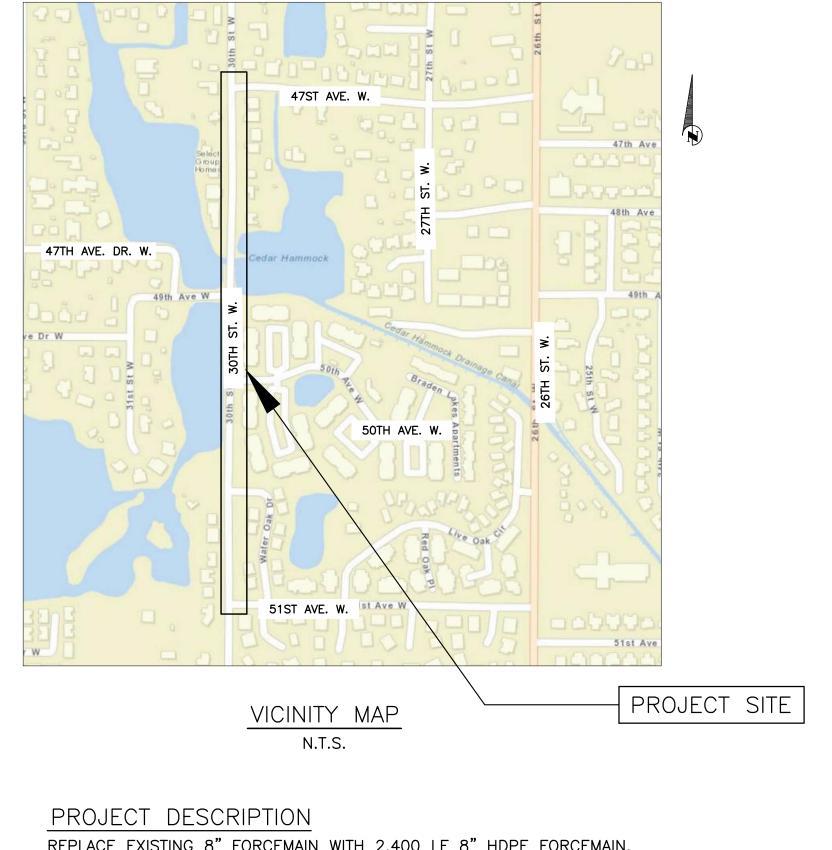
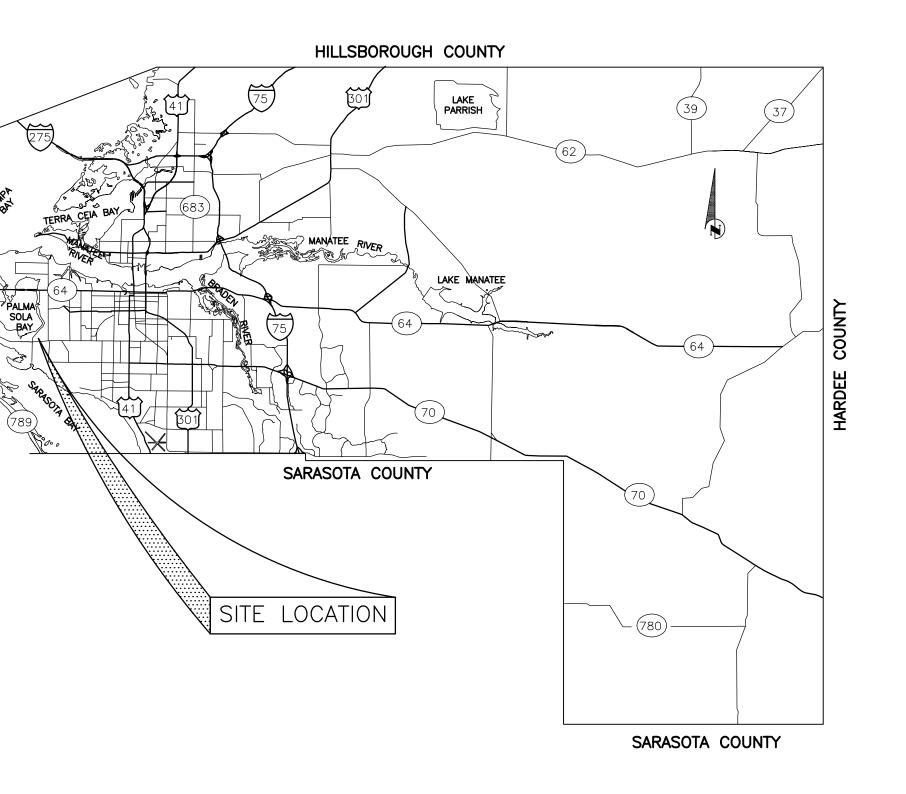
FORCE MAIN 30A REPLACEMENT 51ST AVE. WEST TO 47TH AVE. WEST 404-6028387



REPLACE EXISTING 8" FORCEMAIN WITH 2,400 LF 8" HDPE FORCEMAIN. EXISTING FORCEMAIN TO BE GROUTED AND ABANDONED IN PLACE.



August 2019



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BID PLANS

INDEX OF SHEETS

COVER NOTES & LEGEND GRAVITY MANHOLE REHABILITATION PLAN & PROFILE DETAILS SURVEY CONTROL EROSION CONTROL

NAVD 88 DATUM



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1.	ERAL ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ANTHONY RUSSO P.E. AND CAN BE REACHED AT (941)—708—7450 X7349.			
	SITE VISITS ARE MANDATORY FOR ALL BIDDERS. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND	TDANS		
	AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLAN	IS.		
	OCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BIE COST TO THE OWNER.			
	THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVE DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, A WILL BE BASED.	ER INVE	STIGATION TH	IEY MAY
	THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AF DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COM			
	AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR C FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.			
	NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PRO- SECTION 01310 OF THE SPECIFICATIONS. <u>TY</u>	JECT RE	ESTRAINTS, R	EFER TO
	THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90—96, LAWS OF FLORIDA AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.			
11. 12.	THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UT THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATI PROVIDING A CONTINUOUS SAFE WORKSPACE. RONMENTAL	TILITIES,	POWER LINE	ES, ETC.
	THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASUF TDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF TH PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.			
	STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPIL FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILE CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.			
	STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY E SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENO THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.	GINEER	BEFORE INST	FALLATION.
	SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH DPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BE DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.	D, CONS	STRUCTED, O S SHALL BE	R IN THE FULLY
17.	ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING C WITHIN THREE (3) DAYS OF EXCAVATION.	CONSTRU	JCTION AND	BE SODDED
	SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONS SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS M BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.			
	ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALI REPAIRED AS REQUIRED.	l be ci	LEANED OUT	AND/OR
	THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUC /ICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AN THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT COU	ND/OR F	PERMITS FOR	
	FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.			
23.	ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT—OF—WAY AND/OR EASEMENTS S THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PRO PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.			
	THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS-OF-WAY USE PERMIT AND THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTME DF TRAFFIC CONTROL AND SAFE PRACTICES". A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE	N. ALL I INT OF	MAINTENANCE TRANSPORTAT	: and tion "manual
	THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE / SHOWN ON THE PLANS OR NOT. THE HEADWALLS SHALL BE REPLACED IN ACCORDANCE WITH F.D.O.T. STANDARDS.			
	T IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT—OF—WAY LINES, BASE LINES, BENCH M AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.	· ·	,.	
	THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.			
	A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRI DONE OUTSIDE OF THE RIGHT—OF—WAY OR EASEMENT.	IVEWAY	CONSTRUCTIC	ON WORK IS
29.	TIES LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST FIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEN ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SH PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND D JTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY EFFECT HIS WORK. ALL EXI EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATIO CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.	MENTS, HOWN O DIMENSIC ISTING U	UTILITIES, ET R RELOCATEI INS OF ALL JTILITIES TO	C. WHICH D SINCE THE EXISTING BE
	THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, TENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHA ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO	LL REP	AIR AND/OR	REPLACE
31.	DWNER. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTI MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN AC DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY O COMPLETED AT NO ADDITIONAL COST TO THE OWNER.	CORDAN	NCE WITH TH	E CONTRACT
	FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION, WHICH MAY REQUIRE BY—PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILE SECTION 02720.			
33.	ALL WATER SERVICES TO BE INSTALLED OR MODIFIED ON PRIVATE PROPERTY SHALL REQUIRE A PLUMBING PERMIT; A. THE CONTRACTOR'S PLUMBER SHALL INSTALL A REDUCED PRESSURE (RP) TYPE BACKFLOW PREVENTION ASSEMBLIES (BPA'S RELIEF VALVE AT THE POTABLE WATER METER WHENEVER ANY OF THE FOLLOWING CONDITIONS EXIST AT A PROPERTY: •IN-GROUND IRRIGATION SYSTEM, •SECONDARY SOURCE OF WATER (I.E. RECLAIMED WATER OR WELL), •SWIMMING POOL, •FIRE SPRINKLER SYSTEM,) EQUIF	PED WITH A	PRESSURE
N	REVISION DESCRIPTION	BY	DATE	

FORCE MAIN 30A REPLACEMENT **51ST AVE. WEST TO 47TH AVE. WEST NOTES & LEGEND**



64. THE CONTRACTOR IS RESPONSIBLE FOR ANY TRAFFIC CONTROL PLAN (TCP) IMPLEMENTED. THE TCP SHALL BE PREPARED BY AN INDIVIDUAL CERTIFIED TO PREPARE A TCP IN THE STATE OF FLORIDA THAT MEETS OR EXCEEDS THE REQUIREMENTS OF THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS LATEST EDITION (SERIES 600). ANY DEVIATIONS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA AND SUBMITTED TO COUNTY (AND FDOT) FOR APPROVAL AT LEAST FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COUNTY (AND FDOT) APPROVAL PRIOR TO IMPLEMENTATION AND FAILURE TO OBTAIN APPROVAL SHALL NOT BE GROUNDS FOR ANY DELAY CLAIM FOR TIME OR ADDITIONAL COMPENSATION.

