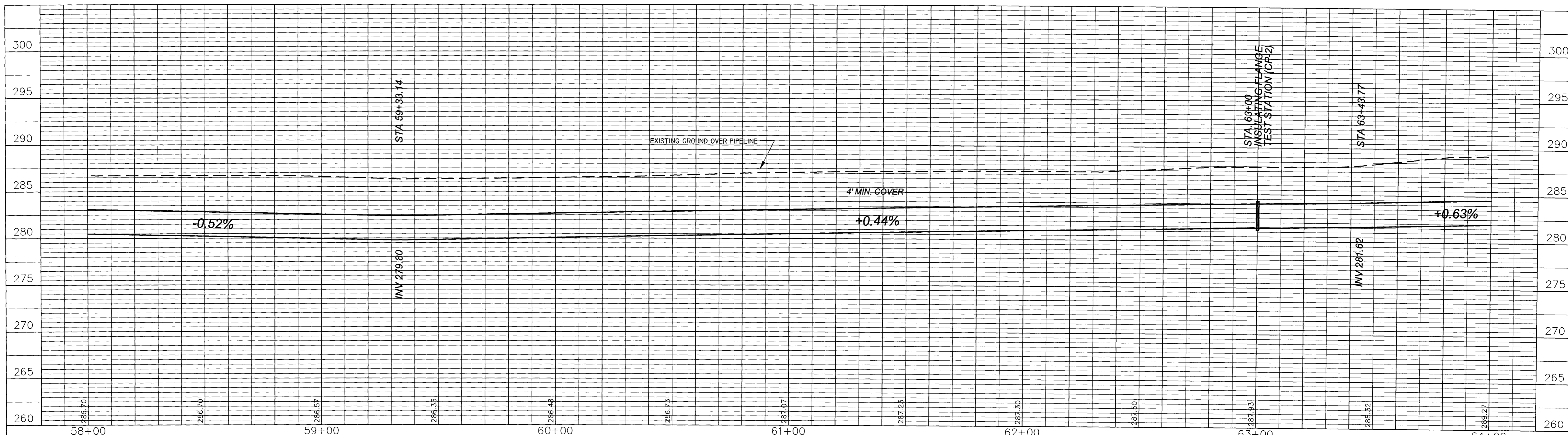
SHEET NO.  
**03-538-10**

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
27	STA. 58+34.09 2°00'00" (LT) HORZ. DEF. REQ'D.
28	STA. 60+02.86 1°36'34" (RT) HORZ. DEF. REQ'D.
29	STA. 60+22.86 1°36'34" (RT) HORZ. DEF. REQ'D.
30	STA. 60+42.86 1°36'34" (RT) HORZ. DEF. REQ'D.
31	STA. 60+62.86 1°36'32" (RT) HORZ. DEF. REQ'D.

SCALES:  
1" = 20' HOR  
1" = 5' VER

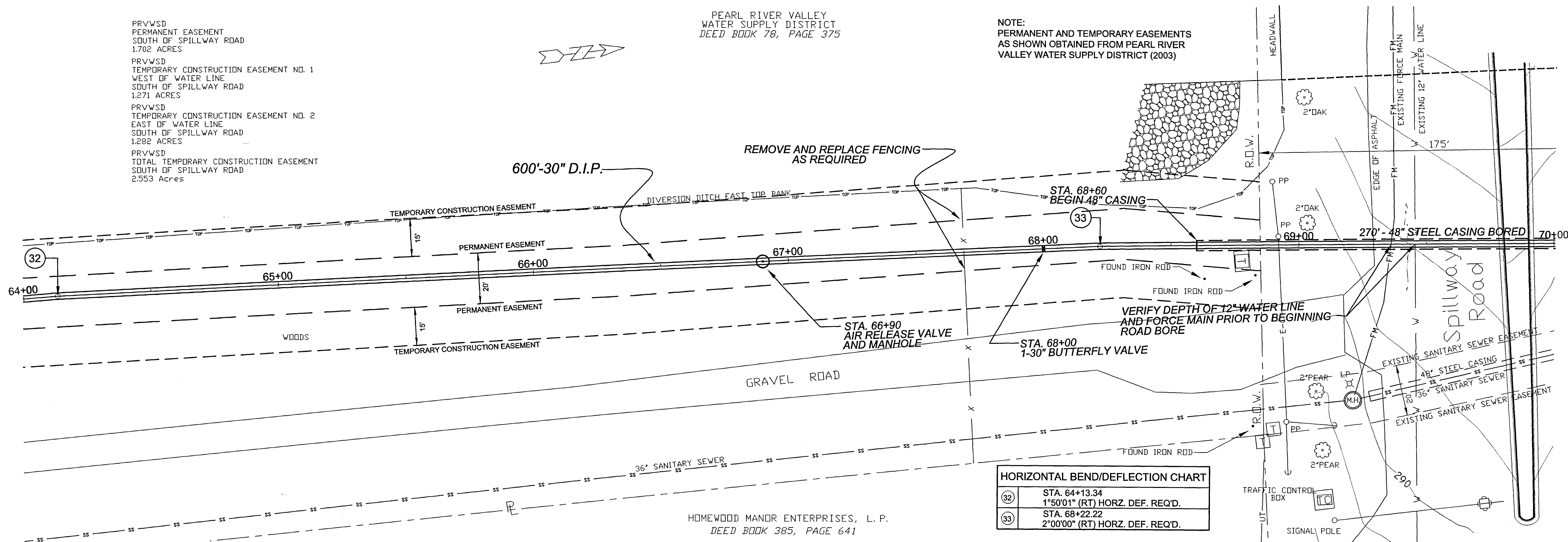


REVISIONS NO. DATE NATURE BY APPD.		DESIGNED: MAB DATE: 5-2-03 DRAWN: MWH SCALE: HZ: 1"=20' VT: 1"=5' CHECKED: JSS APPROVED: RCL	<p><b>Southern Consultants, Inc.</b> CONSULTING ENGINEERS JACKSON, MISSISSIPPI <i>A Woman's Business Enterprise</i> IN ASSOCIATION WITH <b>NEEL SCHAFFER</b> engineers • planners • ecologists • landscape architects • surveyors</p>	SEAL: JAMES S. STEWART REGISTERED PROFESSIONAL ENGINEER NO. 8143 STATE OF MISSISSIPPI	PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY <b>30" WATER TRANSMISSION LINE</b> CONSTRUCTION CONTRACT NO. 1 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD	SHEET NAME: PLAN / PROFILE STA. 58+00 TO STA. 64+00	SHEET NO.: 03-538-11
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PRVWSD  
 PERMANENT EASEMENT  
 SOUTH OF SPILLWAY ROAD  
 1.702 ACRES  
 PRVWSD  
 TEMPORARY CONSTRUCTION EASEMENT NO. 1  
 WEST OF WATER LINE  
 SOUTH OF SPILLWAY ROAD  
 1.271 ACRES  
 PRVWSD  
 TEMPORARY CONSTRUCTION EASEMENT NO. 2  
 EAST OF WATER LINE  
 SOUTH OF SPILLWAY ROAD  
 1.282 ACRES  
 PRVWSD  
 TOTAL TEMPORARY CONSTRUCTION EASEMENT  
 SOUTH OF SPILLWAY ROAD  
 2.553 ACRES

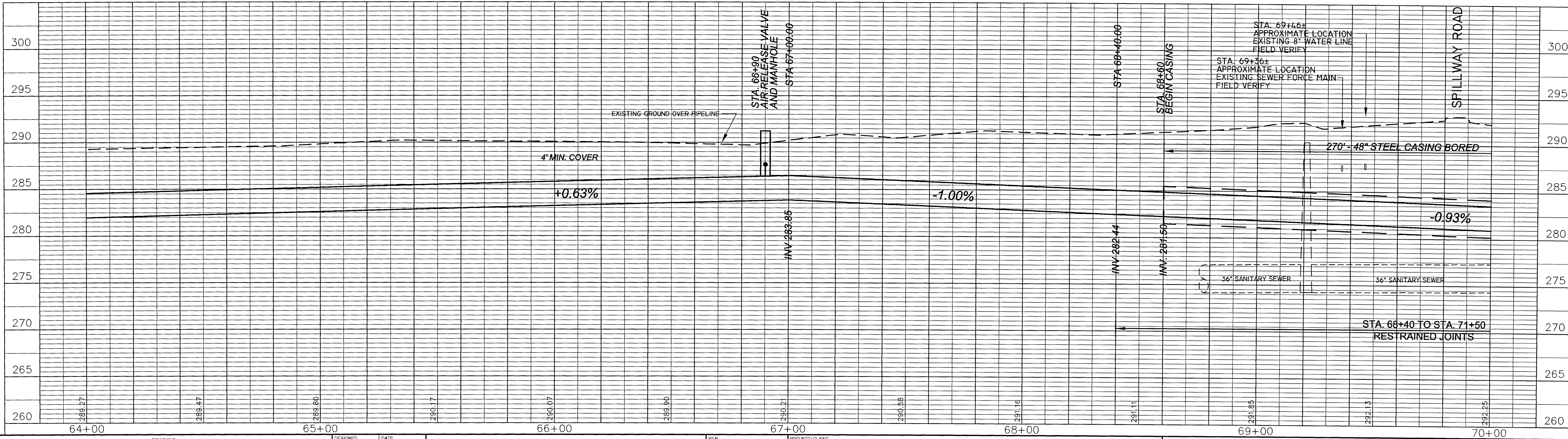
PEARL RIVER VALLEY  
 WATER SUPPLY DISTRICT  
 DEED BOOK 78, PAGE 375

NOTE:  
 PERMANENT AND TEMPORARY EASEMENTS  
 AS SHOWN OBTAINED FROM PEARL RIVER  
 VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
32	STA. 64+13.34 1°50'01" (RT) HORZ. DEF. REQ'D.
33	STA. 68+22.22 2°00'00" (RT) HORZ. DEF. REQ'D.

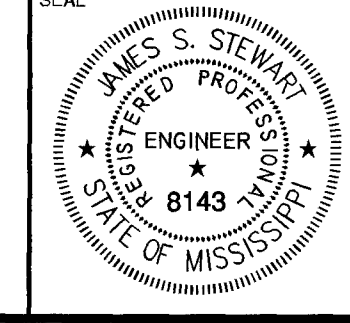
SCALES:  
 1" = 20' HOR  
 1" = 5' VER



NO.	DATE	REVISIONS	BY	APPD.

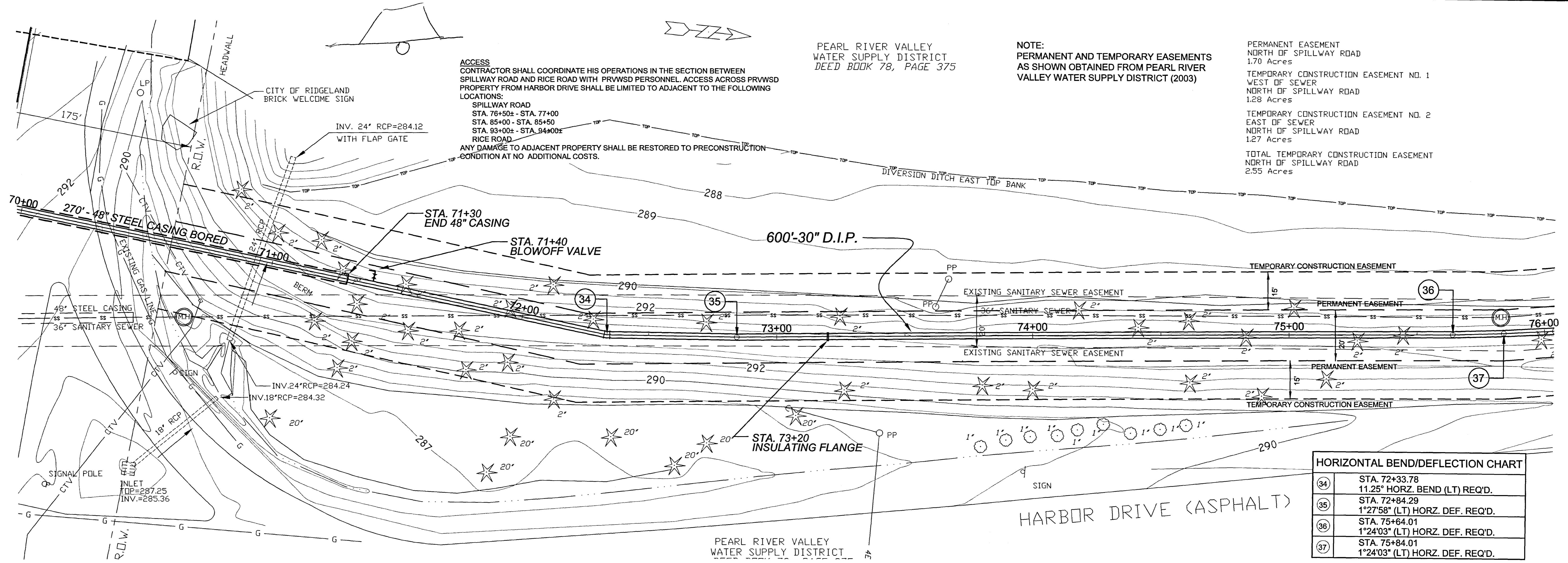
DESIGNED: MAB  
 DATE: 5-2-03  
 DRAWN: MWH  
 SCALE: HZ: 1"=20'  
 VT: 1"=5'  
 CHECKED: JSS  
 APPROVED: RCL

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PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
 CONSTRUCTION CONTRACT NO. 1  
 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME: **PLAN / PROFILE**  
**STA. 64+00 TO STA. 70+00**  
 SHEET NO.: **03-538-12**



PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

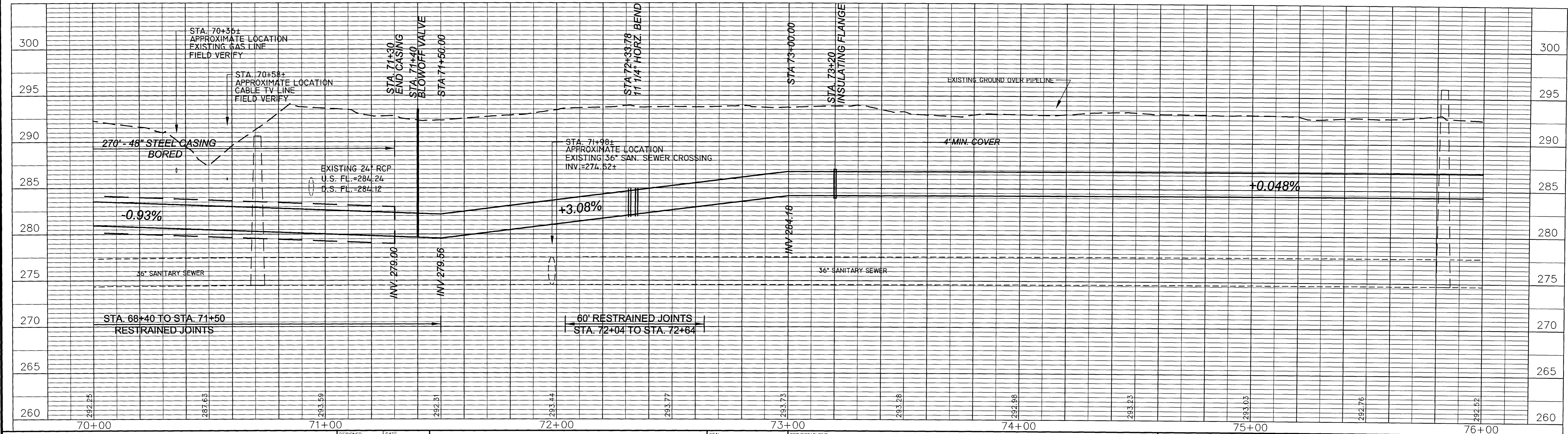
NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)

PERMANENT EASEMENT  
NORTH OF SPILLWAY ROAD  
1.70 Acres  
TEMPORARY CONSTRUCTION EASEMENT NO. 1  
WEST OF SEWER  
NORTH OF SPILLWAY ROAD  
1.28 Acres  
TEMPORARY CONSTRUCTION EASEMENT NO. 2  
EAST OF SEWER  
NORTH OF SPILLWAY ROAD  
1.27 Acres  
TOTAL TEMPORARY CONSTRUCTION EASEMENT  
NORTH OF SPILLWAY ROAD  
2.55 Acres

ACCESS  
CONTRACTOR SHALL COORDINATE HIS OPERATIONS IN THE SECTION BETWEEN  
SPILLWAY ROAD AND RICE ROAD WITH PRVWSD PERSONNEL. ACCESS ACROSS PRVWSD  
PROPERTY FROM HARBOR DRIVE SHALL BE LIMITED TO ADJACENT TO THE FOLLOWING  
LOCATIONS:  
SPILLWAY ROAD  
STA. 76+50± - STA. 77+00  
STA. 85+00 - STA. 85+50  
STA. 93+00± - STA. 94+00±  
RICE ROAD  
ANY DAMAGE TO ADJACENT PROPERTY SHALL BE RESTORED TO PRECONSTRUCTION  
CONDITION AT NO ADDITIONAL COSTS.

HORIZONTAL BEND/DEFLECTION CHART	
34	STA. 72+33.78 11.25° HORZ. BEND (LT) REQ'D.
35	STA. 72+84.29 1°27'58" (LT) HORZ. DEF. REQ'D.
36	STA. 75+64.01 1°24'03" (LT) HORZ. DEF. REQ'D.
37	STA. 75+84.01 1°24'03" (LT) HORZ. DEF. REQ'D.

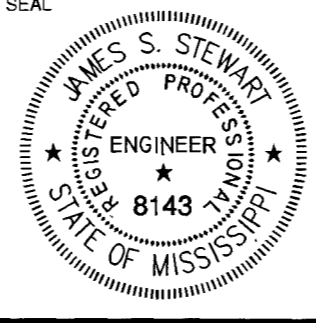
SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS	BY	APPD.

