

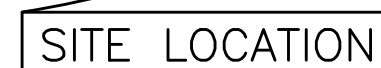


NOVEMBER 2015

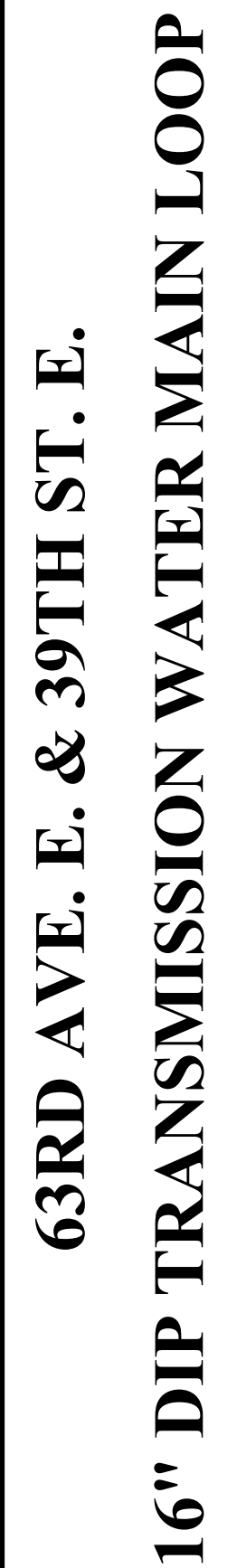


PROJECT SITE

ALL WATER MAINS CALLED OUT TO BE ABANDONED SHALL BE ABANDONED IN-PLACE BY GROUT FILLING.



NO.	INDEX OF SHEETS
1.	COVER SHEET
2.	GENERAL NOTES & LEGEND
3.-6.	PLAN & PROFILE - 63RD AVE. E. (SAUNDERS)
7.-10.	PLAN & PROFILE - TUTTLE AVE & 39TH AVE E.
11.-13.	DETAILS
14.	EROSION CONTROL
15.-17.	EX. TOPO & SURVEY CONTROL SHEETS



J. SHEA SHOUN, P.E.

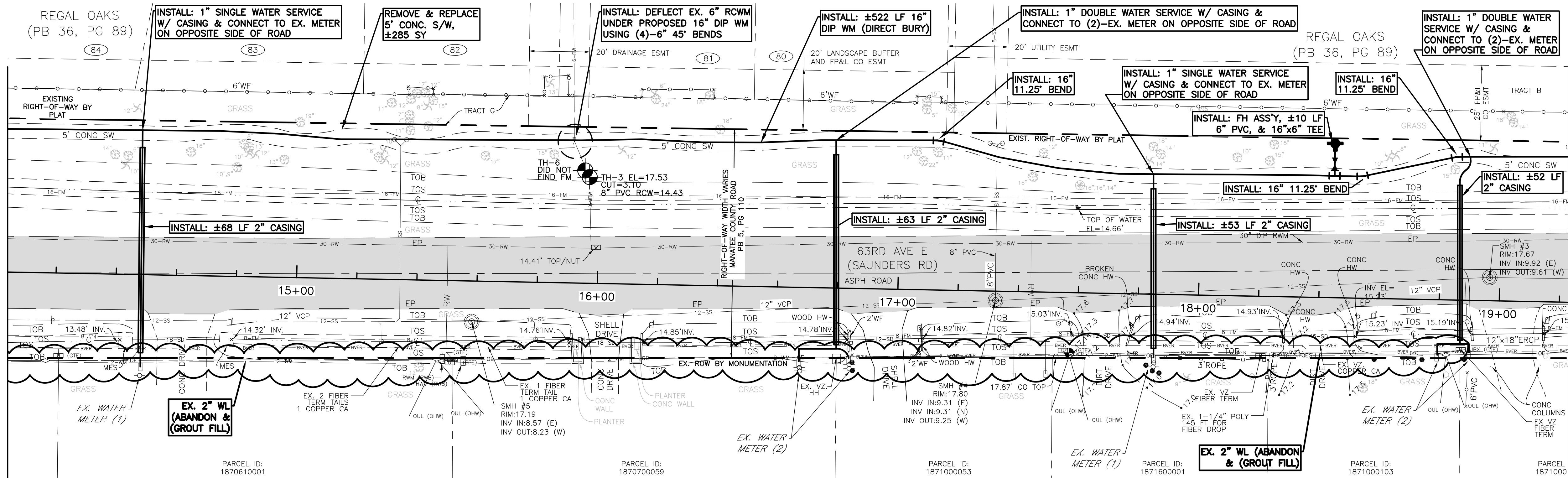
FLOOR 5E-SHOUN 60923

JOHN S. SHOUN
LICENSE
No. 60923
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

SHEET 17

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT S:\P\WD_Engineering\Shore Util. Eng. Design\PROJ\WTR LINE Proj\Water Line-63rd Ave E & 39th St E Loop\DWG\3\active-63rd-39th-WM Trans Loop.dwg,04 ANSI D - SHD04, 11/5/2015 2:20 PM Shea Shoun, 1:1, ANSI full bleed D (34.00 x 22.00 inches)

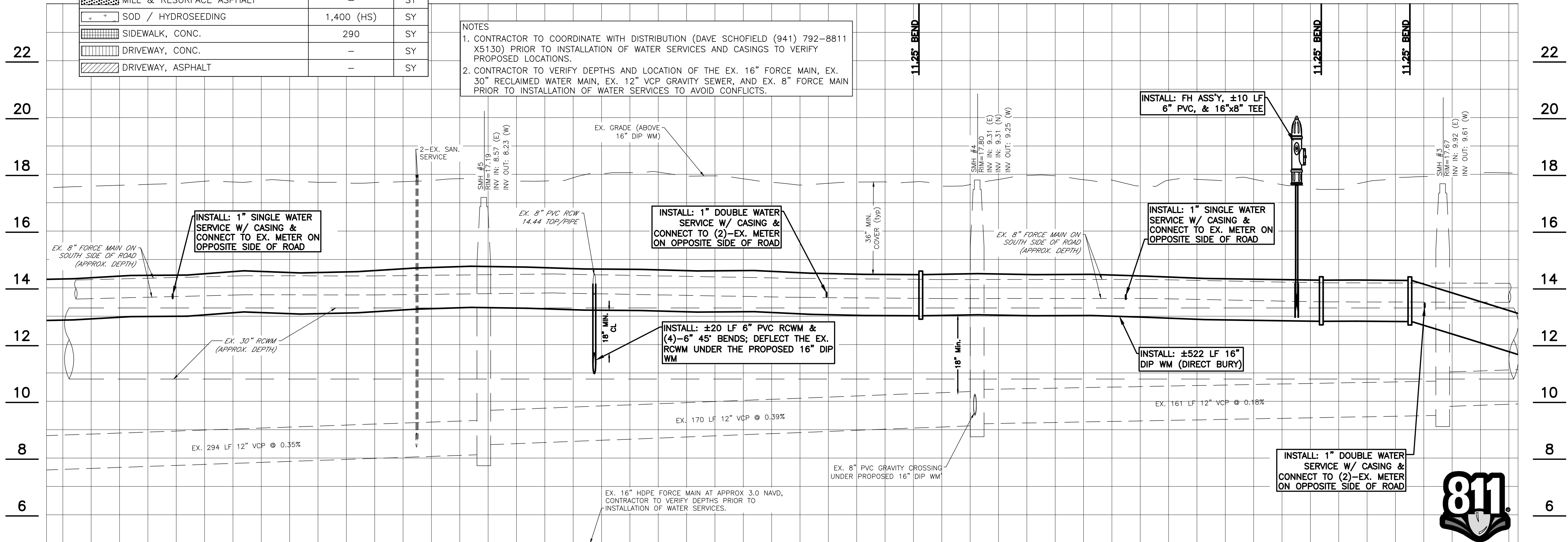
SEE SHEET 3
MATCH LINE STA. 14+02



MATCH LINE STA. 19+22
SEE SHEET 5

RESTORATION	QTYs. THIS PAGE	UNITS
TYPE "D" CONC. CURB RESTORATION	-	LF
TYPE "F" CONC. CURB RESTORATION	-	LF
MIAMI CONC. CURB RESTORATION	-	LF
BASE, MILL AND RESURFACE ASPHALT	-	SY
MILL & RESURFACE ASPHALT	-	SY
SOD / HYDROSEEDING	1,400 (HS)	SY
SIDEWALK, CONC.	290	SY
DRIVEWAY, CONC.	-	SY
DRIVEWAY, ASPHALT	-	SY

- NOTES
- CONTRACTOR TO COORDINATE WITH DISTRIBUTION (DAVE SCHOFIELD (941) 792-8811 X5130) PRIOR TO INSTALLATION OF WATER SERVICES AND CASINGS TO VERIFY PROPOSED LOCATIONS.
 - CONTRACTOR TO VERIFY DEPTHS AND LOCATION OF THE EX. 16" FORCE MAIN, EX. 30" RECLAIMED WATER MAIN, EX. 12" VCP GRAVITY SEWER, AND EX. 8" FORCE MAIN PRIOR TO INSTALLATION OF WATER SERVICES TO AVOID CONFLICTS.



Know what's below
Call before you dig

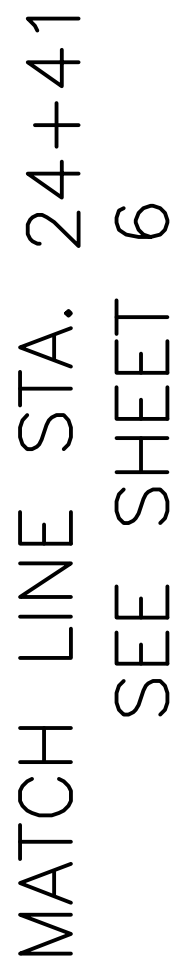
63RD AVE. E. & 39TH ST. E.

16" DIP TRANSMISSION WATER MAIN LOOP

PLAN & PROFILE STA. 14+19 TO STA. 19+70
63RD AVE. E. (SAUNDERS RD.) BASELINE



NO.	REVISION	DESCRIPTION	BY	DATE
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20+00	21+00	22+00	23+00	24+00
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Know what's below
Call before you dig

NO.						
REVISION DESCRIPTION						
BY						
DATE						
PROJECT #	404-6031770					
SURVEY #	620_63rd-39th					
SEC./TWN./RGE	20&21/35s/18e					
HORIZ. SCALE	PER PLAN					
VERT. SCALE	1"=2'					
	BY		DATE			
SURVEYED	JTP		2/28/15			
DESIGNED	JSS		06/15			
DRAWN	CB/JSS		06/15			
CHECKED	JSS		10/15			










J. SHON S. SHOUH, P.E.
 FLORENCE, S.C.
 No. 60923
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
 Signature: _____ Date: _____