MAINTENANCE OF TRAFFIC

REFERENCE 2010 EDITION OF FDOT UTILITY ACCOMMODATION MANUAL (UAM)

LEVEL "C" -SURFACE VISIBLE FEATURES SURVEY LEVEL "D" -EXISTING RECORDS OR GIS

LEVEL "B" -DESIGNATED BY GPR OR FLAGGING (HORIZONTAL)

LEVEL "A" -VISUALLY LOCATED OR SOFT DIGS (HORIZONTAL AND VERTICAL)

63. THE FOLLOWING IDENTIFIES THE QUALITY LEVEL OF EXISTING UTILITY LINEWORK ON PLANS.

ABLE TO PRESENT THE RECORD DRAWINGS TO THE COUNTY PROJECT MANAGER AND/OR INSPECTOR ON DEMAND AS THE WORK PROGRESSES. EXISTING UTILITY LOCATIONS

FORCE MAIN CUT AND PLUG POINTS. AS-BUILT DRAWINGS SHALL BE ANNOTATED EACH DAY AS THE WORK PROCEEDS AND SHALL BE AVAILABLE TO THE COUNTY PROJECT MANAGER AND/OR FIELD INSPECTOR FOR REVIEW ON AN ONGOING BASIS. AS-BUILT DRAWINGS SHALL PROVIDE THE HORIZONTAL AND VERTICAL INSTALLED LOCATION OF ALL NEW PIPELINE, FITTINGS, VALVES AND FORCE MAIN APPURTENANCES REFERENCED TO FIXED SURFACE FEATURES THAT ARE SHOWN ON THE CONSTRUCTION DRAWINGS AND/OR RIGHT-OF-WAY LINES, PROPERTY CORNERS OR OTHER SURVEYED POINTS. THE CONTRACTOR SHALL BE

INFORMATION REQUIREMENTS IN SECTION 1.14 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 1.14 WILL BE PROVIDED UPON REQUEST. 62. THE CONTRACTOR SHALL MAINTAIN AS-BUILT DRAWINGS OF THE WORK AS CONSTRUCTED. AS-BUILT DRAWINGS SHALL INCLUDE THE LOCATION OF ABANDONED

61. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 1.14 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS AT NO COST TO

THE OWNER. RECORD DRAWINGS SHALL BE SIGNED & SEALED BY A SURVEYOR CURRENTLY LICENSED BY THE STATE OF FLORIDA. ALL RECORD DRAWING

ENGINEER.

STANDARDS" AND MANATEE COUNTY UTILITY STANDARDS UNLESS NOTED OTHERWISE ON THE PLANS. 60. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE

59. WATER MAINS CROSSING OVER OR UNDER SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES SHALL BE LAID PER CURRENT EDITION OF "10 STATE

FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING. 58. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.

57. ALL NEW PIPE LINES SHALL BE PIG CLEANED (4" AND LARGER), FLUSHED, PRESSURE TESTED, DISINFECTED AND CERTIFIED PRIOR TO TIE-INS TO EXISTING

SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS. WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBLINE, BRADENTON HERALD SARASOTA HERALD TRIBUNE, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.

INFORMATIONAL SIGNS IN THE NEIGHBORHOOD AT LEAST TWO DAYS (48 HRS) PRIOR TO THE WATER SHUT-OFF. REFERENCE SECTION 01580, PARAGRAPH 1.03 OF THE SPECIFICATIONS. WHEN FEASIBLE, "DOOR HANGERS" SHALL BE DELIVERED TO AFFECTED RESIDENCES AT LEAST TWO DAYS (48 HRS) PRIOR TO WATER SHUT-OFF. FOR LARGE PROJECTS WITH HUNDREDS OF HOMES AFFECTED, THE CONTRACTOR SHALL ALSO MAKE EXTENSIVE USE OF THE MEDIA AND

54. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS. 55. ALL PENETRATIONS OF EXISTING STRUCTURES SHALL BE BY MECHANICAL ROTARY CORE DRILLING METHOD. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY. 56. THE CONTRACTOR, PRIOR TO ANY TEMPORARY WATER SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING

51. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE RECOMMENDED DEFLECTION. 52. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.

53. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF

50. ALL FITTINGS FOR PRESSURE CLASS-RATED PIPE SHALL BE RESTRAINED DUCTILE IRON. RESTRAINED LENGTHS OF PIPE SHALL ADHERE TO THE REQUIREMENTS AS SHOWN ON THE DETAIL SHEETS.

49. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.

48. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.

LINES AND GRADES SHOWN ON THE PLANS AND PROFILES. MODIFICATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD.

47. ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE

BOTTOM.

46. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH

43. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED. 44. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.

REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE

42. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEPT DAILY AS PART OF DAILY CLEAN UP.

41. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S

B. A LICENSED PLUMBER SHALL INSTALL THE BPA'S IN ACCORDANCE WITH THE CURRENT FLORIDA PLUMBING CODE AND MANATEE COUNTY CODE OF

34. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.

35. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED

36. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND

38. CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T.

SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN AND OF THE F.D.O.T. DESIGN STANDARDS. CONCRETE WITH A 3,000 PSI @ 28 DAYS SHALL BE USED.

39. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS

COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN

40. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE,

WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A

ORDINANCES, AND SHALL SELECT A PRESSURE RELIEF VALVE WITH AN APPROPRIATE PRESSURE SET POINT TO PROTECT THE CUSTOMERS' PLUMBING AND

NOT ALLOW EXCESSIVE LEAKAGE DUE TO SYSTEM SUPPLY PRESSURE. A PRESSURE REDUCING VALVE MAY BE NECESSARY UPSTREAM OF THE PRESSURE RELIEF VALVE, WHERE NORMAL SUPPLY PRESSURE EXCEEDS 80 PSI. CONTRACTOR SHALL COORDINATE WITH COUNTY CROSS CONNECTION CONTROL STAFF AS

C. IF IN-GROUND IRRIGATION SYSTEM IS CONNECTED TO THE POTABLE WATER LINE, AN ADDITIONAL REDUCED PRESSURE (RP) BPA SHALL BE INSTALLED AT

E. CONTRACTOR SHALL COORDINATE WITH COUNTY CROSS CONNECTION STAFF & PRIVATE PROPERTY OWNER AS REQUIRED. CROSS CONNECTION STAFF SHALL

PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.

•FLOOD ZONE DESIGNATION, (IF ONLY FLOOD ZONE, INSTALL A DOUBLE CHECK BPA),

• SOLAR WATER HEATING SYSTEM.

THE POINT OF CONNECTION.

REQUIRED.

RESTORATION

CUTTING.

CONSTRUCTION

• MULTISTORY OR MULTIFAMILY RESIDENTIAL FACILITY.

D. VACUUM BREAKERS SHALL BE INSTALLED ON ALL EXTERNAL HOSE BIBBS.

AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.

37. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.

SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.

DETERMINE WHICH PROPERTIES REQUIRE A BPA AND TYPE OF BPA TO BE INSTALLED.

OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST.

• PROPERTY THAT ABUTS OR INCLUDES A BODY OF WATER (INCLUDING RIVER, BAY, LAKE OR POND),

DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.

45. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.

65. THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHT-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN (TCP). THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES". A TCP SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. 66. THE CONTRACTOR SHALL USE, BUT ARE NOT LIMITED TO, FDOT INDICES 415, 600, 615, 616, AND 621. THE RECOMMENDED FDOT DESIGN STANDARD INDICES

67. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY DRAINAGE. THERE WILL BE NO DIRECT PAY FOR THIS WORK. COSTS SHALL BE INCLUDED IN

68. MOTORIZED AND MECHANICAL EQUIPMENT SHALL BE EFFECTIVELY SHIELDED, PADDED, OR LOCATED TO MINIMIZE NOISE.

ARE CONCEPTUAL

THE COST OF PIPE.