DESIGNED: MAB  
DATE: 5-2-03  
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SCALE: HZ. 1"=20'  
VT. 1"=5'  
CHECKED: JSS  
APPROVED: RCL

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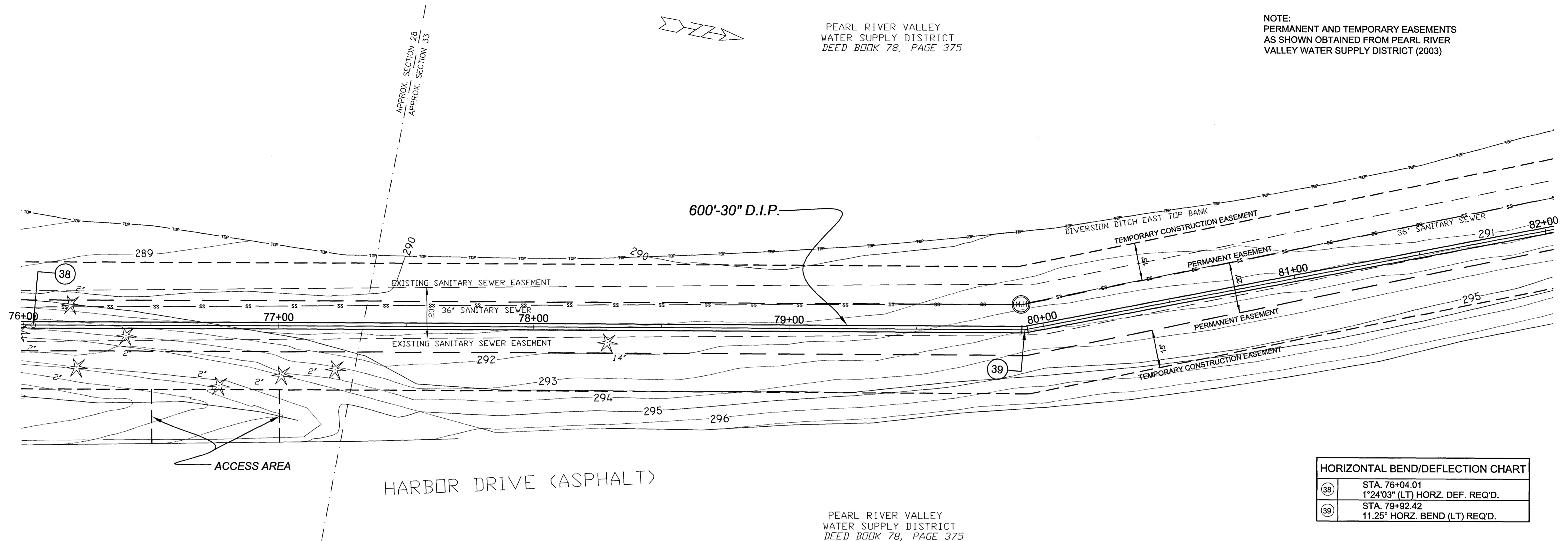


PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME: **PLAN / PROFILE**  
STA. 70+00 TO STA. 76+00  
SHEET NO.: 03-538-13

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

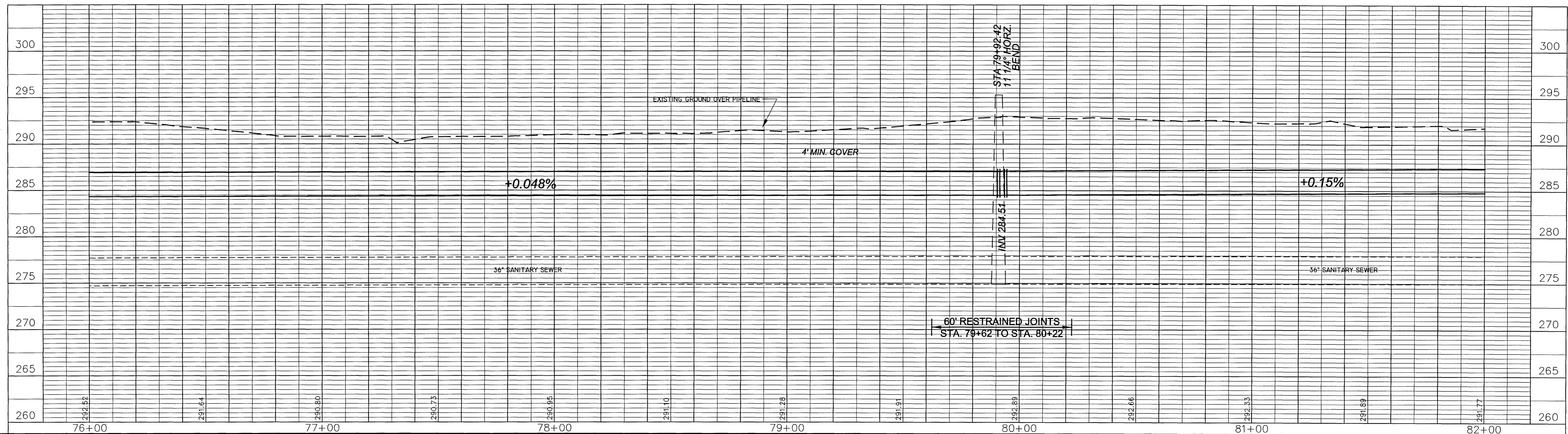
NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
38	STA. 76+04.01 1°24'03" (LT) HORZ. DEF. REQ'D.
39	STA. 79+92.42 11.25° HORZ. BEND (LT) REQ'D.

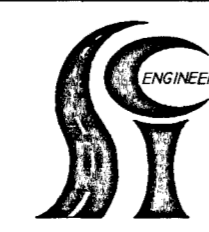
SCALES:  
1" = 20' HOR  
1" = 5' VER

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

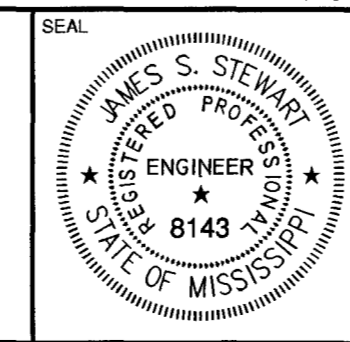


NO.	DATE	REVISIONS NATURE	BY	APPD.

DESIGNED: MAB  
DATE: 5-2-03  
DRAWN: MWH  
SCALE: HZ: 1"=20'  
VT: 1"=5'  
CHECKED: JSS  
APPROVED: RCL



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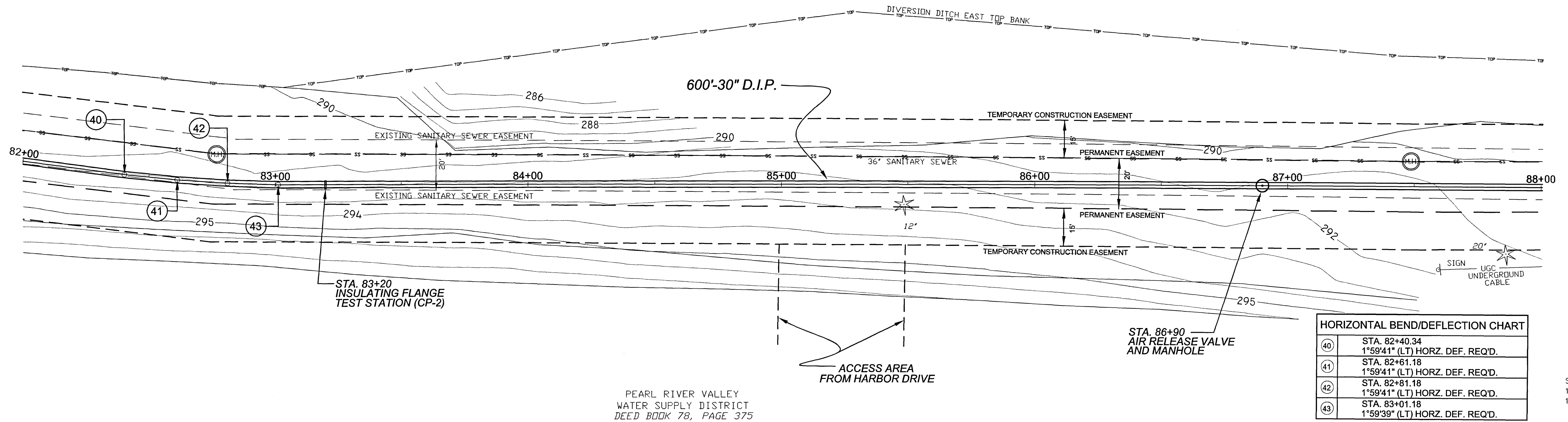
PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME: **PLAN / PROFILE**  
STA. 76+00 TO STA. 82+00

SHEET NO.: **03-538-14**

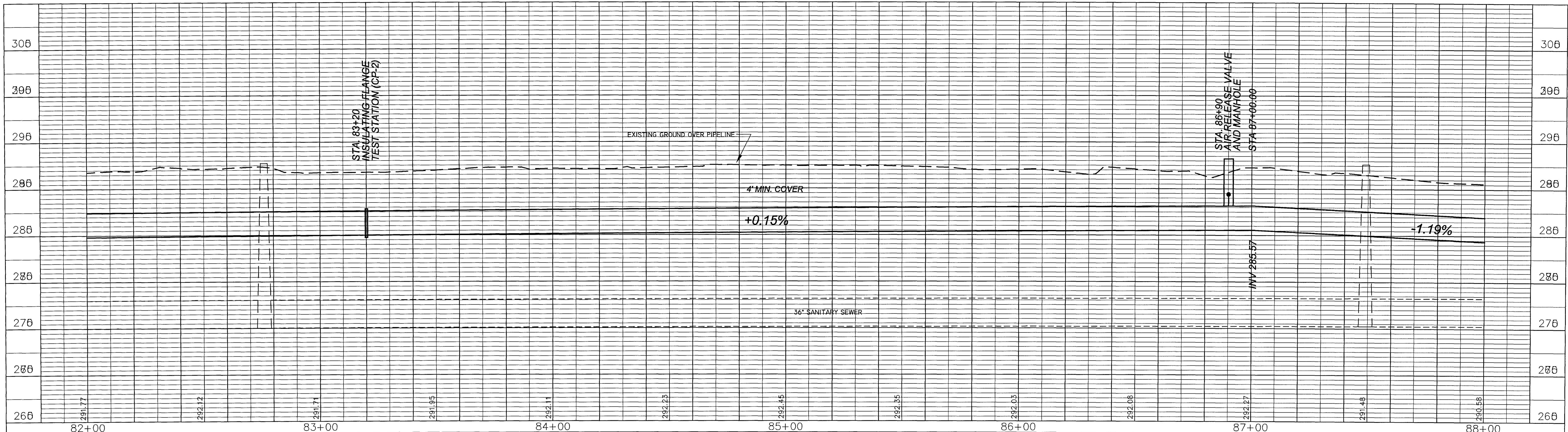
PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
④0	STA. 82+40.34 1°59'41" (LT) HORZ. DEF. REQ'D.
④1	STA. 82+61.18 1°59'41" (LT) HORZ. DEF. REQ'D.
④2	STA. 82+81.18 1°59'41" (LT) HORZ. DEF. REQ'D.
④3	STA. 83+01.18 1°59'39" (LT) HORZ. DEF. REQ'D.

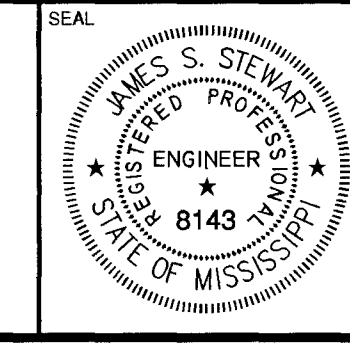
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1" = 5' VER



REVISIONS	
NO.	DATE

DESIGNED	MAB	DATE	5-2-03
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PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

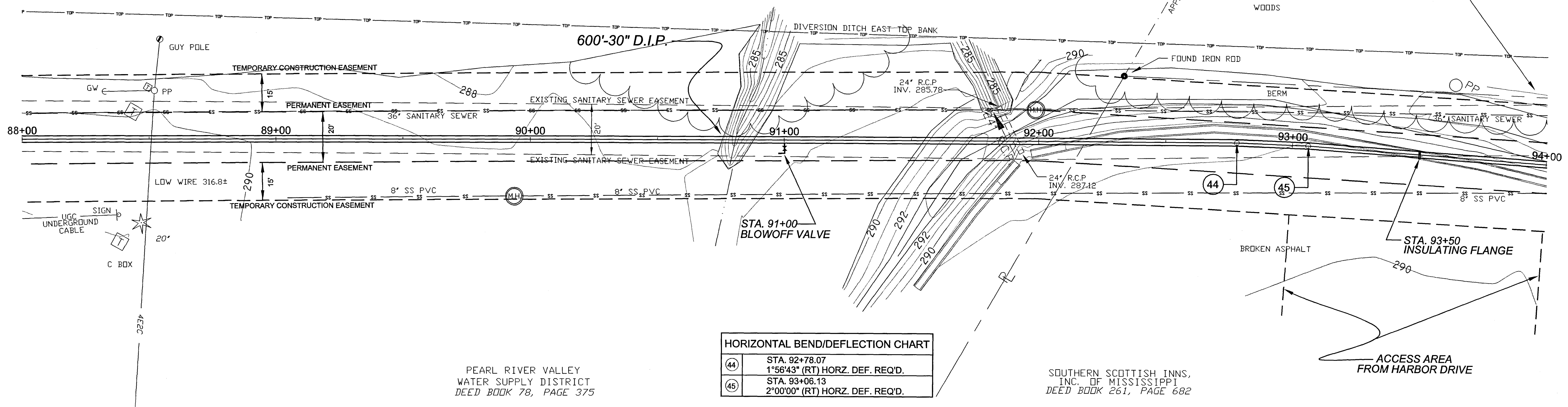
SHEET NAME  
**PLAN / PROFILE**  
STA. 82+00 TO STA. 88+00

SHEET NO.  
**03-538-15**

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)

EASEMENTS SHOWN IN THIS AREA  
BOUND BY THE SOUTHERN SCOTTISH INNS  
PROPERTY ARE EXCLUDED FROM TOTALS  
BELOW  
(PE = 0.242 Acres TCE = 0.362 Acres)

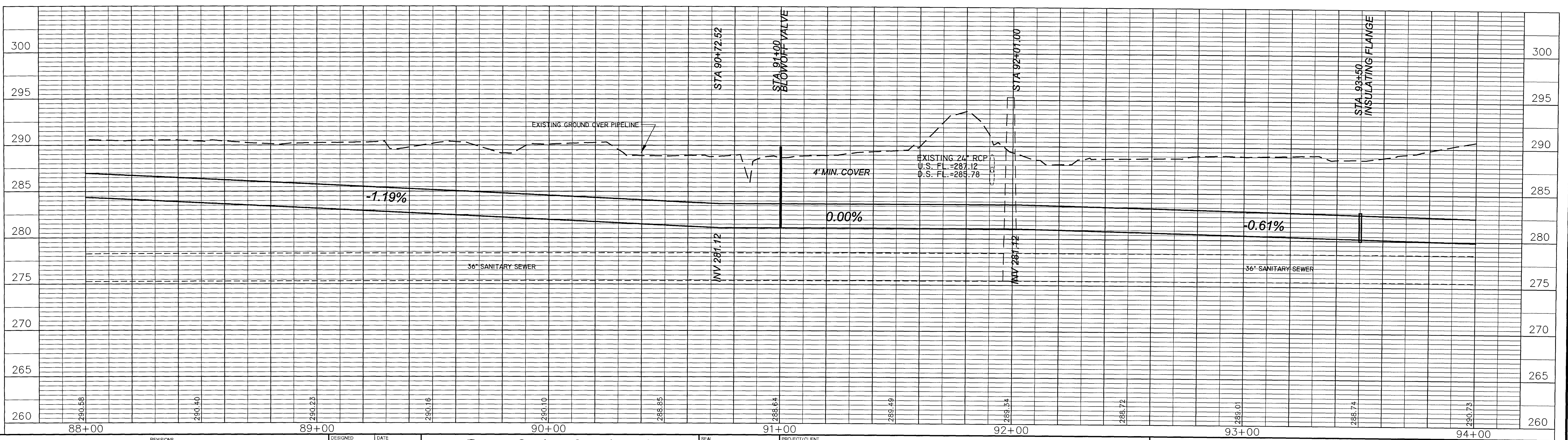


44	STA. 92+78.07 1°56'43" (RT) HORZ. DEF. REQ'D.
45	STA. 93+06.13 2°00'00" (RT) HORZ. DEF. REQ'D.

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

SOUTHERN SCOTTISH INNS,  
INC. OF MISSISSIPPI  
DEED BOOK 261, PAGE 682

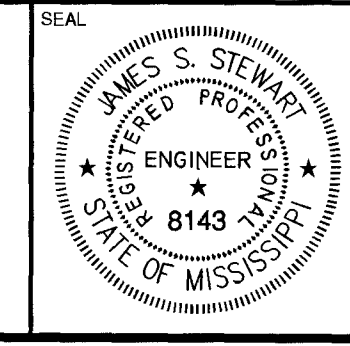
SCALES:  
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PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

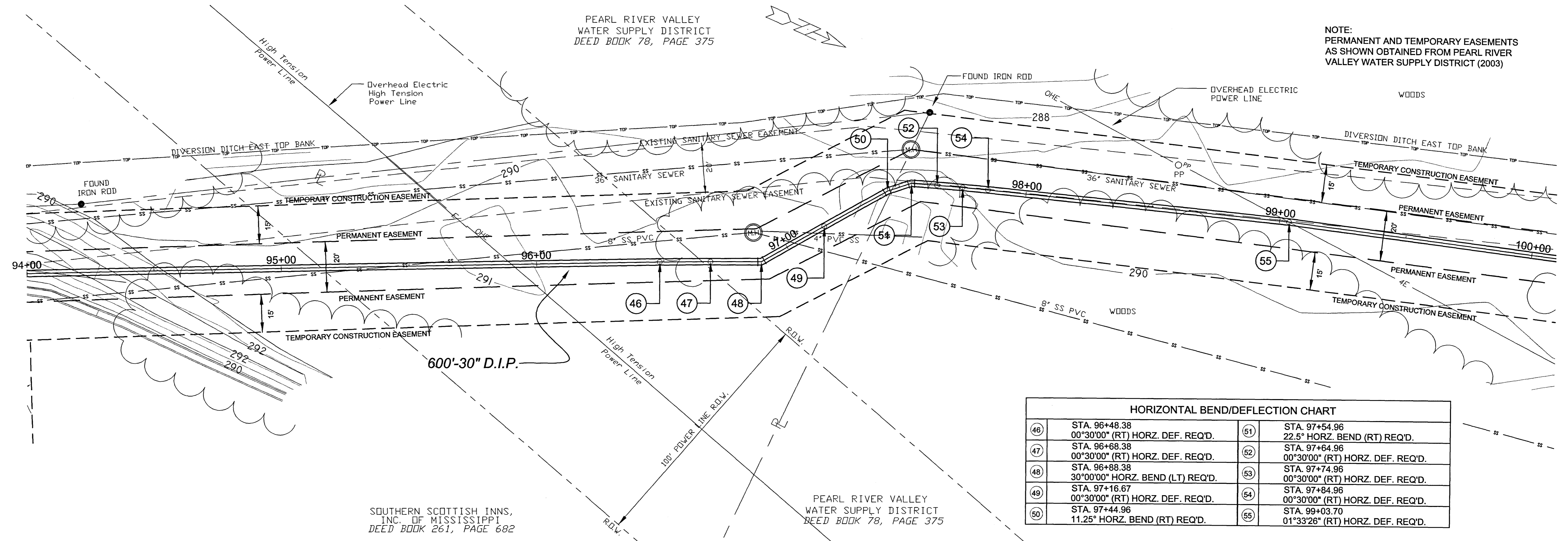
SHEET NAME  
**PLAN / PROFILE**  
STA. 88+00 TO STA. 94+00

SHEET NO.  
**03-538-16**



PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
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VALLEY WATER SUPPLY DISTRICT (2003)

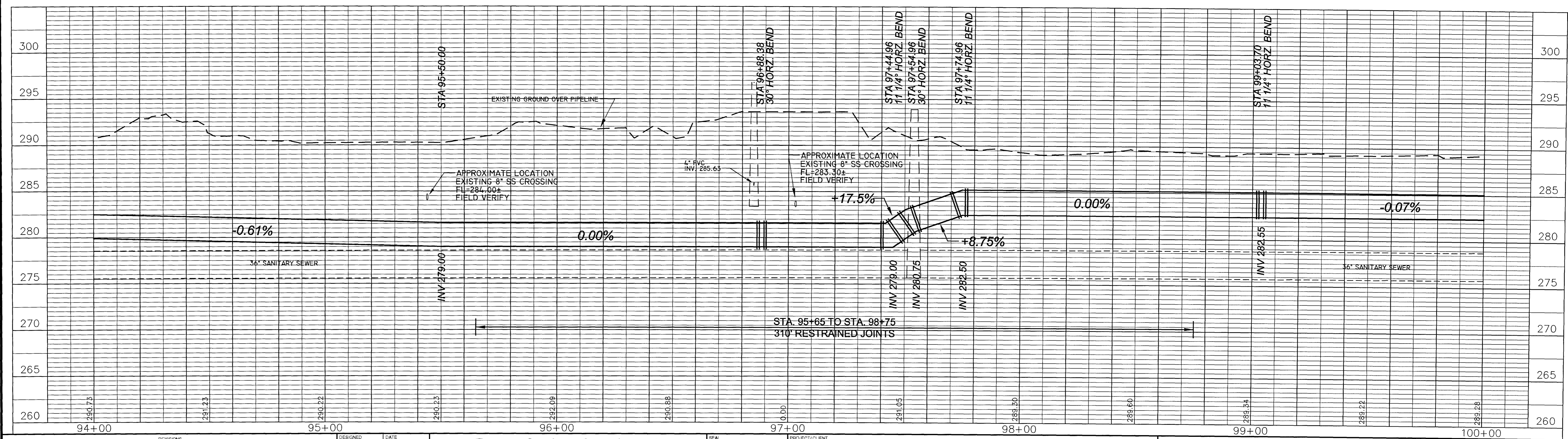


④⑥	STA. 96+48.38 00°30'00" (RT) HORZ. DEF. REQ'D.	⑤①	STA. 97+54.96 22.5° HORZ. BEND (RT) REQ'D.
④⑦	STA. 96+68.38 00°30'00" (RT) HORZ. DEF. REQ'D.	⑤②	STA. 97+64.96 00°30'00" (RT) HORZ. DEF. REQ'D.
④⑧	STA. 96+88.38 30°00'00" HORZ. BEND (LT) REQ'D.	⑤③	STA. 97+74.96 00°30'00" (RT) HORZ. DEF. REQ'D.
④⑨	STA. 97+16.67 00°30'00" (RT) HORZ. DEF. REQ'D.	⑤④	STA. 97+84.96 00°30'00" (RT) HORZ. DEF. REQ'D.
⑤⑩	STA. 97+44.96 11.25° HORZ. BEND (RT) REQ'D.	⑤⑤	STA. 99+03.70 01°33'26" (RT) HORZ. DEF. REQ'D.

