



63RD ST. E. WATERMAIN 61ST ST. E. TO S.R. 70 E. 404-6077970

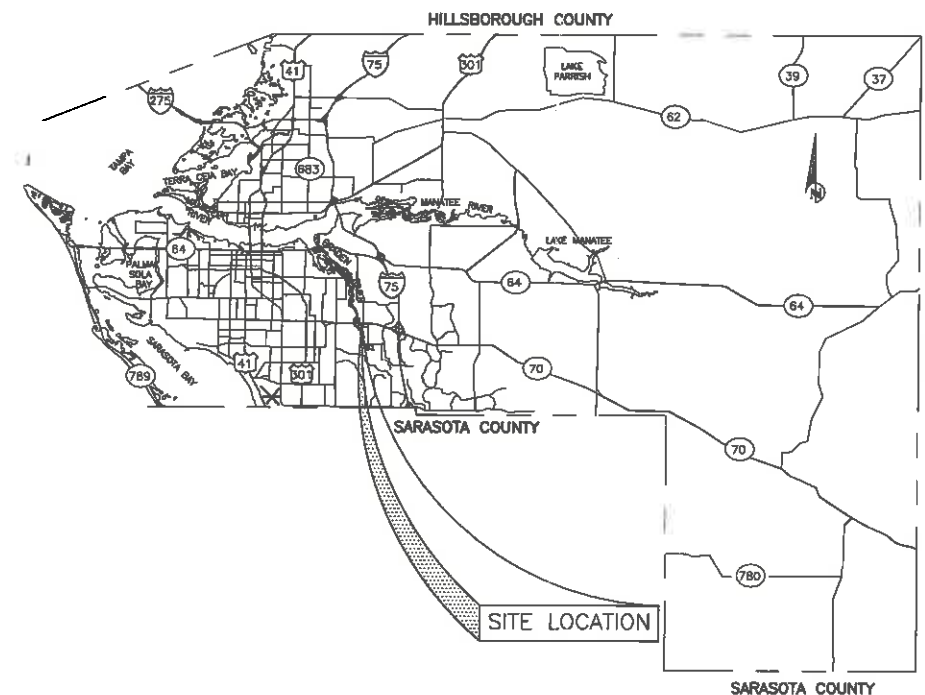
SEPTEMBER 2016



VICINITY MAP
N.T.S.

PROJECT DESCRIPTION

INSTALL APPROXIMATELY 2,000 LF 12" PVC WATER MAIN FROM S.R. 70 TO 61ST ST. EAST AND APPROXIMATELY 650 LF PVC WM ALONG CARUSO ROAD TO COMPLETE LOOP SYSTEM.



NO.	INDEX OF SHEETS
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PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1823 26th Avenue East, Bradenton, FL 34208

63RD ST. E. WATERMAIN
61ST ST. E. TO S.R. 70 E.
COVER SHEET

NO.	REVISION DESCRIPTION	BY	DATE

GENERAL

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ANTHONY BENITEZ P.E. AND CAN BE REACHED AT (941) 708-7450 EXT. 7333
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 BASED ON NGS, NORTH AMERICAN VERTICAL DATUM, 1988 ADJUSTMENT (NAVD 88).
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.
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.
37. FOR DEFINITIONS OF EXISTING UTILITY LETTER DESIGNATIONS REFER TO THE FDOT UTILITY ACCOMMODATIONS MANUAL LATEST EDITION.

RESTORATION

38. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
39. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
40. 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.
41. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.
42. 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.
43. 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.
44. 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

45. 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.
46. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEPED DAILY AS PART OF DAILY CLEAN UP.
47. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
48. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
49. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
50. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
51. 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.
52. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
53. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
54. 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.
55. 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.
56. 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.
57. 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.
58. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
59. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
60. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
61. 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.
62. 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.
63. 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.
64. 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.
65. 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.

66. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
67. 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.

SURVEY

68. THE FOLLOWING NGS VERTICAL CONTROL MONUMENTS WERE RECOVERED AND UTILIZED FOR THE ELEVATIONS INDICATED HEREIN: "SUGARMILL WOODS" NAVD 1988 ELEVATION 14.01' "D 564" NAVD 1988 ELEVATION 7.57'
69. THIS SURVEY IS REFERENCED TO A PROJECTION OF THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE NAD 1983/2011 ADJUSTMENT).