CLOSURES OR DETOURS

SEPARATE PAYMENT.

STANDARD INDEX 600.

69. THE CONTRACTOR WILL NOTIFY ALL EMERGENCY AND RESCUE AGENCIES LOCATED IN THE PROJECT VICINITY 24 HOURS IN ADVANCE OF ANY PROPOSED LANE

70. ACCESS TO ALL SIDE STREETS AND DRIVEWAYS MUST BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.

71. USE FDOT INDEX NO. 619 FOR TRAFFIC CONTROL MEASURES WHEN CONSTRUCTION EQUIPMENT IS DRIVEN ON OPEN TRAVEL LANES. THE REGULATORY SPEED IN WORK ZONES SHOULD BE AS CLOSE TO NORMAL CONDITIONS AS POSSIBLE, UNLESS NOTED ON THE TRAFFIC CONTROL PLANS. 72. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO WORKING NEAR THEIR EXISTING FACILITIES.

73. CONSTRUCTION SEQUENCES SHALL BE COORDINATED TO PROVIDE POSITIVE DRAINAGE OF THE TRAVELWAYS AT ALL TIMES.

74. ANY MOT ITEM NOT SPECIFICALLY LISTED UNDER A PARTICULAR PAY ITEM SHALL BE CONSIDERED SUBSIDIARY TO OTHER BID ITEMS. THERE SHALL BE NO

75. THE MAXIMUM SPACING BETWEEN WARNING DEVICES USED FOR DELINEATION BETWEEN THE TRAVELWAY(S) AND CONSTRUCTION AREA SHALL BE AS PER FDOT

76. ALL DETOURS, IF APPROVED BY THE COUNTY, SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D. LATEST EDITION) AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION (600 SERIES). ANY DETOUR RECOMMENDED BY THE CONTRACTOR MUST BE SUBMITTED TO THE COUNTY (AND FDOT) FOR APPROVAL AT LEAST FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COUNTY (AND FDOT) APPROVAL PRIOR TO IMPLEMENTATION AND FAILURE TO OBTAIN APPROVAL SHALL NOT BE GROUNDS FOR ANY DELAY CLAIM FOR TIME OR ADDITIONAL COMPENSATION.