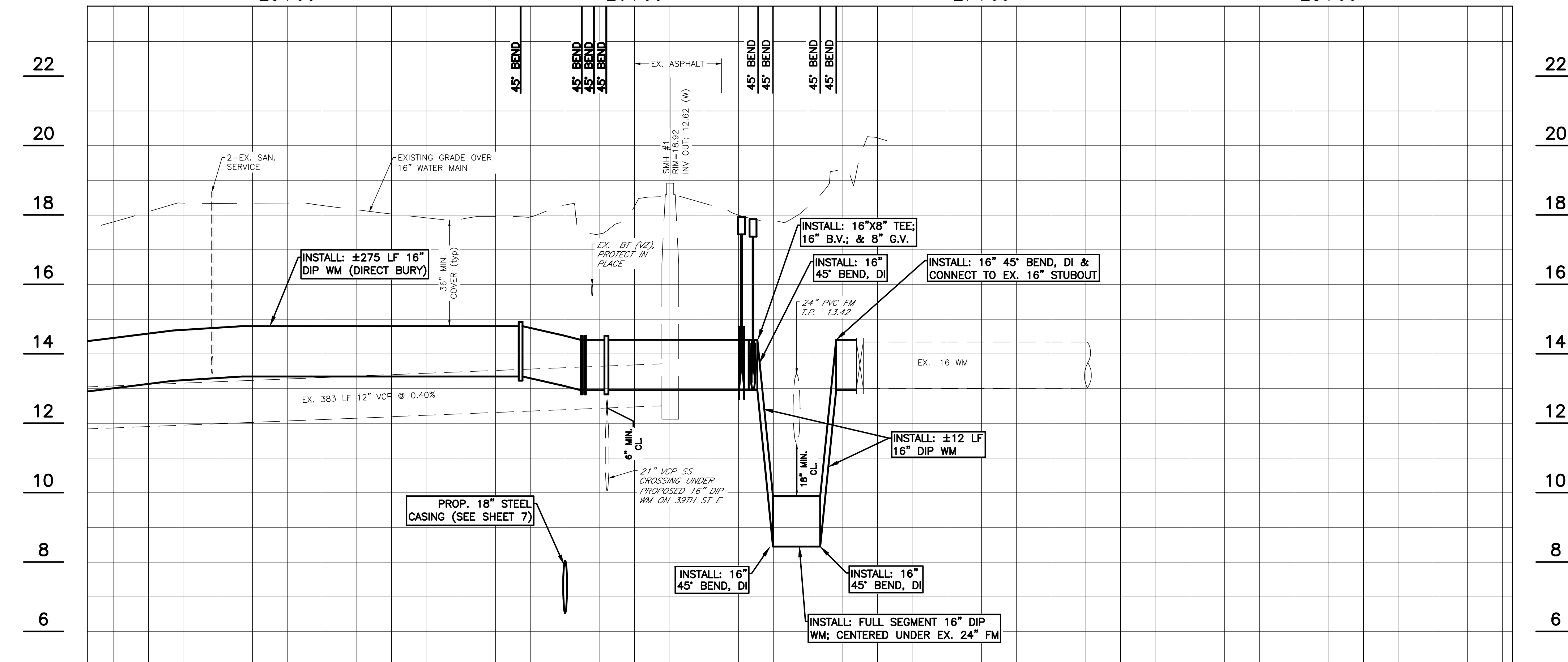
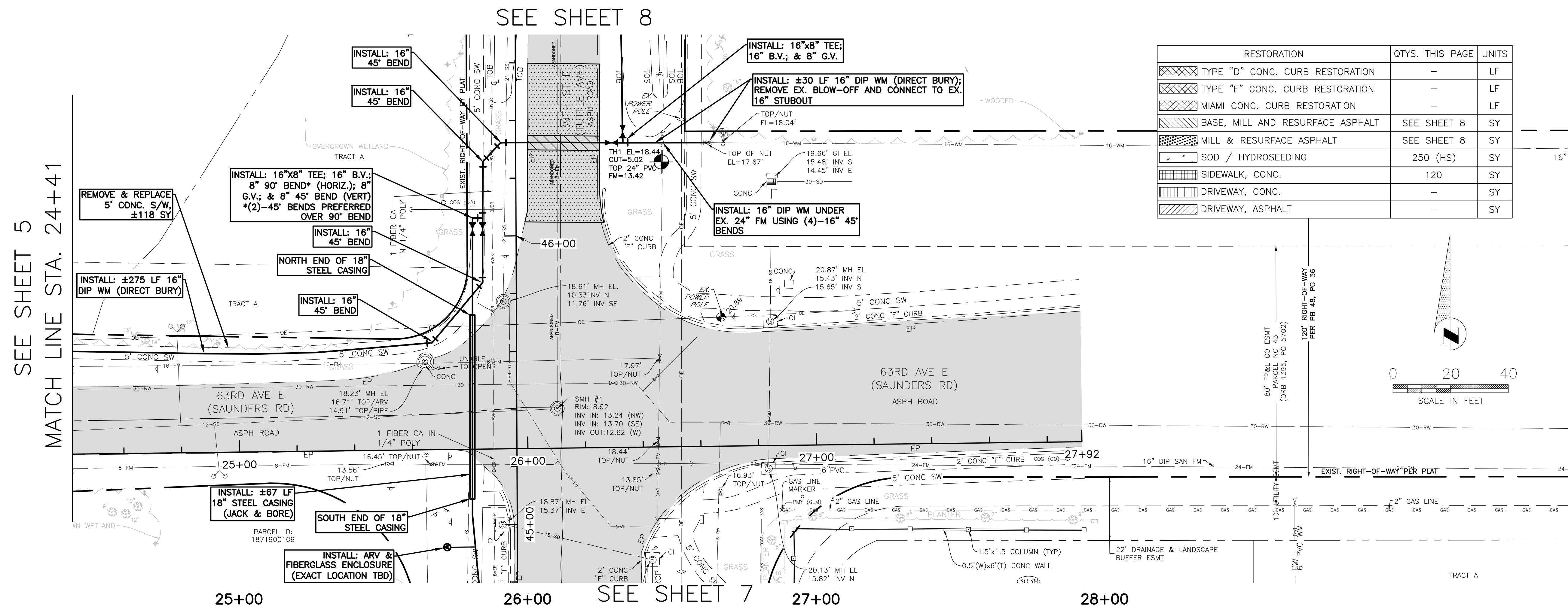
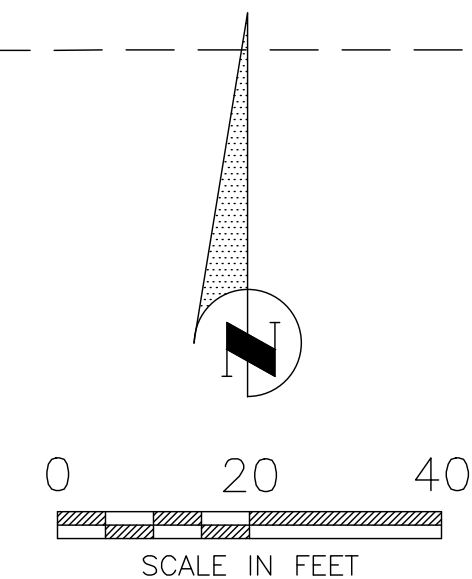
63RD AVE. E. & 39TH ST. E.

16" DIP TRANSMISSION WATER MAIN LOOP

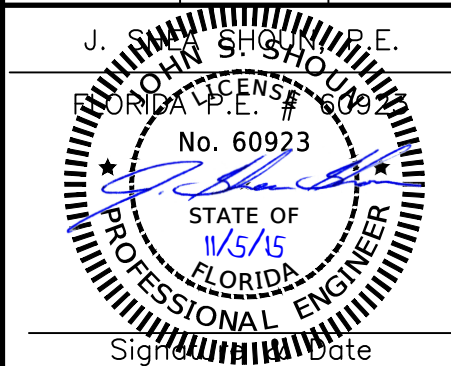
PLAN & PROFILE STA. 25+20 TO STA. 37+92

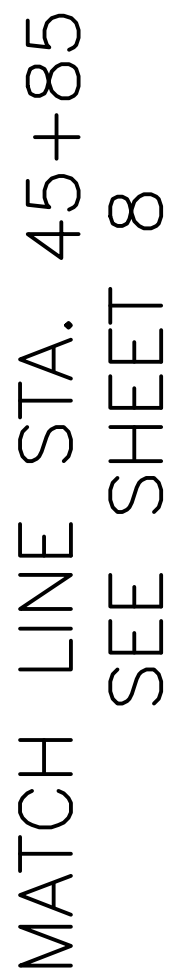
63RD AVE. E. (SAUNDERS RD.) BASELINE

RESTORATION		QTYs. THIS PAGE	UNITS
	TYPE "D" CONC. CURB RESTORATION	—	LF
	TYPE "F" CONC. CURB RESTORATION	—	LF
	MIAMI CONC. CURB RESTORATION	—	LF
	BASE, MILL AND RESURFACE ASPHALT	SEE SHEET 8	SY
	MILL & RESURFACE ASPHALT	SEE SHEET 8	SY
	SOD / HYDROSEEDING	250 (HS)	SY
	SIDEWALK, CONC.	120	SY
	DRIVEWAY, CONC.	—	SY
	DRIVEWAY, ASPHALT	—	SY












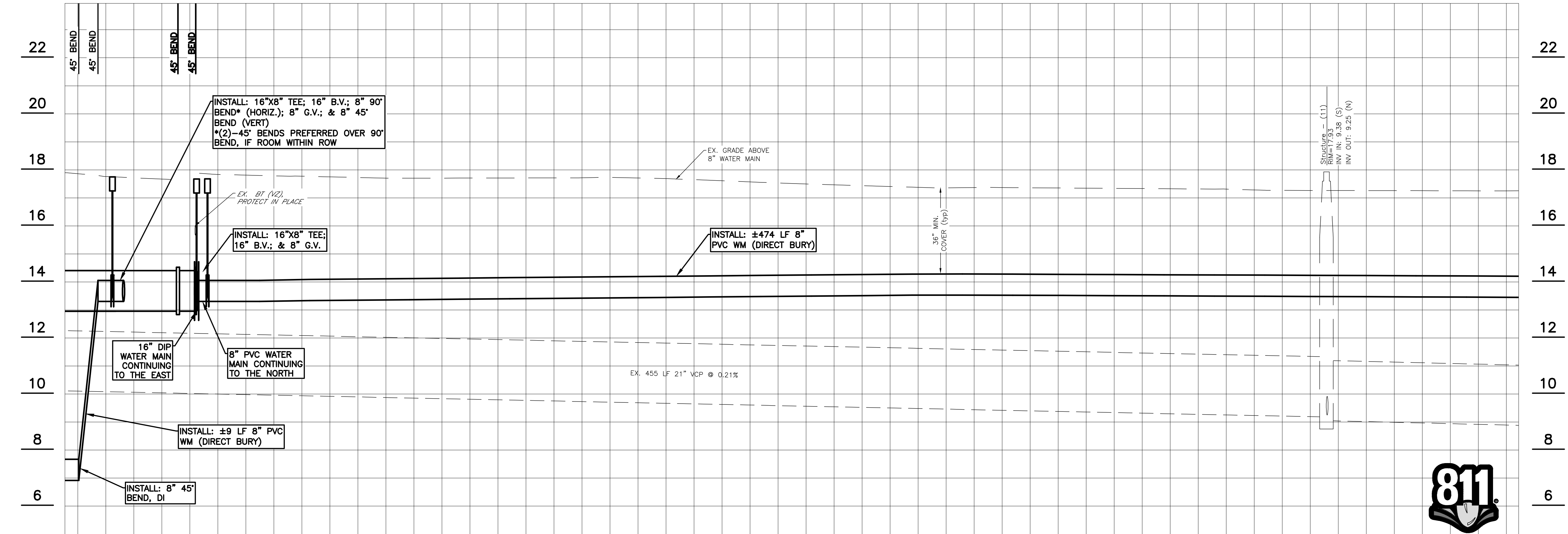
Know what's below
Call before you dig





MAINT LINE SIA. 51+04
SEE SHEET 9

RESTORATION	QTYs. THIS PAGE	UNITS
 TYPE "D" CONC. CURB RESTORATION	—	LF
 TYPE "F" CONC. CURB RESTORATION	—	LF
 MIAMI CONC. CURB RESTORATION	—	LF
 BASE, MILL AND RESURFACE ASPHALT	14	SY
 MILL & RESURFACE ASPHALT	140	SY
 SOD / HYDROSEEDING	1,080 (HS)	SY
 SIDEWALK, CONC.	—	SY
 DRIVEWAY, CONC.	—	SY
 DRIVEWAY, ASPHALT	—	SY



Know what's below
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63RD AVE. E. & 39TH ST. E.

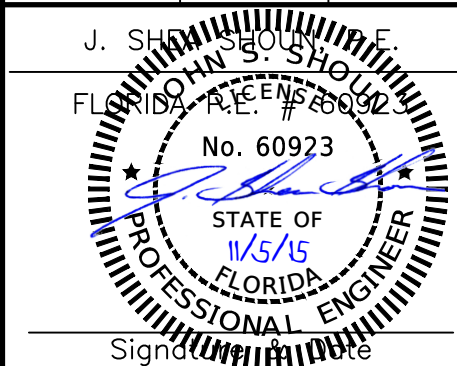
16" DIP TRANSMISSION WATER MAIN LOOP

**PLAN & PROFILE STA. 46+60 TO 52+10
39TH ST. E. (TUTTLE AVE.) BASELINE**



**PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208**

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #		404-6031770	
SURVEY #		620_63rd-39th	
SEC./TWN./RGE		20&21/35s/18e	
HORZ. SCALE		PER PLAN	
VERT. SCALE		1"=2'	
	BY	DATE	
SURVEYED	JTP	2/28/15	
DESIGNED	JSS	06/15	
DRAWN	CB/JSS	06/15	
CHECKED	JSS	10/15	



63RD AVE. E. & 39TH ST. E.