SITE CONTROL

DESIGNATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
#104	1131377.17	500144.15	15.88	SIR&C 7203
#105	1130780.58	500135.78	17.19	SNL&D 7203
#106	1130254.59	500139.09	15.13	SIR&C 7203
#107	1129766.13	500138.38	14.07	SIR&C 7203
#110	1130935.71	499871.04	14.95	SIR&C 7203
#111	1130945.89	499525.72	14.32	SIR&C 7203

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: 1-877-832-8911	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 33537 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	SUNSHINE STATE ONE CALL OF FLORIDA 1-(800) 432-4770	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) 750-9384		

LEGEND

EXISTING	PROPOSED	ABBREVIATIONS
BENCH MARK	OVERHEAD CHARTER_TV	R/W RIGHT OF WAY
CONCRETE MONUMENT	BURIED_CHARTER_TV	CONC CONCRETE
IRON PIPE	OVERHEAD ELECTRIC	ASPH ASPHALT
IRON ROD	BURIED_FPL	DRAWY DRAINAGE
HUB	OVERHEAD FRONTIER	SWK SIDEWALK
NAIL & DISK	BURIED FRONTIER	EP EDGE OF PAVEMENT
ELEVATION	FIBER OPTICS	BOC BACK OF CURB
PARCEL ID NO.	UNKNOWN BURIED UTILITY	
PARCEL ID NO.	UNKNOWN OVERHEAD UTILITY	
LOT NO.	RAIL ROAD TRACKS	
GUY WIRE	EDGE OF CONCRETE	
POWER POLE	TOE OF SLOPE	
LIGHT POLE	TOP OF BANK	
MAIL BOX	GRATE INLET	
SIGN	PROPERTY LINE	
REFLECTOR	RIGHT OF WAY	
SPRINKLER		
GAS MARKER		
BACKFLOW PREVENTER		
BLOW OFF VALVE		
FIRE HYDRANT		
WATER VALVE		
AIR RELEASE VALVE		
WATER METER		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEAN OUT		
SOIL BORING LOCATION		
TELEPHONE SERVICE BOX		
FLOW DIRECTION		
GRATE INLET		
METERED END SECTION		



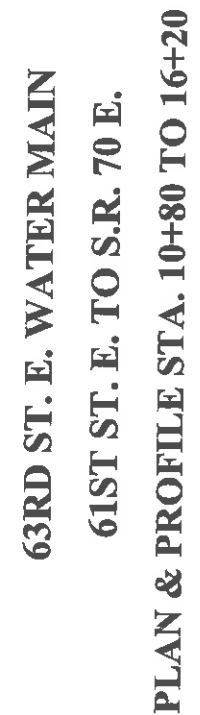
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1022 26th Avenue East, Bradenton, FL 34208

63RD ST. E. WATERMAIN

61ST ST. E. TO S.R. 70 E.

NOTES & LEGEND

DATE					
BY					
REVISION DESCRIPTION					
NO.					
PROJECT #	404-6077970				
SURVEY #	5118116				
SEC./TWN./RGE	15/35s/18e				
SCALE	N/A				
SURVEYED	HYATT	01/02/16	BY	DATE	
DESIGNED	AB/JEA	07/20/16			
DRAWN	JEA	07/20/16			
CHECKED	J.B	07/21/16			
ANTHONY BENITEZ P.E.					
FLORIDA P.E. # 69130					
9/22/16					
Signature & Date					
SHEET 2 OF 4					



NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		404-6077970			
SURVEY #		5118116			
SEC./TWN./RGE		15/35s/18e			
VERT. SCALE		1"=4' 11X17			
HORZ. SCALE		1"=40' 11X17			
		BY	DATE		
SURVEYED			07/12/16		
DESIGNED		AB/JEA	37/20/16		
DRAWN		JEA	07/20/16		
CHECKED		AB	07/21/16		
ANTHONY BENITEZ P.E.					
FLORIDA P.E. # 89130					
9/22/16					
<i>Anthony Benitez</i>					
Signature & Date					
SHEET 3 OF 11					

