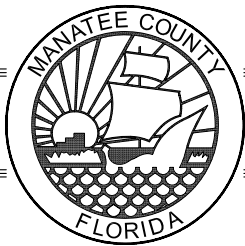


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# MANATEE COUNTY, FLORIDA

## FORCE MAIN 18M REPLACEMENT

### BRADENTON, FL

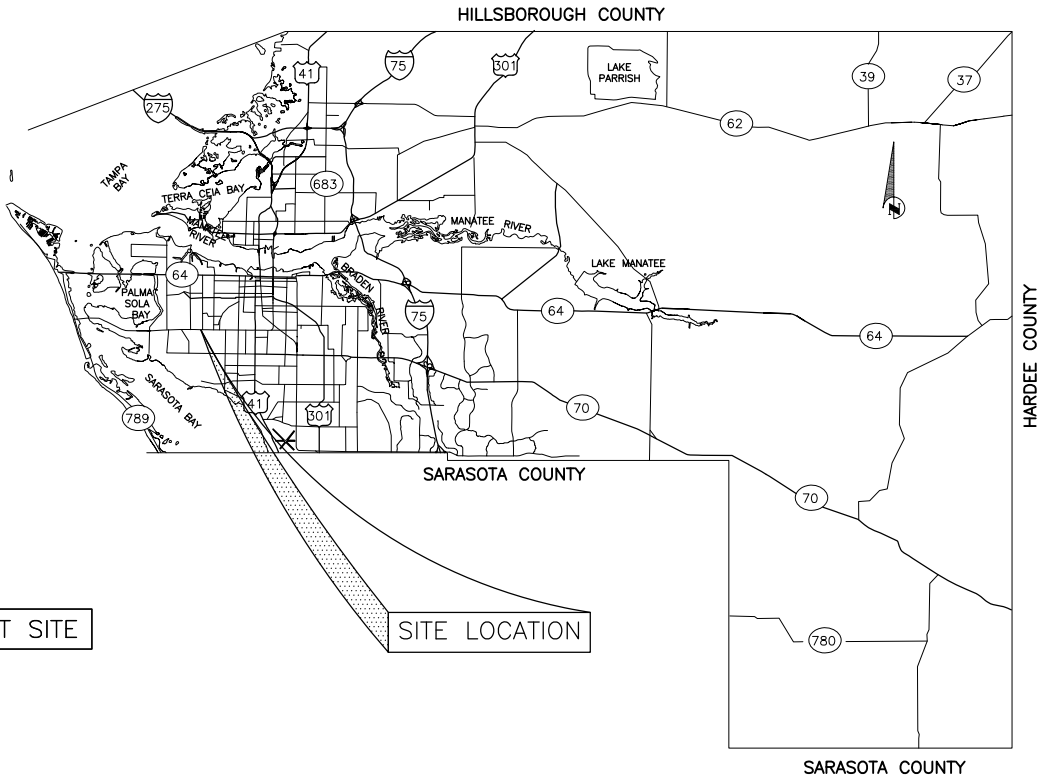
#### 404-6083780

JULY 2016



VICINITY MAP  
N.T.S.

PROJECT SITE



### BID PLANS

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#### PROJECT DESCRIPTION

REPLACE APPROXIMATELY 3,000 LF OF 6" DUCTILE IRON PIPE FORCE MAIN WITH 8" HDPE FORCE MAIN. THE LOCATION OF THE PROJECT IS FROM 6020 45TH AVENUE DRIVE WEST (SLS 18M), NORTH ON 60TH AVENUE WEST AND THEN WEST ALONG CORTEZ ROAD TO THE INTERSECTION OF 66TH STREET WEST AND CORTEZ ROAD.

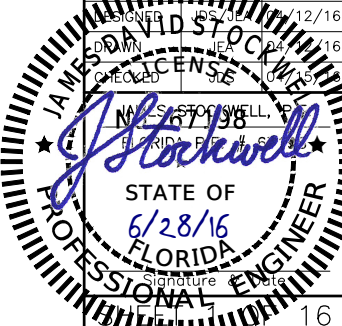
### FORCE MAIN 18M REPLACEMENT BRADENTON, FL COVER SHEET

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	404-6083780
SURVEY #	0973000527S01TP
SEC./TWN./RGE	08/35S/17E
SCALE	1"=20'

SURVEYED BY	DATE
DESIGNED BY	4/2/2013

DESIGNED BY	DATE
CHECKED BY	DATE
DATE	DATE



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GENERAL

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: TAHIA ATAYA AND CAN BE REACHED AT (941) 708-7450; EXT. 7329
2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER .
3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
4. VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED BY A MINIMUM OF TWO REFERENCE BENCHMARKS DESCRIBED ON THE "THE NATIONAL GEODETIC VERTICAL DATUM OF 1929", (NGVD '29).
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
6. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
7. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
8. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
9. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.

SAFETY

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
11. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
12. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
13. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

14. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.
15. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL, THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.
16. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
17. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
18. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.
19. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
20. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
21. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.
22. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
23. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.
24. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.
- RIGHT-OF-WAY
25. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
26. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
27. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. 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 TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS WHETHER SHOWN ON THE PLANS OR NOT. THE HEADWALLS SHALL BE REPLACED IN ACCORDANCE WITH F.D.O.T. STANDARDS.
29. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.
30. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.
31. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

UTILITIES

32. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY EFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.
33. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
34. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.
35. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY OR NIGHT AND WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
36. FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FLOW OF ALL SEWAGE DURING CONSTRUCTION, WHICH MAY REQUIRE BY-PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILED BY-PASS PUMPING PLAN PER SECTION 02720.

RESTORATION

37. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
38. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
39. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.
40. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.
41. 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, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS.
42. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN CUTTING.
43. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST.

CONSTRUCTION

44. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
45. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEP DAILY AS PART OF DAILY CLEAN UP.
46. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
47. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
48. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
49. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
50. 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 LINES AND GRADES SHOWN ON THE PLANS AND PROFILES.
51. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
52. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
53. 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.
54. 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.
55. 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.
56. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
57. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
58. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
59. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.

60. THE CONTRACTOR, PRIOR TO ANY TEMPORARY WATER SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING 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 SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS. WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBUNE, BRADENTON HERALD, SARASOTA HERALD TRIBUNE, WBFD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.
61. ALL NEW PIPE LINES SHALL BE PIG CLEANED (4" AND LARGER), FLUSHED, PRESSURE TESTED, DISINFECTED AND CERTIFIED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING.
62. 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.
63. ALL EXISTING MAINS THAT ARE BEING REPLACED SHALL BE ABANDONED IN PLACE UPON ACCEPTANCE AND ACTIVATION OF THE NEW MAINS. ABANDONED MAINS SHALL BE CUT, FILLED WITH GROUT, AND CAPPED. REFER TO SECTION 02064 OF THE SPECIFICATIONS FOR GROUTING OF ABANDONED PIPE.
64. WATER MAINS CROSSING OVER OR UNDER SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES SHALL BE LAID PER CURRENT EDITION OF "10 STATE STANDARDS" AND MANATEE COUNTY UTILITY STANDARDS UNLESS NOTED OTHERWISE ON THE PLANS.
65. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
66. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 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 INFORMATION REQUIREMENTS IN SECTION 14 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 14 WILL BE PROVIDED UPON REQUEST.

SPECIAL FDOT PROVISIONS

67. CONTRACTOR SHALL SUBMIT PED MOT PLAN FOR FDOT AND COUNTY APPROVAL AND MAINTAIN PED ACCESS TO ALL LOTS AT ALL TIMES.
68. CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS TO ALL LOTS AT ALL TIMES. NIGHT WORK MAY BE REQUIRED DURING PIPE, TRENCH, AND CONCRETE WORK AT DRIVEWAYS/ACCESS.
69. DRIVEWAYS SHALL BE RESTORED WITHIN 20 DAYS OF DISTURBANCE. SIDEWALKS SHALL BE RESTORED WITHIN 35 DAYS OF DISTURBANCE.
70. CONTRACTOR SHALL NOTIFY EACH DRIVEWAY OWNER WITH DOOR HANGERS AND OR SITE SIGNS AS APPROVED BY FDOT OF DATES AND TIMES THAT DRIVEWAY ACCESS WILL BE DISRUPTED MINIMUM 7 DAYS IN ADVANCE.
71. LANE CLOSURES WILL REQUIRE NIGHT WORK.

EMERGENCY CONTACTS

MANATEE COUNTY PUBLIC WORKS DEPT. 1022 26TH AVENUE EAST BRADENTON, FL 34208 SCOTT MAY, P.E. (941) 708-7450 EXT. 7650 FAX: (941) 708-7415	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SARASOTA SERVICE OFFICE STEVE LOPES 6750 FRUITVILLE ROAD SARASOTA, FL 34240 (941) 377-3722 FAX: (941) 373-7660	PEACE RIVER ELECTRIC COOPERATIVE, INC. P.O. BOX 1310 WACHULA, FL 33873 KENDELL COKER (863) 767-4660 kendell.coker@preco.coop
TECO/PEOPLES GAS CO. 8261 VICO COURT SARASOTA, FL 34240 (941) 342-4030 DAN SHANAHAN FAX: (941) 342-4011 EMERGENCY: 1-877-832-6911	FLORIDA GAS TRANSMISSION 7804 ANDERSON RD. TAMPA FL 33634 CHAD HARRELL PHONE: (813) 466-3327 E-mail: chad.harrell@sug.com	MANATEE COUNTY PUBLIC WORKS DEPT./TRAFFIC ENGINEERING/ATMS 2101 47TH TERRACE EAST BRADENTON, FL 34203 VISHAL KAKAAD, P.E. (941) 749-3500 EXT. 7812 FAX: (941) 749-3571 vishal.kakkad@mymanatee.org.
FRONTIER 1701 RINGLING BLVD. SARASOTA, FL 34236 JOHN PLOTT (941) 906-6707 FAX: (941) 906-6706 John.Plott@ftr.com	DEPARTMENT OF ENVIRONMENTAL PROTECTION 13051 N. TELECOM PKWY TEMPLE TERRACE, FL 33637 ED WATSON PHONE: (813) 470-5875 FAX: (813) 470-5993	FLORIDA DEPARTMENT OF TRANSPORTATION MANATEE OPS CENTER 14000 SR 64 E. BRADENTON, FLORIDA ALBERT ROSENSTEIN (941) 708-4401 (941) 465-1744
FLORIDA POWER & LIGHT 1253 12TH AVENUE EAST PALMETTO, FL 34221 GREG COKER (941) 723-4430 FAX: (941) 723-4444 EMERGENCY: 1-800-4-OUTAGE Greg.Coker@fpl.com	BRIGHT HOUSE NETWORKS 5413 E. STATE ROAD 64 BRADENTON, FL 34208-5535 TOM WRIGHT (941) 748-3816 EXT. 21348 Tom.Wright@charter.com	CITY OF BRADENTON PUBLIC WORKS 1411 9TH ST WEST BRADENTON, FL 34205 JIM McLELLAN JIM.MCLELLAN@CITY OF BRADENTON.COM PHONE (941) 708-6300 FAX (941) 708-6309
MANATEE COUNTY HEALTH DEPT. 410 6th AVENUE EAST BRADENTON, FL 34208 (941) 748-0747 EXT. 1355 FAX: (941) 750-9364	SUNSHINE STATE ONE CALL OF FLORIDA 1-(800) 432-4770	