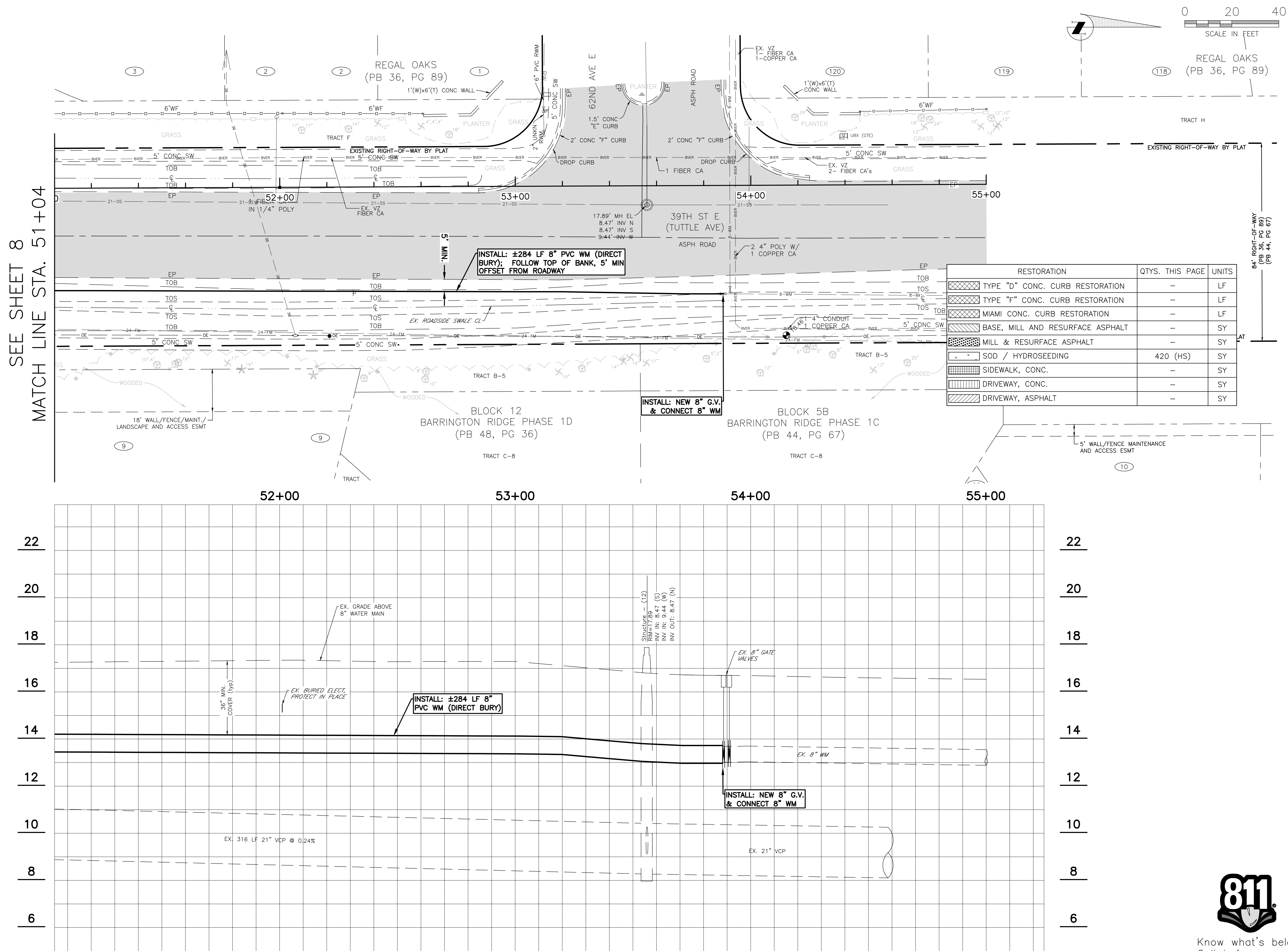
16" DIP TRANSMISSION WATER MAIN LOOP

**PLAN & PROFILE STA. 52+10 TO 55+70
39TH ST. E. (TUTTLE AVE.) BASELINE**

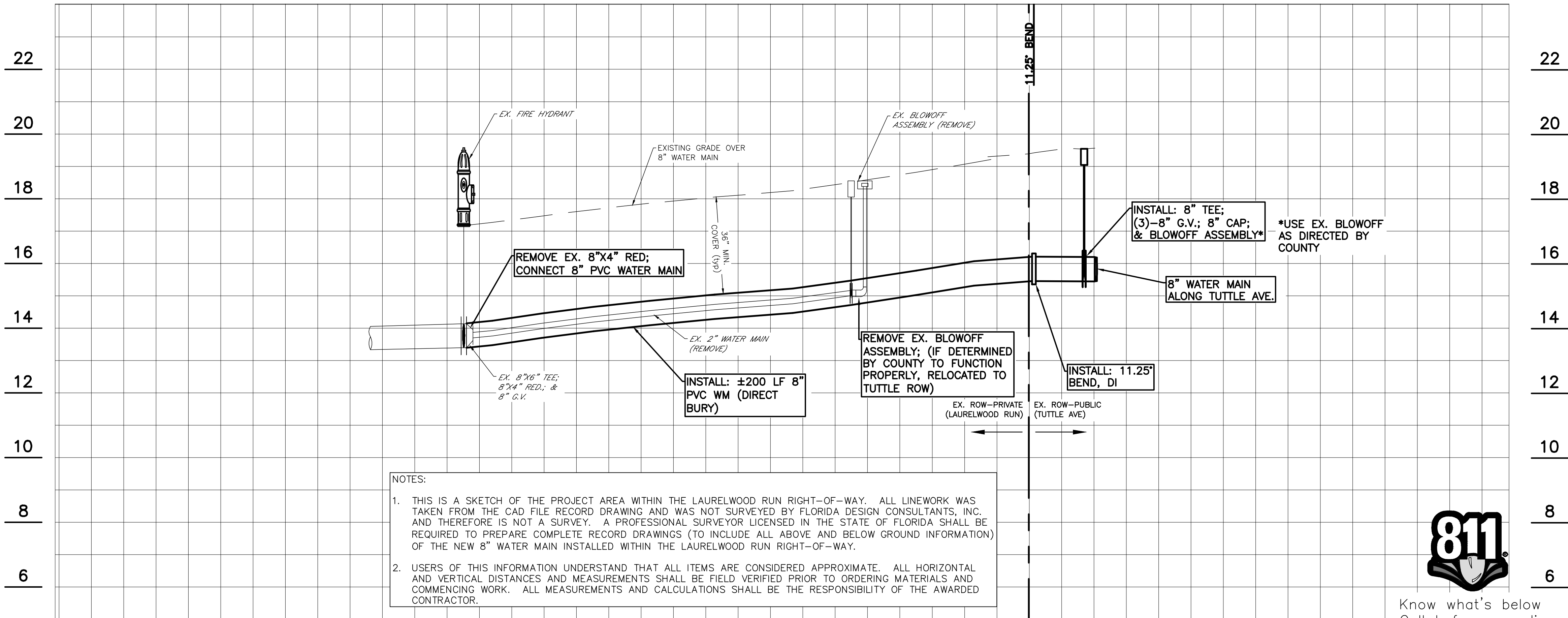
[illegible]

Professional Engineer Seal for John S. Shuman, State of Florida, License No. 60923, expires 11/5/15.

SHEET 9 OF 17



Know what's below
Call before you dig



Know what's below
- Call before you dig




**PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208**

63RD AVE. E. & 39TH ST. E.

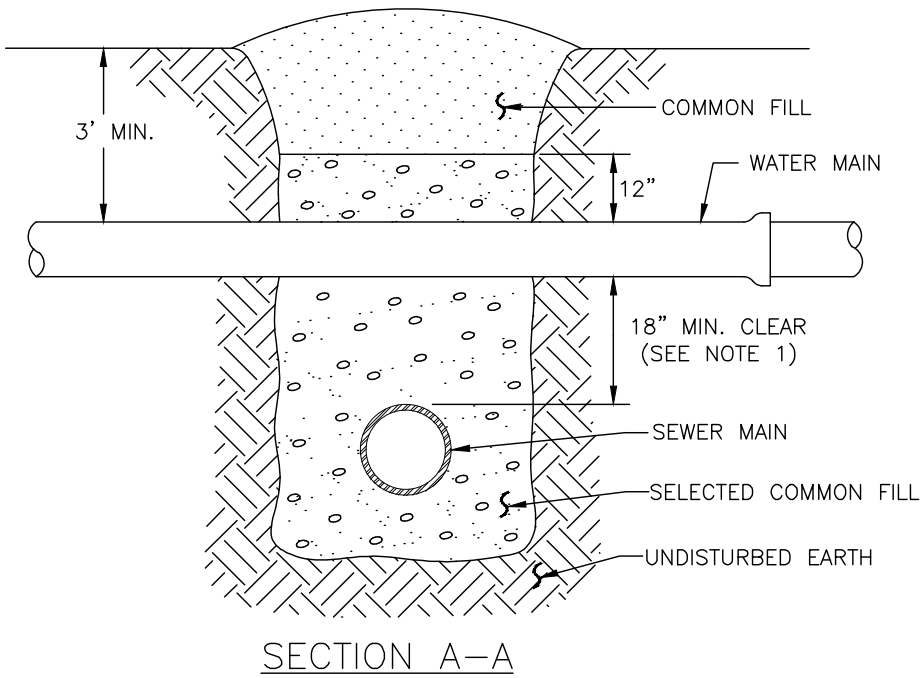
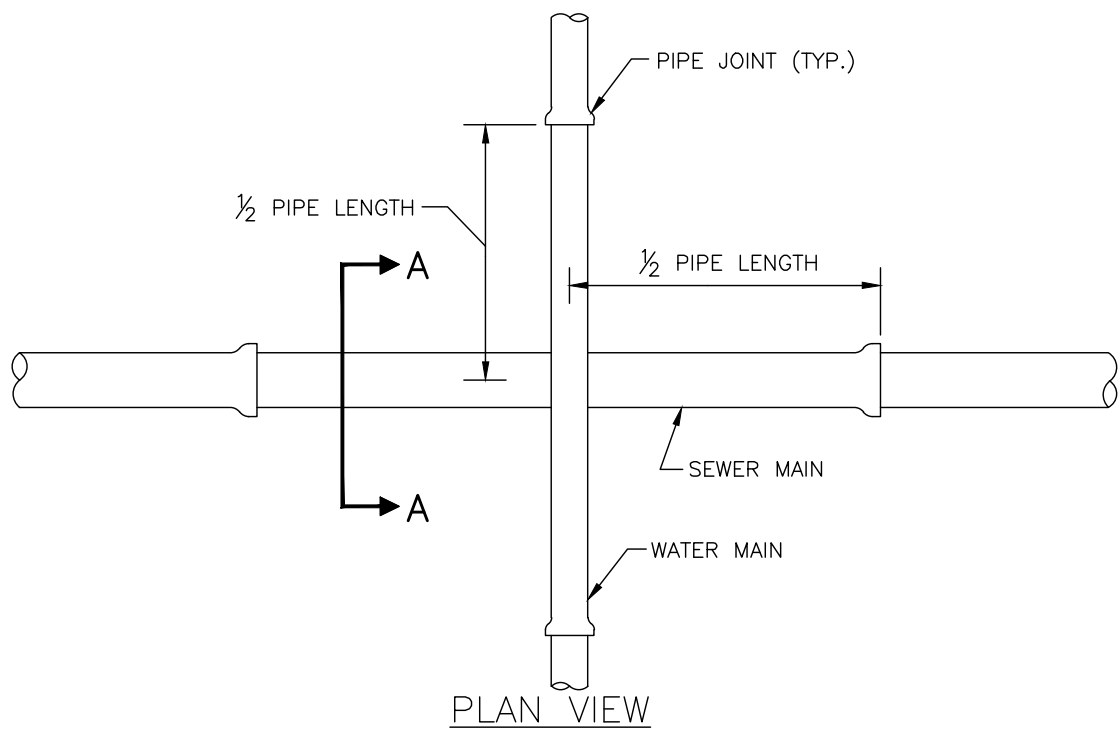
16" DIP TRANSMISSION WATER MAIN LOOP

PLAN & PROFILE STA. 52+10 TO 55+70
39TH ST. E. (TUTTLE AVE.) BASELINE

DATE		BY		REVISION DESCRIPTION		NO.	
PROJECT #		404-6031770					
SURVEY #		620_63rd-39th					
SEC./TWN./RGE		20&21/35s/18e					
HORIZ. SCALE		PER PLAN					
VERT. SCALE		1"=2'					
		BY		DATE			
SURVEYED		JTP		2/28/15			
DESIGNED		JSS		06/15			
DRAWN		CB/JSS		06/15			
CHECKED		JSS		10/15			
J. SHOOK		P.E.					
FLORIAN S. SHOOK							
							
Signature		Date					

SHEET 10 OF 17

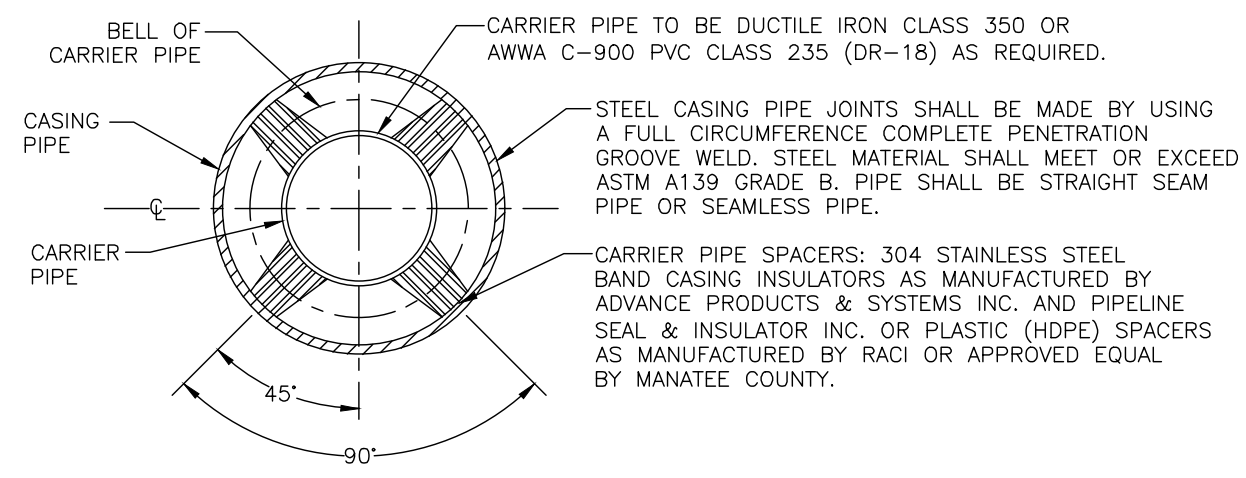
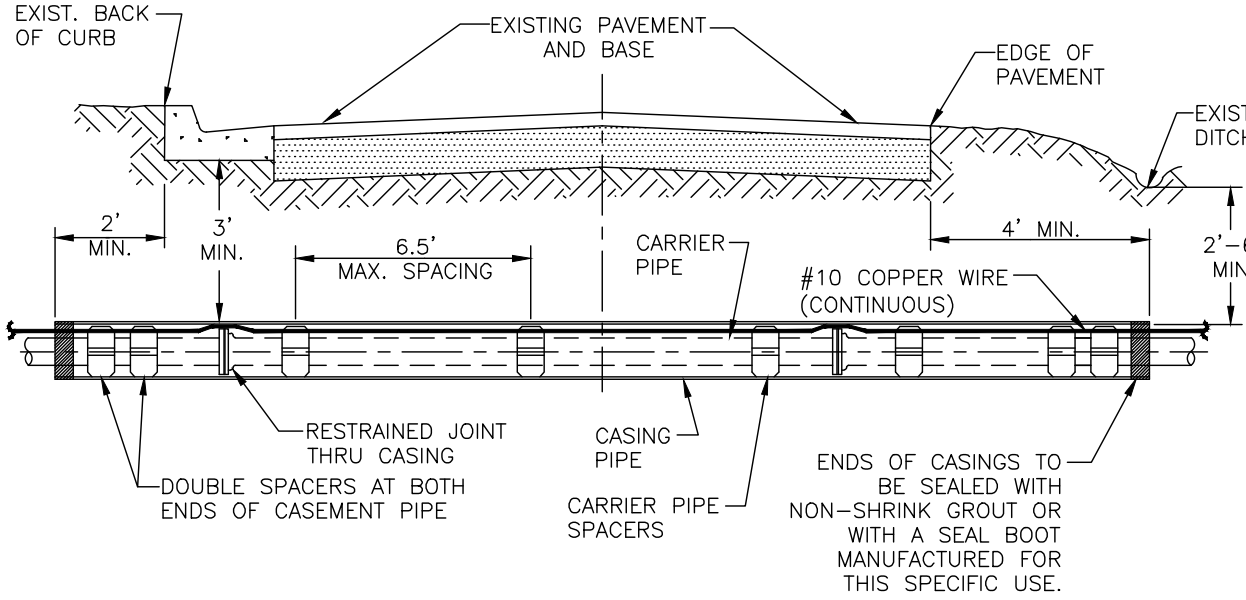
COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\PWD_Engineering_Shares\URL_Eng_Design\PROJ\WTR_LINE\63rd Ave E. & 39th St. E Loop\DWGS\active\63rd-39th_WM_Trans Loop.dwg,1:1, ANSI full bleed D (34.00 x 22.00 inches)