SOUTHERN SCOTTISH INNS,  
INC. OF MISSISSIPPI  
DEED BOOK 261, PAGE 682

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

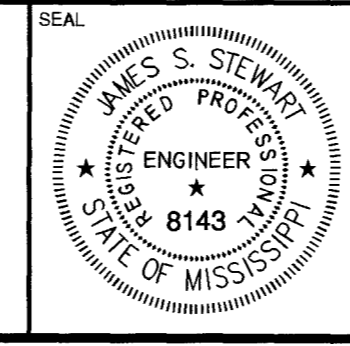
SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS	NATURE	BY	APPD.

DESIGNED: MAB  
DATE: 5-2-03  
DRAWN: MWH  
SCALE: HZ: 1"=20'  
VT: 1"=5'  
CHECKED: JSS  
APPROVED: RCL

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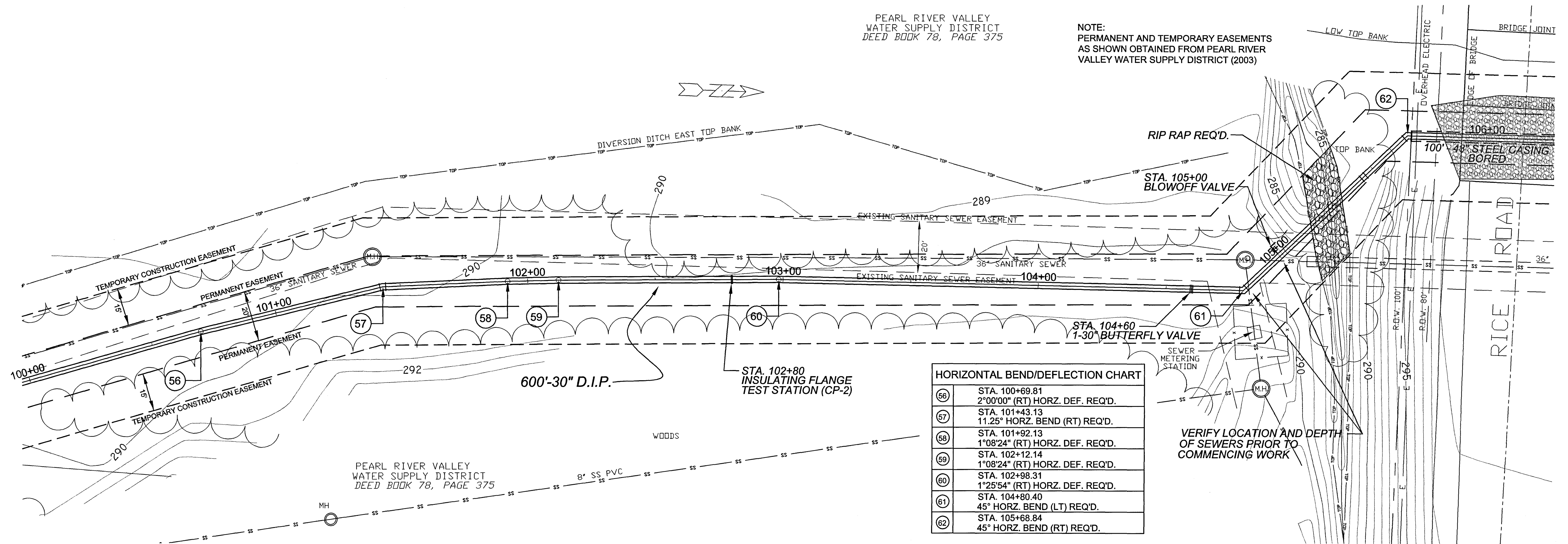
PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME: **PLAN / PROFILE**  
STA. 94+00 TO STA. 100+00

SHEET NO: **03-538-17**

PEARL RIVER VALLEY  
WATER SUPPLY DISTRICT  
DEED BOOK 78, PAGE 375

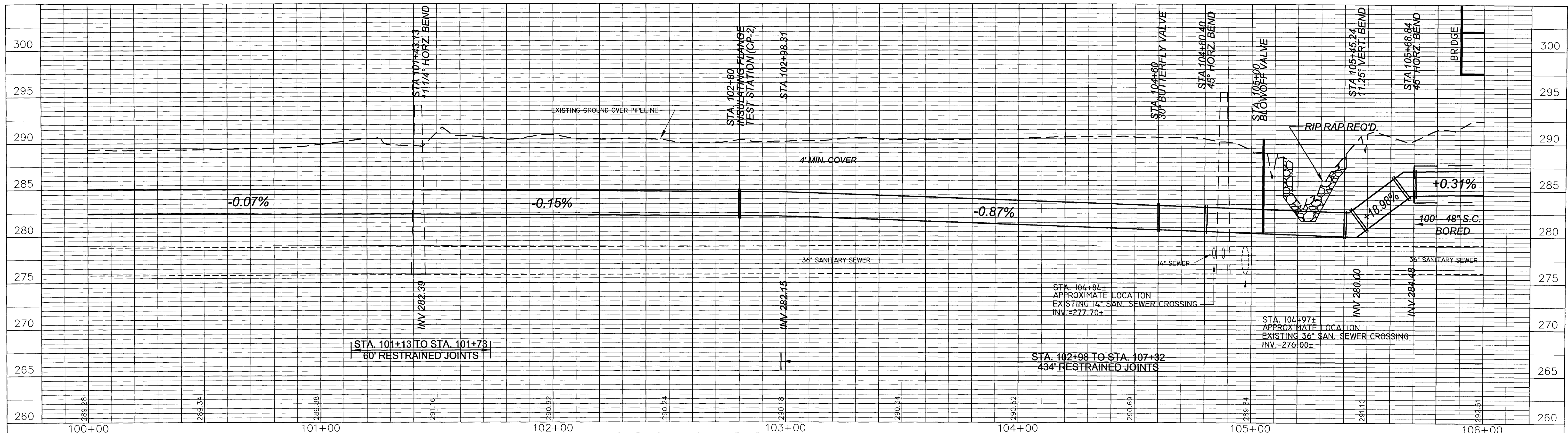
NOTE:  
PERMANENT AND TEMPORARY EASEMENTS  
AS SHOWN OBTAINED FROM PEARL RIVER  
VALLEY WATER SUPPLY DISTRICT (2003)



HORIZONTAL BEND/DEFLECTION CHART	
56	STA. 100+69.81 2°00'00" (RT) HORZ. DEF. REQ'D.
57	STA. 101+43.13 11.25° HORZ. BEND (RT) REQ'D.
58	STA. 101+92.13 1°08'24" (RT) HORZ. DEF. REQ'D.
59	STA. 102+12.14 1°08'24" (RT) HORZ. DEF. REQ'D.
60	STA. 102+98.31 1°25'54" (RT) HORZ. DEF. REQ'D.
61	STA. 104+80.40 45° HORZ. BEND (LT) REQ'D.
62	STA. 105+68.84 45° HORZ. BEND (RT) REQ'D.

VERIFY LOCATION AND DEPTH  
OF SEWERS PRIOR TO  
COMMENCING WORK

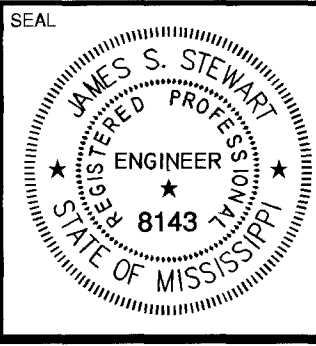
SCALES:  
1" = 20' HOR  
1" = 5' VER



NO.	DATE	REVISIONS	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL

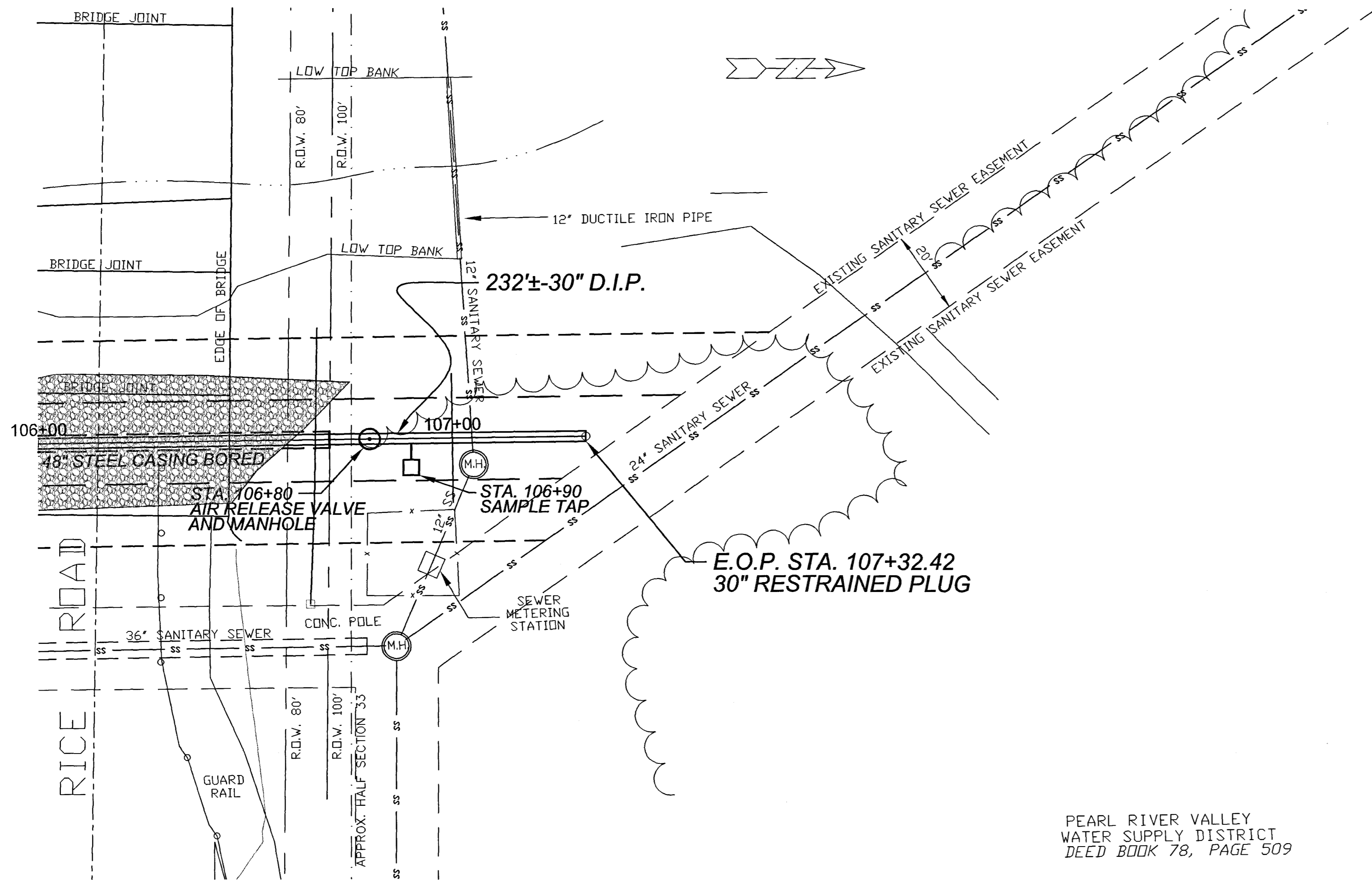
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PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

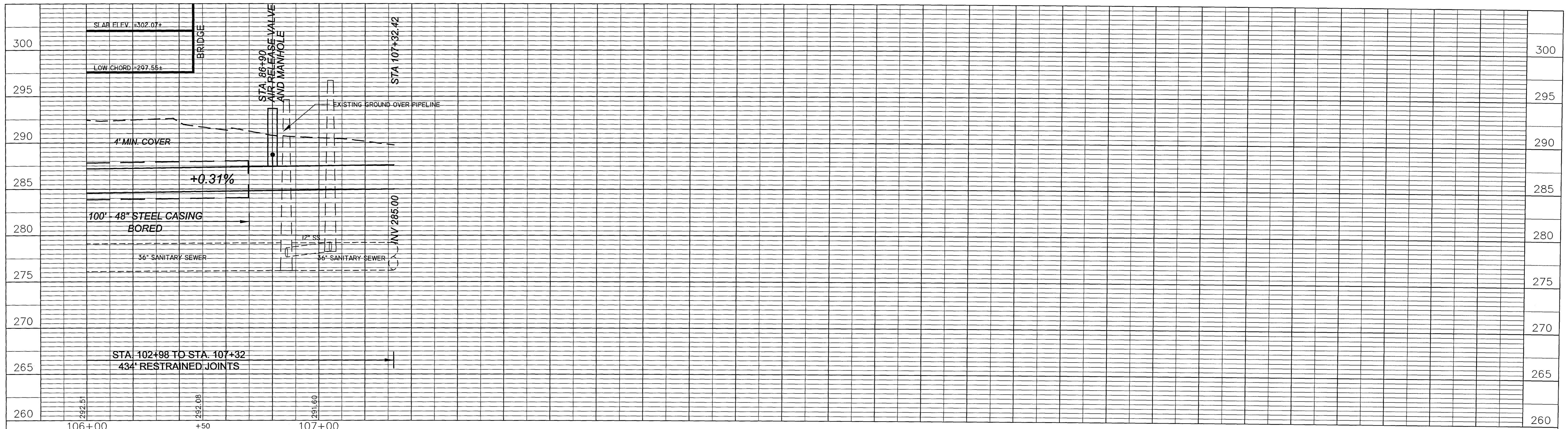
SHEET NAME  
**PLAN / PROFILE**  
STA. 100+00 TO STA. 106+00

SHEET NO.  
**03-538-18**



PEARL RIVER VALLEY  
 WATER SUPPLY DISTRICT  
 DEED BOOK 78, PAGE 509

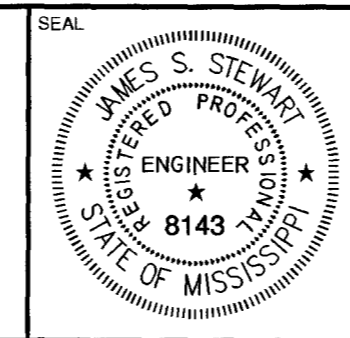
SCALES:  
 1" = 20' HOR  
 1" = 5' VER



NO.	DATE	REVISIONS	BY	APPD.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	HZ: 1"=20' VT: 1"=5'
CHECKED	JSS	APPROVED	RCL

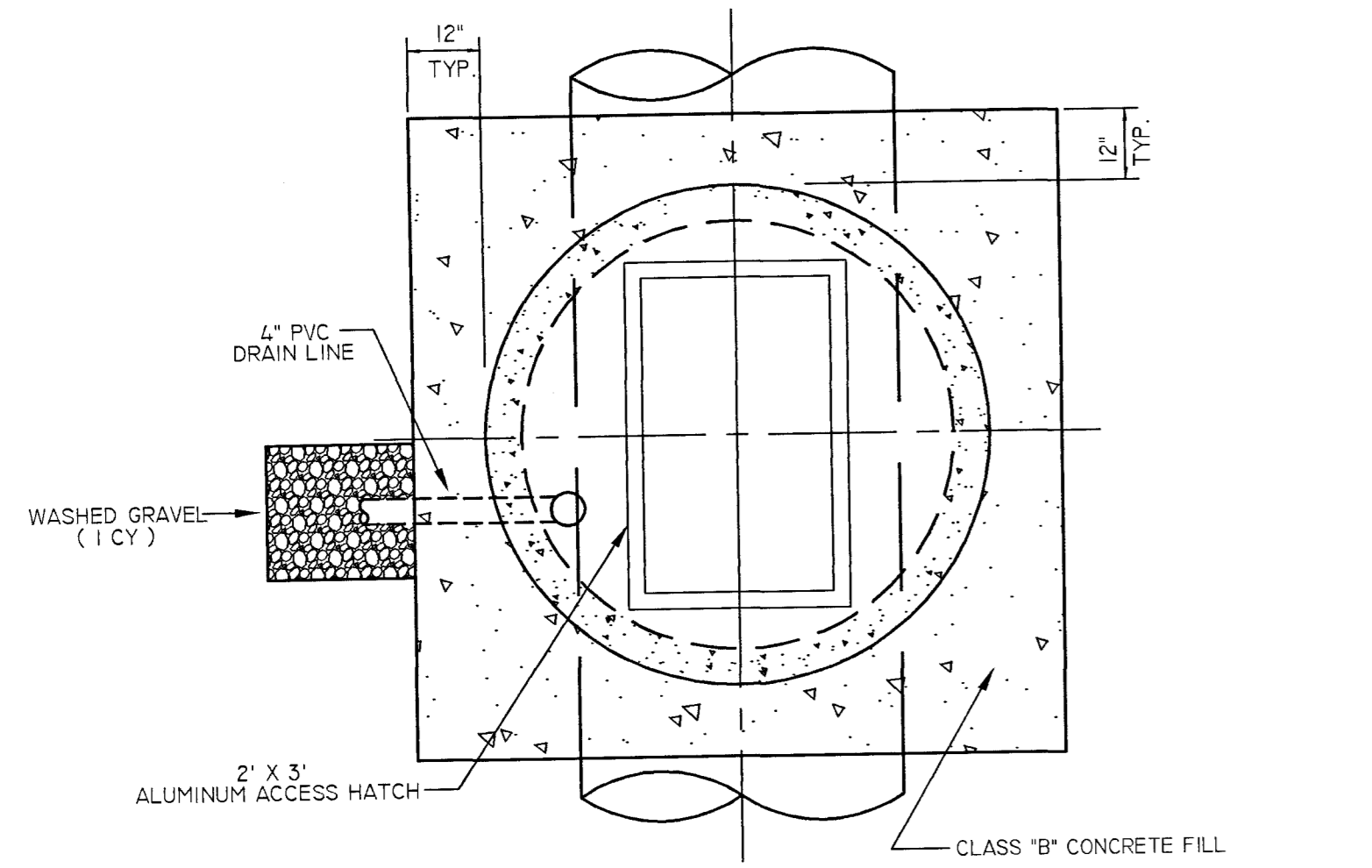
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PROJECT/CLIENT: MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
 CONSTRUCTION CONTRACT NO. 1  
 O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