LEGEND		ABBREVIATIONS	
EXISTING			
BM	BENCH MARK	BUSH	
CM	CONCRETE MONUMENT	TREE	
IP	IRON PIPE	OAK TREE	R/W RIGHT OF WAY
IR	IRON ROD	PALM TREE	CONC CONCRETE
HUB	HUB	PINE TREE	ASPH ASPHALT
N&D	NAIL & DISK	EDGE OF VEGETATION	DRWY DRIVEWAY
ELEVATION		CHAIN LINK FENCE	SNK SIDEWALK
PARCEL ID NO.		WOOD FENCE	EP EDGE OF PAVEMENT
PARCEL ID NO.		X X BARBED WIRE FENCE	BOC BACK OF CURB
LOT NO.		FM FORCE MAIN	CP SURVEY CONTROL POINT
GW	GUY WIRE	PW POTABLE WATER	PB PLAT BOOK
PP	POWER POLE	ROW RECLAIMED WATER	PG. PAGE
LP	LIGHT POLE	SS SANITARY SEWER	O.R. BK. OFFICIAL RECORD BOOK
MB	MAIL BOX	S STORM DRAIN	P.I.D. PARCEL IDENTIFICATION NO.
SN	SIGN	GS GAS LINE	PROPOSED
REF	REFLECTOR	OHCH OVERHEAD TV	
SPRK	SPRINKLER	OR UNDERGROUND CHARTER	MAIN
GM	GAS MARKER	OE OVERHEAD ELECTRIC	SERVICE LINE
BFP	BACKFLOW PREVENTER	FL UNDERGROUND FFL	PROPOSED EASEMENT
BO	BLOW OFF VALVE	OH FR OVERHEAD FRONTIER	FIRE HYDRANT
FH	FIRE HYDRANT	FR UNDERGROUND FRONTIER	VALVE
WV	WATER VALVE		SANITARY SEWER MANHOLE
ARV	AIR RELEASE VALVE		BLOW OFF ASSEMBLY
WM	WATER METER	OH OVERHEAD UTILITY	REDUCER
SMH	SANITARY SEWER MANHOLE	OR RAIL ROAD TRACKS	TEE
CO	CONCRETE	EDGE OF CONCRETE	HORIZONTAL BEND
SB#1	SOIL BORING LOCATION	EDGE OF ROAD	VERTICAL BEND
TEL	TELEPHONE SERVICE BOX	TOE OF SLOPE	PLUG
GI	GRATE INLET	TOP OF BANK	MASTER METER ASSEMBLY
	MITERED END SECTION	PROPERTY LINE	SERVICE LINE & METER
		RIGHT OF WAY	DOUBLE SERVICE

PROPOSED PROJECT NOTES  
JOB SPECIFIC (EXAMPLE):

WATER LINE CALL-OUT  
(TYPICAL)

STA. 40+60, 17' LT.  
1-6" GATE VALVE  
1-6" FITTING

MANATEE COUNTY GOVERNMENT  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES



1022 26th Avenue East  
Bradenton, FL 34208

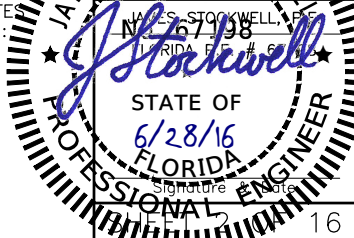
FORCE MAIN 18M REPLACEMENT  
BRADENTON, FL  
GENERAL NOTES & LEGEND

REVISION	DESCRIPTION	DATE	BY
NO.			

PROJECT #	404-6083780
SURVEY #	0973000527S01TP
SEC./TWN./RGE	08/35S/17E
SCALE	

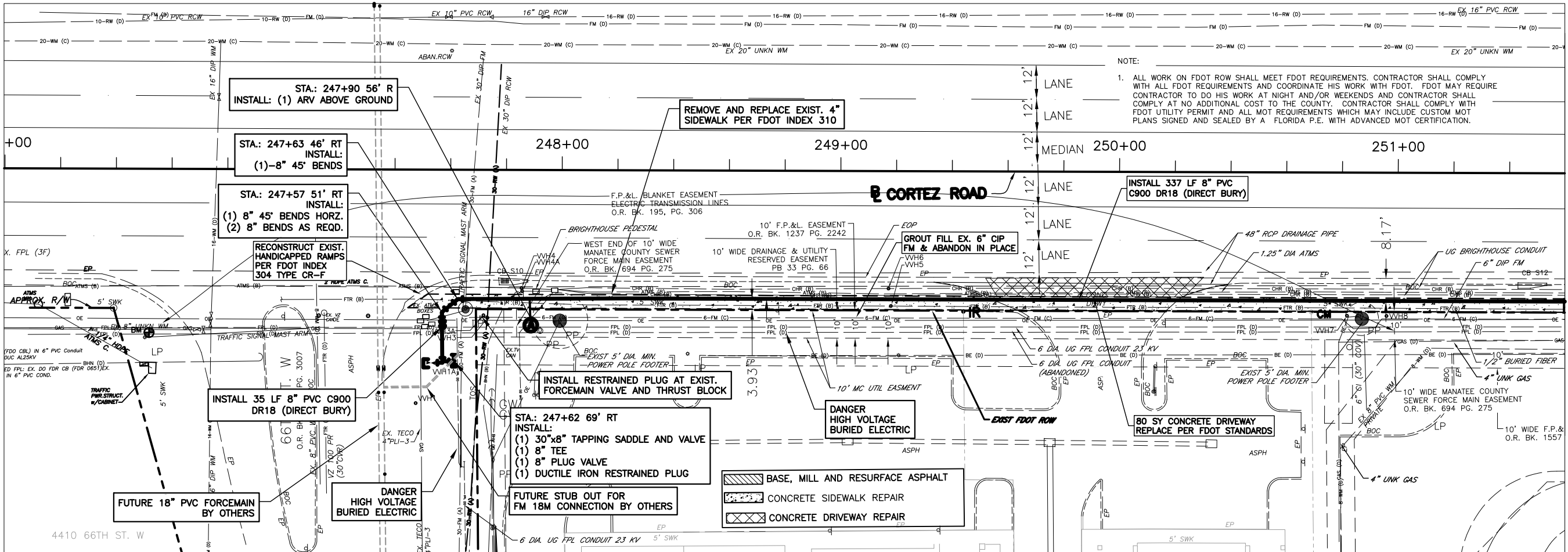
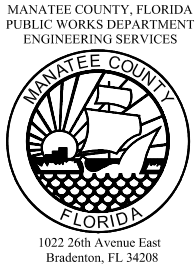
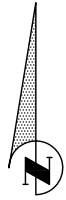
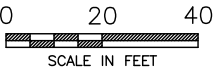
	BY	DATE
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SURVEYED	BY	DATE
SIGNED	DATE	DATE
CHECKED	DATE	DATE





CONTRACTOR SHALL REFERENCE SECTION 14 IN THE  
CURRENT MANATEE COUNTY UTILITY STANDARDS FOR  
RECORD DRAWING REQUIREMENTS.

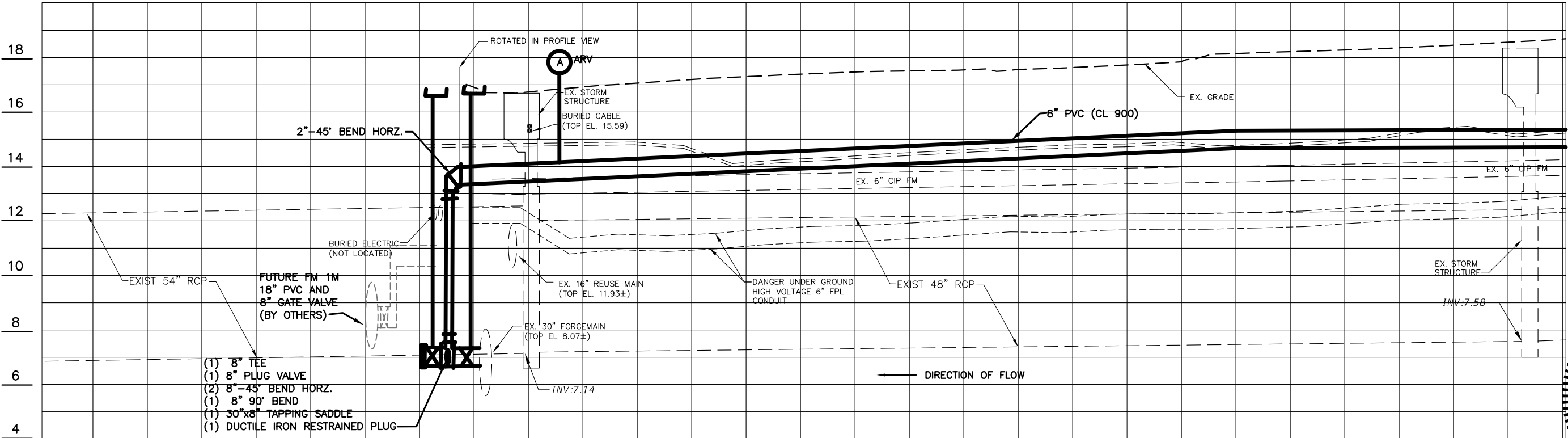


MATCH LINE STA. 251+60

NOTE:  
1. ALL WORK ON FDOT ROW SHALL MEET FDOT REQUIREMENTS. CONTRACTOR SHALL COMPLY WITH ALL FDOT REQUIREMENTS AND COORDINATE HIS WORK WITH FDOT. FDOT MAY REQUIRE CONTRACTOR TO DO HIS WORK AT NIGHT AND/OR WEEKENDS AND CONTRACTOR SHALL COMPLY AT NO ADDITIONAL COST TO THE COUNTY. CONTRACTOR SHALL COMPLY WITH FDOT UTILITY PERMIT AND ALL MOT REQUIREMENTS WHICH MAY INCLUDE CUSTOM MOT PLANS SIGNED AND SEALED BY A FLORIDA P.E. WITH ADVANCED MOT CERTIFICATION.