NOTES:

- CLEARANCE MAY BE REDUCED TO 6" FOR GRAVITY SEWER WHERE WATER MAIN IS DUCTILE IRON OR 3" FOR FORCE MAIN WHERE FORCE MAIN IS ENCASED A MINIMUM OF 10" EACH SIDE OF CROSSING.
- WHERE NO ENCASEMENT IS REQUIRED, PIPE SECTIONS SHALL BE FULL-LENGTH AND SHALL BE ADJUSTED HORIZONTALLY SO THAT THE CROSSING IS AT EACH PIPE SECTION'S MIDPOINT REGARDLESS OF THE VERTICAL CLEARANCE.
- REFER TO THE **JACK & BORE CROSSING** DETAIL FOR CASING AND SPACER REQUIREMENTS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT			TYPICAL NEW WATER & SEWER LINE CROSSING	UG-2
REV. BY	DATE	MAY 10, 2011 DATE OF APPROVAL		
CLB/BR	11/10			
			PAGE 102	



CARRIER SIZE & MINIMUM CASING SIZE											
CARRIER	4"	6"	8"	10"	12"	14"	16"	18"	20"		
CASING	12"	14"	18"	20"	24"	30"	30"	36"	36"		
CASING / WALL THICKNESS	0.188	0.188	0.250	0.250	0.344	0.406	0.406	0.406	0.406		

NOTES:

- THE ENGINEER OF RECORD MAY SELECT LARGER CASING DIAMETERS.
- FOR JACK & BORE SPECIFICATIONS UNDER STATE ROADS AND RAILROADS REFER TO THE F.D.O.T. UTILITY ACCOMMODATION MANUAL, LATEST EDITION.

MANATEE COUNTY			JACK & BORE CROSSING	UG-3
PUBLIC WORKS DEPARTMENT				
REV. BY	DATE	MAY 10, 2011		
CLB/BR	11/10			
DATE OF APPROVAL			PAGE 103	

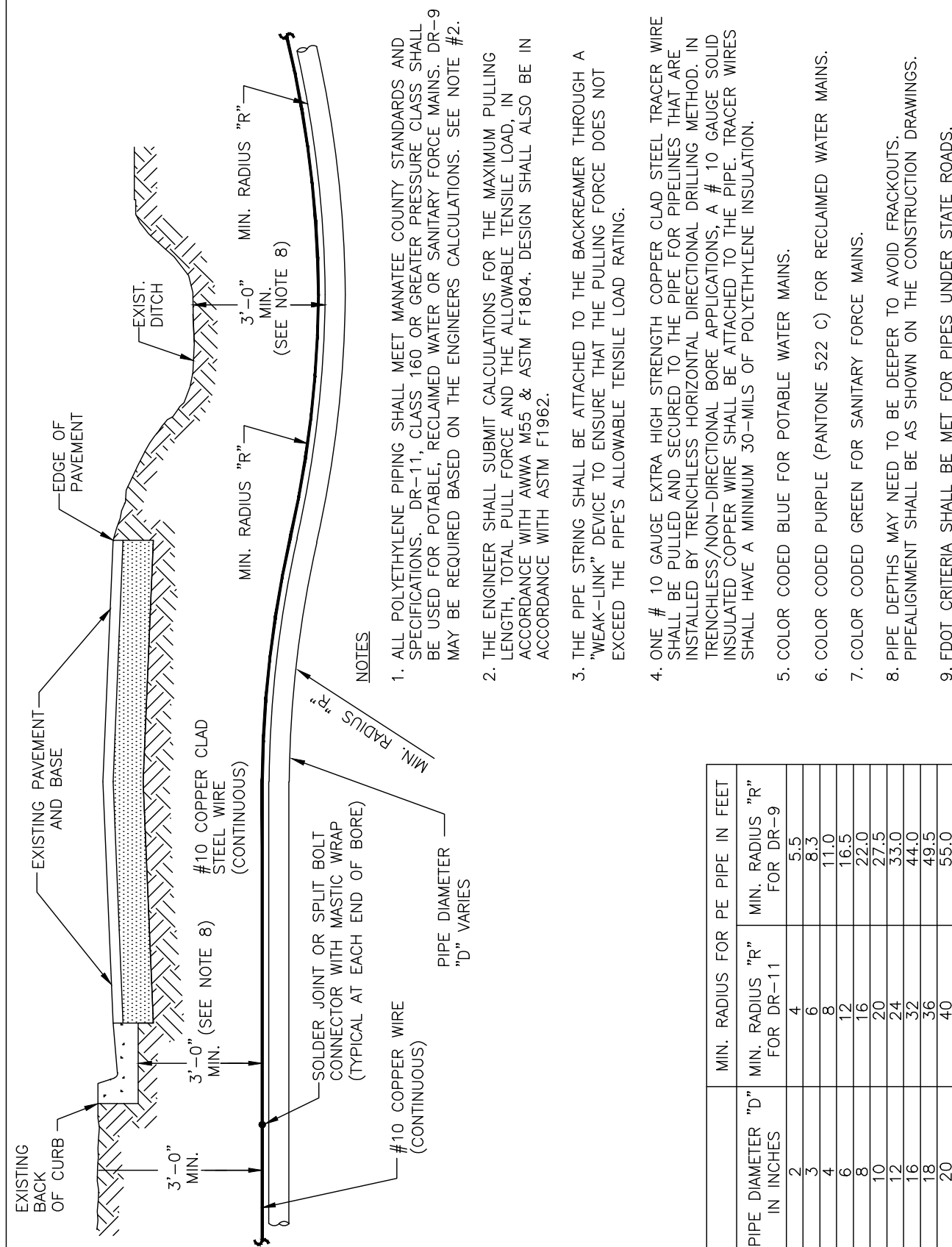
REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DR-18 PVC PIPE

MAIN PIPE SIZE	HORIZ. BENDS			TEES						REDUCERS						PLUGS & VALVES				
	90°	45°	22.5°	SIZE LENGTH						SIZE LENGTH										
24	90°	38'	18.5'	X24	89	132	X16	40	X12	38	X10	64	X16	117	X12	158	214			
20	78	32	16	X20	141	X16	101	X12	53	X10	24	X8	1	X16	65	X12	115	149	184	
16	66	27	13	X16	111	X12	67	X10	41	X8	12			X12	64	X10	107	X8	111	151
12	52	22	10	X12	80	X10	56	X8	31	X6	1			X10	58	X8	62	X6	81	118
10	44	18	9	X10	63	X8	40	X6	7					X8	33	X6	61	X4	86	100
8	37	15	7	X8	49	X6	18	X4	1					X6	35	X4	60			83
6	29	12	6	X6	29	X4	1							X4	33					63
4	21	8	4	X4	12															45

NOTES:

- RESTRAIN 11.25° BENDS 50% OF LENGTH FOR 22.5° BENDS.
- ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTINGSECTIONS OF PIPE.
- ALL ISOLATIONVALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
- PIPE SIZES ARE GIVEN IN INCHES.
- RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
- LENGTHS SHOWN ARE FOR A TEST PRESURE OF 180 PSI.
- THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON SOIL CLASSIFICATION SP WITH AWWA TYPE 3 TRENCH CONDITIONS, 180 PSI TEST PRESSURE, 3 FEET OF COVER AND 1.5 FACTOR OF SAFETY. ACTUAL BURY CONDITIONS MUST BE DETERMINED BY THE ENGINEER OF RECORD AND THE RESTRAINED LENGTHS MODIFIED ACCORDINGLY.
- RESTRAINED LENGTHS TO BE APPLIED TO PIPELINES PER DETAIL RESTRAINED LENGTHS FOR PIPE.

MANATEE COUNTY			RESTRAINED LENGTHS FOR PVC PIPE	UG-8
PUBLIC WORKS DEPARTMENT				
REV. BY	DATE	MAY 10, 2011		
CLB/BR	11/10			
DATE OF APPROVAL				PAGE 108



MIN. RADIUS FOR PE PIPE IN FEET		MIN. RADIUS "R" FOR DR-9	
PIPE DIAMETER "D" IN INCHES	MIN. RADIUS "R" IN INCHES	PIPE DIAMETER "D" IN INCHES	MIN. RADIUS "R" IN INCHES
4	4	4	4
6	6	6	6
8	8	8	8
10	10	10	10
12	12	12	12
14	14	14	14
16	16	16	16
18	18	18	18
20	20	20	20
22	22	22	22
24	24	24	24
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32	32	32	32
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36	36	36	36
38	38	38	38
40	40	40	40

MANATEE COUNTY			DIRECTIONAL BORE ROADWAY CROSSING	UG-4
PUBLIC WORKS DEPARTMENT				
REV. BY	DATE	MAY 10, 2011		
CLB/BR	11/10			
DATE OF APPROVAL			PAGE 104	

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)

MAIN PIPE SIZE	HORIZ. BENDS			TEES										REDUCERS					PLUGS & VALVES													
	90°	45°	22.5°	SIZE					LENGTH					SIZE						LENGTH												
36	142	59	28	x36	x30	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	x36	x30	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	453
30	124	51	25	x30	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	x30	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	391		
24	106	44	21	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	x24	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	327				
20	92	38	18	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	x20	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	280						
16	77	32	15	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	x16	x12	x10	x8	x6	x4	x3	x2	x1	x0	231								
12	61	25	12	x12	x10	x8	x6	x4	x3	x2	x1	x0	x12	x10	x8	x6	x4	x3	x2	x1	x0	181										
10	52	22	10	x10	x8	x6	x4	x3	x2	x1	x0	x10	x8	x6	x4	x3	x2	x1	x0	153												
8	44	18	9	x8	x6	x4	x3	x2	x1	x0	x8	x6	x4	x3	x2	x1	x0	x8	x6	x4	x3	x2	x1	x0	128							
6	34	14	7	x6	x4	x3	x2	x1	x0	x6	x4	x3	x2	x1	x0	x6	x4	x3	x2	x1	x0	98										
4	24	10	5	x4	x3	x2	x1	x0	x4	x3	x2	x1	x0	x4	x3	x2	x1	x0	x4	x3	x2	x1	x0	69								

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED)

MAIN PIPE SIZE	HORIZ. BENDS			TEES										REDUCERS					PLUGS & VALVES				
	90°	45°	22.5°	SIZE										SIZE									
				LENGTH					LENGTH					LENGTH									
36	100	42	20	x36	63	x30	132	x24	96	x20	68	x16	35	x12	x30	57	x24	103	x20	128	x16	49	188
30	88	37	18	x30	38	x24	104	x20	78	x16	58	x12	10	x10	x24	57	x20	88	x16	114			162
24	75	31	15	x24	112	x20	87	x16	59	x12	25	x10	4	x8	x1	x24	57	x20	74	x16	101		135
20	65	27	13	x20	93	x16	67	x12	35	x10	10	x8	x1		x16	41	x12	73	x10	94			116
16	54	22	11	x16	73	x12	44	x10	27	x8	5	x6	x1		x12	31	x10	68	x8	70			96
12	43	18	8	x12	53	x10	37	x8	21	x6	x1				x10	37	x8	40	x5	54			75
10	37	15	7	x10	42	x8	26	x6	x5						x8	21	x6	39	x4	52			63
8	30	13	6	x8	32	x6	12	x4	1						x6	22	x4	38					53
6	24	10	5	x6	19	x4	1								x4	21							41
4	17	7	3	x4	6																		29

NOTE:

SEE RESTRAINED LENGTHS FOR PVC PIPE DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