LEGEND

EXISTING

		\bullet	BENCH MARK		\bigcirc	BUSH			A	BBREVIATIONS
	СМ		CONCRETE MON	UMENT		TREE				
		0	IRON PIPE			OAK TREE			R/W	RIGHT OF WAY
		•	IRON ROD		- Ale and a second	PALM TREE			CONC	CONCRETE
		Δ	HUB		Million and a second second	PINE TREE			ASPH	ASPHALT
		0	NAIL & DISK						DRWY	DRIVEWAY
	(10)	2	ELEVATION						SWK	SIDEWALK
	(123	-	PARCEL ID NO.						EP	EDGE OF PAVEMENT
	1234 5678	-	PARCEL ID NO.			EDGE OF VEGETAT			BOC	BACK OF CURB
	(77)		LOT NO.			CHAIN LINK FENC	E			
	PP	¢	GUY WIRE POWER POLE			WOOD FENCE BARBED WIRE FEN				
	ГГ	У Ф	LIGHT POLE			FORCE MAIN	NCE			
		Ď	MAIL BOX			POTABLE WATER				
		d	SIGN			RECLAIMED WATER				
	REF	9	REFLECTOR			SANITARY SEWER				
		0	SPRINKLER			STORM DRAIN				
		G	GAS MARKER			GAS LINE				
		-0-	BACKFLOW PRE	VENTER		OVERHEAD CHARTI	ER			
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	WV	\bowtie	WATER VALVE		BE I	UNDERGROUND EL	ECTRI	С		
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	WM		WATER METER		FTR	UNDERGROUND FF	RONTIE	R		
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	SB#´	•	SOIL BORING LO	DCATION	——— ОН ———— (OVERHEAD UTILITY				
	TEL	TED	TELEPHONE SEF	RVICE BOX	+++++++++++++++++++++++++++++++++++++++	RAIL ROAD TRACK	S			