- BASE, MILL AND RESURFACE ASPHALT
- CONCRETE SIDEWALK REPAIR
- CONCRETE DRIVEWAY REPAIR

246+00                      247+00                      248+00                      249+00                      250+00                      251+00



THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

**FORCE MAIN REPLACEMENT 18M**  
**45TH AVE. W TO 66TH ST AND**  
**CORTEZ ROAD**  
**PLAN & PROFILE STA. 246+00 TO 251+60**

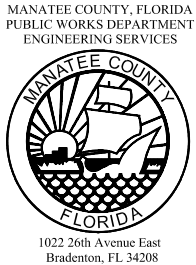
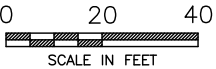
NO.	REVISION	DESCRIPTION	BY	DATE

PROJECT #	404-6083780
SURVEY #	0019606
SEC./TWN./RGE	VARIES
SCALE	1"=40'

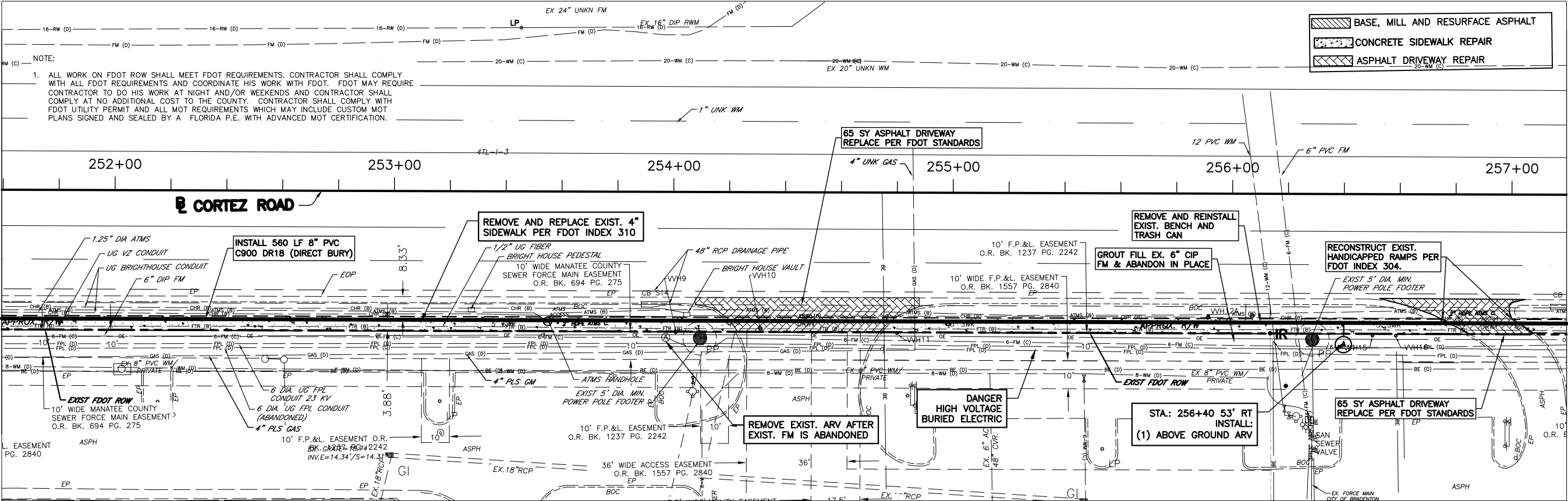
BY	DATE
DESIGNED	4/23/13
DRAWN	04/15/16
CHECKED	04/15/16
IN CHARGE	04/15/16

STATE OF  
6/28/16  
FLORIDA  
PROFESSIONAL ENGINEER

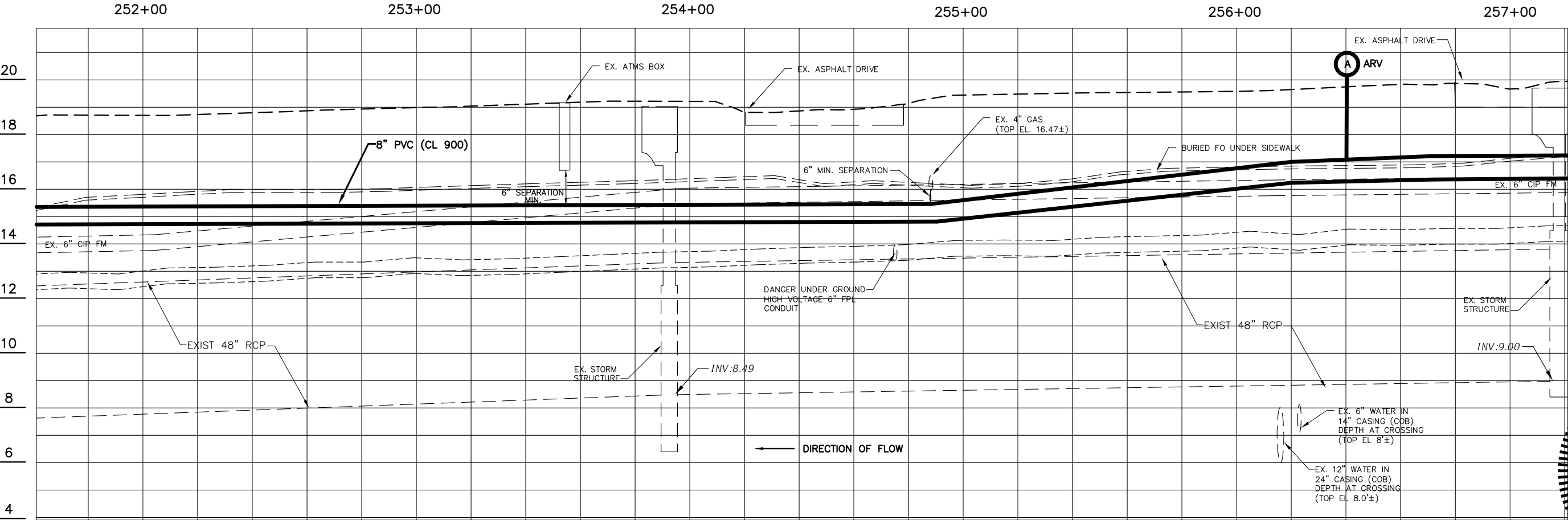
CONTRACTOR SHALL REFERENCE SECTION 14 IN THE  
CURRENT MANATEE COUNTY UTILITY STANDARDS FOR  
RECORD DRAWING REQUIREMENTS.



MATCH LINE STA. 251+60



MATCH LINE STA. 257+20



THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

**FORCE MAIN REPLACEMENT 18M**  
**45TH AVE.W TO 66TH ST AND**  
**CORTEZ ROAD**

**PLAN & PROFILE STA. 251+60 TO 257+20**

NO.	REVISION	DESCRIPTION	BY	DATE

PROJECT #	404-6083780
SURVEY #	0019606
SEC./TWN./RGE	VARIES
SCALE	1"=40'

BY	DATE
	4/23/13
DESIGNED	
	4/15/16
DRAWN	
	4/15/16
CHECKED	
	4/15/16

STATE OF  
6/28/16  
FLORIDA  
PROFESSIONAL ENGINEER

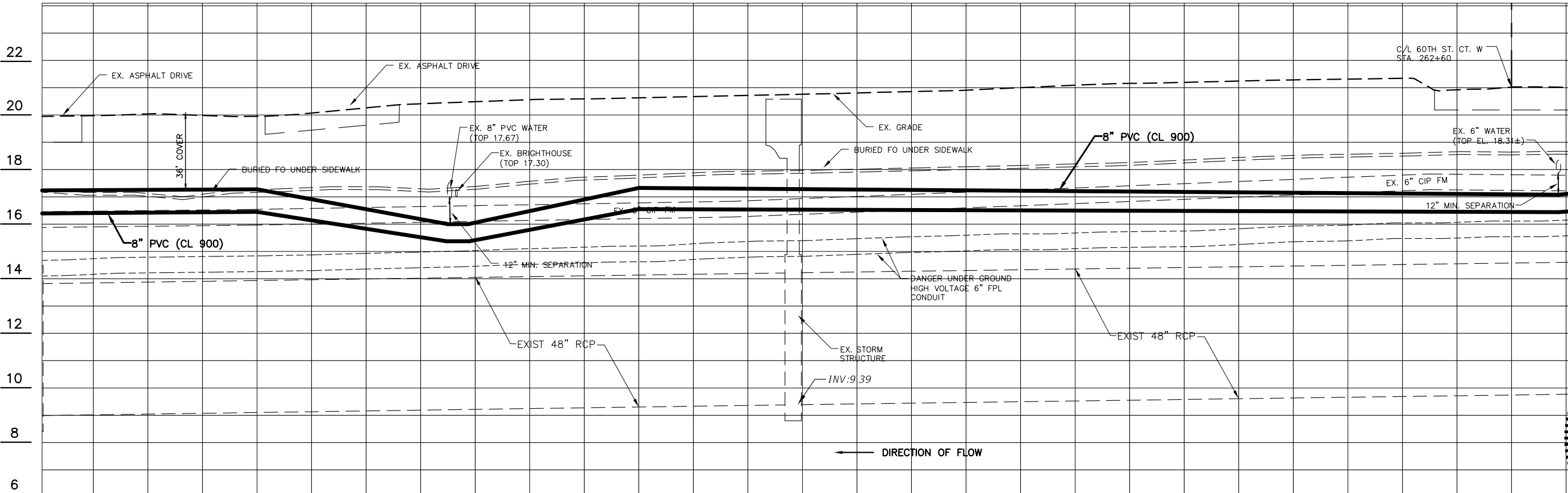


# FORCE MAIN REPLACEMENT 18M 45TH AVE W TO 60TH ST AND

45TH AVE. W TO 66TH ST AND  
COPPER ROAD

CORTEZ ROAD

# PLAN & PROFILE STA. 257+20 TO 262+80



REVISION	DESCRIPTION	BY	DATE
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**RESEARCH**