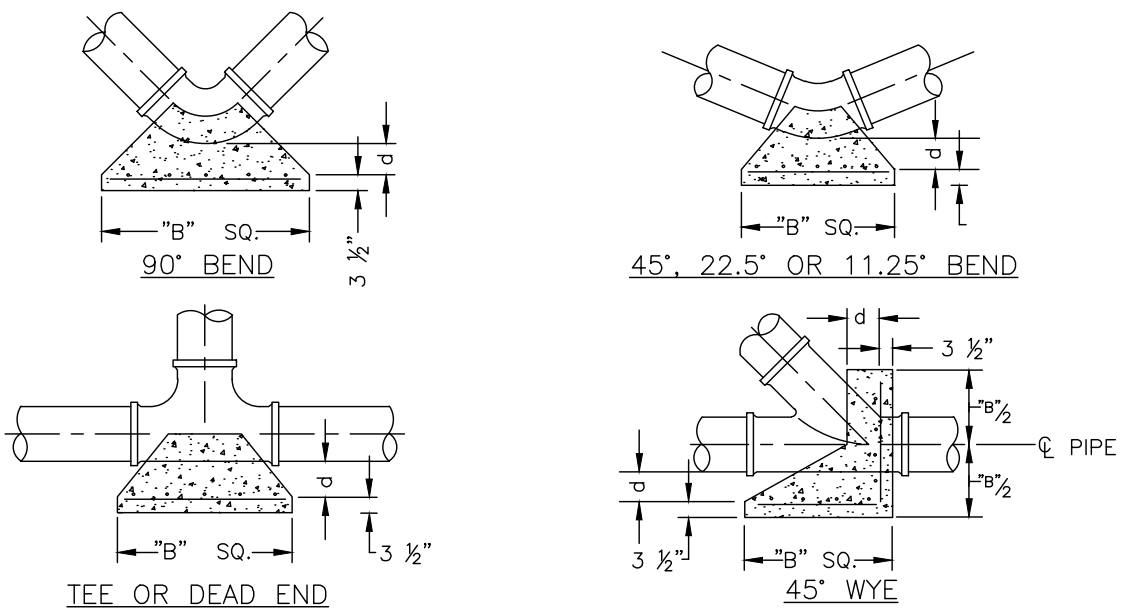
MANATEE COUNTY PUBLIC WORKS DEPARTMENT			RESTRAINED LENGTHS FOR DIP	UG-9
REV. BY CLB/BR	DATE 11/10	MAY 10, 2011 DATE OF APPROVAL		
			PAGE 109	

THRUST BLOCK DIMENSIONS B ft. x d inches													
PIPE SIZE (IN.)	90°BEND			45°BEND		22.5°BEND		11.25°BEND		DEAD END & TEE		45° WYE	
	B	d		B	d	B	d	B	d	B	d	B	d
4	1.5	3 ½		1.1	3 ½	0.8	3 ½	0.6	3 ½	1.3	3 ½	1.1	3 ½
6	2.2	5 ¼		1.6	3 ¾	1.2	3 ¾	0.8	3 ¾	1.9	4 ½	1.6	3 ¾
8	2.9	7		2.1	5	1.5	3 ½	1.1	3 ½	2.4	5 ¾	2.0	4 ¾
10	3.5	8 ½		2.6	6 ¼	1.9	4 ½	1.3	3 ½	3.0	7 ¼	2.5	6
12	4.2	10		3.1	7 ½	2.2	5 ½	1.6	3 ¾	3.5	8 ¼	3.0	7 ½
14	4.9	11 ¾		3.6	8 ¾	2.6	6 ¼	1.8	4 ¼	4.1	9 ¾	3.4	8 ¼
16	5.5	13 ¼		4.1	9 ¾	2.9	7	2.1	5	4.7	11 ¼	3.9	9 ¼
18	6.2	15		4.6	11	3.3	8	2.3	5 ½	5.2	12 ½	4.4	10 ½
20	6.9	16 ½		5.0	12	3.6	8 ¾	2.6	6 ¼	5.8	14	4.9	11 ¾
24	8.2	19 ¾		6.0	14 ½	4.3	10 ¼	3.1	7 ½	6.9	16 ½	5.8	14
30	10.1	24 ¼		7.5	18	5.3	12 ½	3.8	9	8.5	20 ½	7.2	17 ½
36	12.1	29		8.9	21 ¼	6.4	15 ¼	4.5	10 ¾	10.2	24 ½	8.6	20 ¾

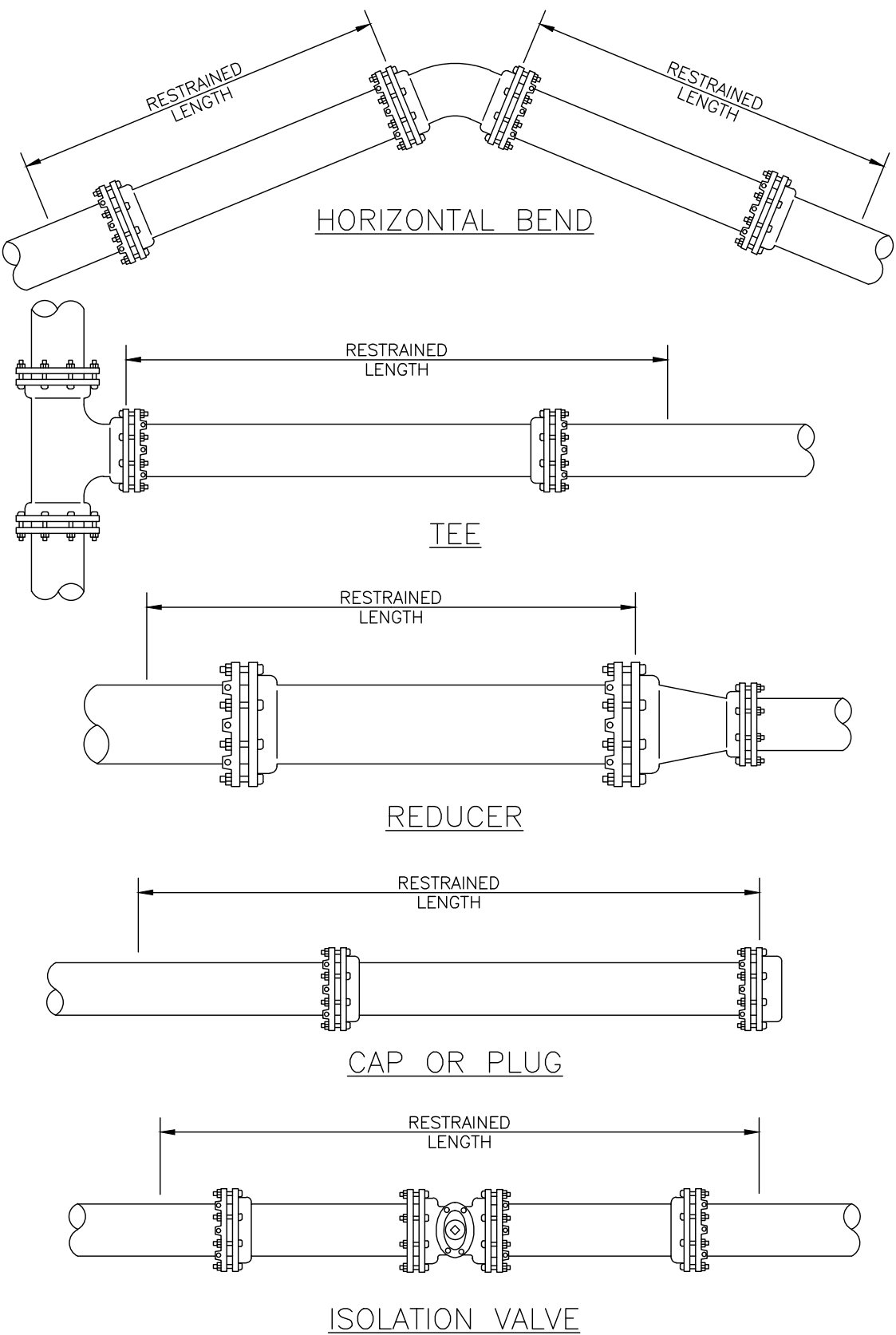
REINFORCEMENT MAT SCHEDULE											
FOR DIM. "B" BETWEEN 5.75' & 12.5' USE #4 @ 8" EACH WAY											
FOR DIM. "B" LESS THAN 5.75' USE #3 @ 8" EACH WAY											

NOTES:

- ALL THRUST BLOCKS SHALL BE CAST IN PLACE. FITTINGS ADJACENT TO THRUST BLOCKS SHALL BE WRAPPED IN POLYETHYLENE.
- THIS TABLE IS BASED ON WATER PRESSURE=180 PSI WITH AN ALLOWABLE SOIL BEARING PRESSURE=2000 PSF, CONCRETE STRENGTH f_c =3000 PSI, REINFORCEMENT f_y =60,000 KSI. THRUST BLOCK SHALL BE CAST AGAINST FIRM UNDISTURBED SOIL.
- FOR LARGER "B" DIMENSIONS IT IS NECESSARY TO CHECK THAT PIPE IS SUFFICIENTLY DEEP TO ALLOW 15" MIN. SOIL COVER OVER TOP EDGE OF THRUST BLOCK.
- RESTRAINED JOINTS MAY BE USED IN LIEU OF THRUST BLOCKS TO SAVE SPACE. THRUST BLOCKS SHALL BE USED IN SITUATIONS WHERE THRUST BLOCKS AND RESTRAINED JOINTS ARE BOTH REQUIRED.



MANATEE COUNTY			CONCRETE THRUST BLOCKS	UG-7
PUBLIC WORKS DEPARTMENT				
REV. BY	DATE	MAY 10, 2011		
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MANATEE COUNTY PUBLIC WORKS DEPARTMENT			RESTRAINED LENGTHS FOR PIPE	UG-10
REV. BY CLB/BR	DATE 11/10	MAY 10, 2011 DATE OF APPROVAL		
			PAGE 110	