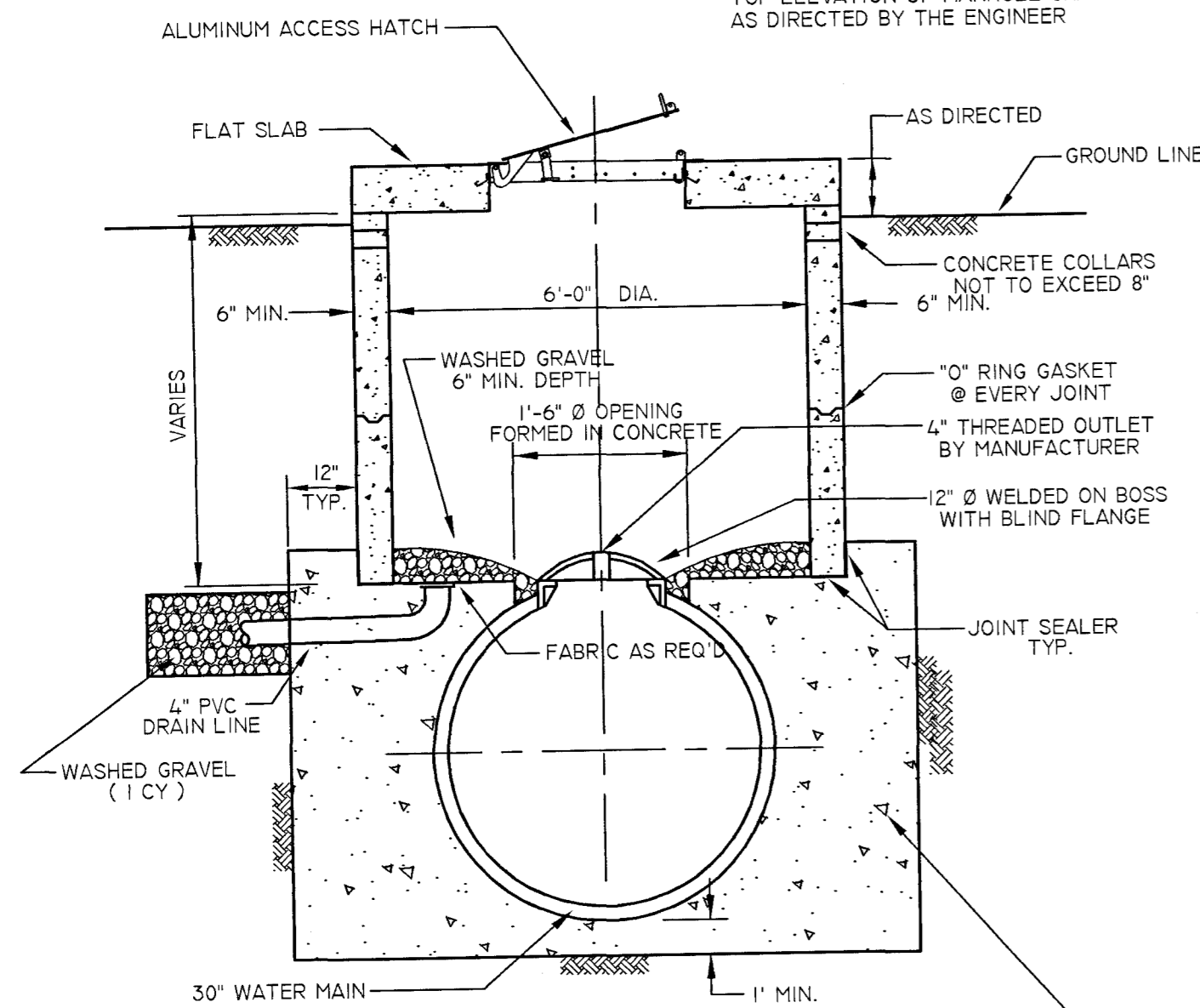
SHEET NAME: **PLAN / PROFILE**  
**STA. 106+00 TO E.O.P.**

SHEET NO: **03-538-19**



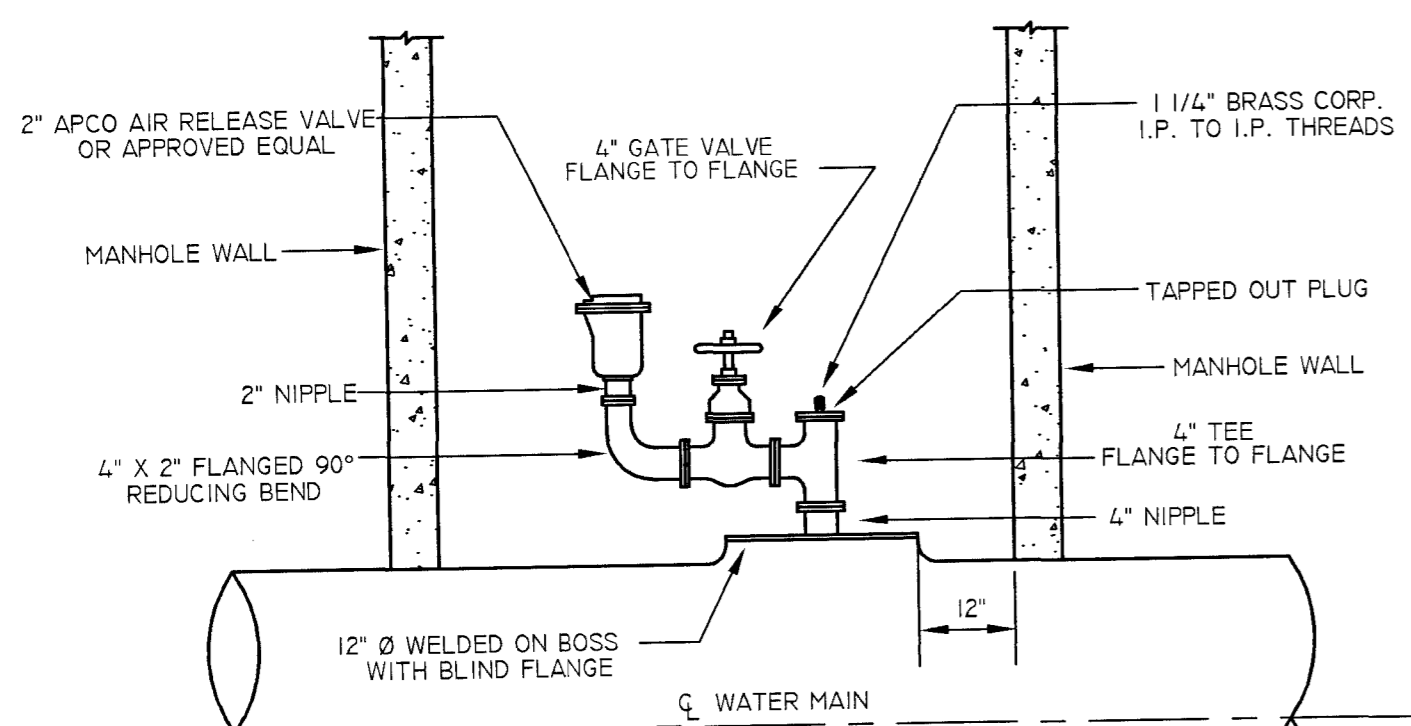
PLAN

NOTE:  
TOP ELEVATION OF MANHOLE SHALL BE AS DIRECTED BY THE ENGINEER



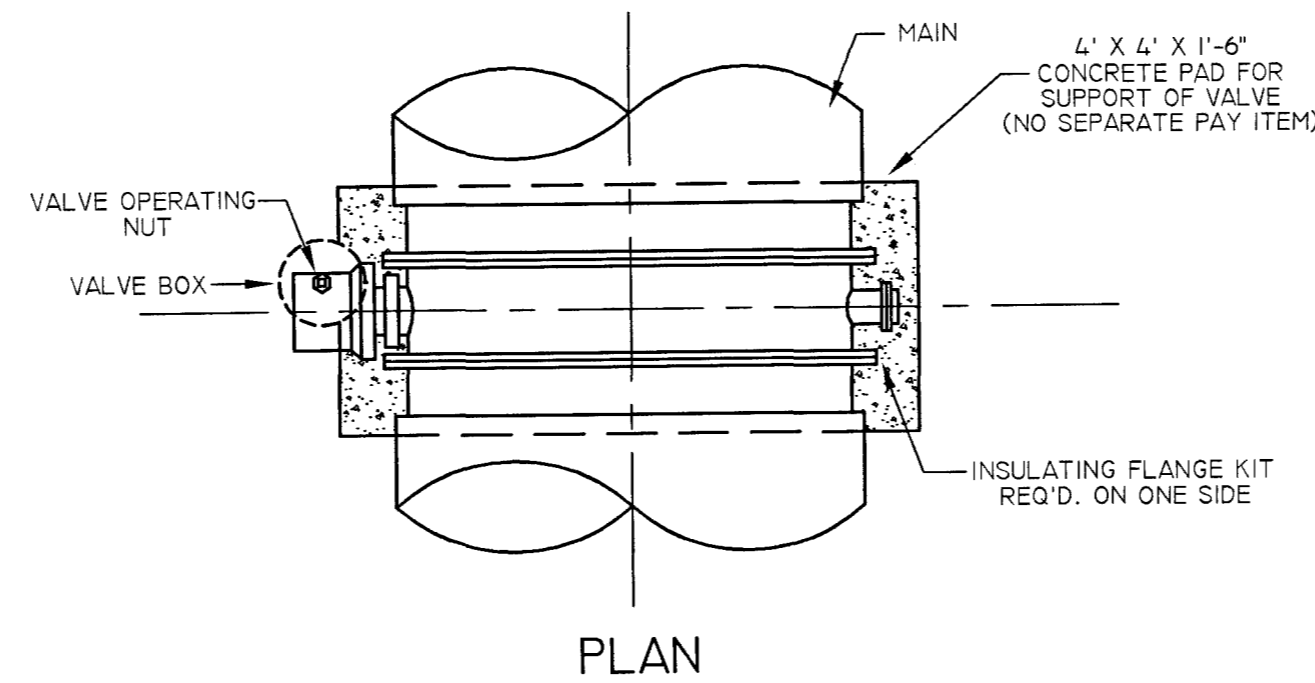
SECTION

MANHOLE DETAIL FOR  
AIR RELEASE VALVE ACCESS  
(SEE AIR RELEASE VALVE ASSEMBLY)

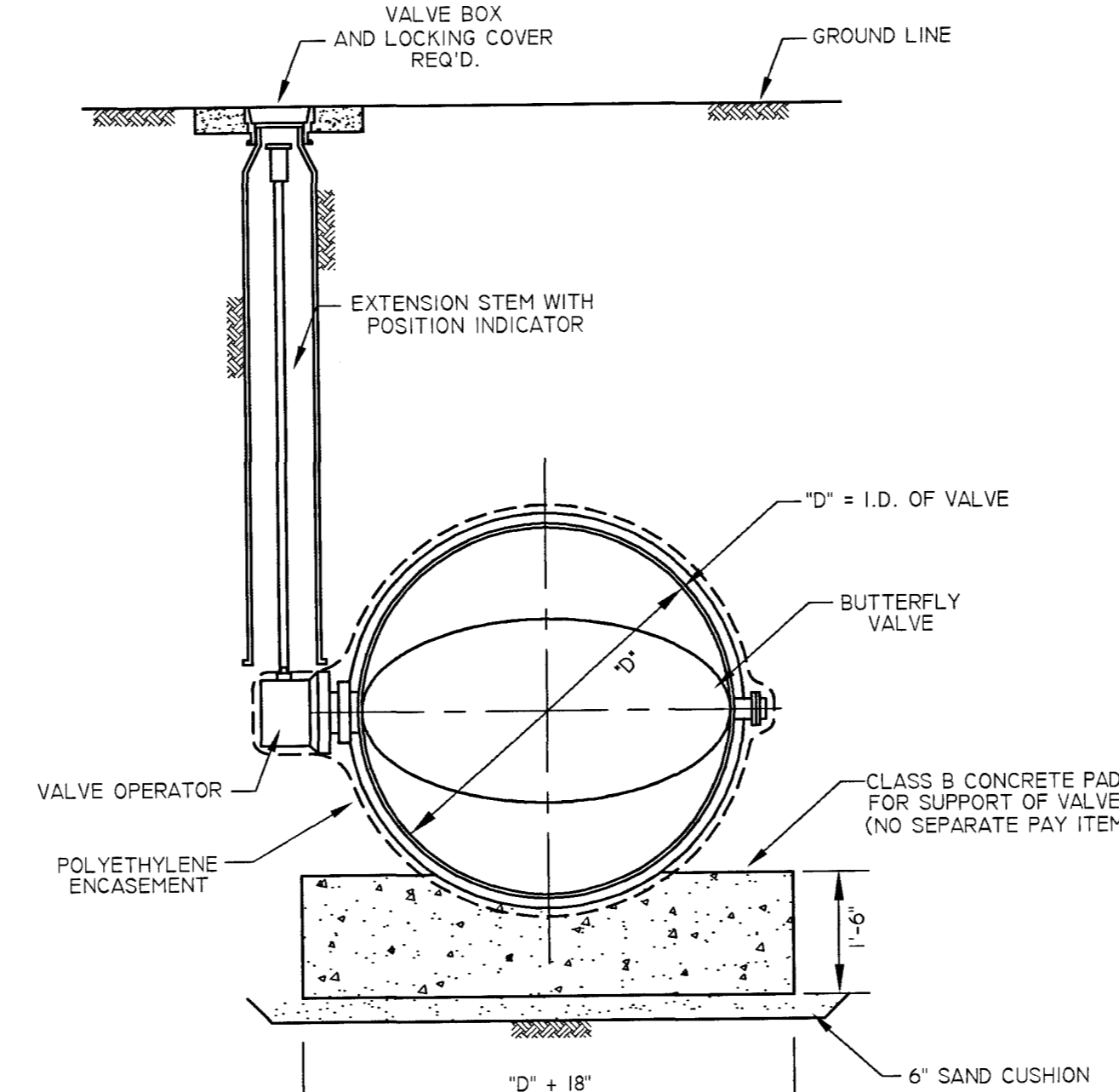


NOTE:  
AIR RELEASE VALVE ASSEMBLY COMPLETE SHALL INCLUDE BOSS, FITTINGS, VALVES, PIPE, MANHOLE ACCESS HATCH, GRAVEL, CONCRETE, AND OTHER ITEMS NECESSARY FOR A COMPLETE INSTALLATION.