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SCOTT N (941) 7	-		T. 7650	(941) 906-				VILLE I FL. 34		ED WATSON PHONE: (813) 470–5875
FAX: (94				FAX: (941) John.Plott@		(941)	377-	-3722		FAX: (813) 470–5993
CITY OF	•					FAX: (941)	373-7	7660	
PUBLIC					WER & LIGHT AVENUE EAST	FLORIE)A GA	S TRAN	SMISSION	CHARTER/BRIGHTHOUSE COMMUNICATION
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BRADEN (941) 7			05	GREG COKE		TAMPA CHAD				BRADENTON, FL. 34208-5535 TOM WRIGHT
JIM MCL		00		(941) 723- FAX: (941)		PHONE	E: (81	13) 46	6–3327	(941) 748–3816 EXT. 21348
ATMS				EMERGENCY	: 1-800-4-00	TAGE E-mai	il: ch	ad.harr	ell@sug.com	Tom.Wright@charter.com
2101 4	7ТН ТЕ	RRACE	EAST	Greg_Coker	@fpl.com	PEACE	RIVE	R ELEC	TRIC	SUNSHINE STATE ONE CALL OF
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		5				PROJECT #			-6028387	JOHN SUSHOUN, P.E.
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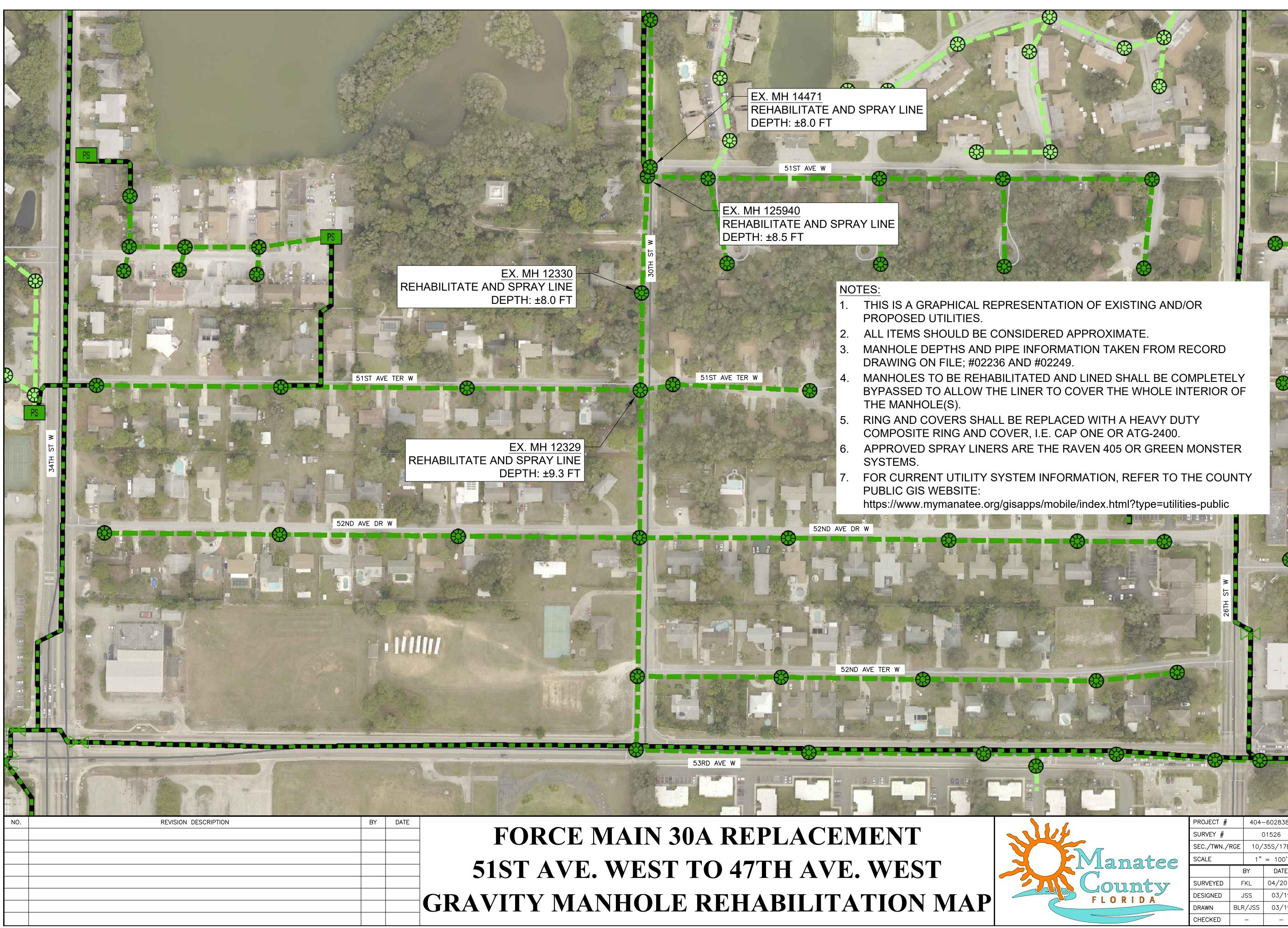
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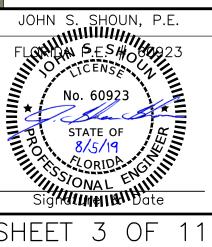
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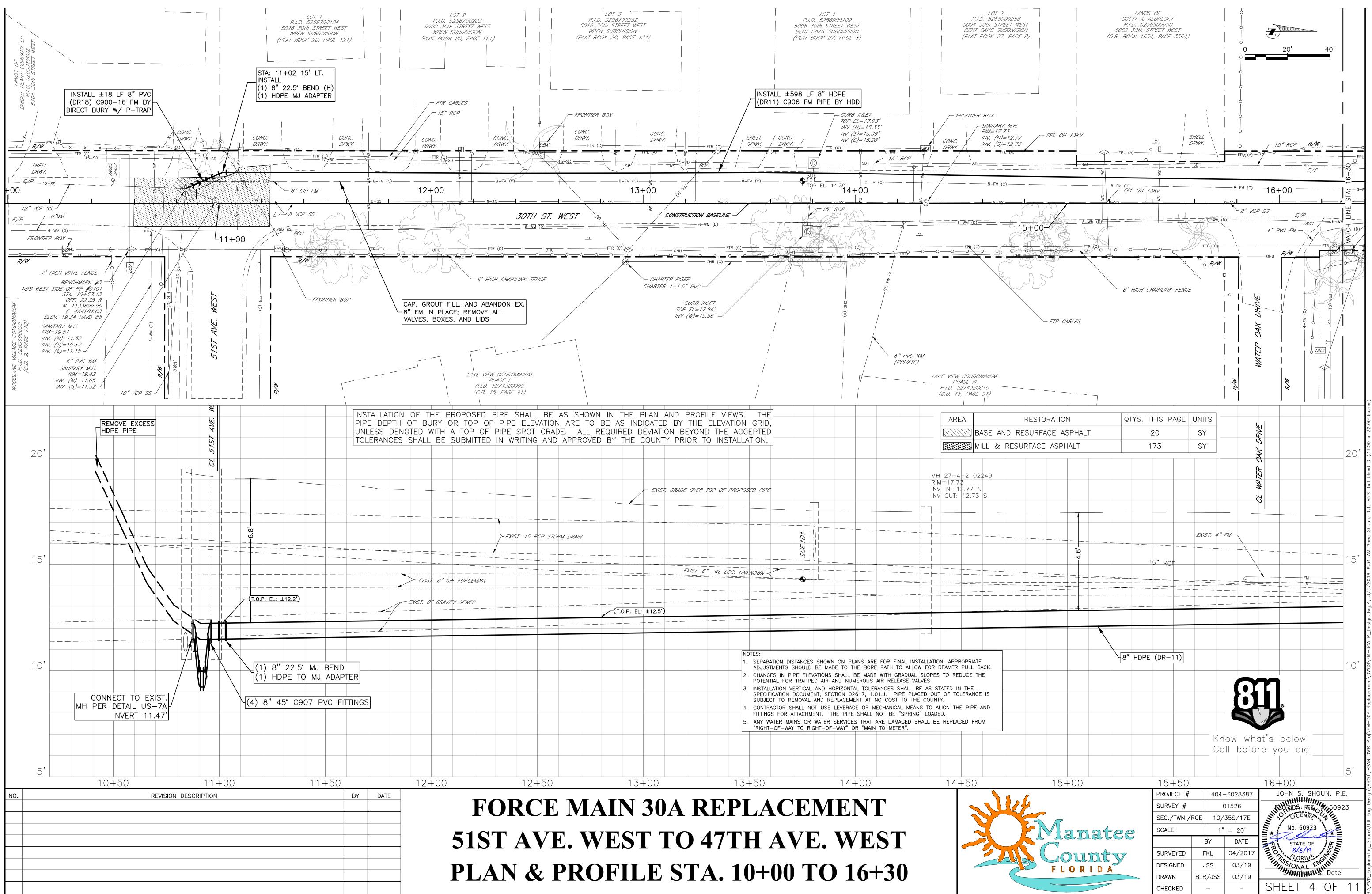
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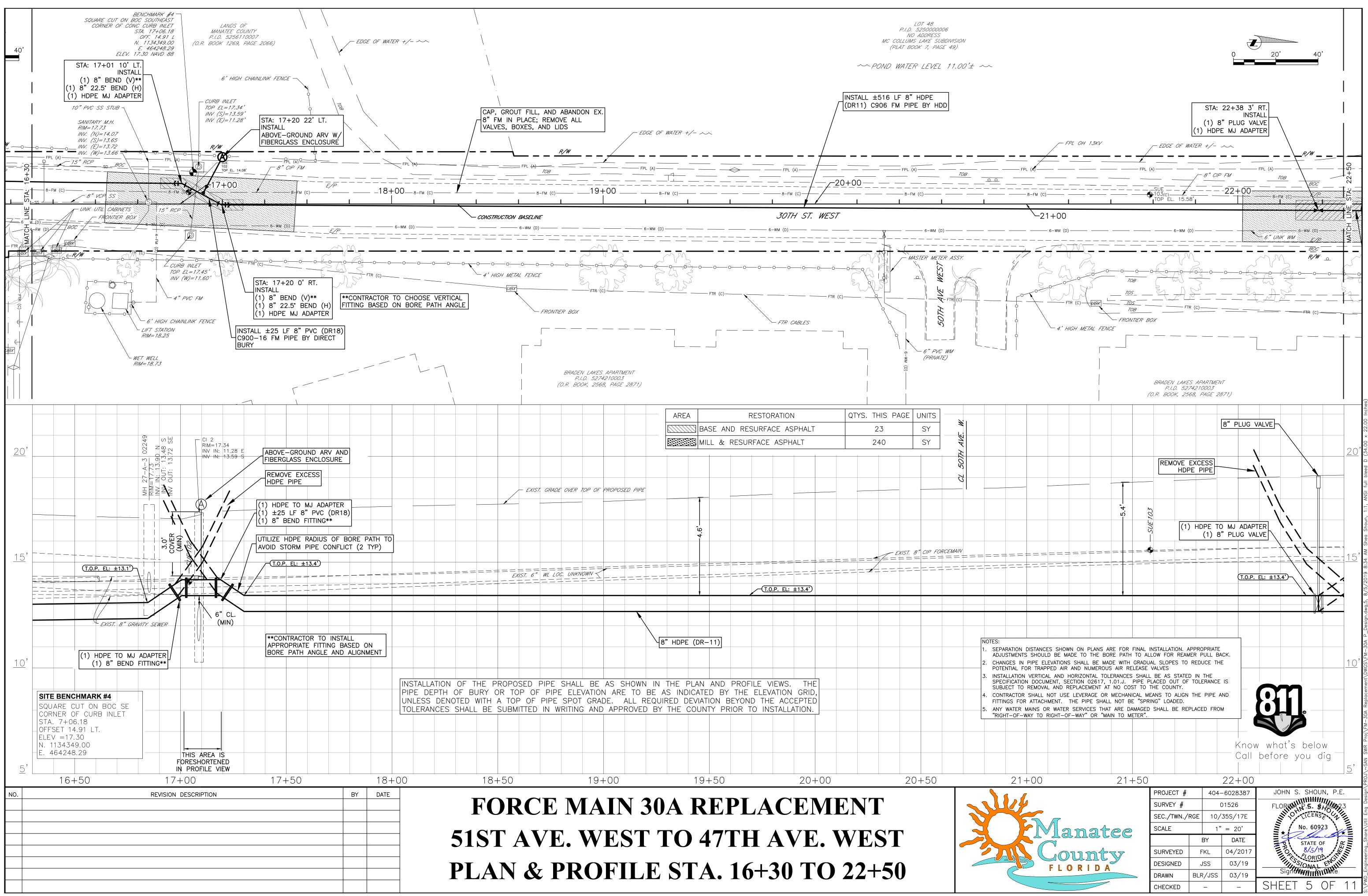
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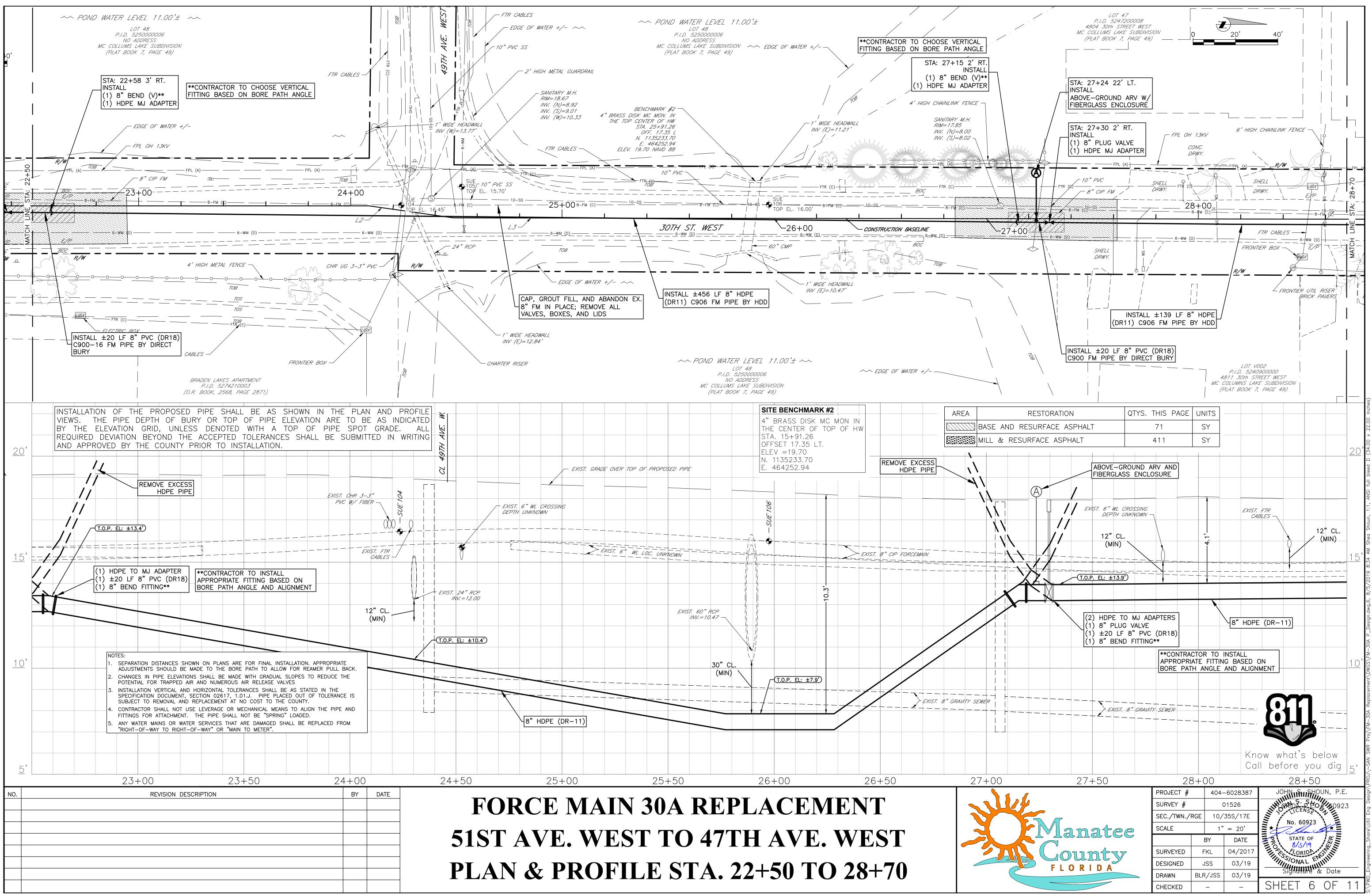