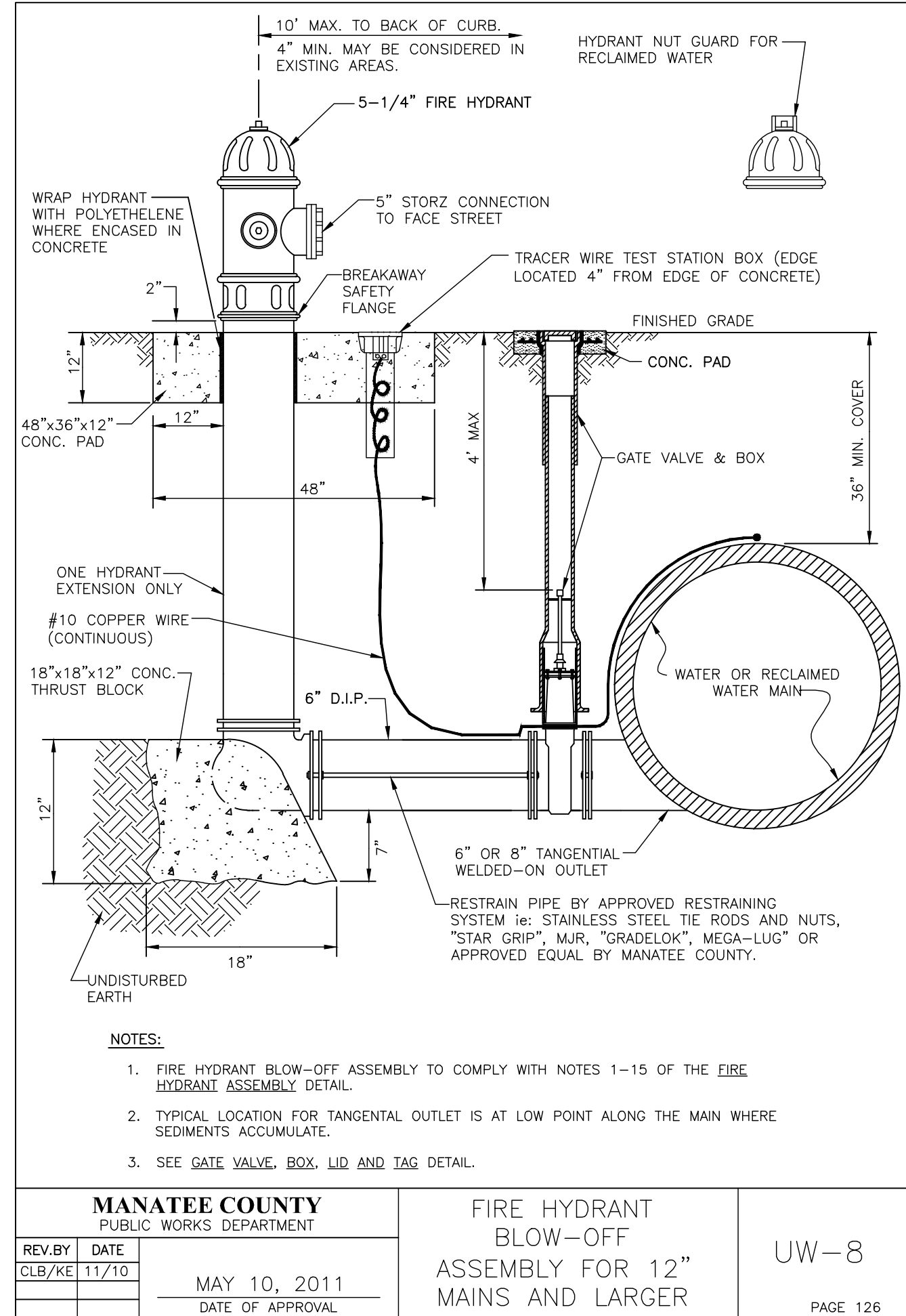
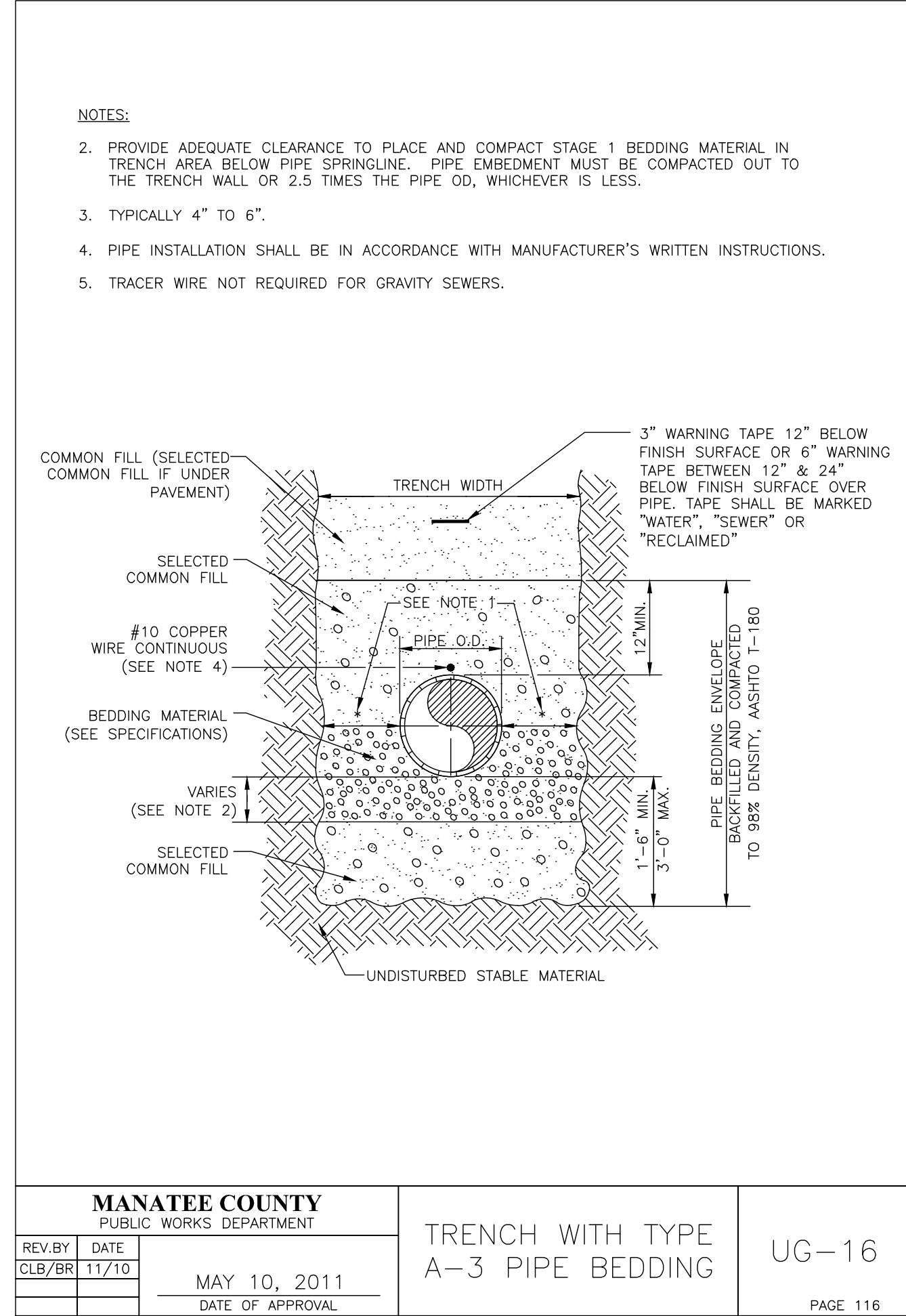
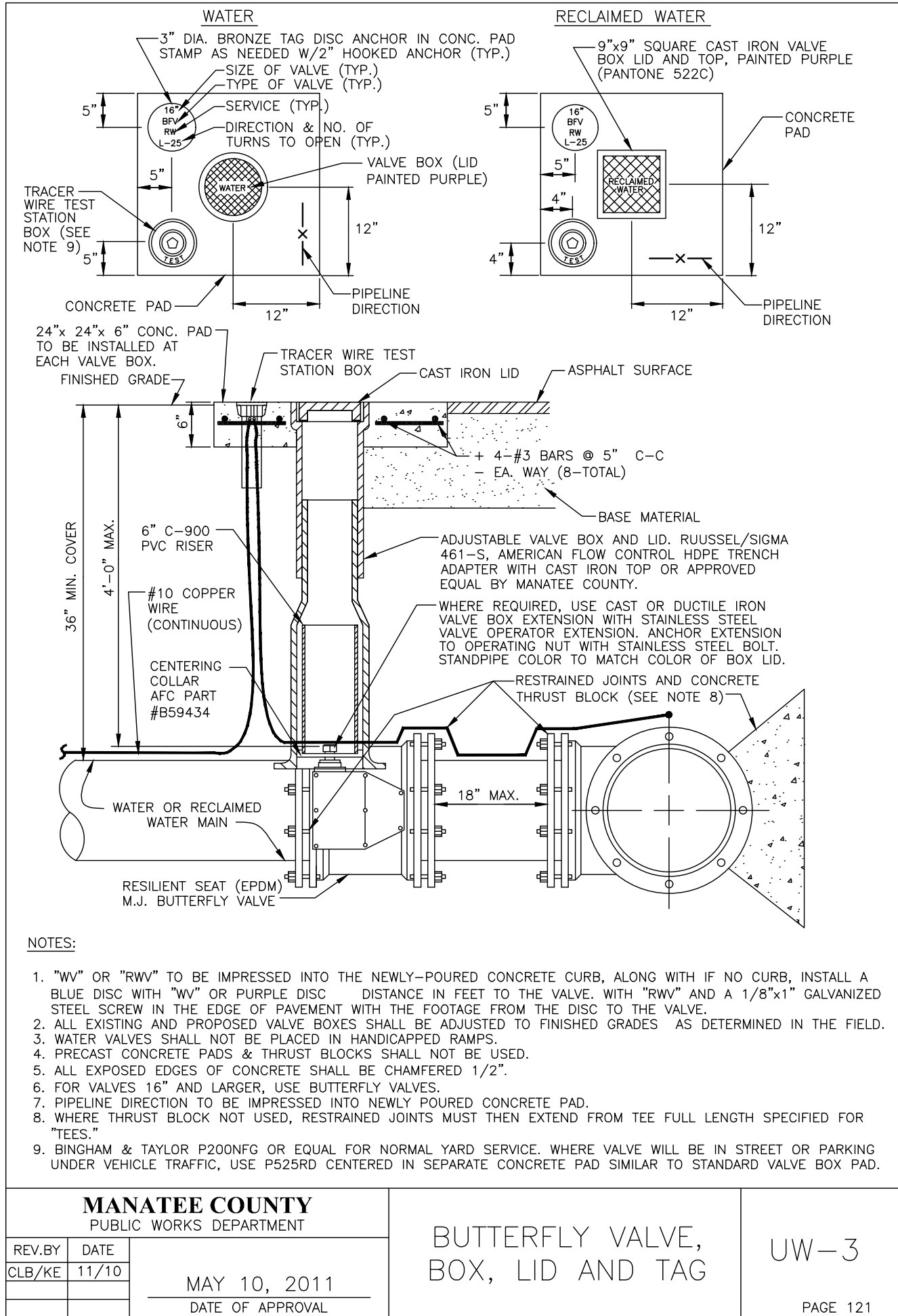
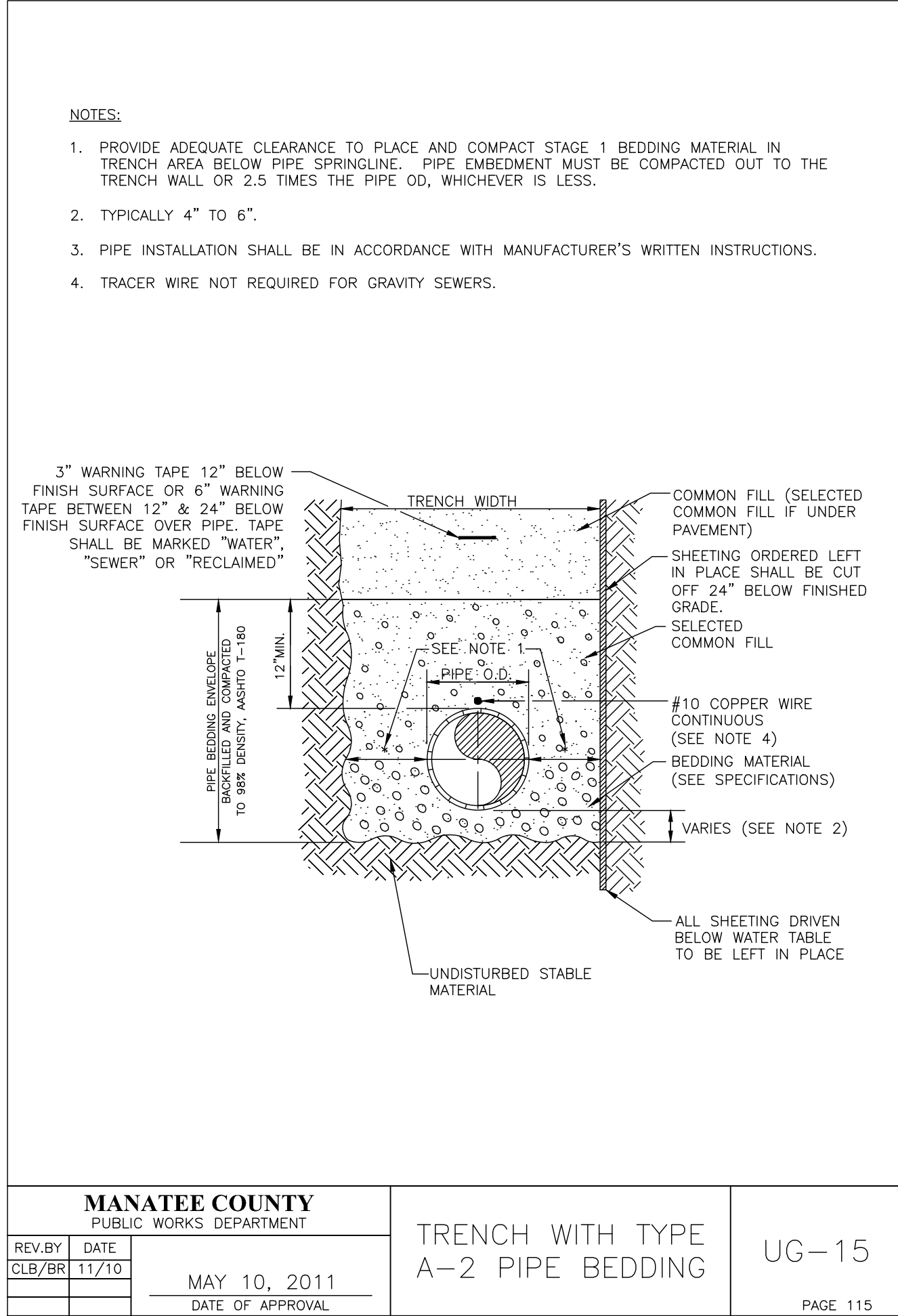
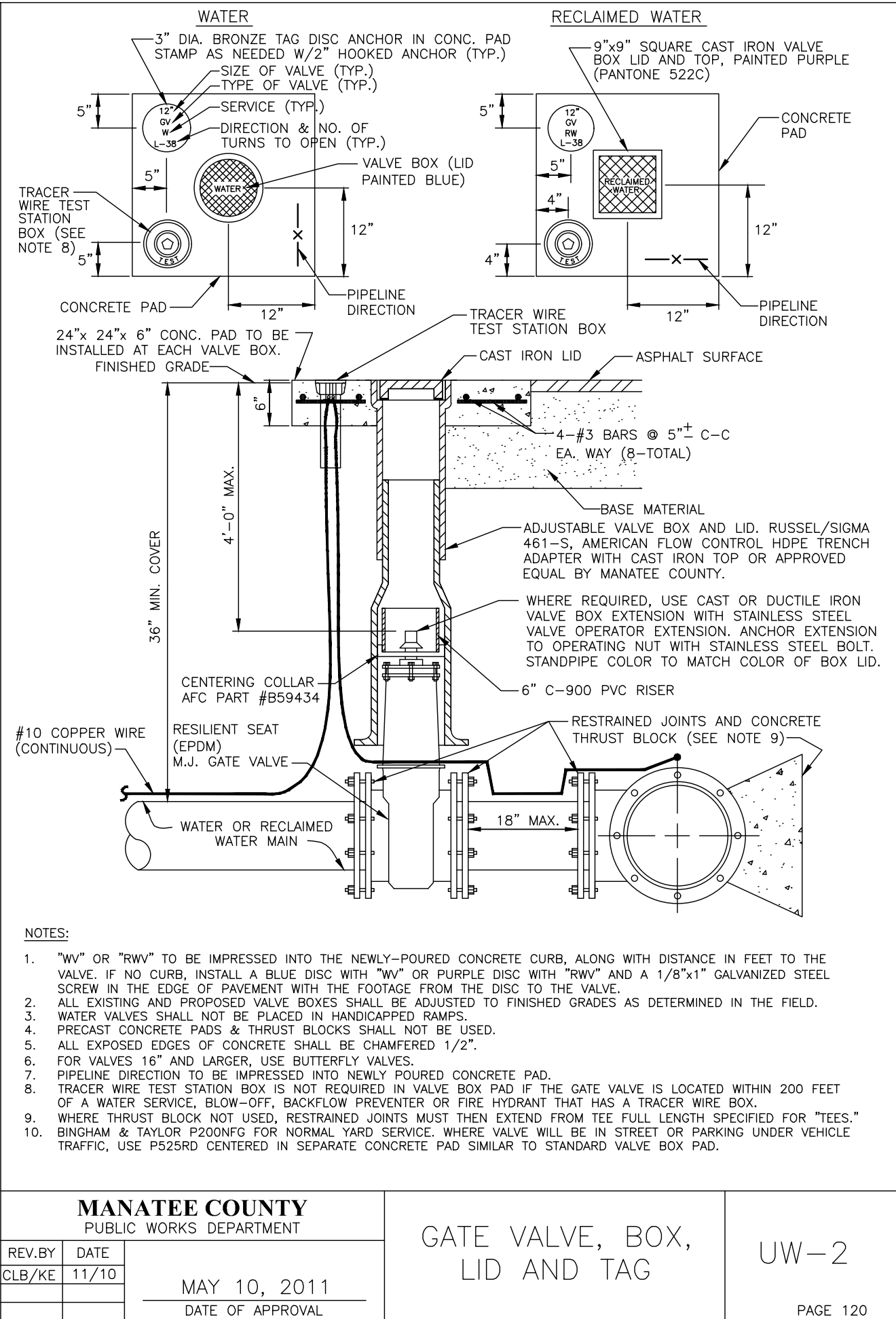
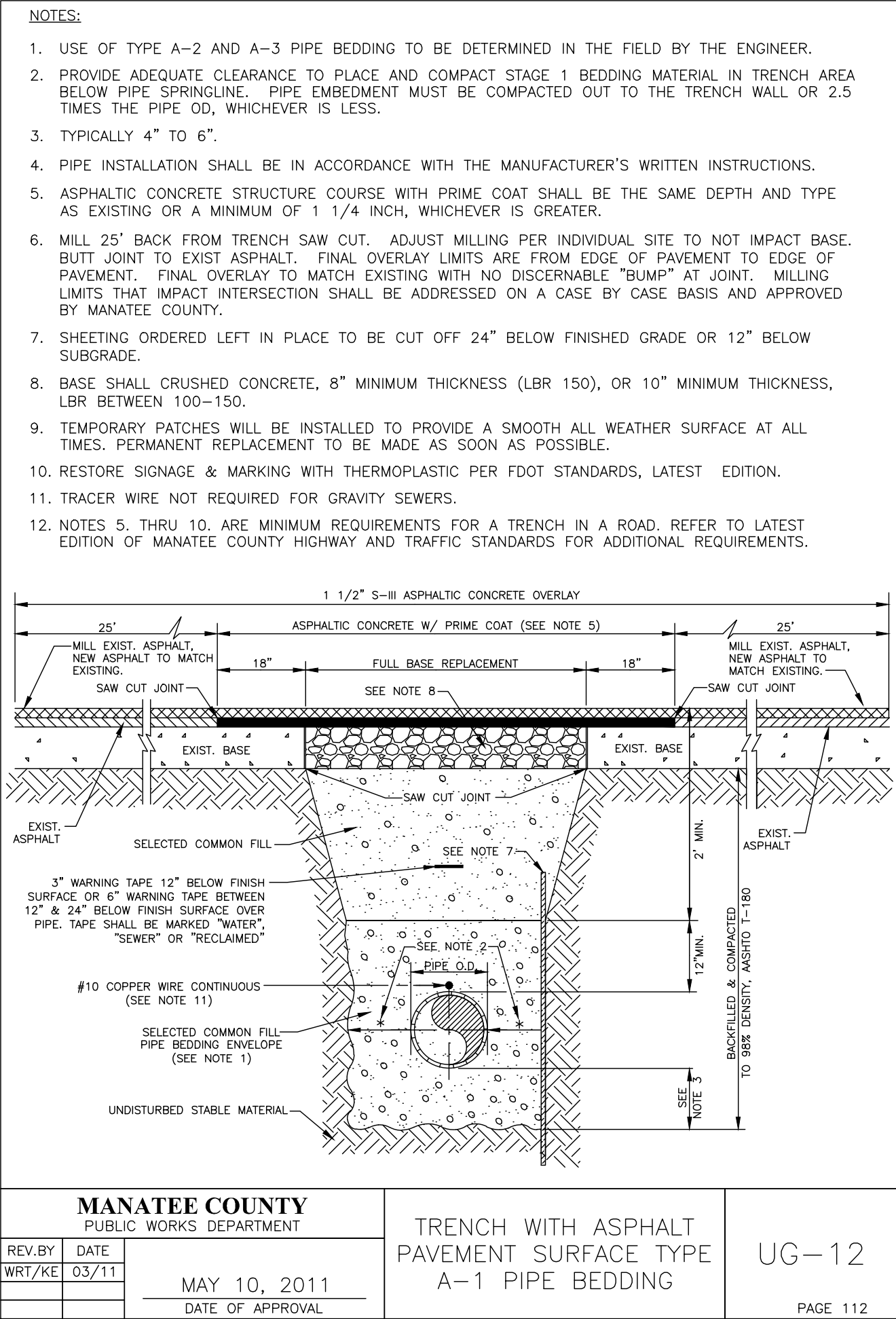
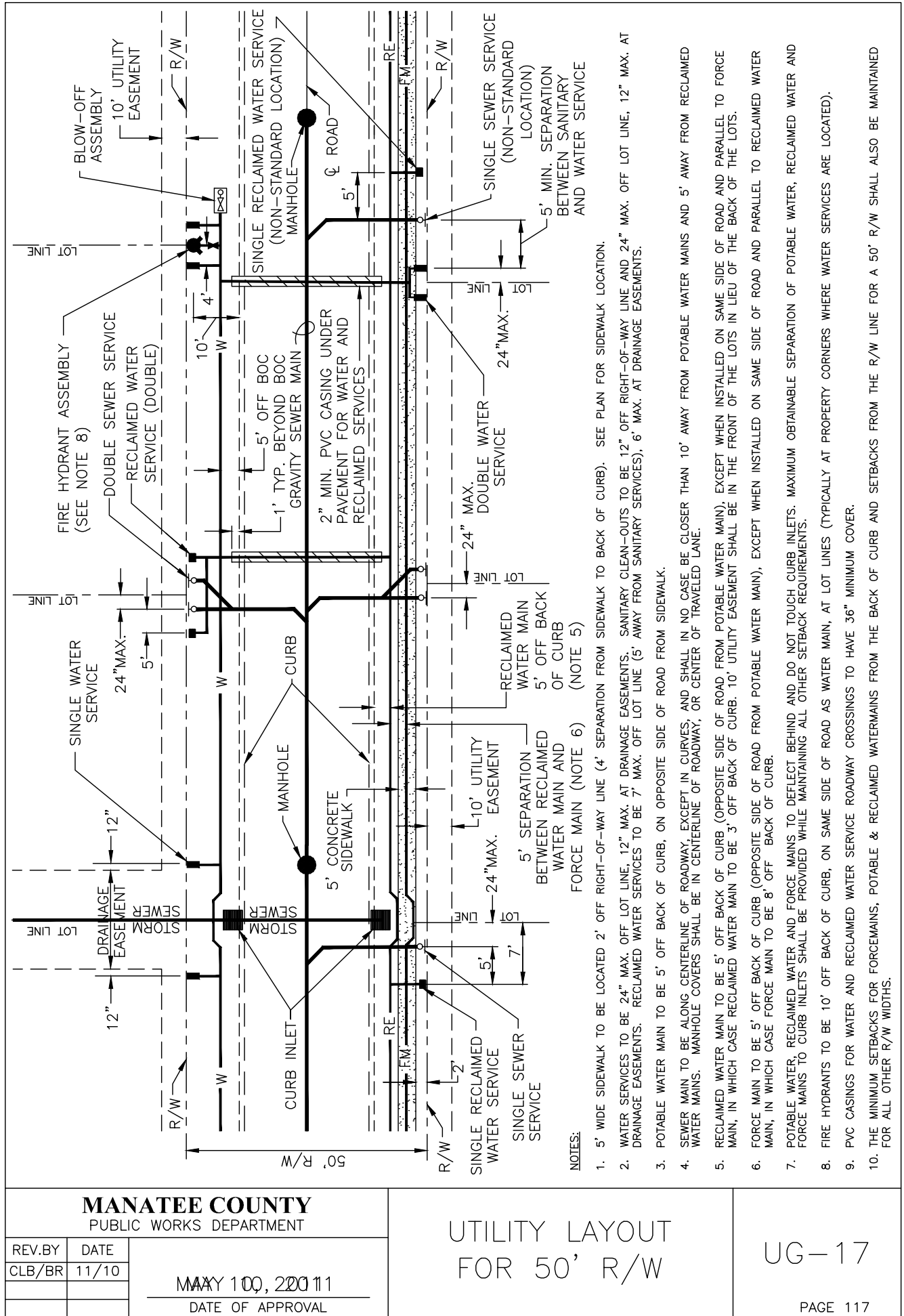
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