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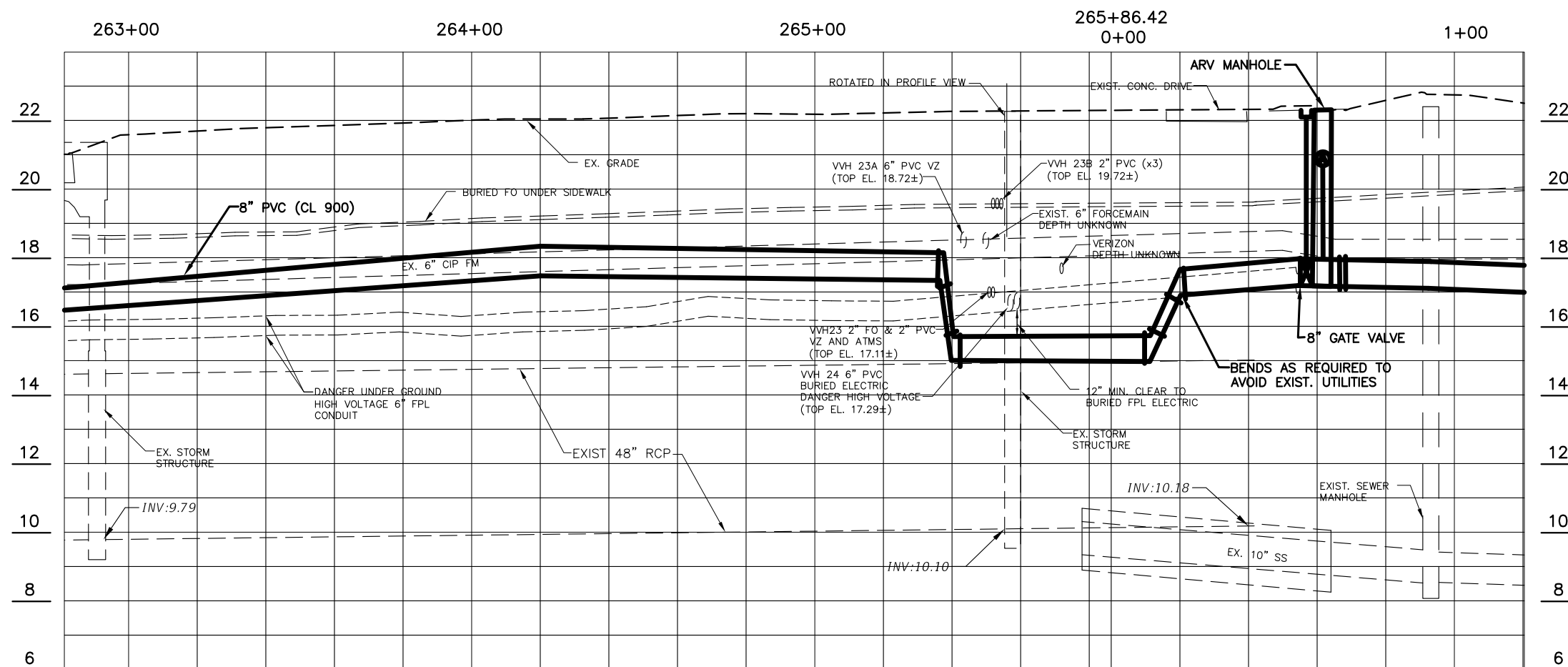
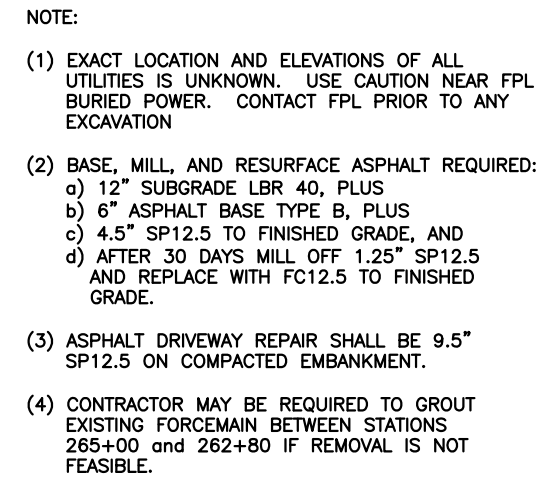
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MANATEE COUNTY, FLORIDA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES



1022 26th Avenue East  
Bradenton, FL 34208



THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

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**FORCE MAIN REPLACEMENT 18M  
45TH AVE.W TO 66TH ST AND  
CORTEZ ROAD  
PLAN & PROFILE STA. 262+80 TO 1+20**

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #		404-6083780	
SURVEY #		0019606	
SEC./TWN./RGE		VARIES	
SCALE		1"=40'	

	BY	DATE
SIGNED	[Signature]	4/23/13
DESIGNER	M.D.	6/5/14
DRAWN	J.E.	9/1/14
CHECKED	E.S.	04/25/15

**FLORIDA ENGINEERING**

**N. JAMES W. BUSHKLEW**  
**FLORIDA # 87998**

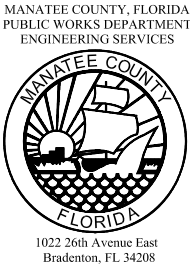
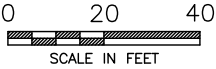
*(Handwritten signature)*

**STATE OF FLORIDA**  
**6/28/16**

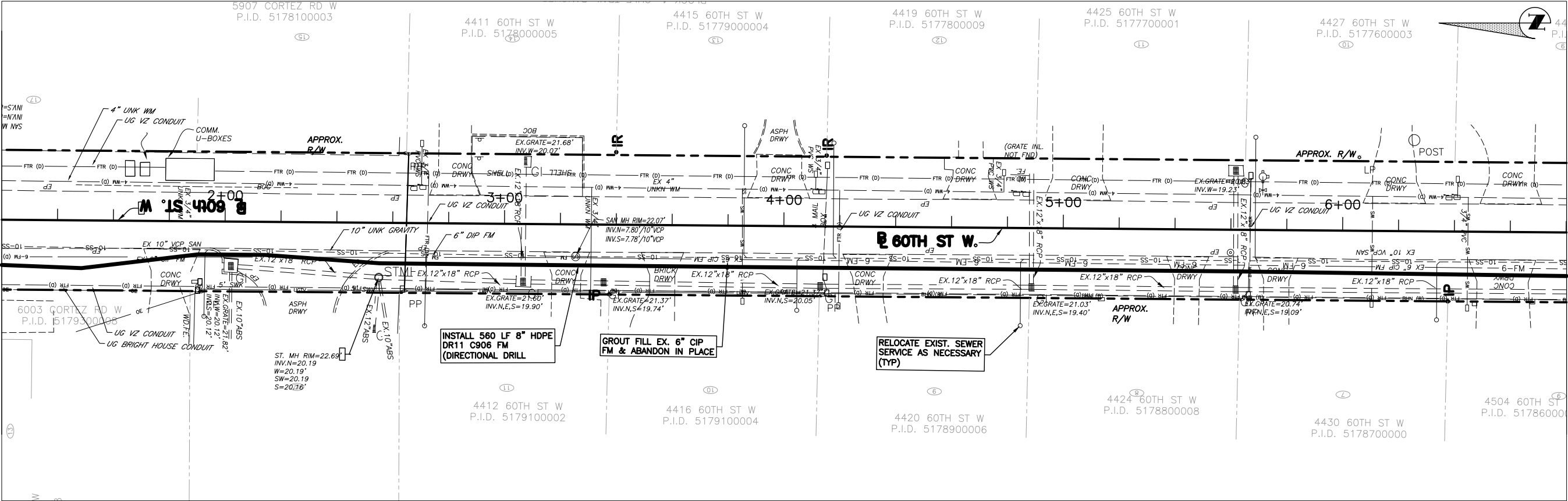
**FLORIDA ENGINEERING**

**STONIALE**

CONTRACTOR SHALL REFERENCE SECTION 14 IN THE  
CURRENT MANATEE COUNTY UTILITY STANDARDS FOR  
RECORD DRAWING REQUIREMENTS.



MATCH LINE STA. 1+20



MATCH LINE STA. 6+80

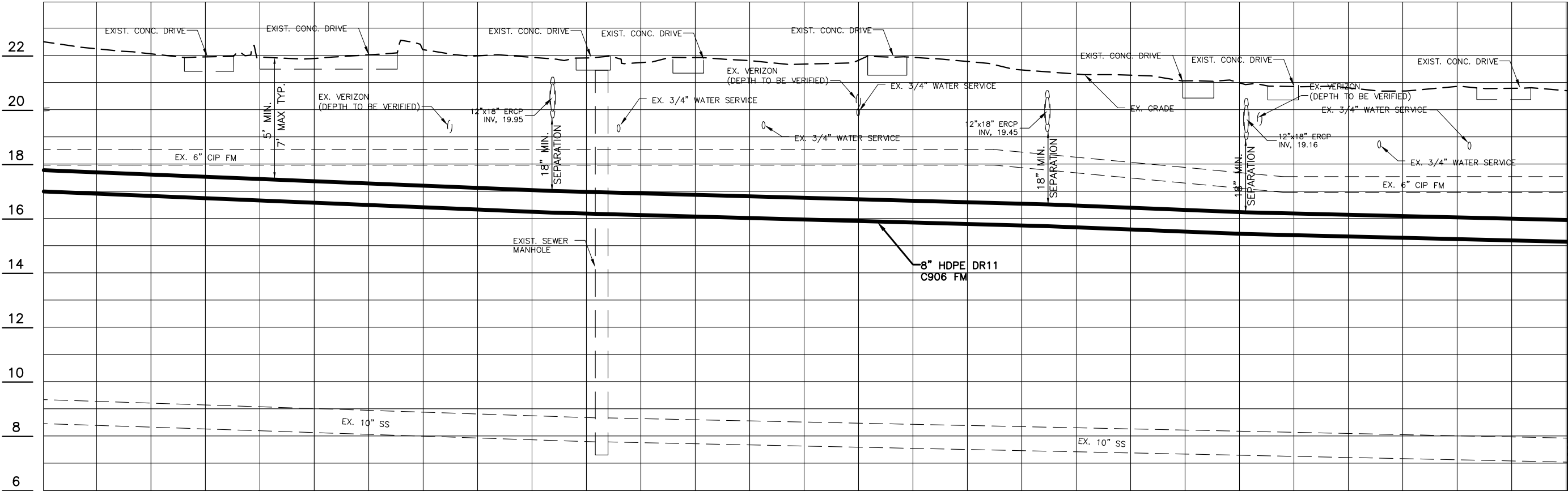
2+00

3+00

4+00

5+00

6+00



THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

**FORCE MAIN REPLACEMENT 18M**  
**45TH AVE. W TO 66TH ST AND**  
**CORTEZ ROAD**  
**PLAN & PROFILE STA. 1+20 TO 6+80**

NO.	REVISION DESCRIPTION	BY	DATE

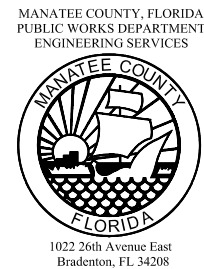
PROJECT #	404-6083780
SURVEY #	0019606
SEC./TWN./RGE	VARIES
SCALE	1"=40'
SUBMITTED BY	DATE
DESIGNED BY	4/23/13
DRAWN BY	4/15/16
CHECKED BY	4/15/16
APPROVED BY	4/15/16
NAME	JAMES STOCKWELL
STATE OF	FLORIDA
DATE	6/28/16
PROFESSIONAL ENGINEER	