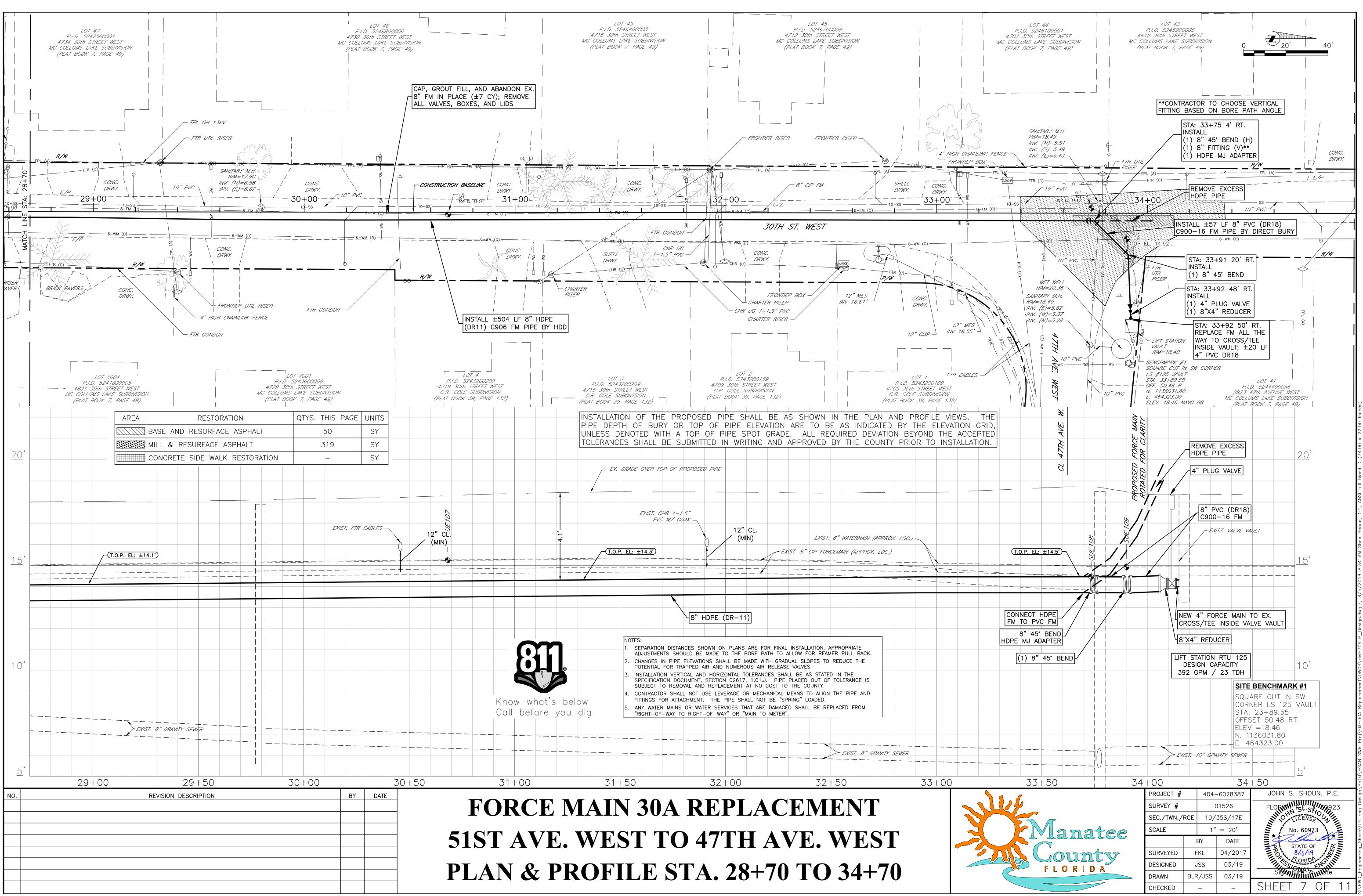
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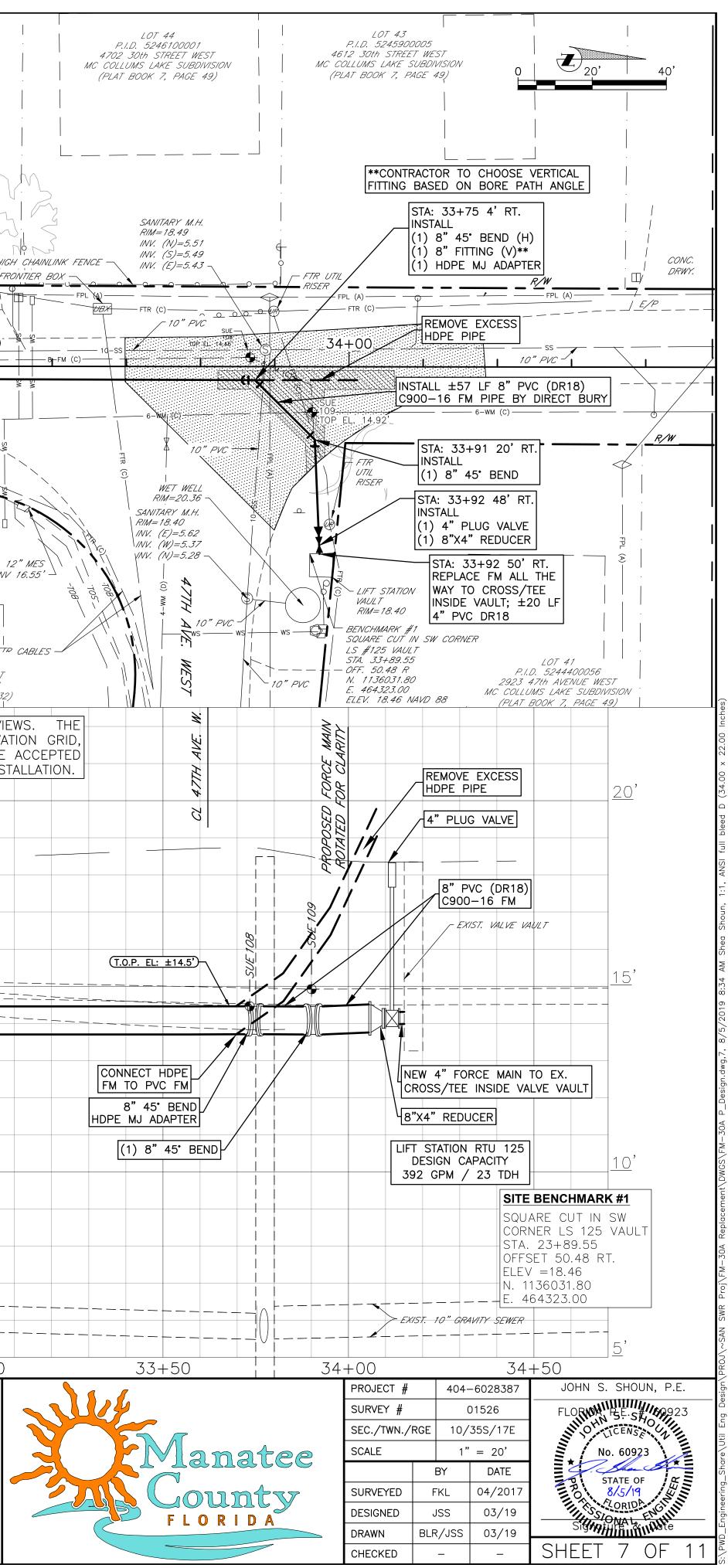