TYPICAL AIR RELEASE  
VALVE ASSEMBLY

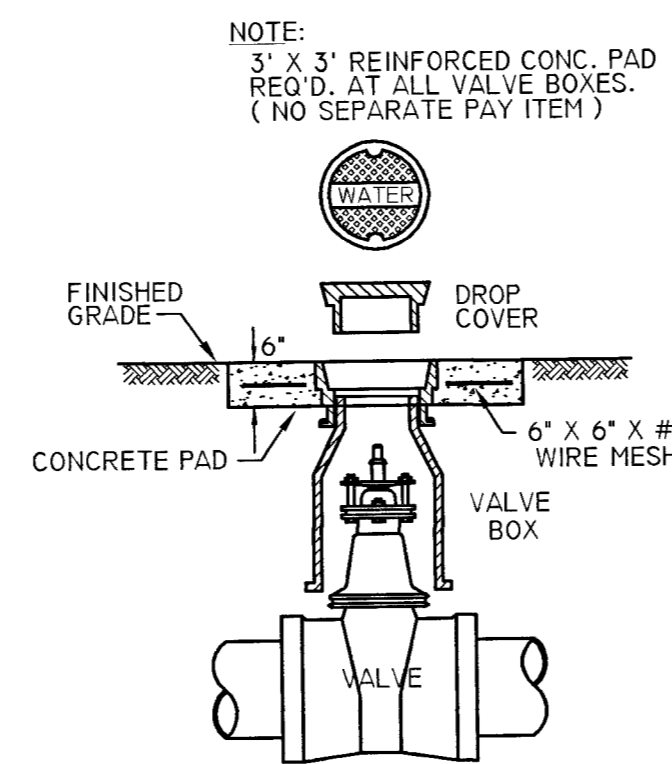


PLAN

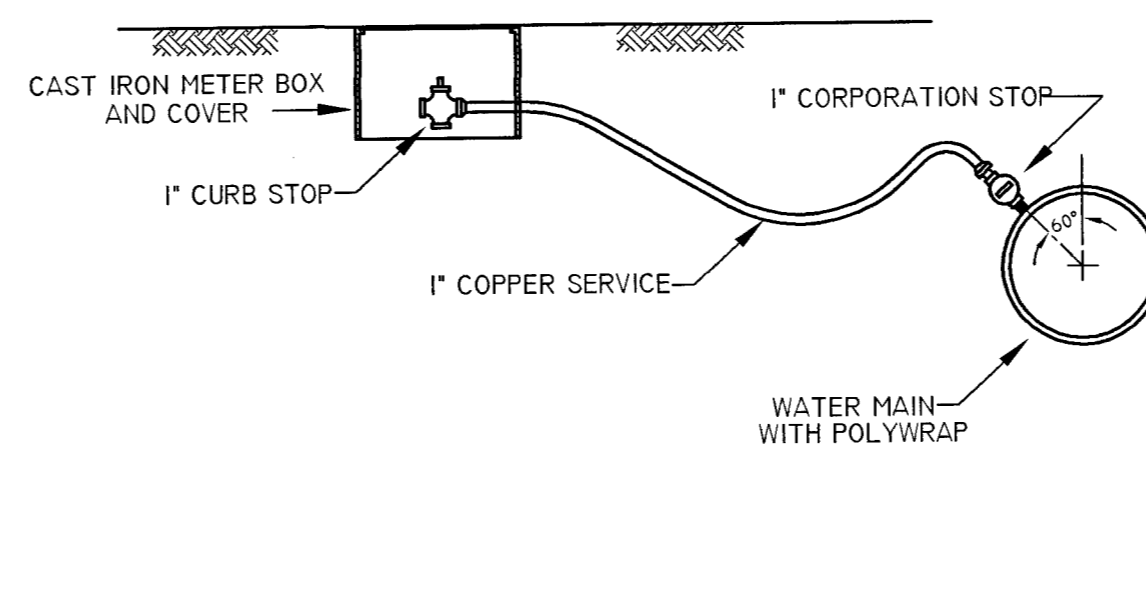


SECTION

BUTTERFLY VALVE DETAIL

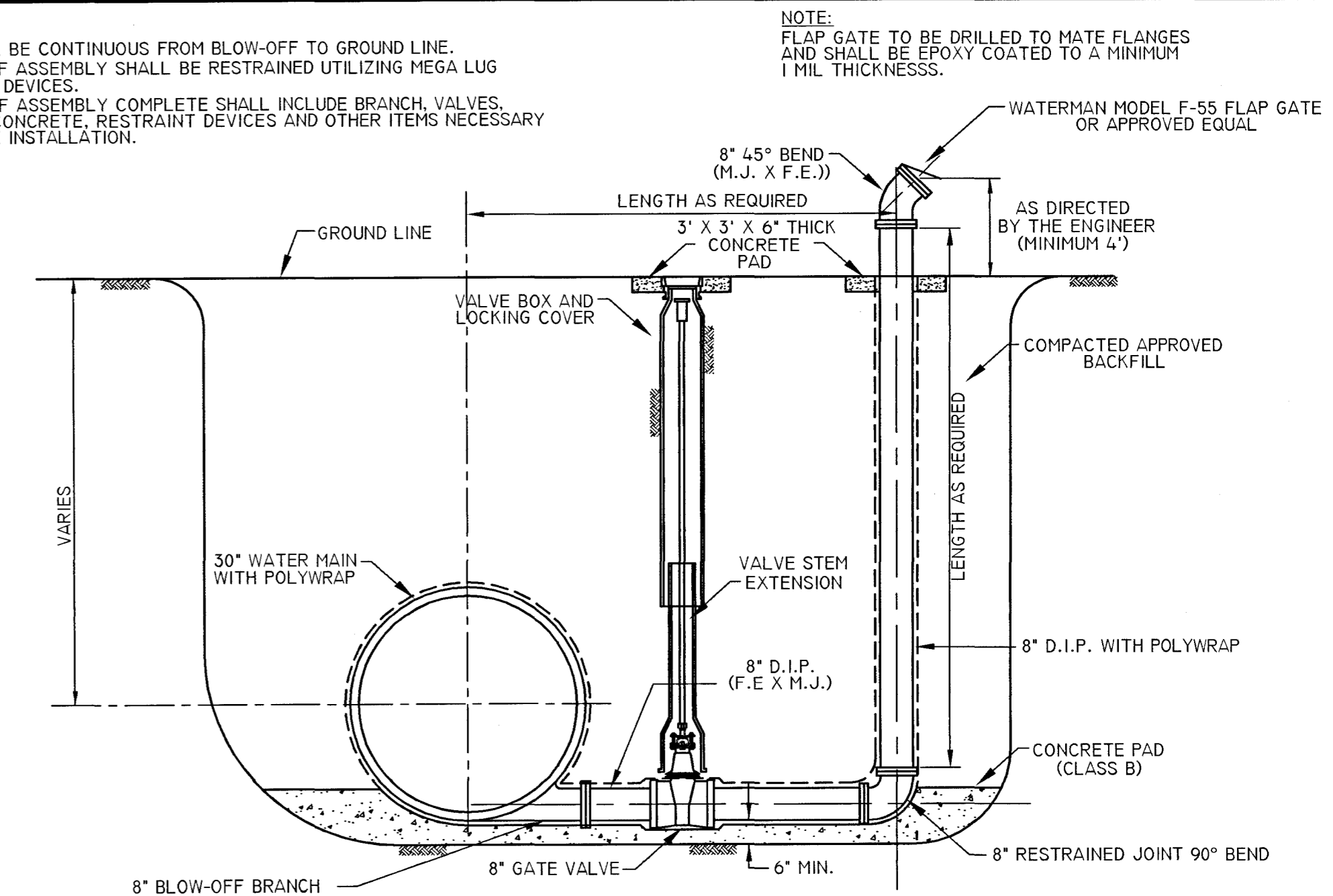


TYPICAL GATE VALVE  
BOX DETAIL

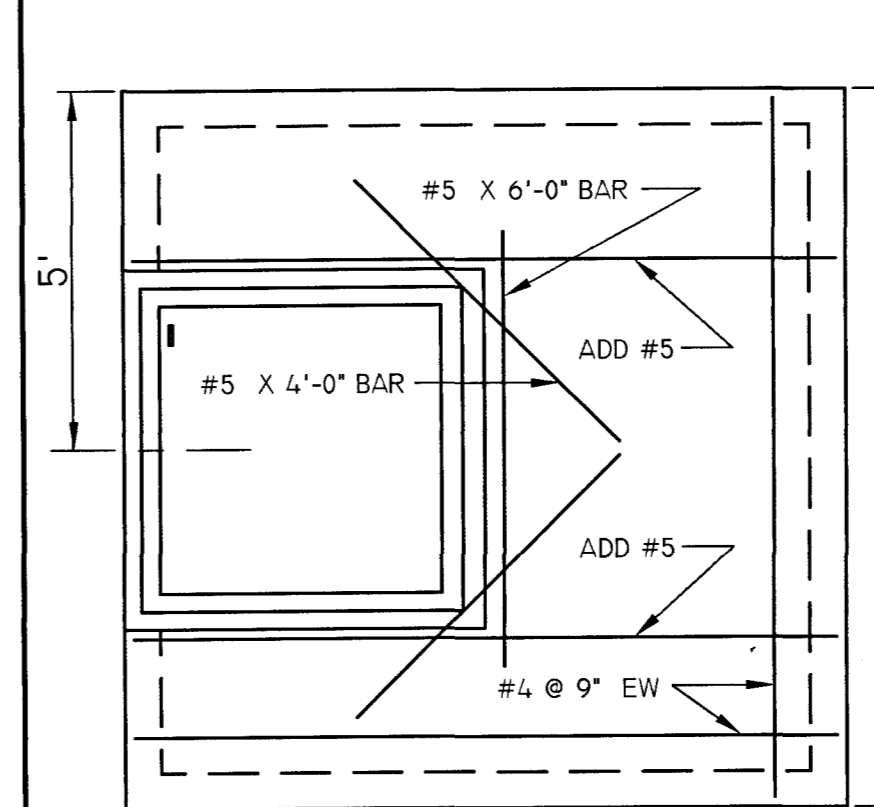


SAMPLE TAP CONNECTION DETAIL  
FOR STERILIZATION

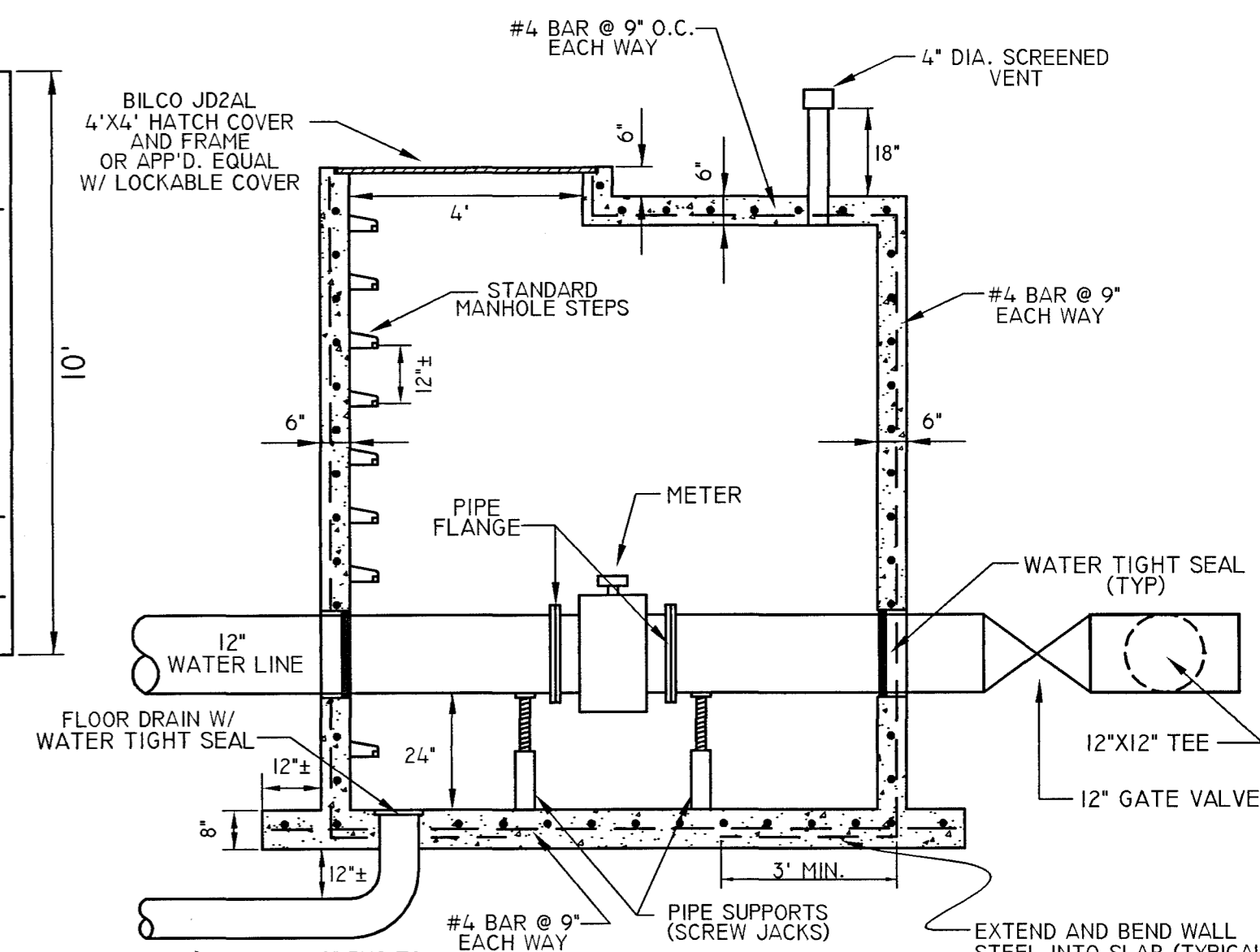
NOTES:  
1. POLYWRAP SHALL BE CONTINUOUS FROM BLOW-OFF TO GROUND LINE.  
2. ENTIRE BLOW-OFF ASSEMBLY SHALL BE RESTRAINED UTILIZING MEGA LUG TYPE RESTRAINT DEVICES.  
3. ENTIRE BLOW-OFF ASSEMBLY COMPLETE SHALL INCLUDE BRANCH, VALVES, PIPE, FITTINGS, CONCRETE, RESTRAINT DEVICES AND OTHER ITEMS NECESSARY FOR A COMPLETE INSTALLATION.



TYPICAL BLOW-OFF ASSEMBLY DETAIL



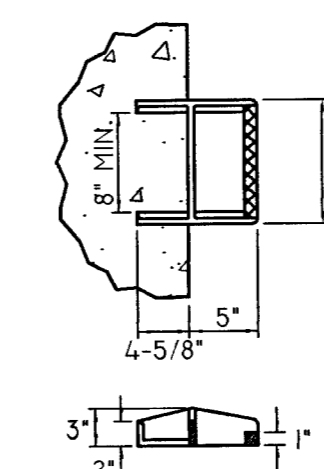
PLAN TOP SLAB



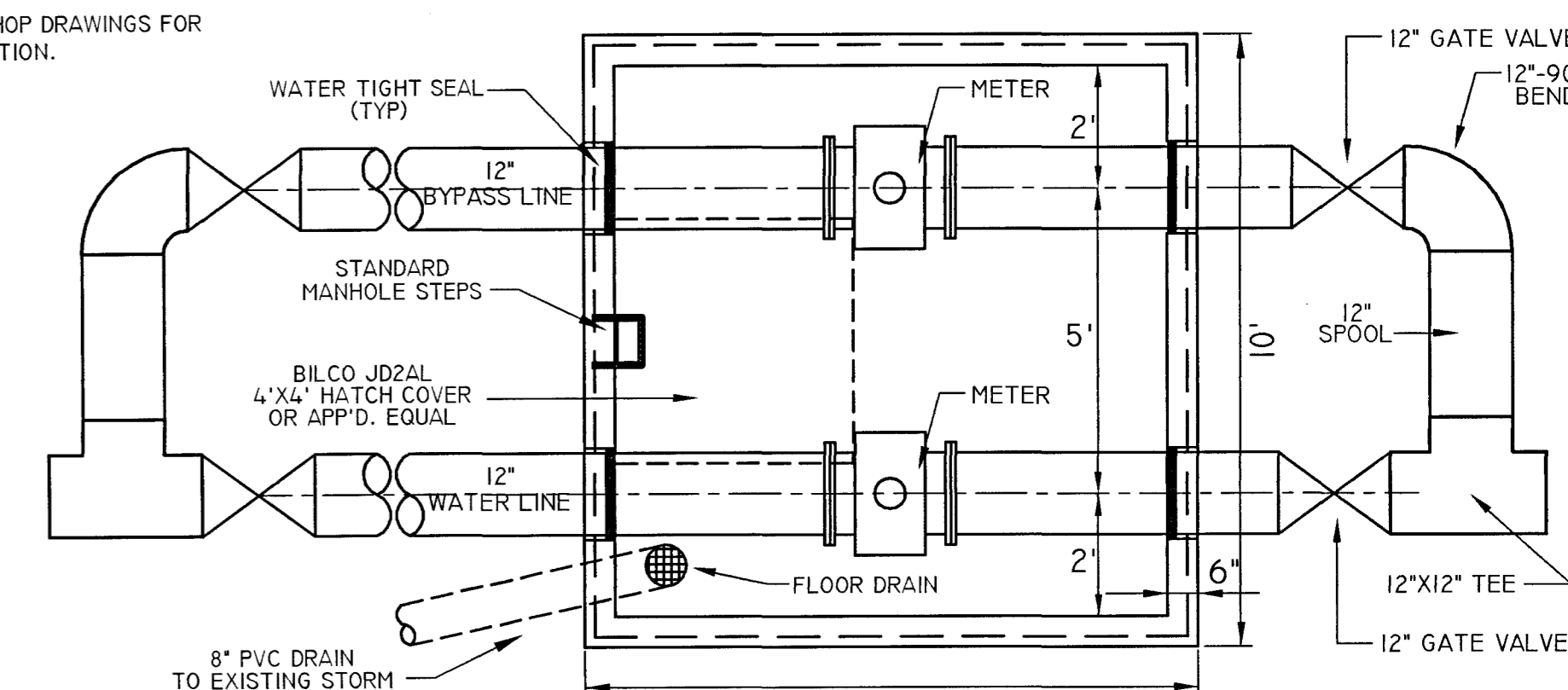
SECTION

NOTE:

- SLOPE VAULT FLOOR TO DRAIN.
- PRICE FOR VAULT SHALL BE INCLUDED IN THE PRICE OF THE METER AND SHALL INCLUDE ALL SUPPORTS, STEPS, VENT, HATCH, DRAIN, TIE IN TO EXISTING MANHOLE, AND ANY OTHER ITEMS FOR THE COMPLETE UNIT.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.



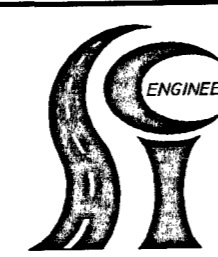
MANHOLE  
STEP DETAIL



PLAN

METER VAULT DETAIL

REVISIONS		DESIGNED	DATE
NO.	DATE	NATURE	
		MAB	5-2-03
		MWH	NTS
		JSS	RCL

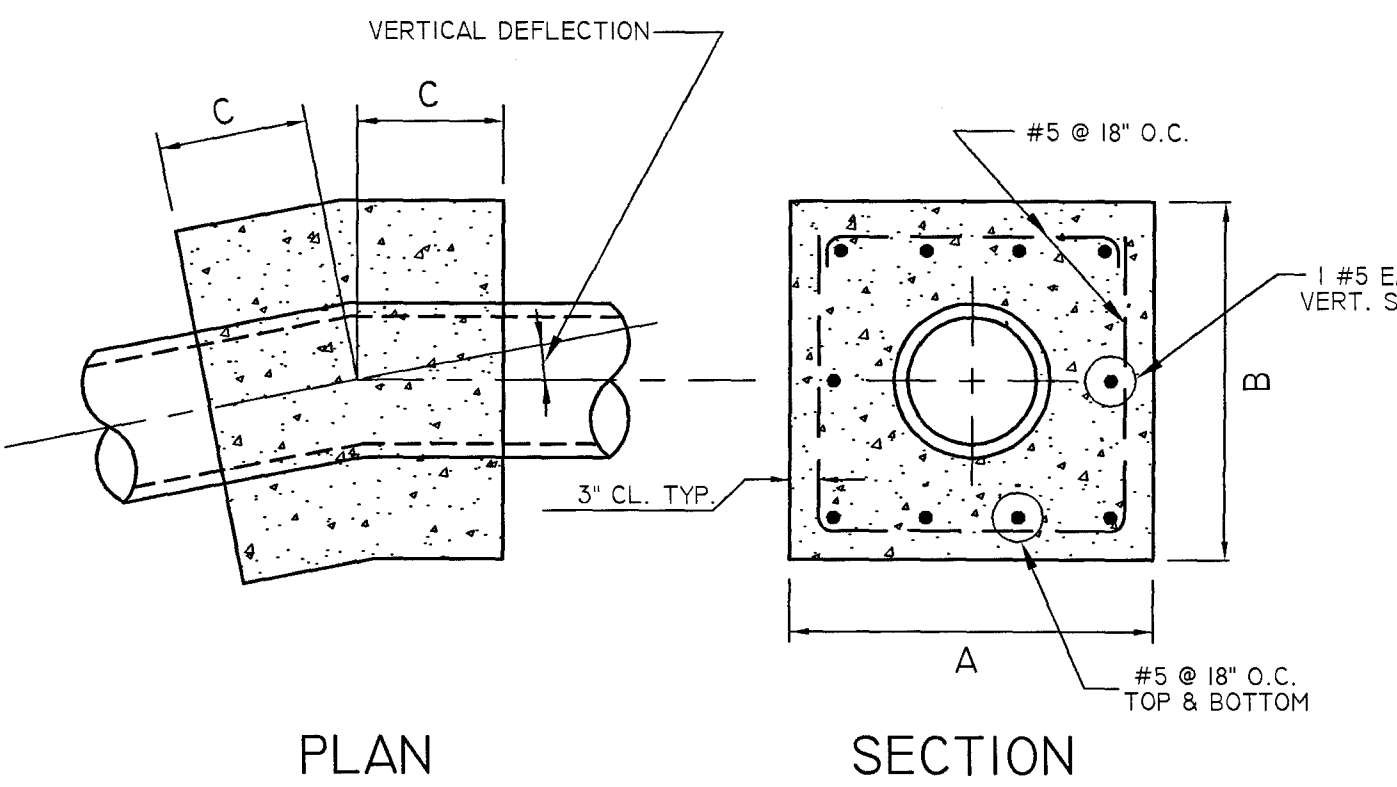
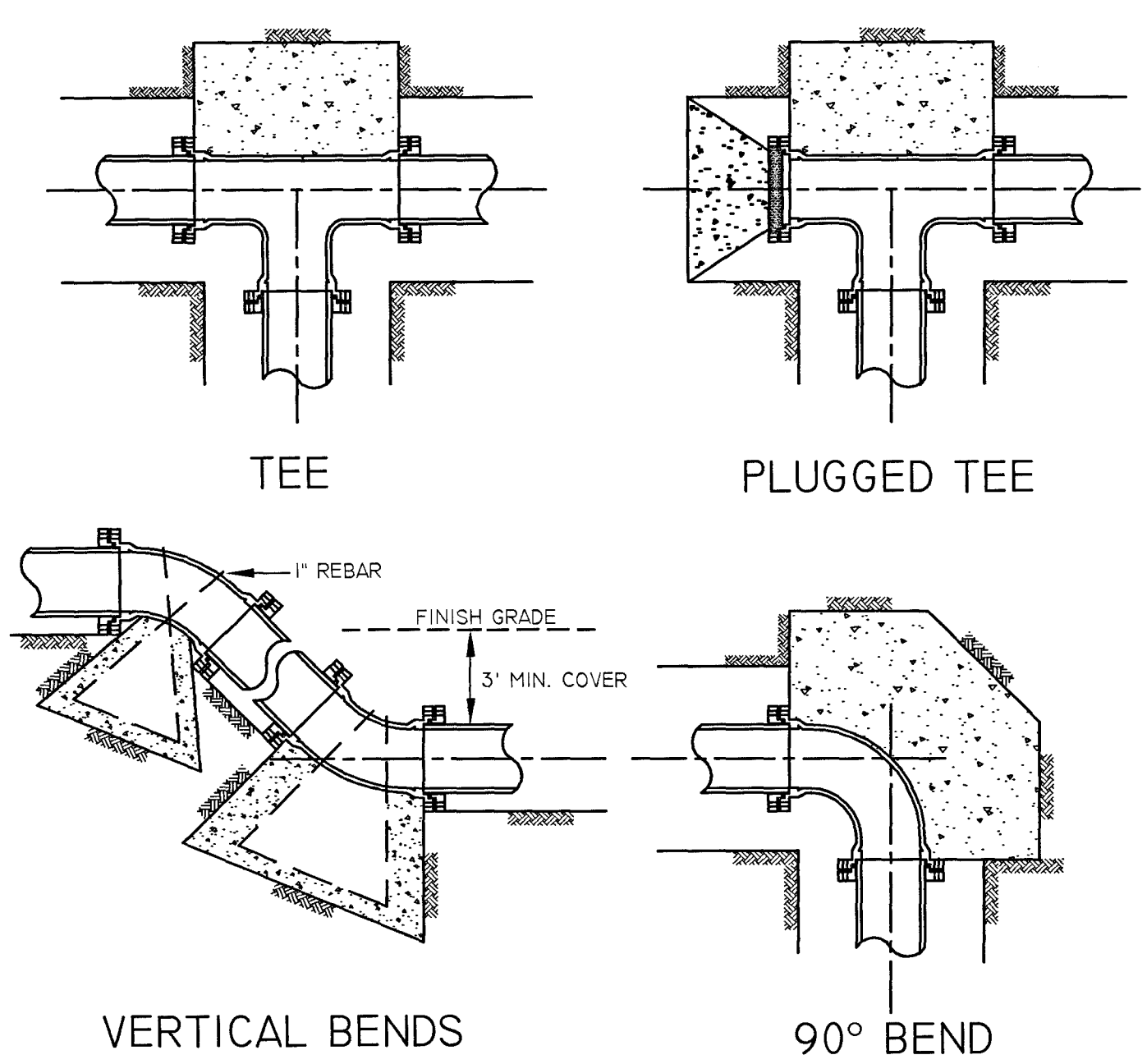