\\S:\P\RD\_Engineering\Shore\Util\_Eng\_Design\PROJ\18M\DWG\SS\8-P&P\_6/27/2016 8:51 AM Jim Anderson, 1:1 Ledger

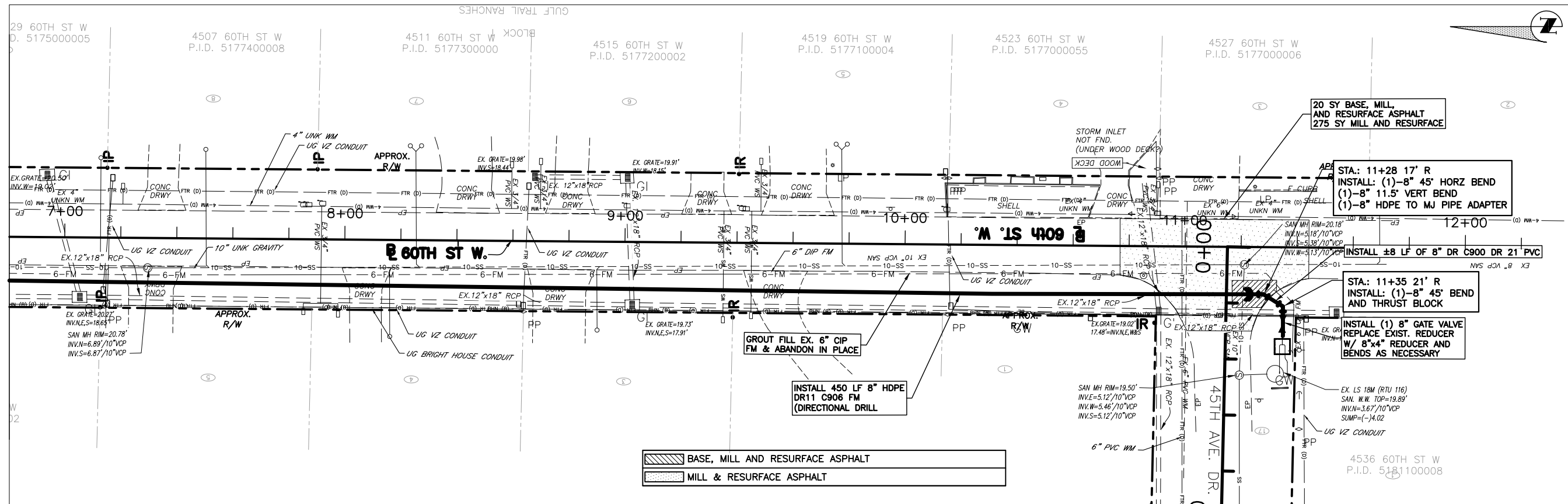
- NOTES:
- (1) CONTRACTOR SHALL SUBMIT PED MOT PLAN AND MAINTAIN PED ACCESS TO ALL LOTS AT ALL TIMES.
  - (2) CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS TO ALL LOTS AT ALL TIMES.

CONTRACTOR SHALL REFERENCE SECTION 14 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS FOR RECORD DRAWING REQUIREMENTS.

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SCALE IN FEET



MATCH LINE STA. 6+80



7+00

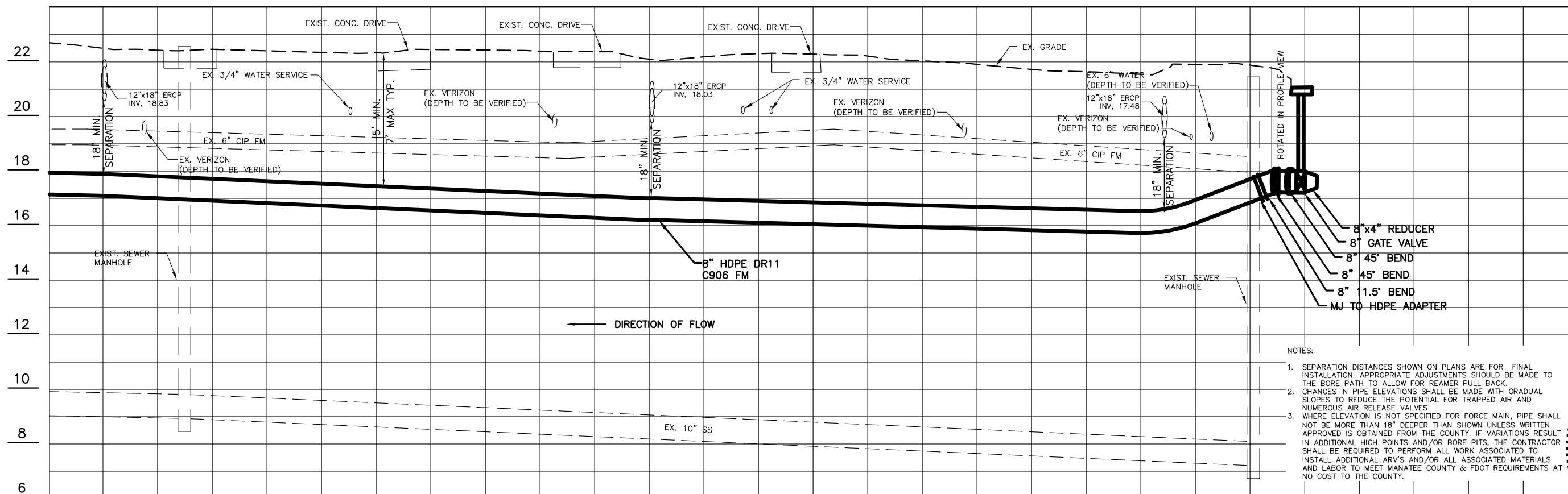
8+00

9+00

10+00

11+00

12+00



NOTES:

1. SEPARATION DISTANCES SHOWN ON PLANS ARE FOR FINAL INSTALLATION. APPROPRIATE ADJUSTMENTS SHOULD BE MADE TO THE BORE PATH TO ALLOW FOR REAMER PULL BACK.
2. CHANGES IN PIPE ELEVATIONS SHALL BE MADE WITH GRADUAL SLOPES TO REDUCE THE POTENTIAL FOR TRAPPED AIR AND NUMEROUS AIR RELEASE VALVES.
3. WHERE ELEVATION IS NOT SPECIFIED FOR FORCE MAIN, PIPE SHALL NOT BE MORE THAN 18" DEEPER THAN SHOWN UNLESS WRITTEN APPROVED IS OBTAINED FROM THE COUNTY. IF VARIATIONS RESULT IN ADDITIONAL HIGH POINTS AND/OR BORE PITS, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL WORK ASSOCIATED TO INSTALL ADDITIONAL ARV'S AND/OR ALL ASSOCIATED MATERIALS AND LABOR TO MEET MANATEE COUNTY & FDOT REQUIREMENTS AT NO COST TO THE COUNTY.

THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

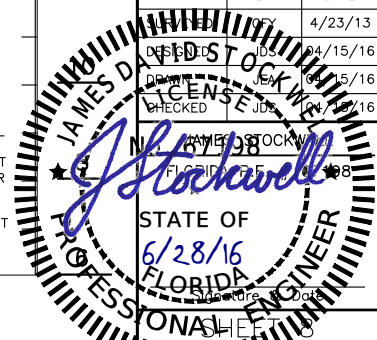
FORCE MAIN REPLACEMENT 18M

45TH AVE. W TO 66TH ST AND

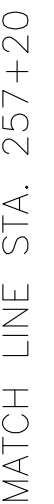
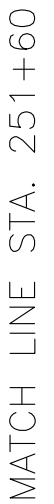
CORTEZ ROAD

PLAN & PROFILE STA. 6+80 TO 12+40

NO.	REVISION	DESCRIPTION	BY	DATE
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6/28/16  
FLORIDA  
8 cr. Units & 100 hrs.

MATCH LINE STA. 251+60

JAMES STOCKWELL  
 PROFESSIONAL ENGINEER  
 STATE OF FLORIDA  
 LICENSE NO. 6798  
 6/28/16

**FORCE MAIN REPLACEMENT 18M  
45TH AVE. W TO 66TH ST AND  
CORTEZ ROAD  
SURVEY CONTROL STA. 257+20 TO 1+20**

THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

DATE \_\_\_\_\_

BY

REVISION	DESCRIPTION
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No.	
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PROJECT #	404-6083780
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SURVEY #	0019606
----------	---------

SEC./TWN./RGE	VARIES
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SCALE	1"=40'
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	BY	DATE

4/23/13

DAVID STODOLSKY

**LICENSE**

CHECKED	JOS	4/4/20
---------	-----	--------

~~N~~ JAMES BODKWEI

# Rockwell

STATE OF Idaho

STATE OF  
6/28/15

6/20/16  
FLORIDA

Signature & Date

SHEET 10



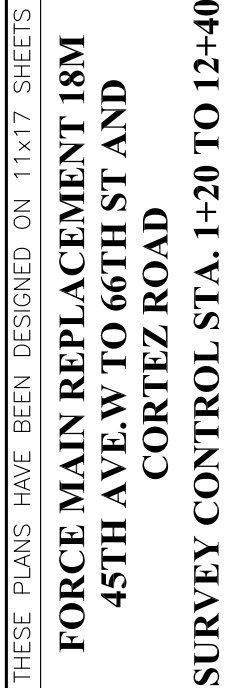
MATCH LINE STA. 262+80

MATCH LINE STA. 1+20

S:\PWD\_Engineering\_Share\Util Eng Design\PROJ\~SAN SWR Proj\FM-18M\DWGS\Survey Control FM Replacement LS 18M.dwg,10 P&P, 6/27/2016 8:52 AM Jim Anderson, 1:1, Ledger