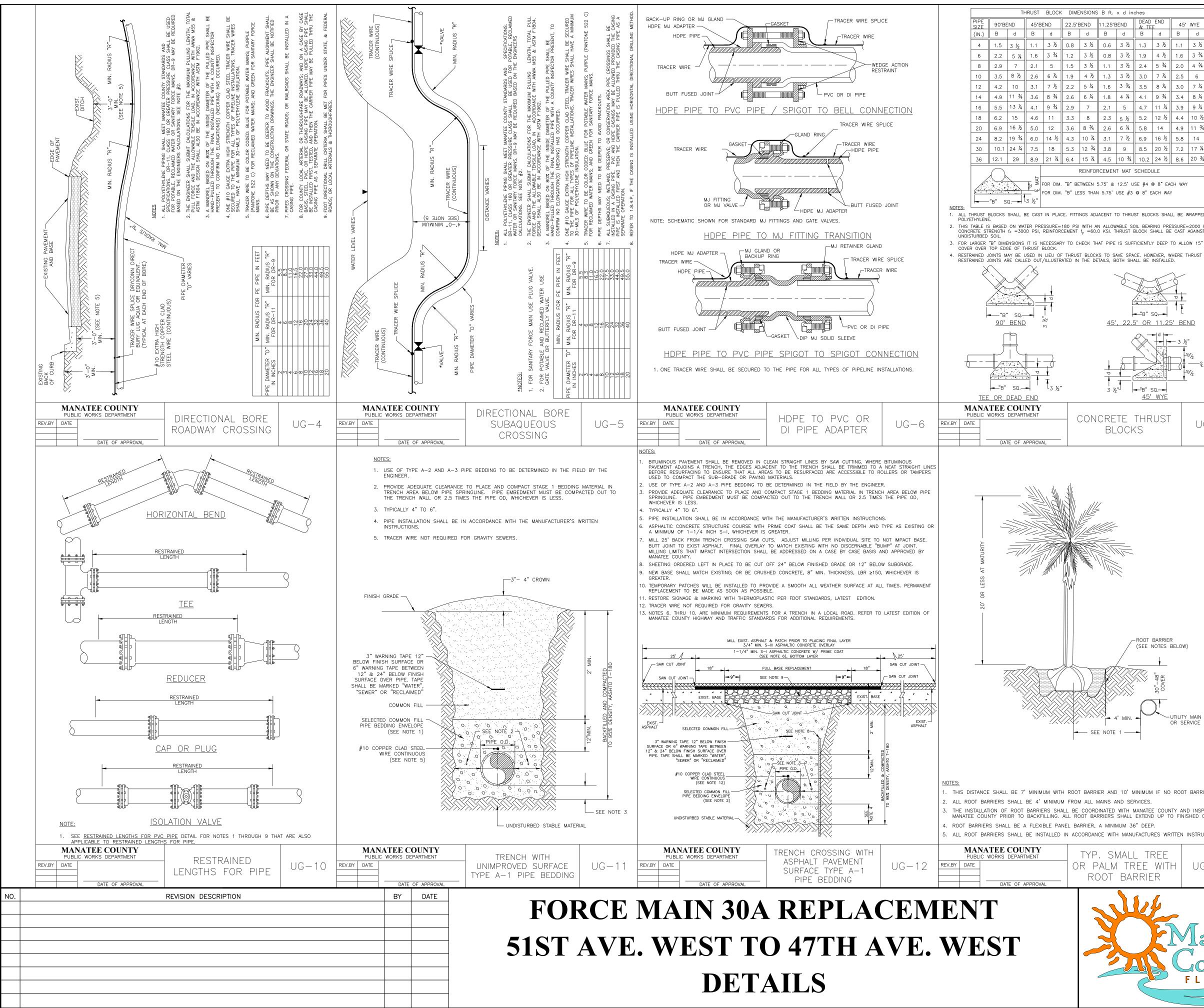




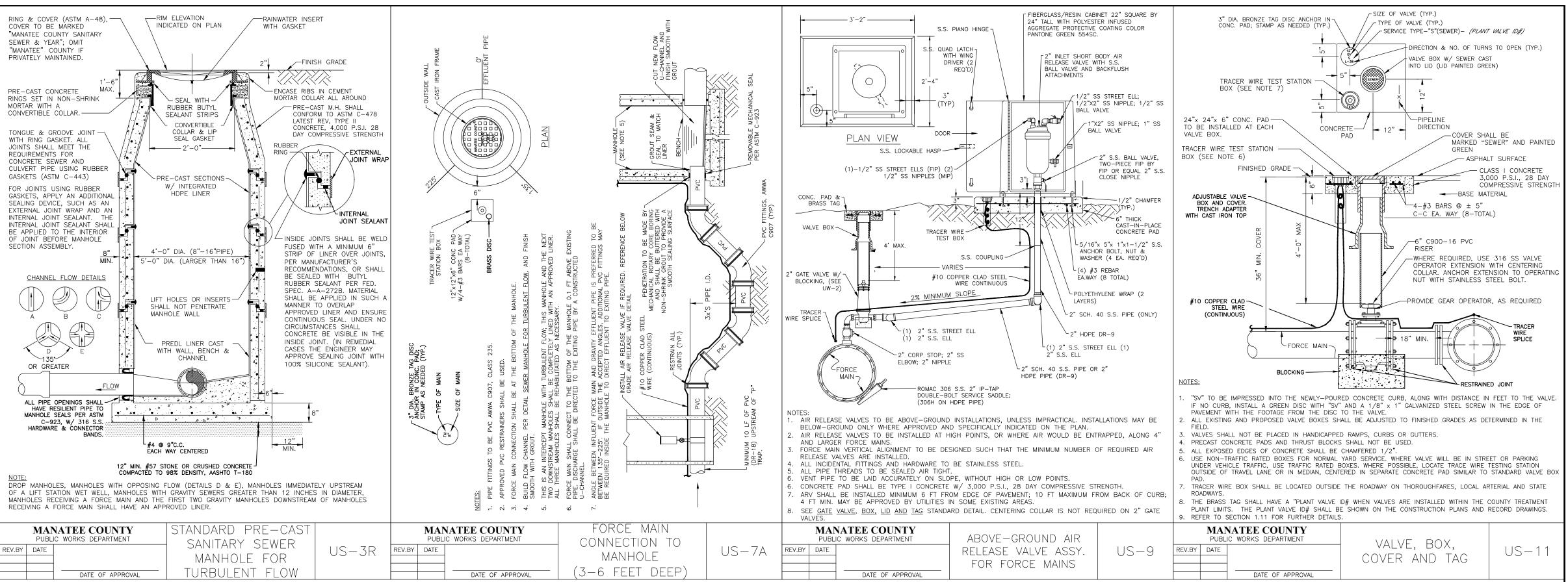








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HRUST BLOCKS SHALL BI E SOIL BEARING PRESSUI SUFFICIENTLY DEEP TO A SPACE. HOWEVER, WHERI SHALL BE INSTALLED.	IRE=2000 PSF, IST AGAINST FIRM ALLOW 15" MIN. SOIL RE THRUST BLOCKS AND	1 2 3 4 5 6 7 8	<ul> <li>ALL V/ OF PIF</li> <li>ALL IS A 180</li> <li>PIPE S</li> <li>RESTR,</li> <li>LENGTI</li> <li>THE R CLASSI PRESS CONDI RESTR,</li> <li>RESTR,</li> <li>LENGTI</li> <li>ALL RI</li> </ul>	ALVES AI PE. OLATION PSI TE SIZES AF AINED P HS SHOV ESTRAINI FICATION URE, 3 TIONS M AINED LE AINED LE HS FOR	ND FIT VALVE ST PRI RE GIVE IPE LE IPE LE WN ARI ED LEN FEET ( UST BI ENGTHS ENGTHS ENGTHS ENGTHS ENGTHS	TINGS ES MUS ESSURE EN IN I NGTHS E FOR NGTHS VITH AV OF COV E DETE S MODI S TO B NT HAF	SHALL T BE IN CHES ARE ARE A TES SHOWI VA T VER AN RMINE FIED A E APF	BE RE PROPE ITHER 5. GIVEN I ST PRES ND 1.5 D BY 1 ACCORD PLIED T E SHAL	ESTRAIN RLY AN DIRECTI N FEET SSURE HESE T TRENCI FACTO INE EN INGLY. O PIPE	NCHORED OR ION. OF 180 PS ABLES ARE H CONDITION OR OF SAFET IGINEER OF	CONNE RESTR BASED IS, 180 Y. ACTI RECORI DETAIL	) PSI TEST JAL BURY ) AND THE
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D' MINIMUM IF NO RO SERVICES. TH MANATEE COUNTY / ALL EXTEND UP TO FI MANUFACTURES WRITTEI	SERVICE DOT BARRIER IS USED. AND INSPECTED BY INISHED GRADE IN INSTRUCTIONS.	<ol> <li>ALL ROOT</li> <li>THE INST/ MANATEE</li> <li>ROOT BAF</li> <li>ALL ROOT</li> <li>LARGE PA</li> <li>MA</li> <li>PUB</li> </ol>	BARRIERS ALLATION ( COUNTY F RRIERS SH	S SHALL DF ROOT PRIOR TO ALL BE N S SHALL INCLUDE E COU	BE 4' BARRIE BACKFI MINIMUM BE INS E ROYAL	MINIMUN RS SHA ILLING. I 36" D TALLED	I FROM ALL BE ALL RC EEP. F IN ACC INGTON	DT BARR 1 ALL M COORDI DOT BAR LEXIBLE CORDANC IIAN, BIS YP.	IER AND MAINS AN NATED S BARRIE CE WITH SMARK A	(SEE N MIN. + 1 -	M IF NO COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT	TILITY MAIN R SERVICE AND INSPECTED BY FINISHED GRADE ANELS. FIEN INSTRUCTIONS. PECIES.
D' MINIMUM IF NO RO SERVICES. TH MANATEE COUNTY / ALL EXTEND UP TO FI 1 36" DEEP. IANUFACTURES WRITTEI	SERVICE DOT BARRIER IS USED. AND INSPECTED BY INISHED GRADE	1. THIS DIST         2. ALL ROOT         3. THE INSTAMANATEE         4. ROOT BAF         5. ALL ROOT         6. LARGE PA         MA         PUB         REV.BY       DATE	BARRIER:	S SHALL DF ROOT PRIOR TO ALL BE N S SHALL INCLUDE E COU	BE 4' BARRIE BACKFI MINIMUM BE INS ROYAL NTY TMENT APPPROVA CT # Y # TWN./I	MINIMUN RS SHA ILLING. I 36" D TALLED ., WASH	A FROM LL BE ALL RC EEP. F IN ACC INGTON 404- ( 10/ 1" Y	DT BARR         ALL M         COORDIDOT BAR         LEXIBLE         CORDANC         IAN, BIS         YP.         LAR         COORDANC         GO1526         G35S/1         = 20         DA         O4/2	I NOTE IER AND AINS AN NATED BARRIE CE WITH SMARK A CAN CAN CAN CAN CAN CAN CAN CAN CAN CA	(SEE N MIN 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MIF NO COUNT WIF NO COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUN COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT COUNT C	TILLITY MAIN TR SERVICE AND INSPECTED BY FINISHED GRADE ANELS. TEN INSTRUCTIONS. PECIES. UG - 20 SHOUN, P.E. SHOUN, P.E. 5E.S#00923 ATE OF 5/19



		NATEE COUNTY	STANDARD PF
REV.BY	DATE		MANHOLE
		DATE OF APPROVAL	TURBULENT

REVISION DESCRIPTION	BY	DATE	<b>5</b> 1
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## FORCE MAIN 30A REPLACEMENT **IST AVE. WEST TO 47TH AVE. WEST** DETAILS



BASELINE REFERENCE TABLE (STA. 10+00)	
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BASELINE REFERENCED	BEARING	DISTANCE	DESCRIPTION OF ACCESSORY					
(1) P.K. NAIL & REFERENCE	S-28*-W	67.50'	PK NAIL & DISC (WITNESS LB2241)SET ON SOUTH SIDE OF A WOOD POWER POLE					
DISC, SET (LB2241) STATE PLANE COORDINATE	N-04°-W	84.30'	NAIL & DISC (WITNESS LB2241) SET ON THE SOUTHWEST CORNER OF A CONCRETE ELECTRIC BOX PAD					
N=1133642.8006 E=464262.2031	N-20°-E	61.70'	PK NAIL & DISC (WITNESS LB2241)SET ON EAST SIDE OF A WOOD POWER POLE					

BASEL	NE REFEI	RENCE TA	ABLE (STA. 17+00)
BASELINE REFERENCED	BEARING	DISTANCE	DESCRIPTION OF ACCESSORY
2 P.K. NAIL & REFERENCE	S-67 <b>*</b> -W	18.40'	DISC (WITNESS LB2241)SET ON NORTHEAST CORNER OF A CURB INLET
DISC, SET (LB2241) STATE PLANE COORDINATE	S-22*-E	65.20'	NAIL & DISC (WITNESS LB2241) SET ON THE NORTH SIDE OF A WOODEN POWER POLE.
N=1134342.7999 E=464263.1873	N−59*−W	23.40'	DISC (WITNESS LB2241)SET ON NORTHWEST CORNER OF A CURB INLET

	SURVEYOR'S NOTES:
1.	BEARINGS ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE NAD 83 (2011) AS DERIVED FROM NATIONAL GEODETIC SURVEY OPUS CONTROL POINTS DM6221 "MYRTLE OAK" AND DM6224 "WHITE ASH", WITH A BEARING OF S88°40'20"E BETWEEN SAID POINTS, WHICH ARE FULLY DESCRIBED HEREON.
2.	LOCATIONS SHOWN HEREON ARE BASED ON VISIBLE IMPROVEMENTS ONLY, THEREFORE EXCEPTION IS MADE HEREIN REGARDING THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT MARKED OR KNOWN AT THE DATE OF SURVEY.
3.	THIS SURVEY WAS PREPARED USING INFORMATION FROM THE MANATEE COUNTY GOVERNMENT G.I.S. MAPS, ALONG WITH PLATS AND DEEDS OF RECORD. NO ATTEMPT WAS MADE TO ESTABLISH PROPERTY LINES BEYOND THE POINT NECESSARY TO CONFIRM THE PHYSICAL MONUMENTATION ALONG THE RIGHTS-OF-WAY.
4.	ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 1988). ORIGIN BENCHMARK IS NATIONAL GEODETIC SURVEY PID DP5439, MANATEE COUNTY DISK "JOHN JACKSON 2014", WITH A PUBLISHED ELEVATION OF 17.68 FT. N.A.V.D. 1988. CLOSING BENCHMARK IS NATIONAL GEODETIC SURVEY PID DM6224, MANATEE COUNTY DISK "WHITE ASH 2009", WITH A PUBLISHED ELEVATION OF 18.29 FT. N.A.V.D. 1988.
5.	BENCHMARKS SHOWN ON THIS SURVEY HAVE BEEN PLACED ON THE BEST AVAILABLE FEATURES, EITHER NATURAL OR ARTIFICIAL. IT IS THE RESPONSIBILITY OF THE USER TO CONFIRM THE POSSIBILITY OF MOVEMENT AND/OR RELIABILITY OF SAID FEATURES AT THE TIME OF USE.
6.	THIS GRAPHIC DEPICTION OF THE TOPOGRAPHIC SURVEY DOES NOT CONTAIN ALL OF THE ELEVATION POINTS COLLECTED IN THE FIELD, FOR CLARITIES SAKE. REFER TO THE ELECTRONIC FILES OF THIS SURVEY FOR COMPLETE INFORMATION.
7.	THE SUBJECT PROPERTY LIES IN FLOOD ZONE "X" PER FLOOD INSURANCE RATE MAP (F.I.R.M.) (PANEL NUMBER 12081C0304E, EFFECTIVE DATE MARCH 17, 2014.