63RD AVE. E. & 39TH ST. E.

16" DIP TRANSMISSION WATER MAIN LOOP

DETAILS

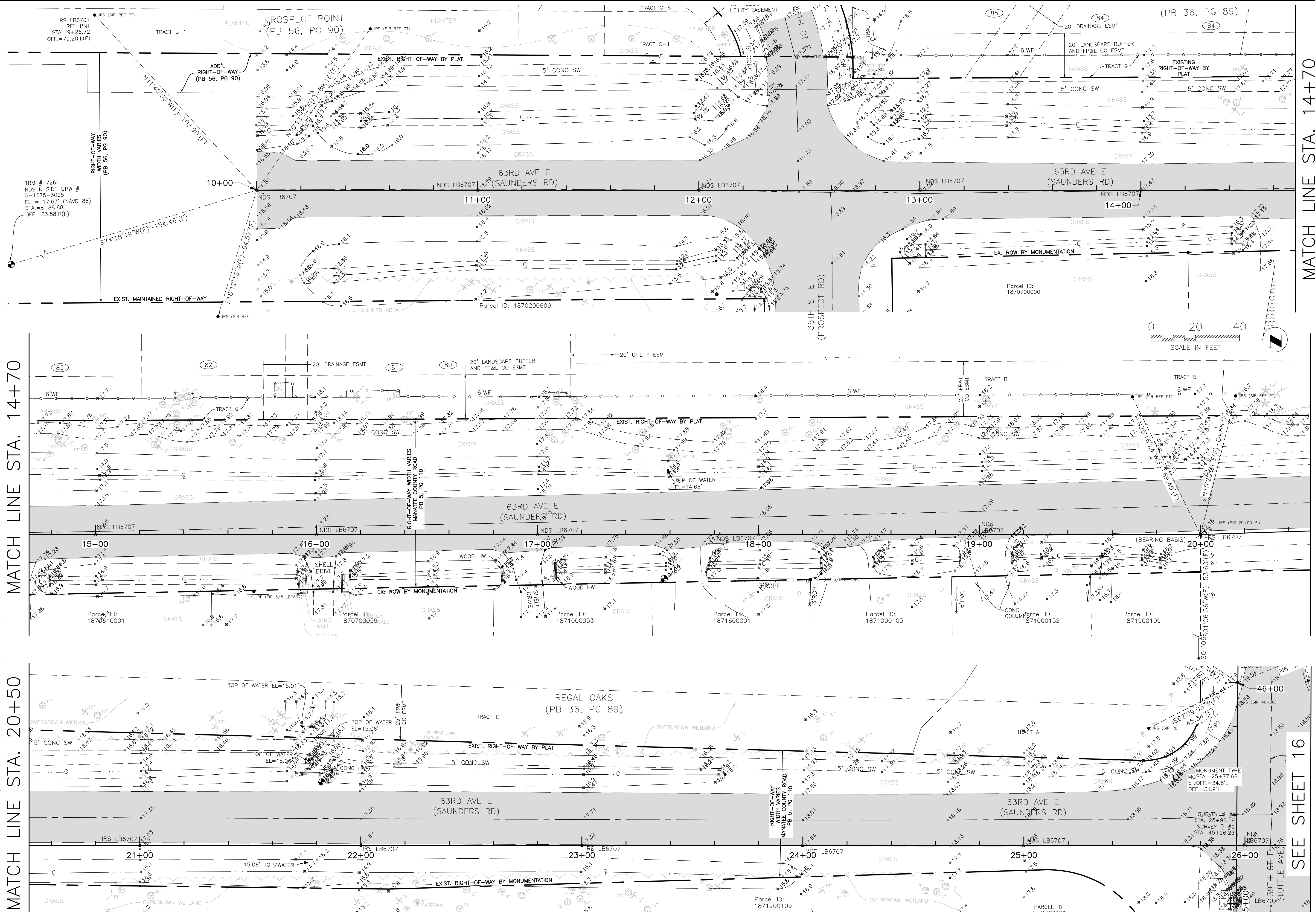
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PROJECT #		404-6031770	
SURVEY #		620_63rd-39th	
SEC./TWN./RGE		20&21/35s/18e	
SCALE		PER PLAN	
	BY	DATE	
SURVEYED	JTP	2/28/15	
DESIGNED	JSS	06/15	
DRAWN	CB/JSS	06/15	
CHECKED	JSS	10/15	
<div>J. SHOWN SHOWN FLORIDA PROFESSIONAL ENGINEER No. 60923 STATE OF FLORIDA 11/5/15 PROFESSIONAL ENGINEER Signature Date</div>			
SHEET 11 OF 17			



COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT S:\PWD_Engineering\Share\Util_Eng_Design\PROJ\WTR_LINE\Proj\Water_Line-63rd Ave E & 39th St E Loop\DWG\39th-WM Trans Loop.dwg, 15 Survey Control Sheet, 11/15/2015 2:24 PM Shea Shoun, 1:1, ANSI full bleed D (34.00 x 22.00 inches)

MATCH LINE STA. 14+70


MATCH LINE STA. 20+50



MATCH LINE STA. 14+70

MATCH LINE STA. 20+50

MATCH LINE STA. 26+30



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

63RD AVE. E. & 39TH ST. E.