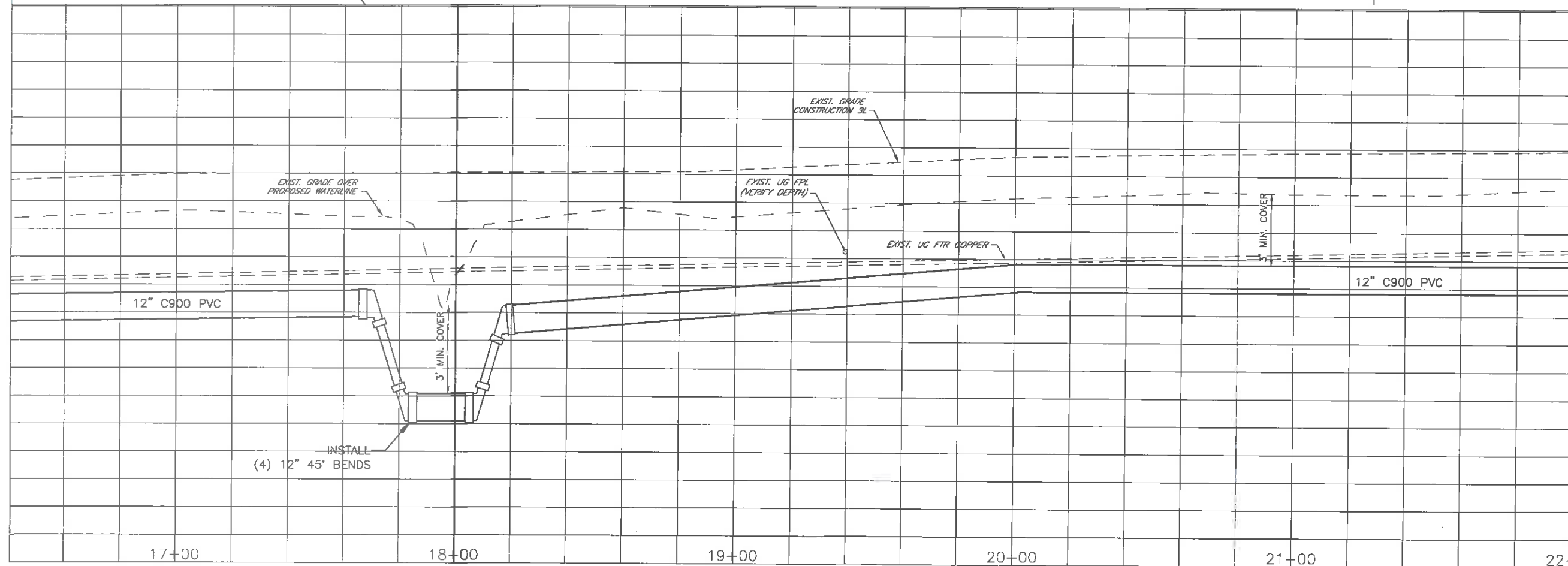
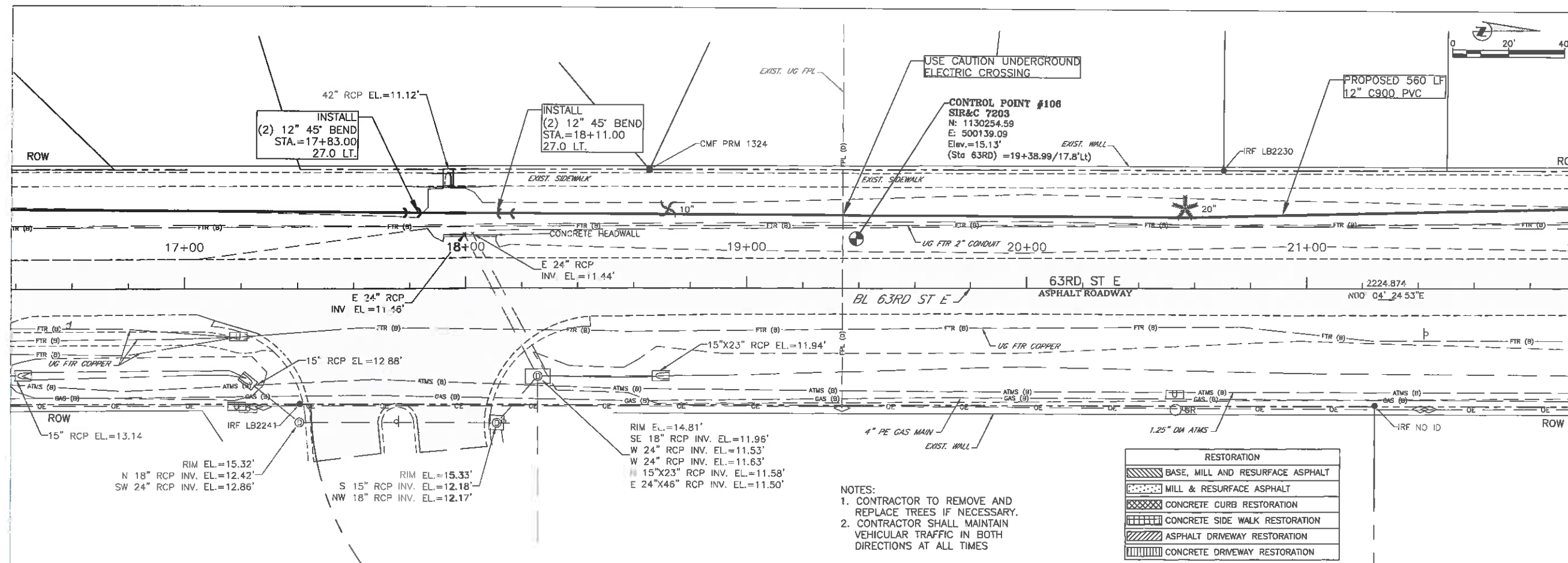


PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1023 26th Avenue East, Bradenton, FL 34208

63RD ST. E. WATER MAIN

61ST ST. E. TO S.R. 70 E.

PLAN & PROFILE STA. 16+40 TO 22+00



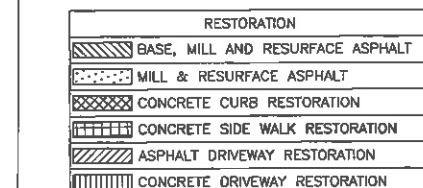
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	404-6077970
SURVEY #	5118116
SEC./TWN./RGE	15/35s/18e
VERT. SCALE	1"=4' 11X17
HORZ. SCALE	1"=40' 11X17
SURVEYED	HYA/T 07/12/16
DESIGNED	AB/JEA 07/20/16
DRAWN	JFA 07/21/16
CHECKED	AB 07/21/16

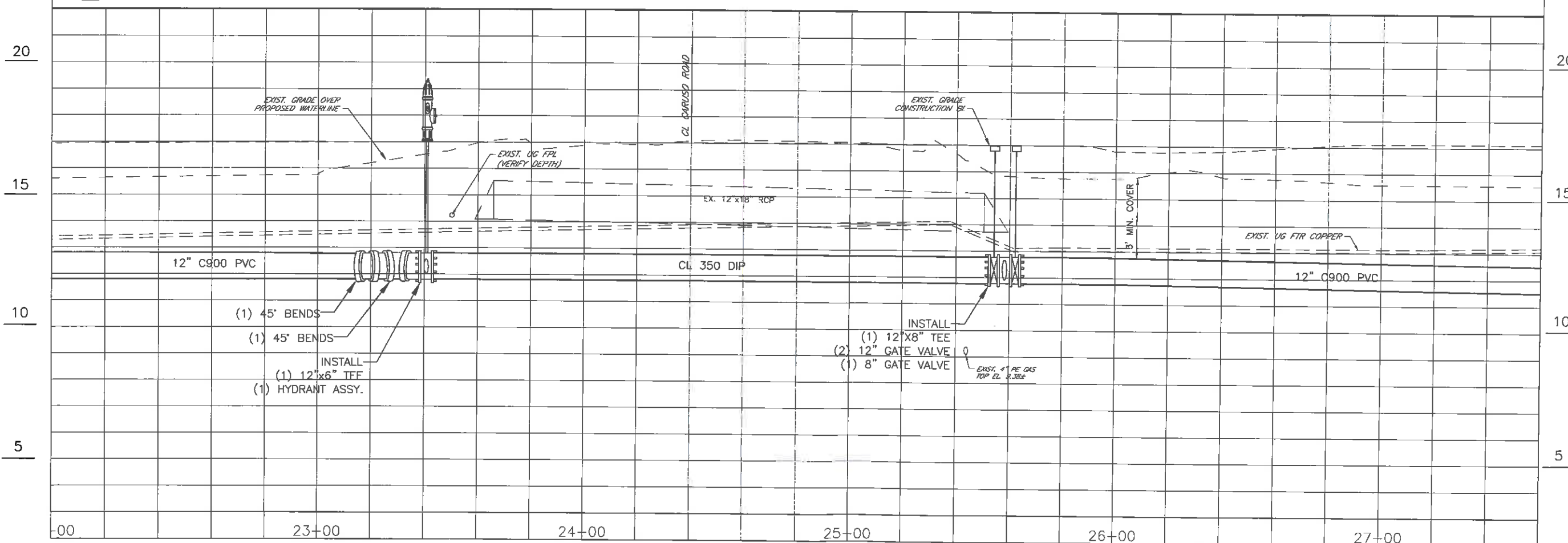
ANTHONY BENITEZ P.E.
FLORIDA P.E. # 69130
9/22/16
Signature & Date