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SCALE IN FEET



THESE PLANS HAVE BEEN DESIGNED ON 11x17 SHEETS

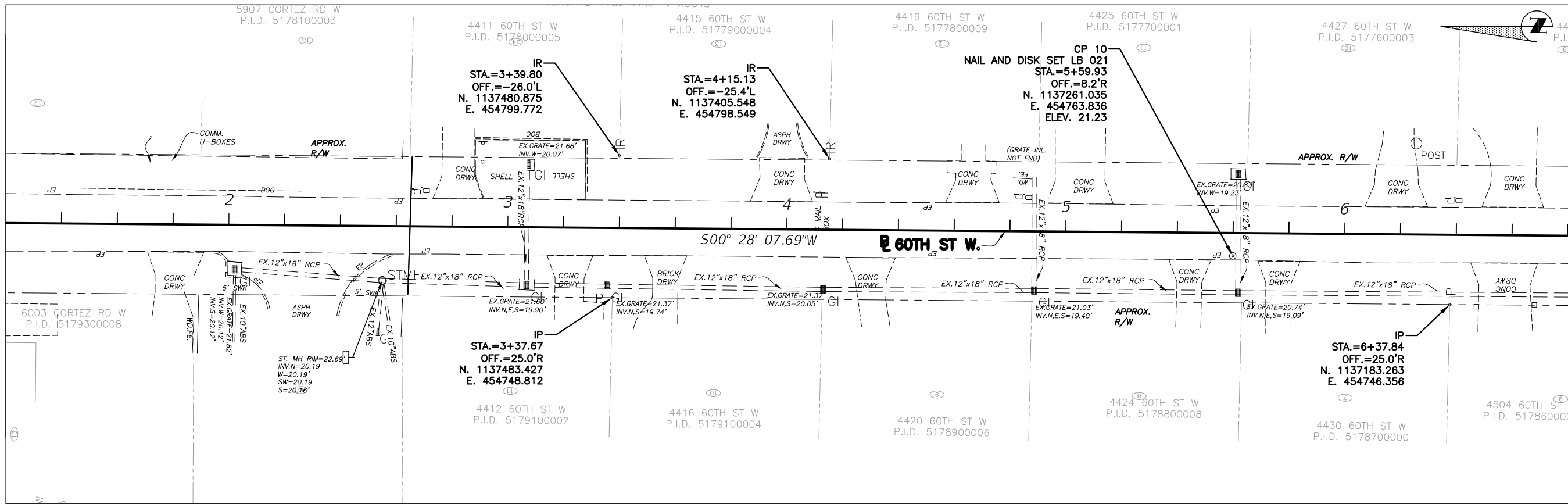
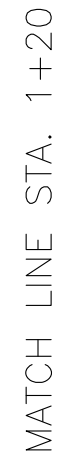
**FORCE MAIN REPLACEMENT 18M  
45TH AVE. W TO 66TH ST AND  
CORTEZ ROAD  
SURVEY CONTROL STA. 1+20 TO 12+40**

[illegible]

PROJECT #	404-6083780
SURVEY #	0019606
SEC./TWN./RGE	VARIES
SCALE	1"=40'

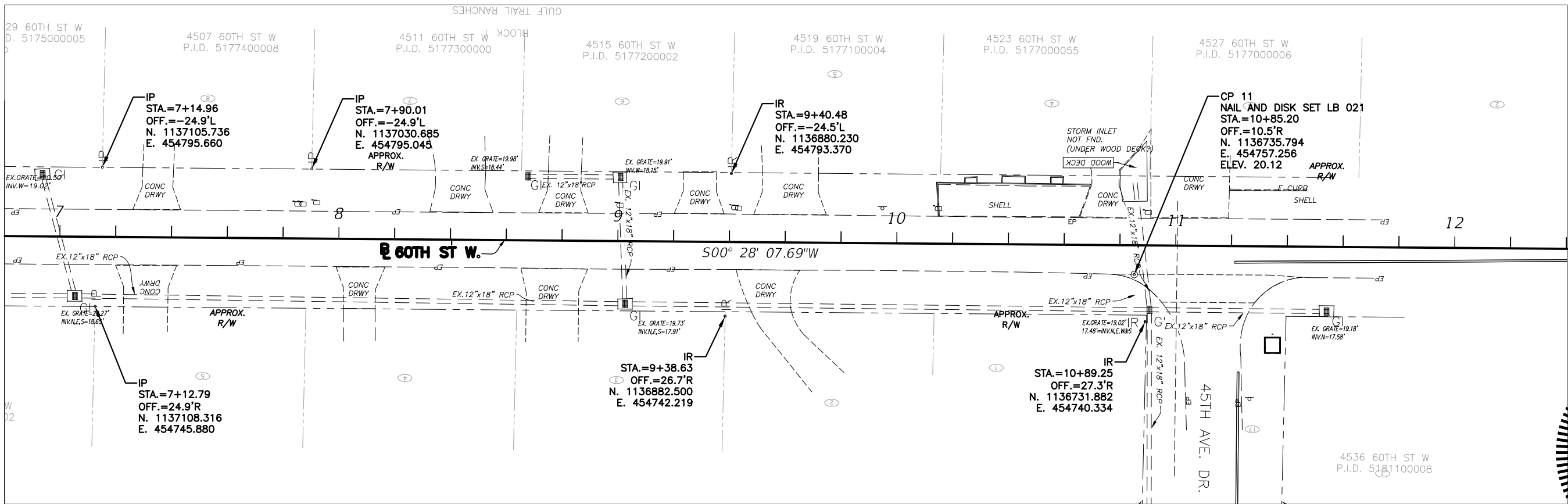
	BY	DATE
PAYED		4/23/13
CHECKS	JDS	15/16
DEPOSIT	JEX	16/16
CHECKED	JDS	16/16

W-907E-98OCK  
*Stockwell*  
 FRIKIP... 10-98  
 STATE OF  
 6/28/16  
 FLORIDA  
 Signature \_\_\_\_\_ Date \_\_\_\_\_  
 JONAS SHEPHERD 1