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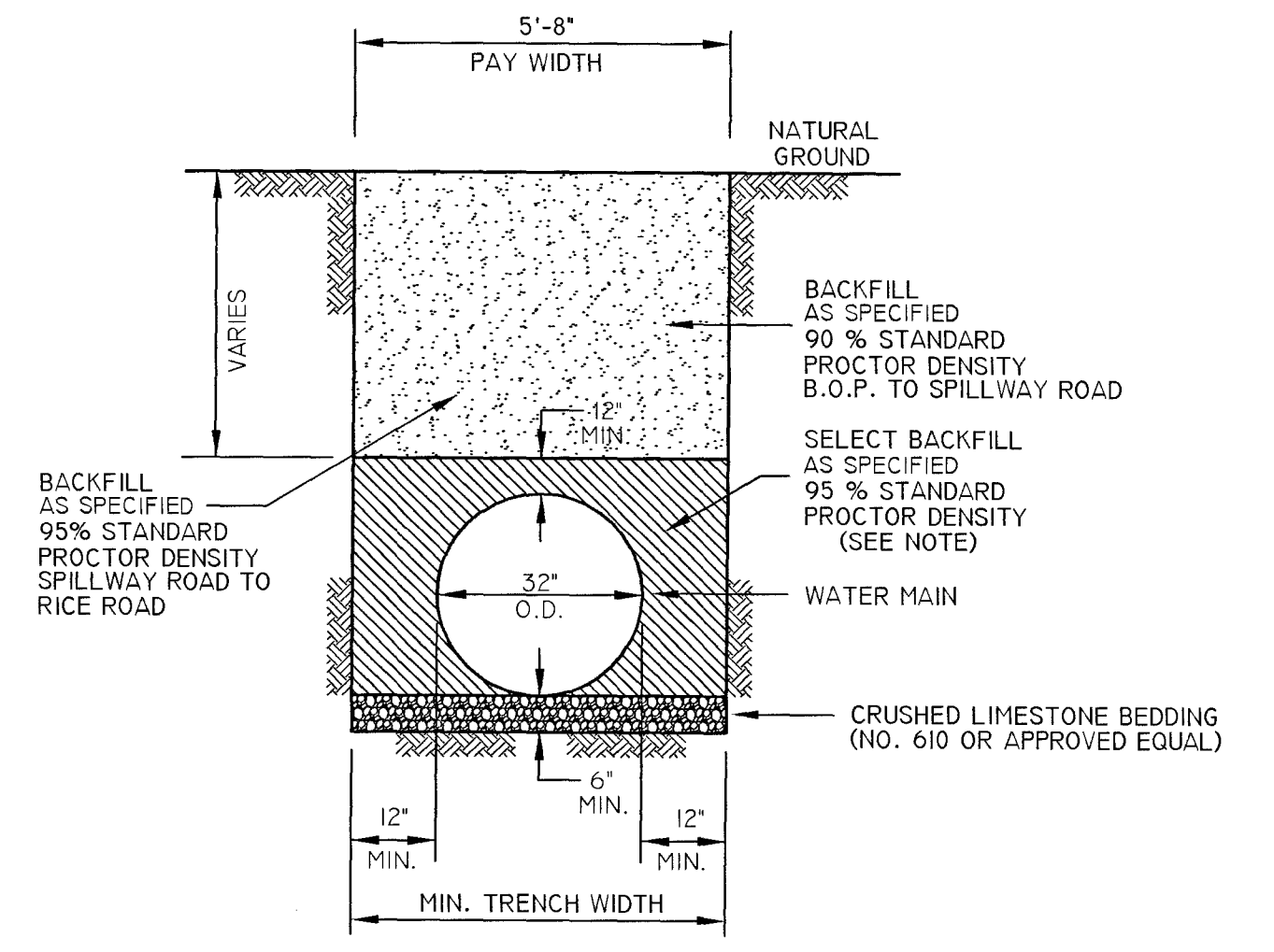
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME  
**MISCELLANEOUS DETAILS NO. 1**  
SHEET NO.  
**03-538-20**



PIPE SIZE	30"		
	A	B	C
UP TO 45'	10'	9'	15'-6"
UP TO 30'	9'	8'	12'-0"
UP TO 22 1/2'	8'	7'	11'-0"
UP TO 15'	8'	7'	7'-6"
UP TO 11 1/4'	7'	6'	7'

**CONCRETE COUNTER-WEIGHT FOR VERTICAL BENDS FOR 30" PIPE**



**TYPICAL TRENCH DETAIL**

NOTE:  
CONTRACTOR SHALL FURNISH SELECT MATERIALS AS SPECIFIED FOR THE PIPE ENVELOP UNLESS SUITABLE ONSITE MATERIAL IS AVAILABLE.

THESE VALUES ARE THE MINIMUM REQUIRED. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ADEQUATE BLOCKING BASED ON FIELD CONDITIONS.

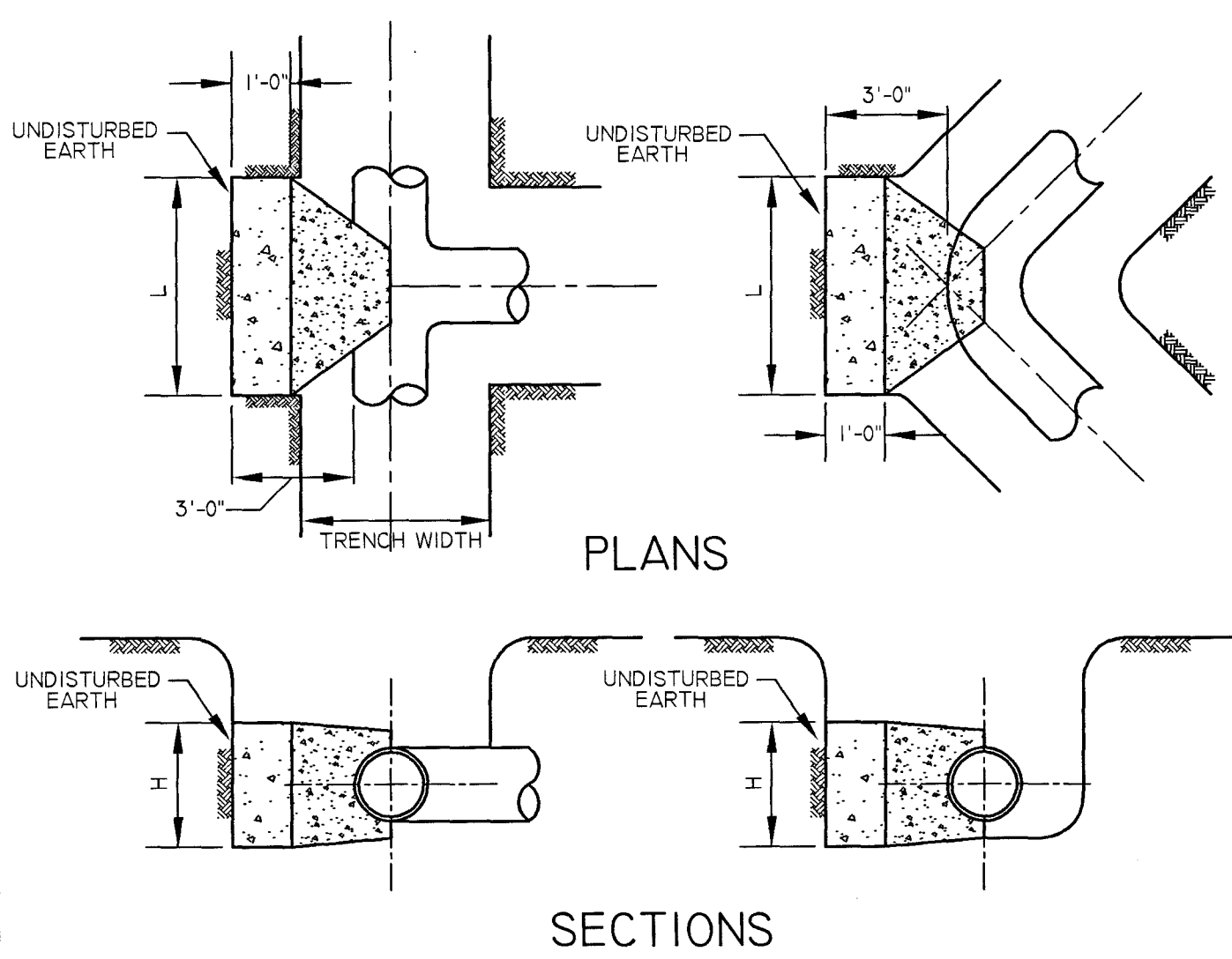
BEARING AREA IN SQ.FT.					
NOMINAL PIPE DIA. (INCHES)	DEAD-END OR TEE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND
4 AND SMALLER	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	2.0	2.0	2.0
8	3.0	3.0	2.0	2.0	2.0
12	5.0	6.0	4.0	3.0	3.0
16	8.0	12.0	6.0	4.0	4.0

VERTICAL BENDS					
NOMINAL PIPE DIA. (INCHES)	DEAD-END OR TEE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND
4 AND SMALLER	-	-	6.0 (.22)	4.0 (.15)	4.0 (.15)
6	-	-	16.0 (.52)	6.0 (.22)	6.0 (.15)
8	-	-	27.0 (.89)	9.0 (.33)	6.0 (.22)
12	-	-	68.0 (2.15)	22.0 (.83)	9.0 (.33)
16	-	-	92.0 (3.33)	32.0 (1.19)	18.0 (.67)

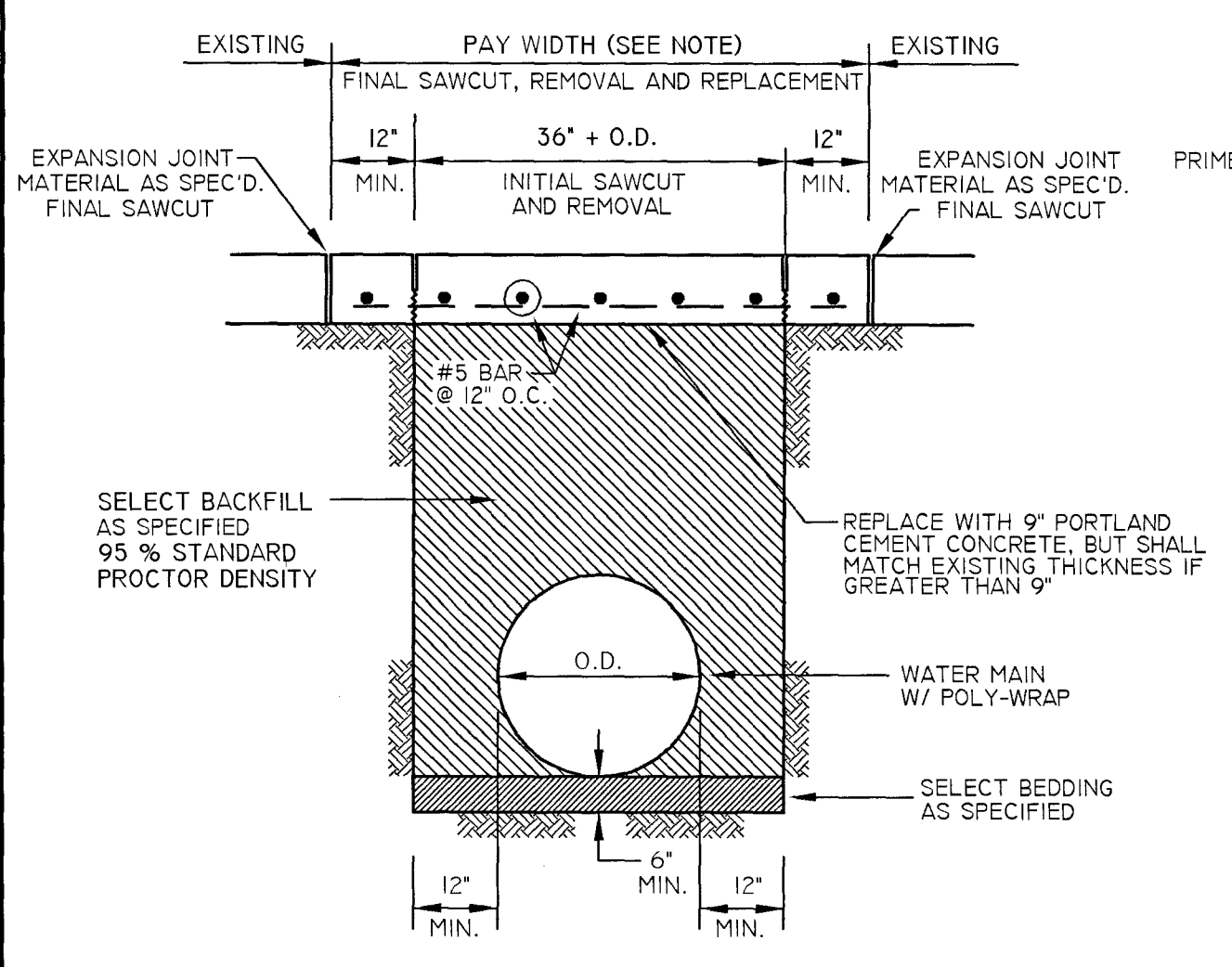
VOLUME OF BLOCKS INCLUDING SOIL LOAD CU.FT. (CU.YD.)

**TYPICAL BLOCKING ON WATER MAINS**

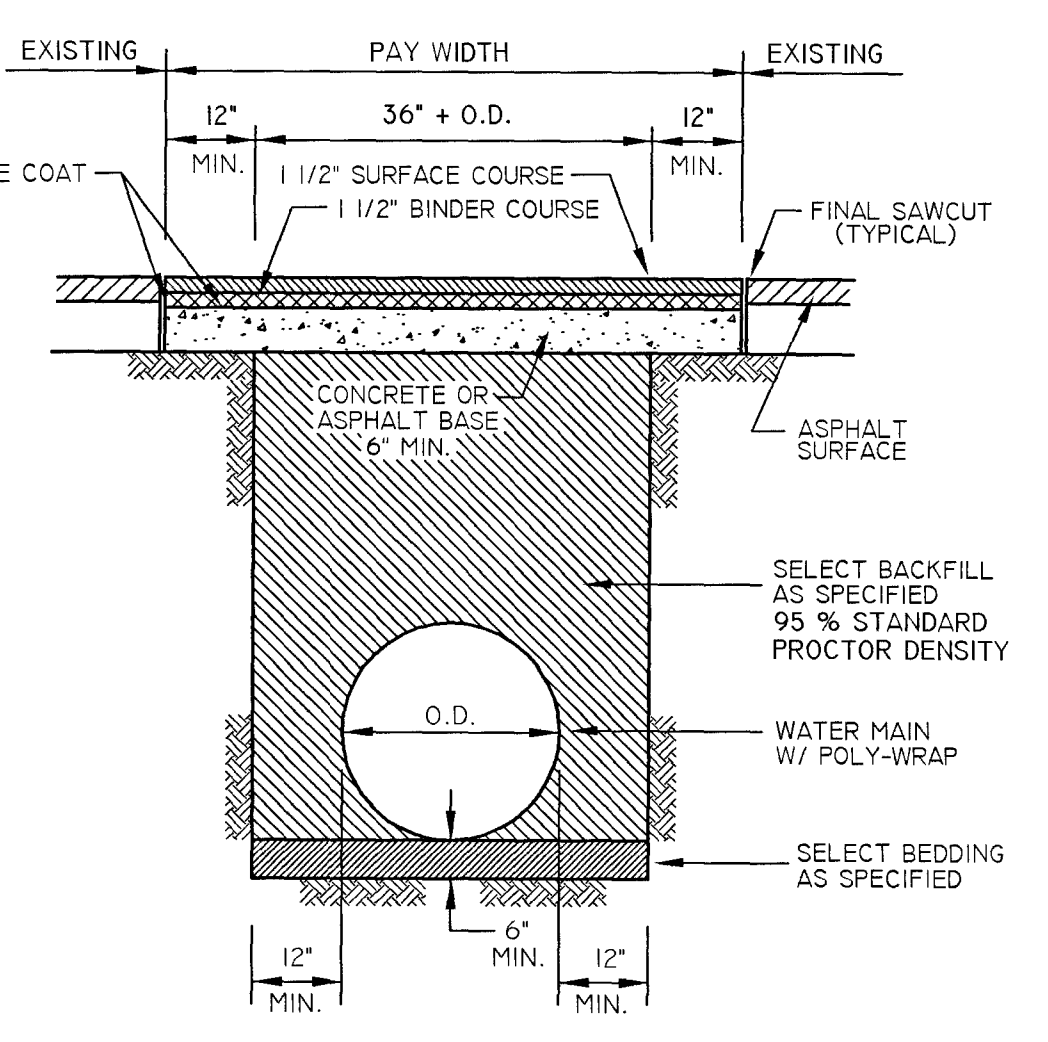


THRUST BLOCK TABLE		
PIPE DIA (INCHES)	30" BLOCK	
	LENGTH (FT)	HEIGHT (FT)
90°	34"	9"
45°	21"	8"
22 1/2°	14"	6"
11 1/4°	9"	5"
PLUG OR TEE	24"	9"