GEODETIC	DATA: GEODETIC CONTROL POINTS USED (U.S. SURVEY FOOT)
DM6221 MYRTLE OAK	MARK IS LOCATED 725 FT. EASTERLY OF THE INTERSECTION OF 53RD AVENUE WEST (STATE ROAD 70) AND NORTHERLY OF 43RD STREET WEST. THE MARK IS 90.44 FT. SOUTHEASTERLY OF A PK NAIL AND DISC (LB6982) IN THE SOUTH SIDE OF A 5 FT. WIDE CONCRETE SIDEWALK. IT IS 20.53 FT. SOUTHERLY OF A PK NAIL AND DISC (LB6982) IN THE WEST SIDE OF A 10" PALM TREE. IT IS 77.40 FT. NORTHWESTERLY OF A TRAFFIC CONTROL SOLAR PANEL POLE. THE MARK IS ABOUT 2 FT. SOUTHERLY OF A CONCRETE SIDEWALK. ROD IS DRIVEN TO REFUSAL. MARK IS SURROUNDED (NOT INCASED) BY A 10" CONCRETE CYLINDER FLUSH WITH THE GROUND. NAD 83 (2011) COORDINATE VALUE PUBLISHED BY THE NATIONAL GEODETIC SURVEY (NGS) LATITUDE: 27*26'52.51274"N NORTHING: 1132475.89 CONVERGENCE: (-)0.27882542* LONGITUDE: -82*36'17.58707"W EASTING: 459988.44 SCALE FACTOR: 0.99998530
DM6224 WHITE ASH	FROM THE INTERSECTION US 41/ (14TH STREET WEST) AND 53RD AVENUE WEST (STATE ROAD 70) PROCEED WESTERLY ALONG 53RD AVENUE WEST (STATE ROAD 70), A DISTANCE OF 0.75 MILES TO THE INTERSECTION OF 53RD AVENUE WEST AND 26TH STREET WEST. THE MARK LIES 36.00 FT. SOUTH OF THE CENTERLINE OF 53RD AVENUE WEST (STATE ROAD 70), AND 40.00 FT. WEST OF THE CENTERLINE OF 26TH STREET WEST. NAD 83 (2011) COORDINATE VALUE PUBLISHED BY THE NATIONAL GEODETIC SURVEY (NGS) LATITUDE: 27°26'51.49984"N NORTHING: 1132346.93 CONVERGENCE: (-)0.27091897° SCALE FACTOR: 0.99998283

THIS PAGE IS COMPROMISED OF INFORMATION EXTRACTED FROM THE ORIGINAL TOPOGRAPHIC SURVEY BY FOLEY/KOLARIC INC., THIS SURVEY IS AVAILABLE UPON REQUEST.

NO.	REVISION DESCRIPTION	BY	DATE	
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				<b>JI</b> 2
				-

BASELINE REFERENCED

3 P.K. NAIL & REFERENCE DISC, SET (LB2241) STATE PLANE COORDINATE N=1135051.4992 E=464264.1837

BASELI

BASELINE REFERENCED P.K. NAIL & REFERENCE DISC, SET (LB2241) STATE PLANE COORDINATE N=1135091.3341 E=464269.8794

N	NE REFERENCE TABLE STA (24+08.70)									
BEARING DISTANCE DESCRIPTION OF ACCESSORY										
	N-67 <b>°</b> -E	34.70'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A WOOD POWER POLE							
	S-84*-W	36.90'	NAIL & DISC (WITNESS LB2241) SET ON THE CENTER OF A CONCRETE HEADWALL							
	N-41°-W	25.80'	NAIL & DISC (WITNESS LB2241)SET ON EAST SIDE OF A WOOD POWER POLE							

### INE REFERENCE TABLE STA (24+48.94)

	BEARING	DISTANCE	DESCRIPTION OF ACCESSORY
	S-67*-E	36.50'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A WOOD POWER POLE
	S-48°-W	30.50'	NAIL & DISC (WITNESS LB2241)SET ON EAST SIDE OF A WOOD POWER POLE
	S-83*-E	32.00'	NAIL & DISC (WITNESS LB2241) SET ON THE CENTER OF A CONCRETE HEADWALL
_			

BASELINE REFERENCE TABLE (STA. 30+00)									
BASELINE REFERENCED	BEARING	DISTANCE	DESCRIPTION OF ACCESSORY						
5 P.K. NAIL & REFERENCE	N-16°-E	92.50'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A 12" PALM TREE						
DISC, SET (LB2241) STATE PLANE COORDINATE	S−19 <b>°</b> −W	71.10'	NAIL & DISC (WITNESS LB3341) SET ON THE NORTH SIDE OF A WOODEN POWER POLE.						
N=1135642.3919 E=464271.4236	N-22*-W	43.40'	WOODEN MAIL BOX POST						

BASELINE REFERENCE TABLE (STA. 34+61.92)									
BASELINE REFERENCED	BEARING	DISTANCE	DESCRIPTION OF ACCESSORY						
6 P.K. NAIL & REFERENCE	N-62*-E	11.20'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A 24" OAK TREE						
DISC, SET (LB2241) STATE PLANE COORDINATE	S−12 <b>°</b> −₩	84.60'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A WOOD POWER POLE						
N=1136104.3101 E=464272.7180	N-17°-W	43.40'	NAIL & DISC (WITNESS LB2241)SET ON WEST SIDE OF A WOOD POWER POLE						

	30TH ST WEST CONSTRUCTION BASELINE										
Number	Length	Radius	Delta Angle	Line/Chord	Chord Length	Start Station	Start Northing	Start Easting	End Station	End Northing	End Easting
L 1	1707.703			NOO° 04' 50.08"E		7+01.00	1133343.80	464261.79	24+08.70	1135051.50	464264.19
L2	40.237			N08° 08' 14.48"E		24+08.70	1135051.50	464264.19	24+48.94	1135091.33	464269.88
٢3	1392.267			NOO° 09' 38.09"E		24+48.94	1135091.33	464269.88	38+41.21	1136483.60	464273.79

Foley/	Kolarik	, Inc.											503 8th Avenue West Palmetto, Florida 34221 (941) 722–4561 Fax (941) 729–6248		
			S	ubsurface	Utility E	ngineering Te	st Hole	Field	Data			1			
F/K Project N	No.:			1052	6.0000				Date:	6/	/22/2017				
Client Name:				Manatee	e County					,	,				
Proj. Name:				Force Main 30	)A Replacemen	t									
City / County	/ / State:		Brade	enton / Manat	ee County /	Florida			Horizontal [	Datum:	NAD 83 (2011)	Vertical Datu	m:	NAVD 88	
-	0.D.	Outside Diameter													
	E-W	East-West													
	N-S	North-South													
Test Hole Date	Test Hole Number	Utility Size, Material & Type measured in inches and is		Northing	Easting	Baseline	Station	Offset	Ground Elevation	Manual Depth (Top)	Utility Elevation (Top)	Utility Owner	Utility Direction	Surface Type	
5/23/2017	101	8" Cast—Iron Force Main		1134017.942	464252.170	30th Street West	13+75.13	10.56' L	17.65	3.35'	14.30	Manatee Co.	N-S	Soil	
5/23/2017	102	8" Cast-Iron Force Main		1134346.870	464257.640	30th Street West	17+04.06	5.56' L	17.08	3.00'	14.08	Manatee Co.	N-S	Soil	
5/23/2017	103	8" Cast-Iron Force Main		1134801.214	464259.450	30th Street West	21+58.41	4.39' L	18.43	2.85'	15.58	Manatee Co.	N-S	Soil	
5/23/2017	104	8" Cast-Iron Force Main		1135066.591	464263.849	30th Street West	24+23.59	2.47' L	18.80	2.35'	16.45	Manatee Co.	N-S	Soil	
5/23/2017	105	6" Cast-Iron Force Main		1135095.159	464255.194	30th Street West	24+52.72	14.70' L	18.35	2.65'	15.70	Manatee Co.	E-W	Soil	
5/23/2017	106	8" Cast-Iron Force Main		1135239.923	4464263.861	30th Street West	25+97.51	6.44' L	18.10	2.10'	16.00	Manatee Co.	N-S	Soil	
5/23/2017	107	8" Cast-Iron Force Main		1135710.615	464272.627	30th Street West	30+68.23	1.01' R	18.14	2.90'	15.24	Manatee Co.	N-S	Soil	
5/23/2017	108	8" Cast-Iron Force Main		1136015.763	464270.036	30th Street West	33+73.37	2.44' L	18.46	4.00'	14.46	Manatee Co.	N-S	Soil	
5/23/2017	109	6" Asbestos-Cement Water		1136032.408	464284.801	30th Street West	33+90.05	12.28' R	18.39	3.47'	14.92	Manatee Co.	N-S	Soil	

## FORCE MAIN 30A REPLACEMENT ST AVE. WEST TO 47TH AVE. WEST SURVEY CONTROL



PROJECT #		404-	J					
SURVEY #		(	01526	FL				
SEC./TWN./	RGE	10/						
		BY	DATE					
SURVEYED	F	-KL	04/2017					
DESIGNED	JSS		JSS		JSS		03/19	
DRAWN	BLF	R/JSS	03/19					
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JOHN SHAHDHN, P.E.	
FLOW DATE OF No. 60923 STATE OF 8/5/19 S/ONAL Signature & Date	
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