16" DIP TRANSMISSION WATER MAIN LOOP

EX. TOPO & SURVEY CONTROL SHEET

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	404-6031770
SURVEY #	620_63rd-39th
SEC./TWN./RGE	20&21/35s/18e
HORIZ. SCALE	PER PLAN
VERT. SCALE	1"=2'

	BY	DATE
SURVEYED	JTP	2/28/15
DESIGNED	JSS	06/15
DRAWN	CB/JSS	06/15
CHECKED	JSS	10/15

J. SHEA SHOUN P.E.

FLORIDA PROFESSIONAL ENGINEER

No. 60923

STATE OF FLORIDA

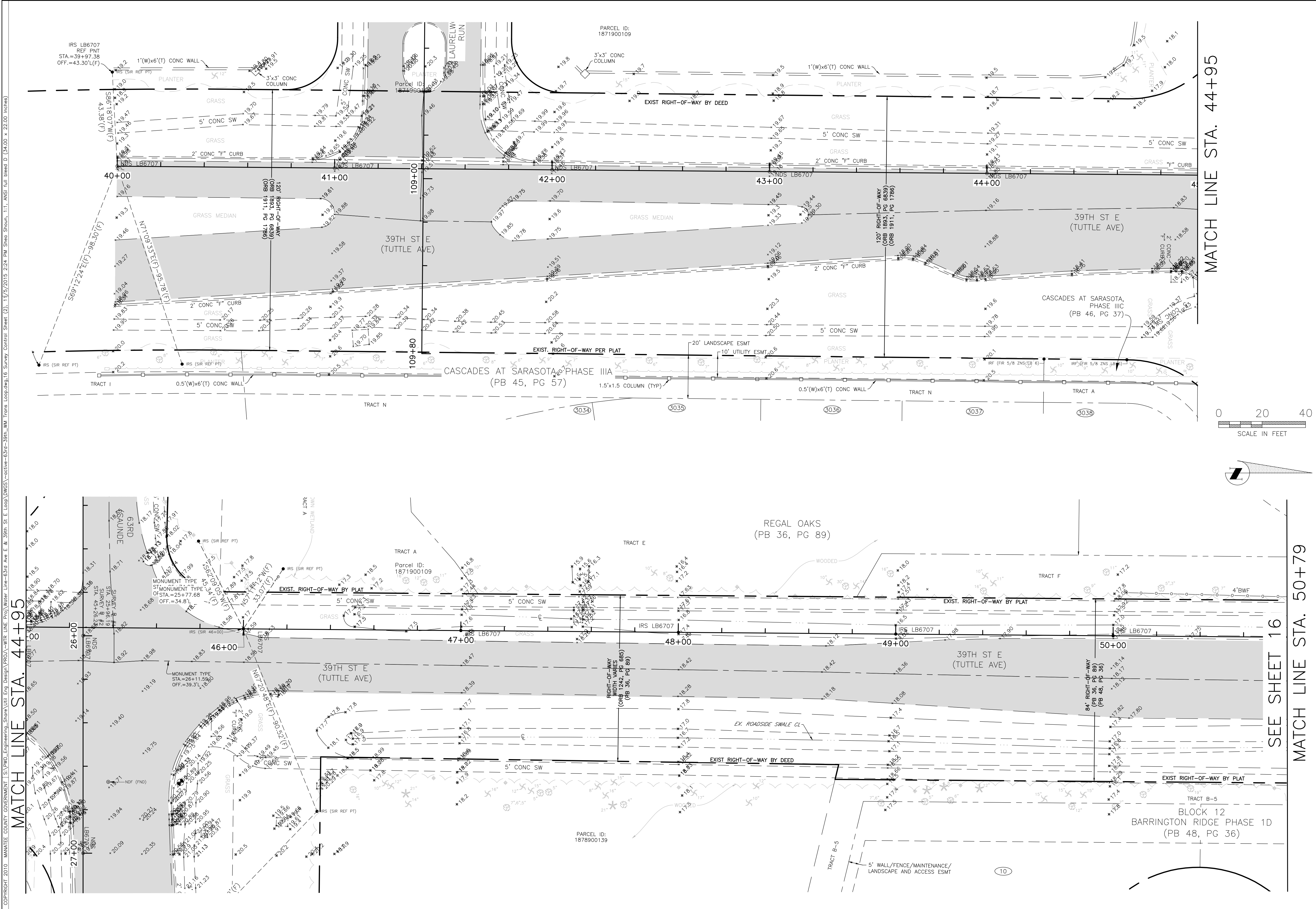
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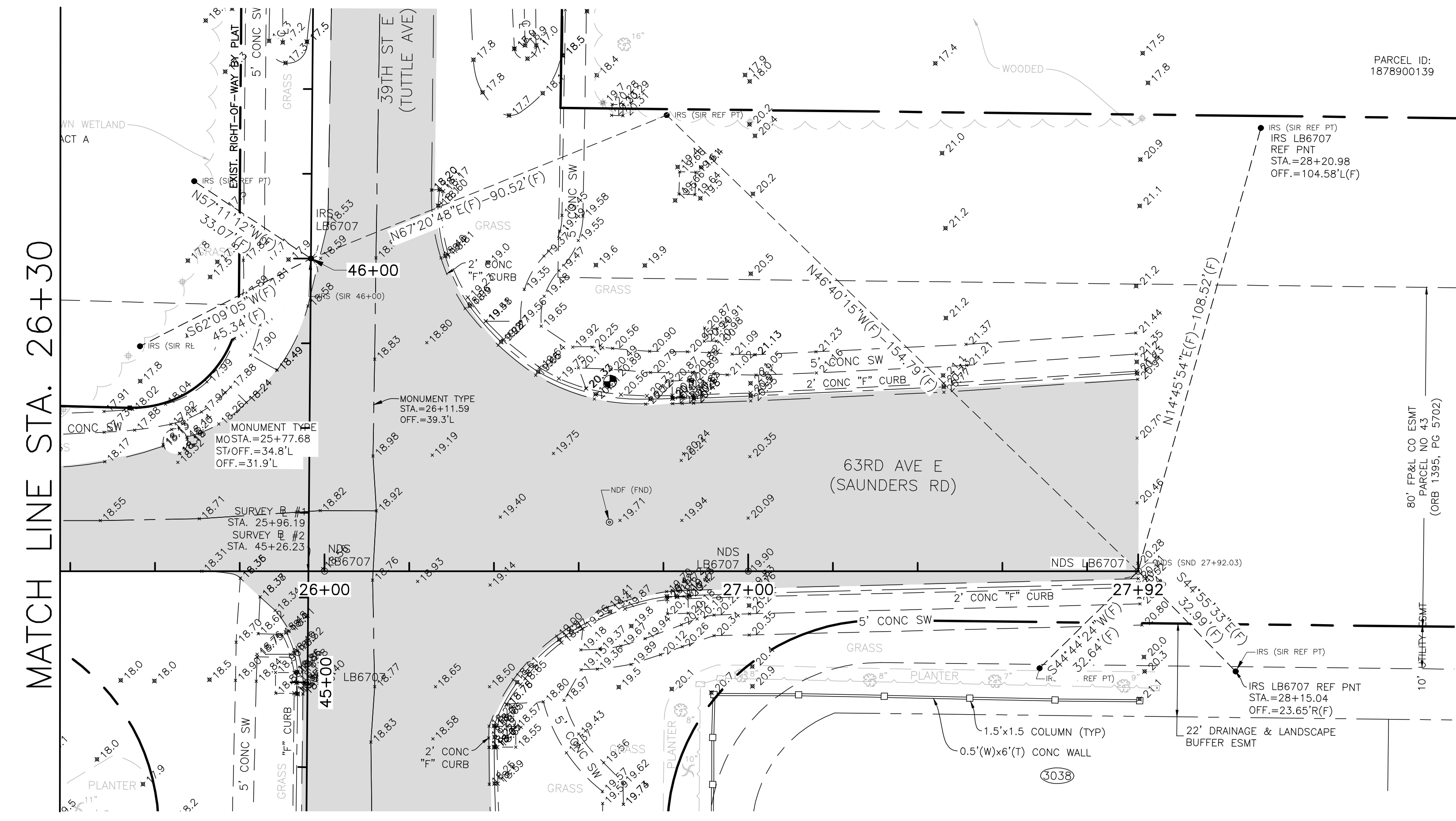
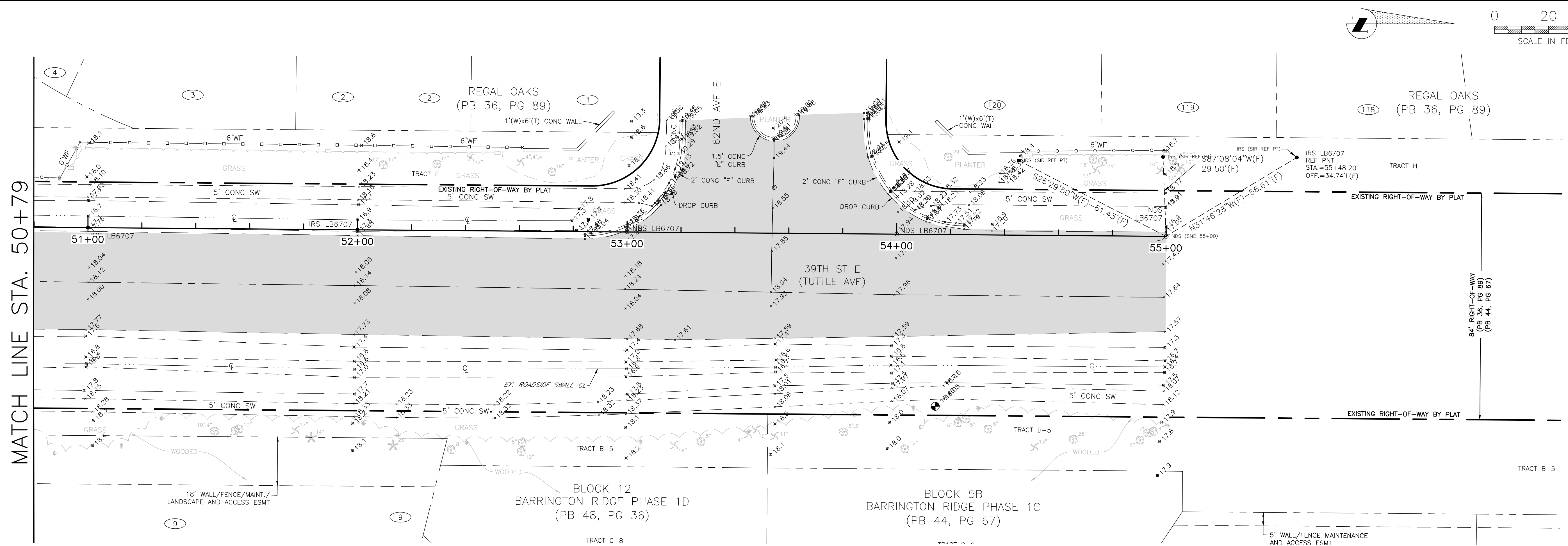
SHEET 15 OF 17

SEE SHEET 16

EX. TOPO & SURVEY CONTROL SHEET

J. SHELDON S. SHOOK, P.E.
 JOHN S. SHOOK
 FLORIDA PROFESSIONAL ENGINEER
 No. 60923
 STATE OF
 11/5/15
 FLORIDA
 PROFESSIONAL ENGINEER
 Signature: _____





63RD AVE. E. & 39TH ST. E.

16" DIP TRANSMISSION WATER MAIN LOOP

EX. TOPO & SURVEY CONTROL SHEET

REVISION	DESCRIPTION	BY	DATE		
NO.					
PROJECT #		404-6031770			
SURVEY #		620_63rd-39th			
SEC./TWN./RGE		20&21/35s/18e			
HORZ. SCALE		PER PLAN			
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SURVEYED		JTP	2/28/15		
DESIGNED		JSS	06/15		
DRAWN		CB/JSS	06/15		
CHECKED		JSS	10/15		

Professional Engineer Seal for John S. Shoukri, State of Florida, License No. 60923, dated 11/5/15.