**THRUST BLOCK DETAILS FOR 30" PIPE**



**PORTLAND CEMENT CONCRETE PAVEMENT SURFACE**

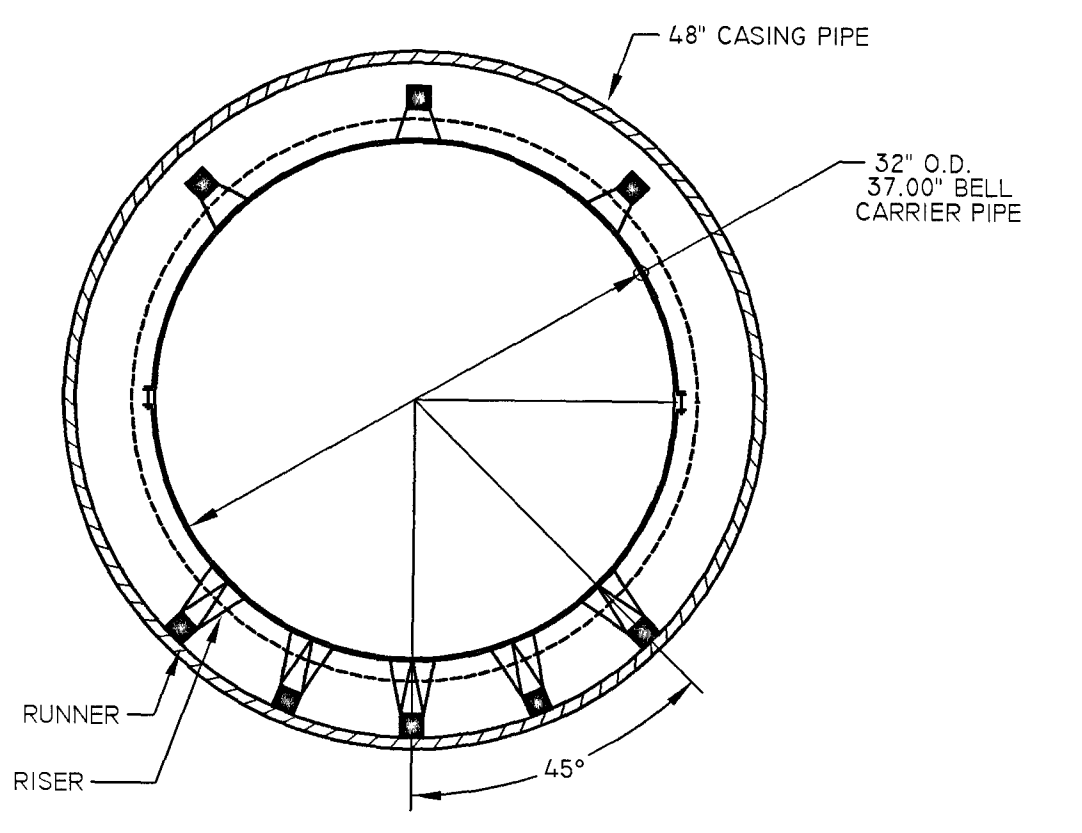


**BITUMINOUS CONCRETE PAVEMENT SURFACE**

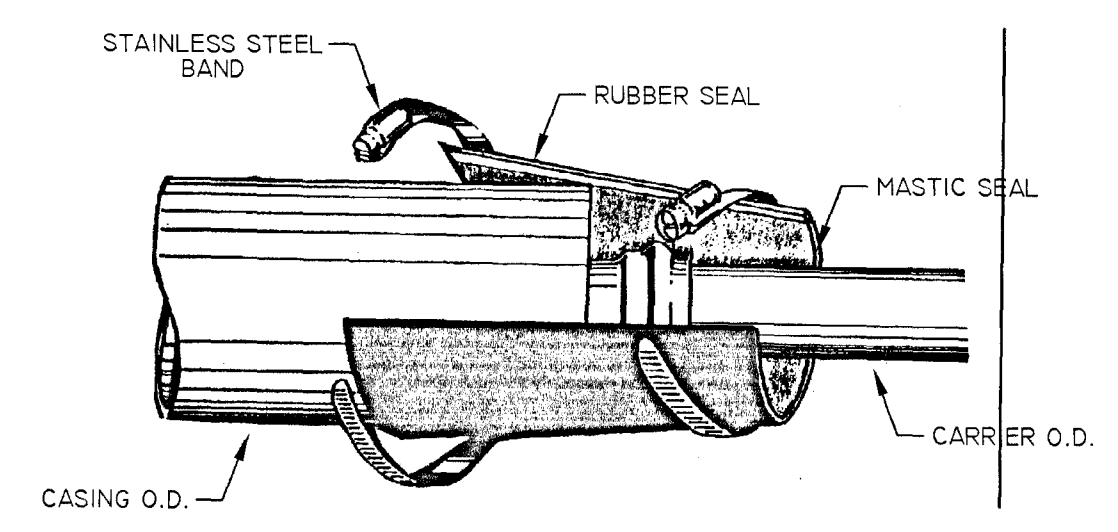
**TYPICAL STREET / DRIVEWAY REPAIR**

CASING INSULATOR SPECIFICATION  
MODEL: SS112-2-5670-CR (OR APPROVED EQUAL)

- BAND**  
12" WIDE  
14 GA. (.074") 304 STAINLESS STEEL  
2B FINISH  
RIBBED FLANGES
- LINER**  
POLYVINYL CHLORIDE - .090" MIN.  
HARDNESS - DUREMETER 'A' 85-90  
DIELECTRIC STRENGTH - 60,000 VPM  
WATER ABSORPTION - 1% MAX.
- RUNNER**  
2" WIDE X 1 1/2" HIGH MOLDED POLYMER  
3 TOP, 5 BOTTOM
- RISERS**  
10 GA. (.134) STAINLESS STEEL  
MIG WELDED TO BAND  
TOP = 3.50" TALL  
BOTTOM = 4.75" TALL (REINFORCED)
- ASSEMBLY HARDWARE**  
4 SETS PER FLANGE  
5/16" - 18 X 22" STAINLESS STEEL BOLTS  
5/16" WASHERS SAE 2330  
5/16" HEX NUTS



**CASING SPACER / INSULATOR DETAIL**  
FOUR INSULATORS REQ'D. PER JOINT OF PIPE



**MODEL AW WRAP-AROUND END SEAL**

NOTE:  
NO SEPARATE PAYMENT WILL BE MADE FOR CASING SPACERS AND END SEALS.

**PIPE CASING DETAILS**

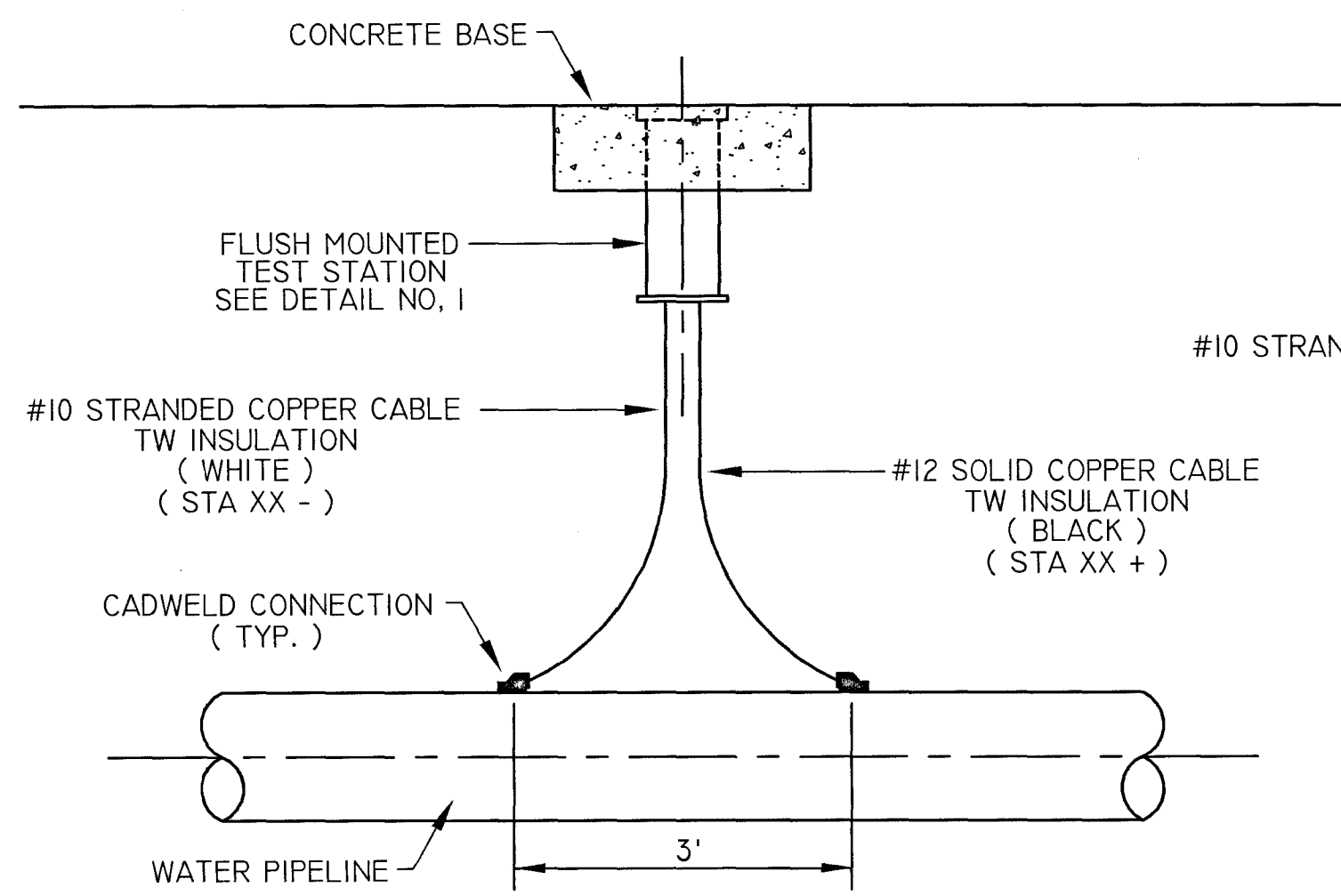
REVISIONS				
NO.	DATE	NATURE	BY	APPRO.

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	NTS
CHECKED	JSS	APPROVED	RCL

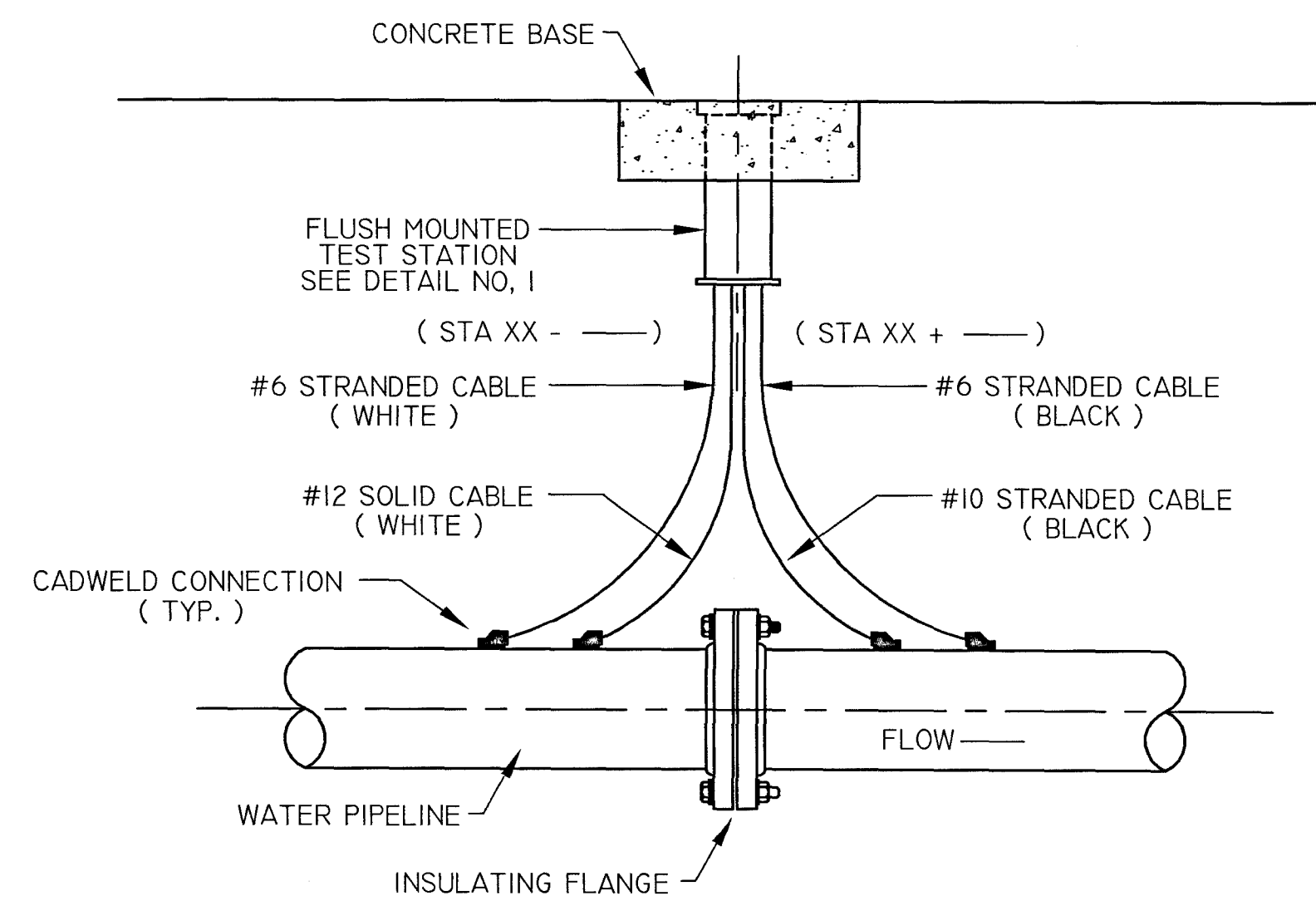
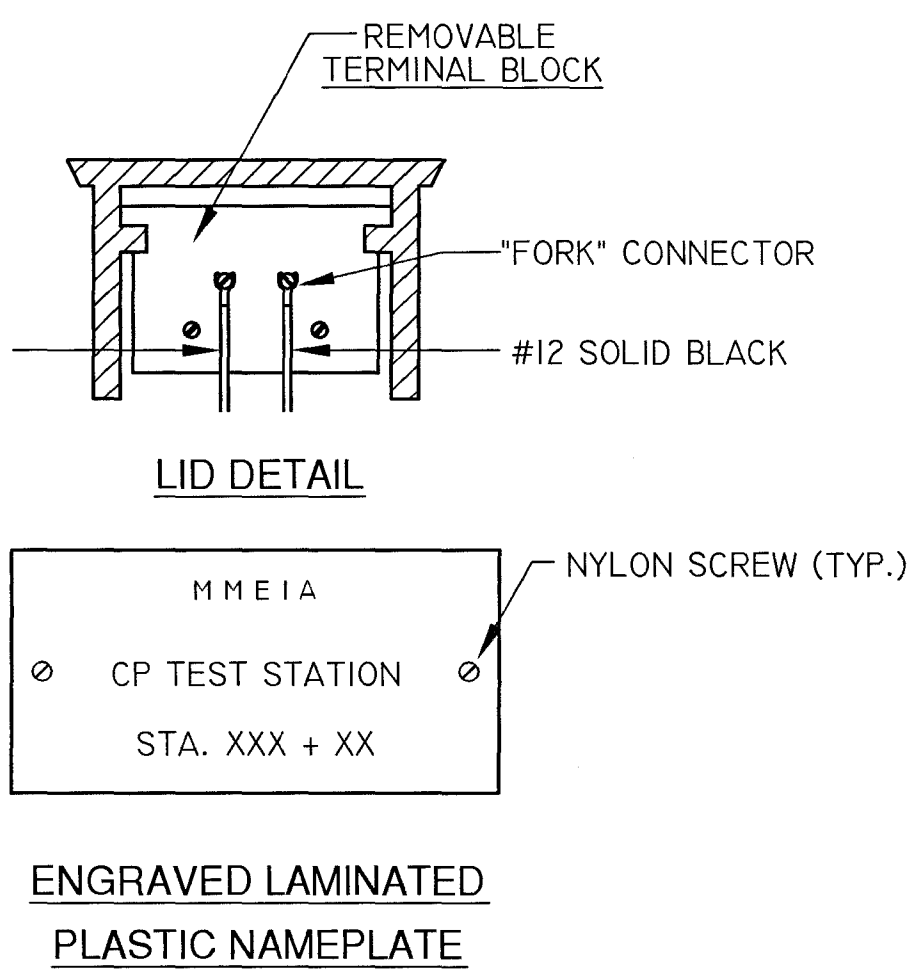
**Southern Consultants, Inc.**  
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MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