MATCH LINE STA. 6+80

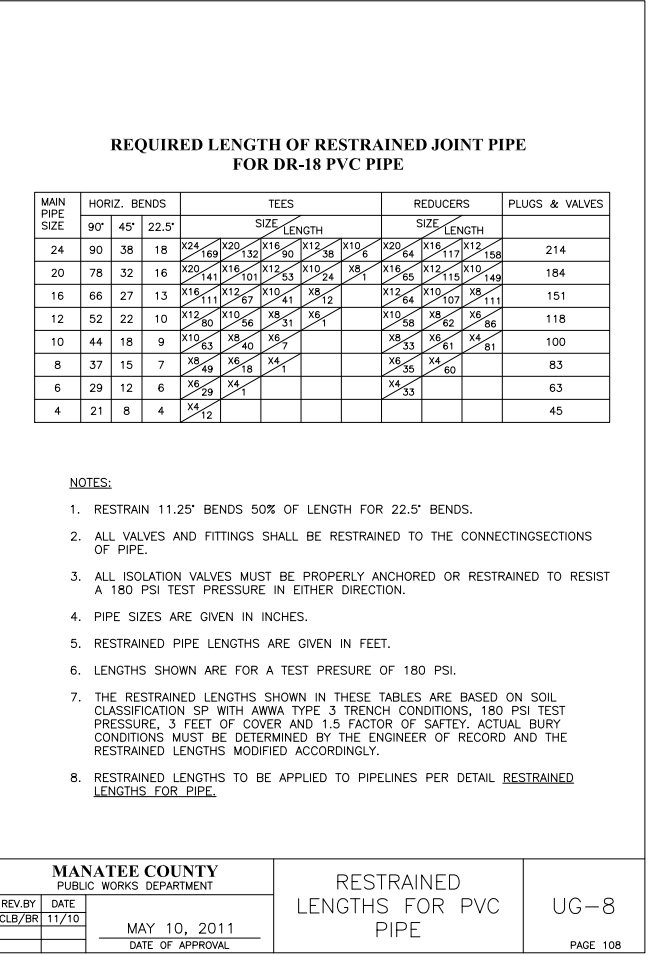
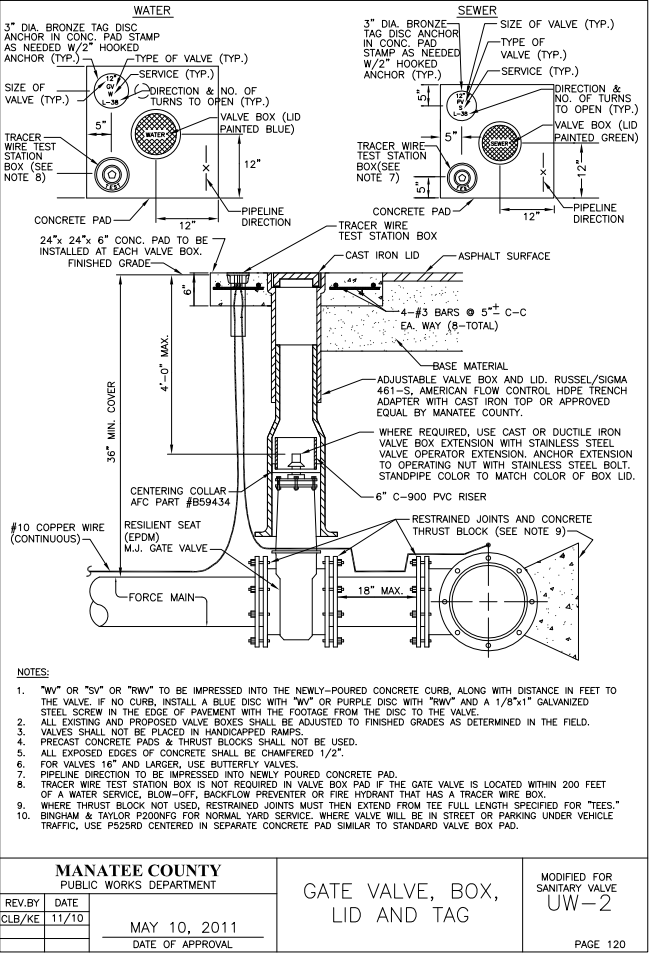
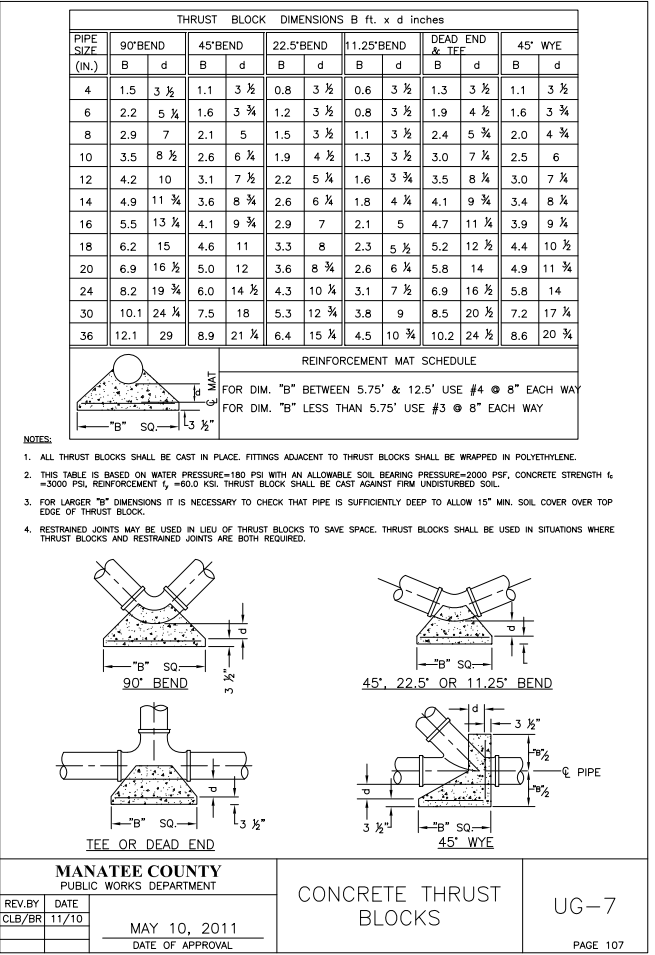
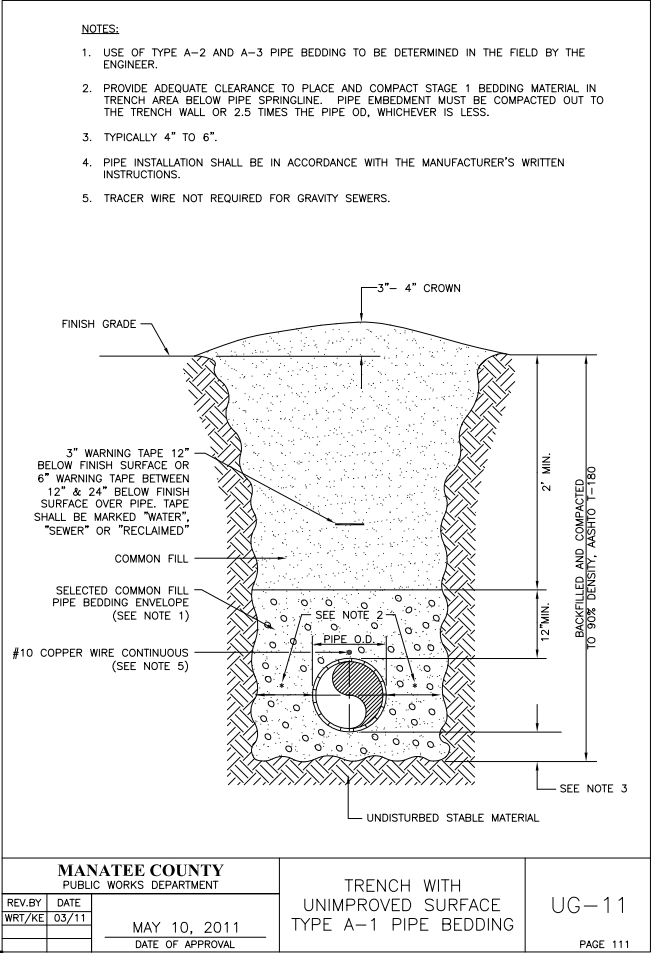
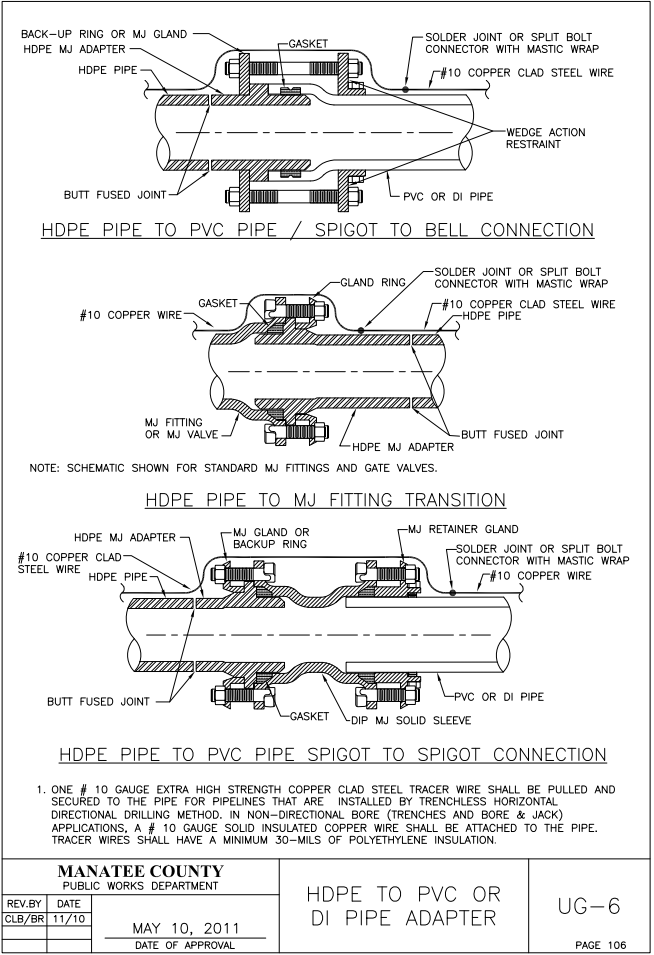
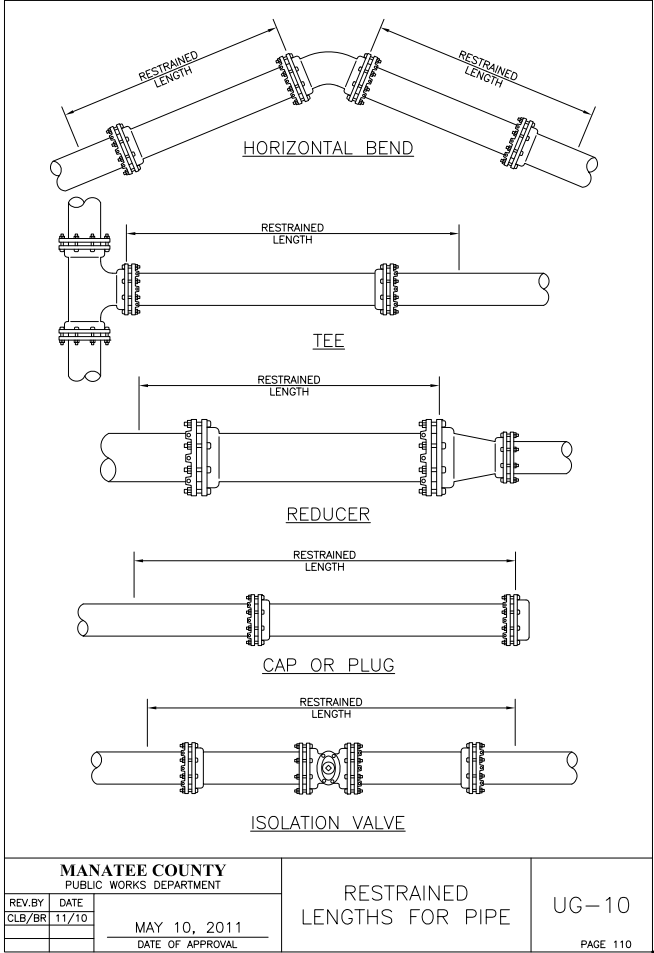
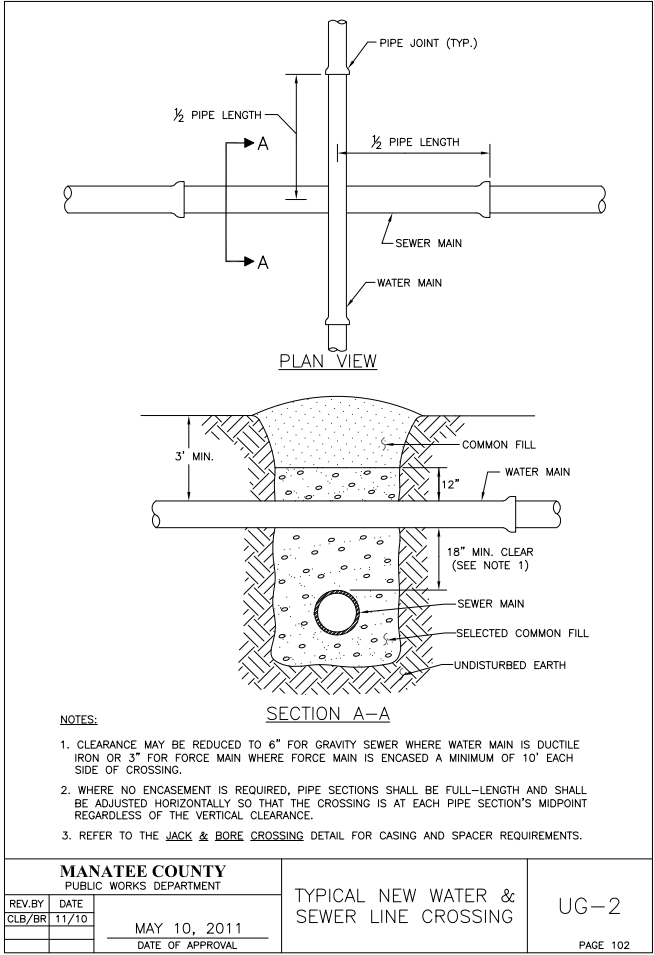
MATCH LINE STA. 6+80



ONAL SHEET 11



COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT S:\PMD\_Engineering\_Share\Util\_Eng\_Design\PROJ\18M\_SWR\_FM-18M\_PWS\FM-18M\_PWS\Notes\_Details.dwg,Det12, 6/28/2016 6:40 AM Jim Anderson, 1:2, Ledger



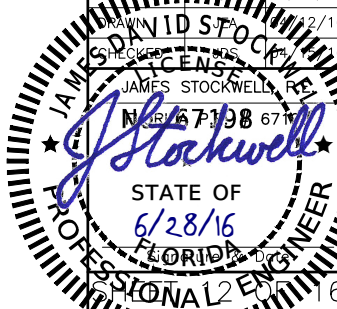
1022 26th Avenue East  
Bradenton, FL 34208

# FORCE MAIN 18M REPLACEMENT BRADENTON, FL DETAILS

REVISION	DESCRIPTION	BY	DATE
NO.			