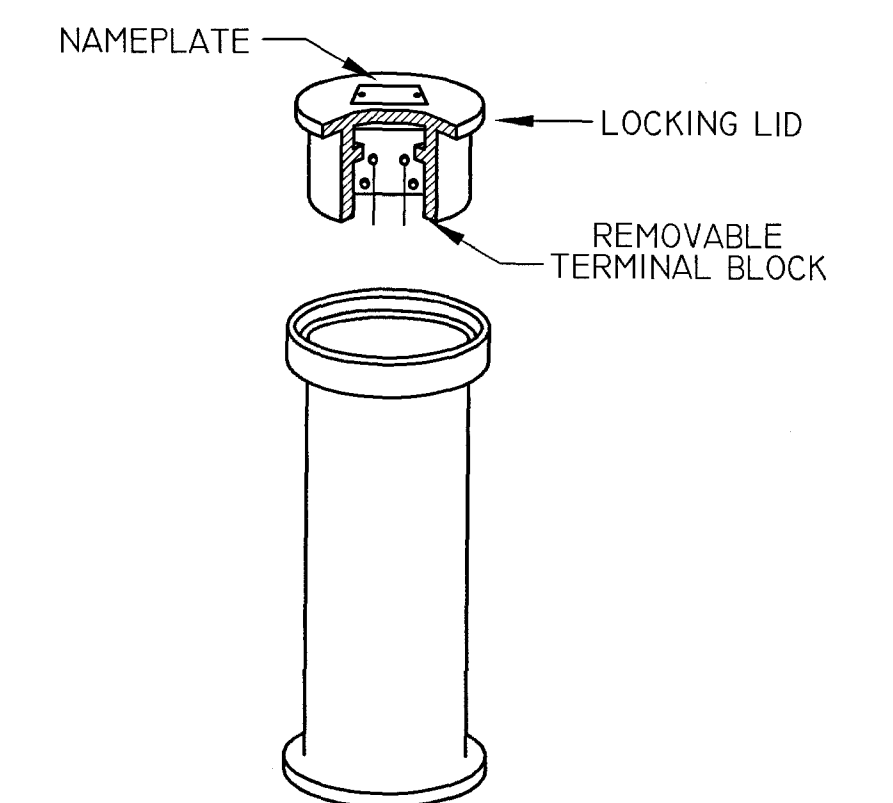
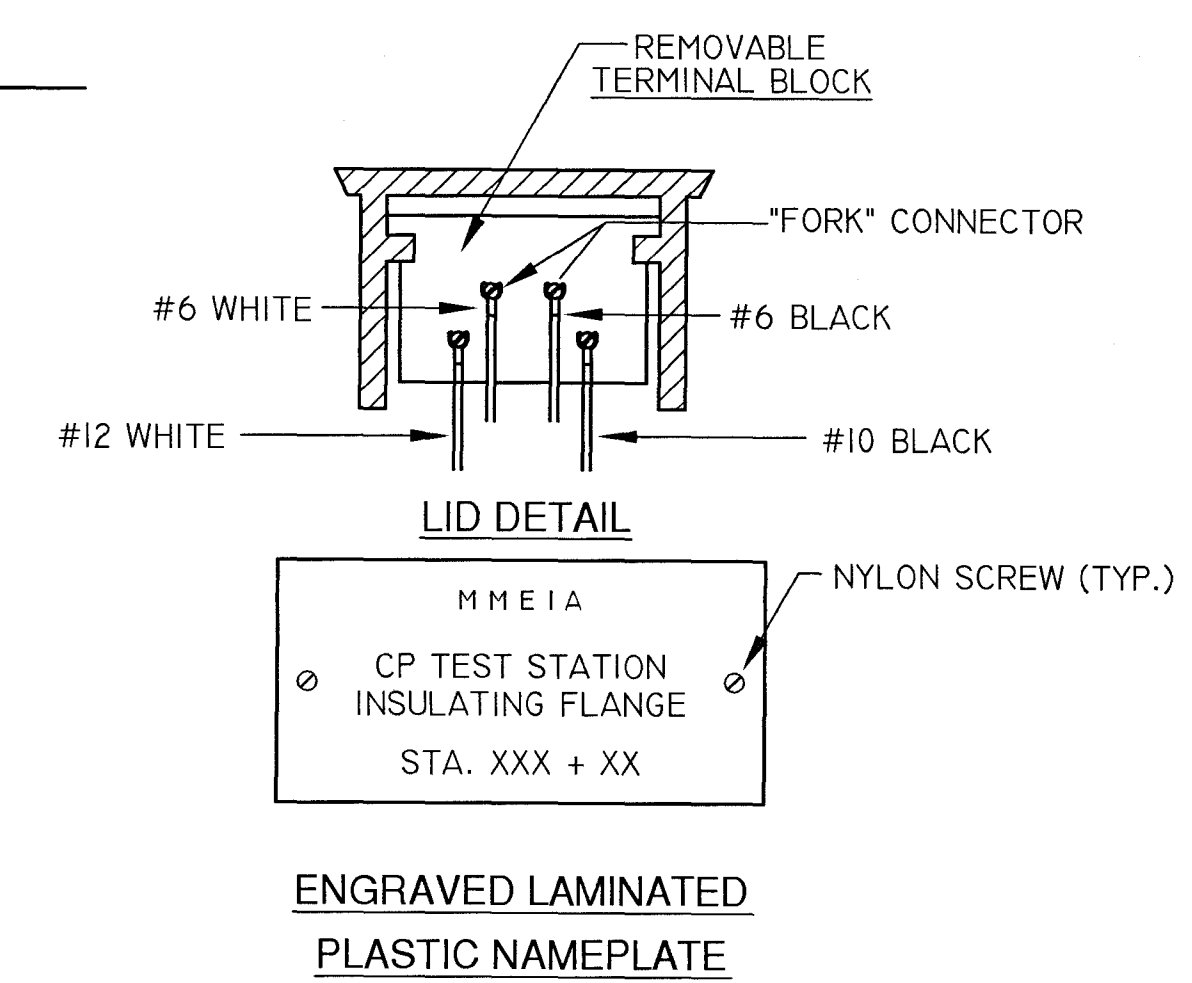
SHEET NAME	MISCELLANEOUS DETAILS NO. 2	SHEET NO.	03-538-21
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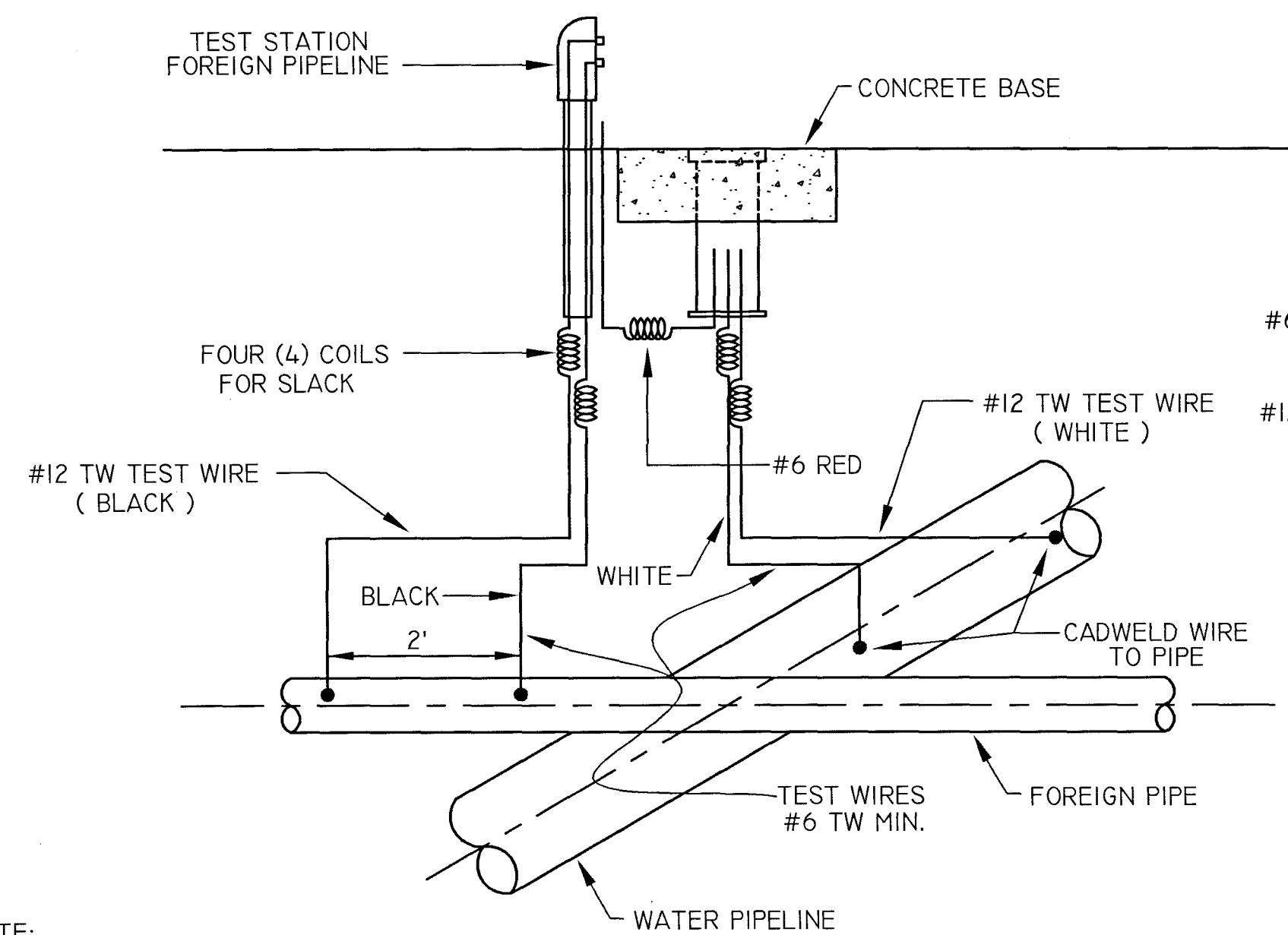
**DETAIL CP-1  
STANDARD TEST STATION**



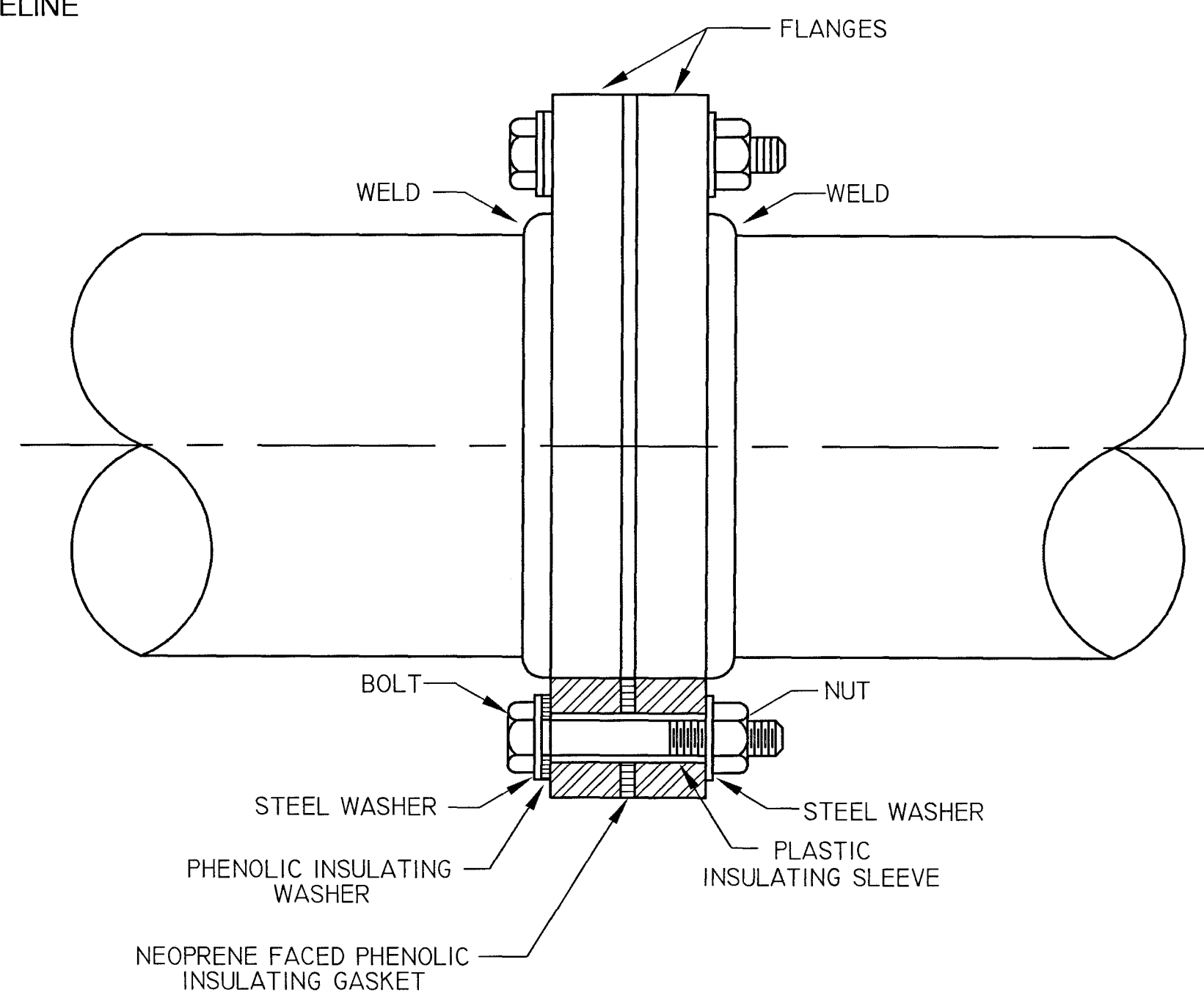
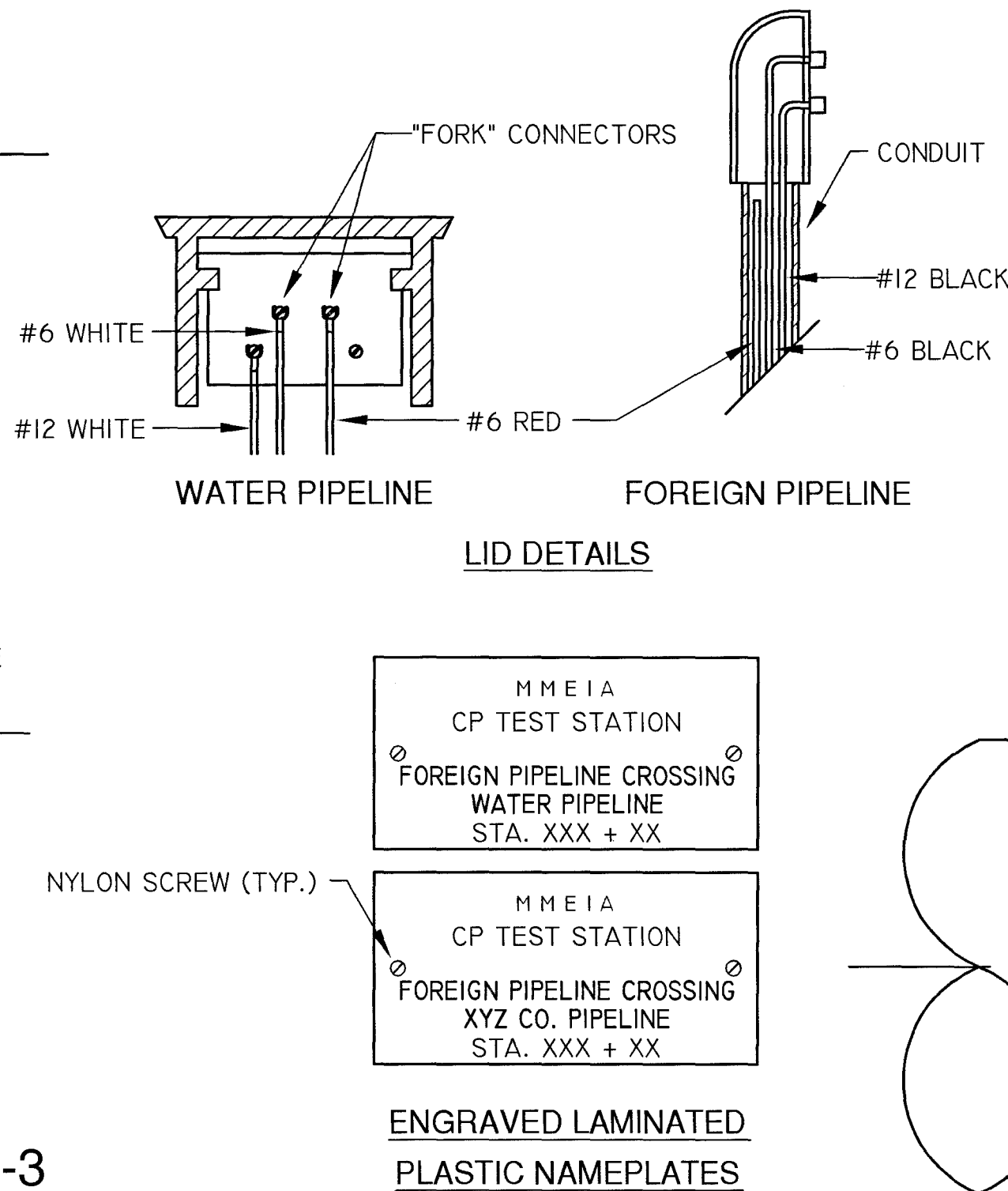
**DETAIL CP-2  
INSULATING FLANGE TEST STATION**



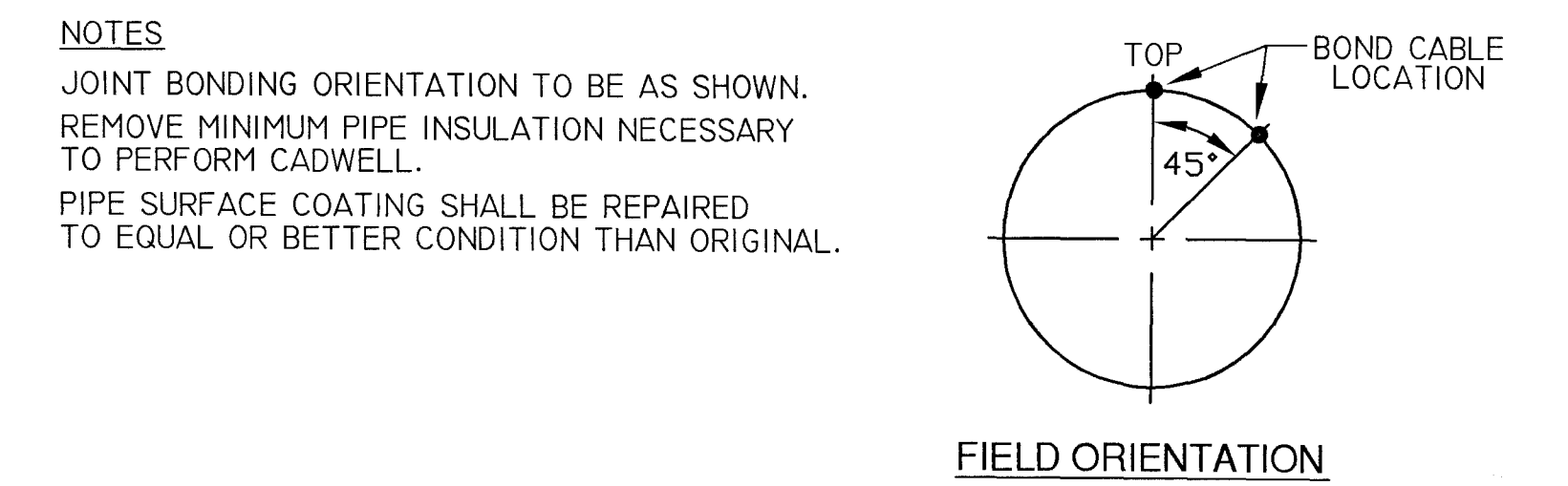
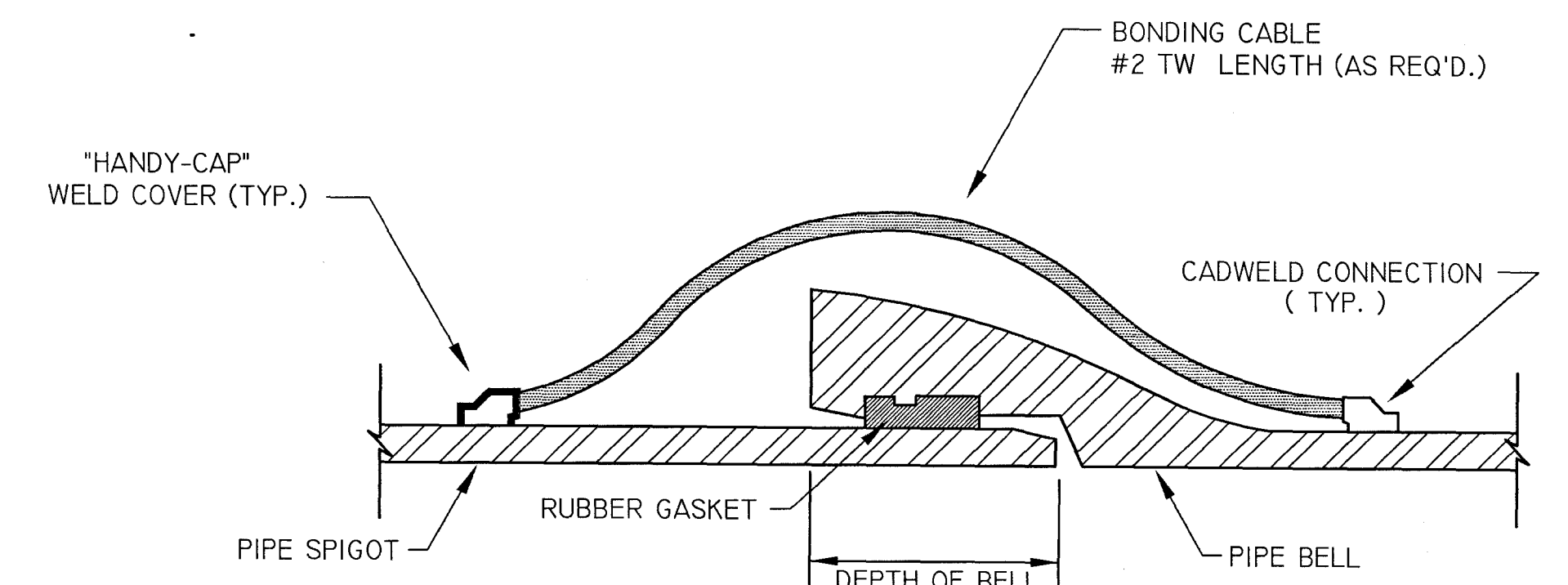
**DETAIL NO. 1  
FLUSH MOUNTED TEST STATION**



**DETAIL CP-3  
FOREIGN PIPELINE CROSSING TEST STATION**



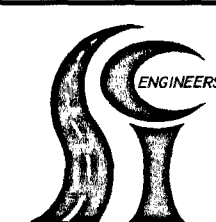
**DETAIL CP-4  
DUCTILE IRON PIPE INSULATING FLANGE**



**DETAIL CP-6  
DUCTILE IRON PIPE JOINT BONDING**

REVISIONS				DESIGNED	DATE
NO.	DATE	NATURE	BY	APPD.	
				MAB	5-2-03
				MWH	NTS
				JSS	RCL

DESIGNED	MAB	DATE	5-2-03
DRAWN	MWH	SCALE	NTS
CHECKED	JSS	APPROVED	RCL



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SEAL

PROJECT/CLIENT  
MISSISSIPPI MAJOR ECONOMIC IMPACT AUTHORITY  
**30" WATER TRANSMISSION LINE**  
CONSTRUCTION CONTRACT NO. 1  
O. B. CURTIS WATER TREATMENT PLANT TO RICE ROAD

SHEET NAME  
**CATHODIC PROTECTION DETAILS**

SHEET NO.  
**03-538-22**