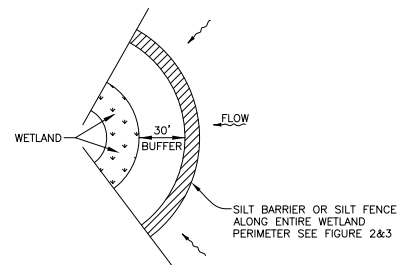
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SURVEY #	0973000527S01TP
SEC./TWN./RGE	08/35S/17E
SCALE	

SURVEYED	GFY	4/2/2013
DESIGNED	GFY	04/12/16
DRAWN	GFY	04/12/16
CHECKED	GFY	04/12/16
IN CHARGE	GFY	04/12/16

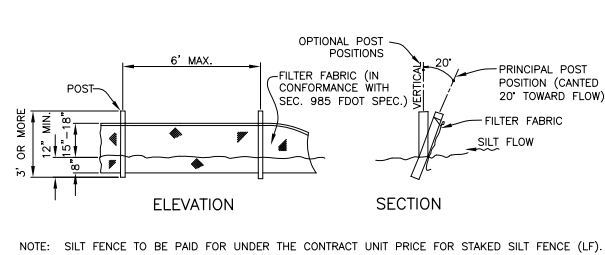




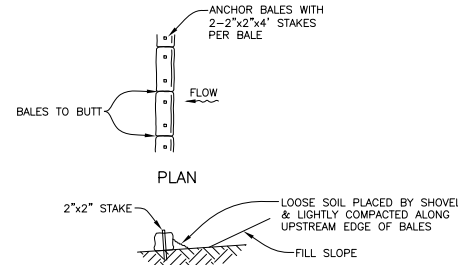




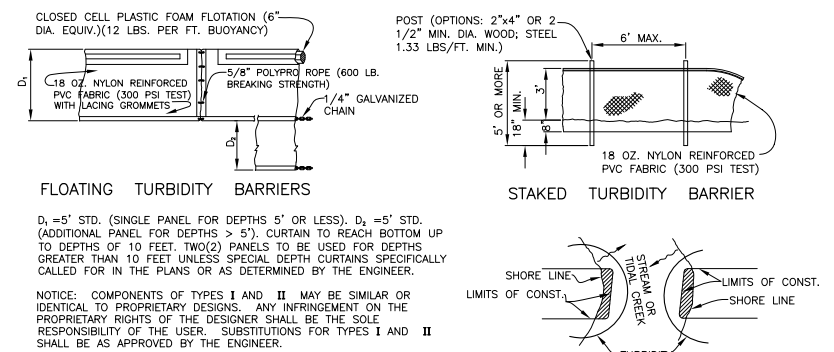
WETLAND BUFFER  
FIGURE 1



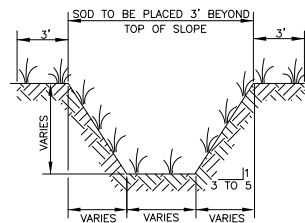
TYPICAL SILT FENCE  
FIGURE 2



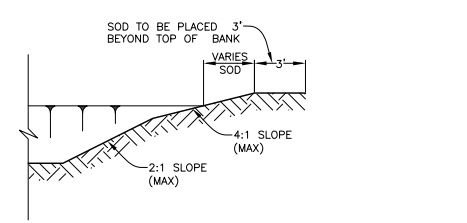
TYPICAL BALE SILT BARRIER  
FIGURE 3



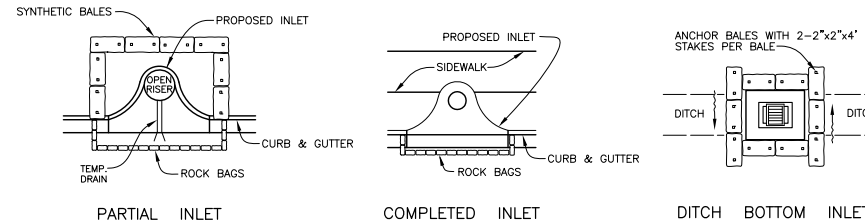
TURBIDITY BARRIERS  
FIGURE 4



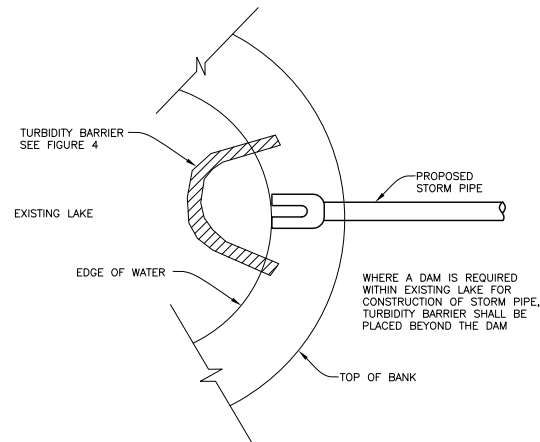
TYPICAL SWALE SECTION  
FIGURE 5



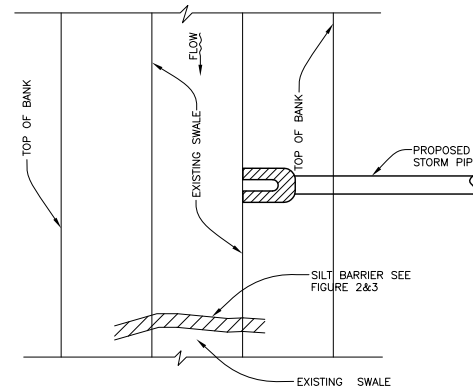
TYPICAL RETENTION/DETENTION POND SECTION  
FIGURE 6



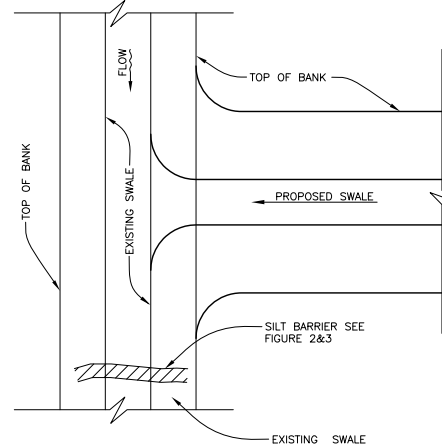
SYNTHETIC BALE PROTECTION AROUND  
INLETS OR SIMILAR STRUCTURES  
FIGURE 7



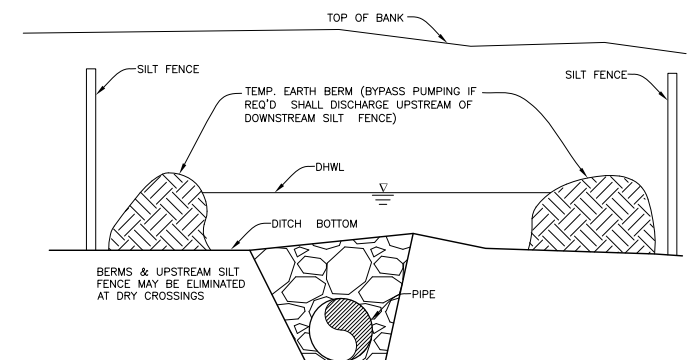
TURBIDITY BARRIER AT CONNECTION OF  
STORM PIPE TO EXISTING LAKE  
FIGURE 9



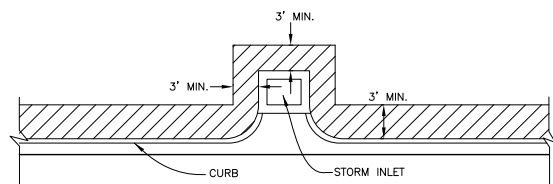
SILT BARRIER AT CONNECTION OF  
STORM PIPE TO EXISTING SWALE  
FIGURE 10



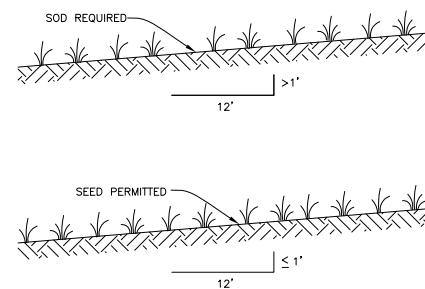
SILT BARRIER AT CONNECTION  
OF SWALE TO EXISTING SWALE  
FIGURE 11



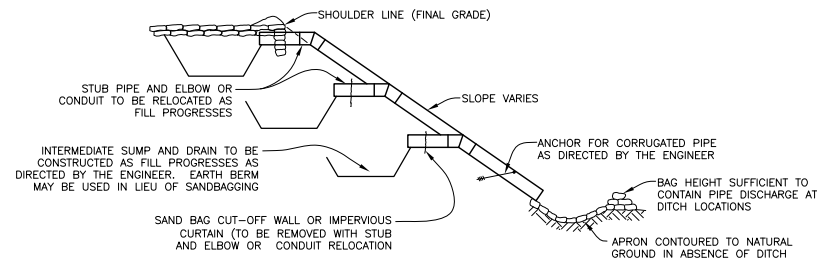
UNDERGROUND PIPE CROSSING  
FIGURE 12



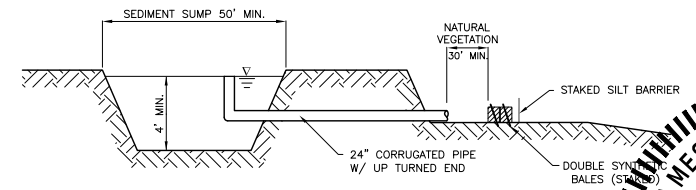
SOD ALONG CURB  
AND AROUND INLET  
FIGURE 14



GRASS SLOPES  
FIGURE 13



SECTION AA  
TEMPORARY SLOPE DRAIN  
 FIGURE 15



SEDIMENT SUMP SECTION

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FIGURE 16

NOTE:  
REFERENCE THE FDOT DESIGN STANDARDS  
LATEST EDITION FOR ALL TEMPORARY  
EROSION CONTROL MEASURES.



022 26th Avenue East  
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**FORCE MAIN 18M  
REPLACEMENT  
BRADENTON, FL  
EROSION CONTROL**

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