61ST ST. E. TO S.R. 70 E.

PLAN & PROFILE STA. 22+00 TO 27+60



NOTES:
1. CONTRACTOR TO REMOVE AND REPLACE TREES IF NECESSARY.
2. CONTRACTOR SHALL MAINTAIN VEHICULAR TRAFFIC IN BOTH DIRECTIONS AT ALL TIMES



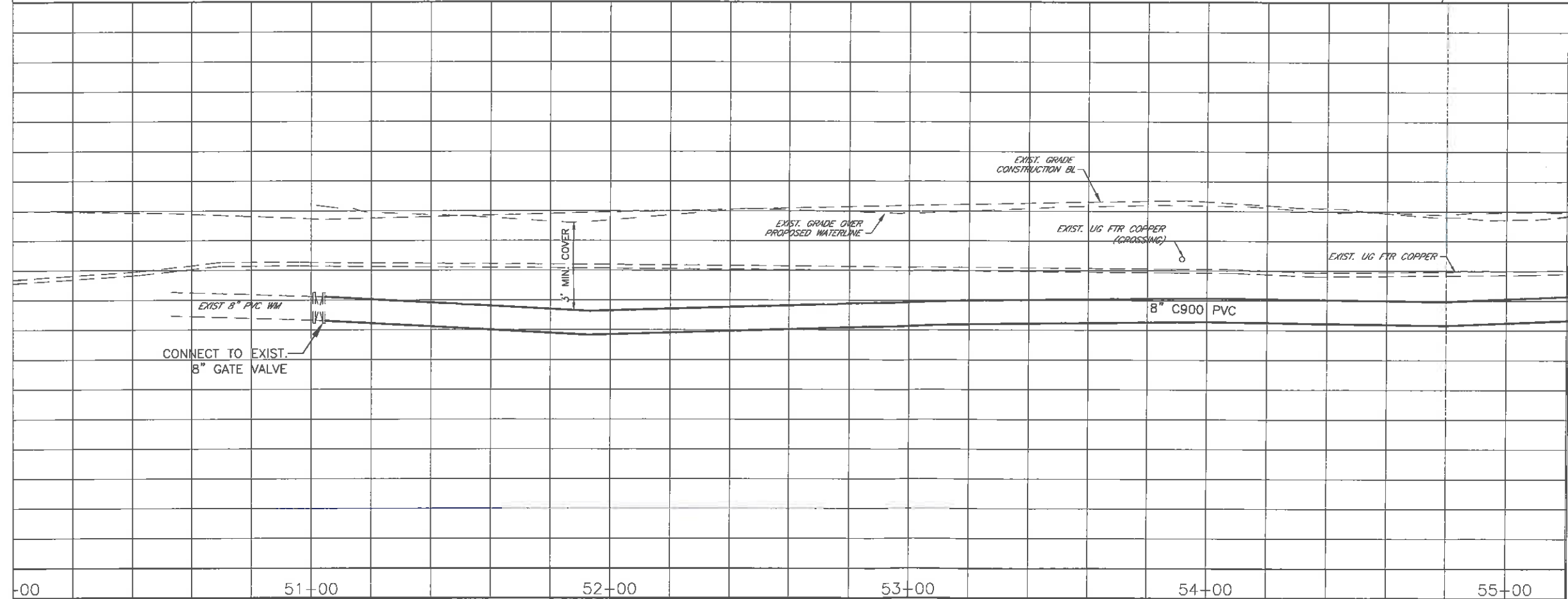
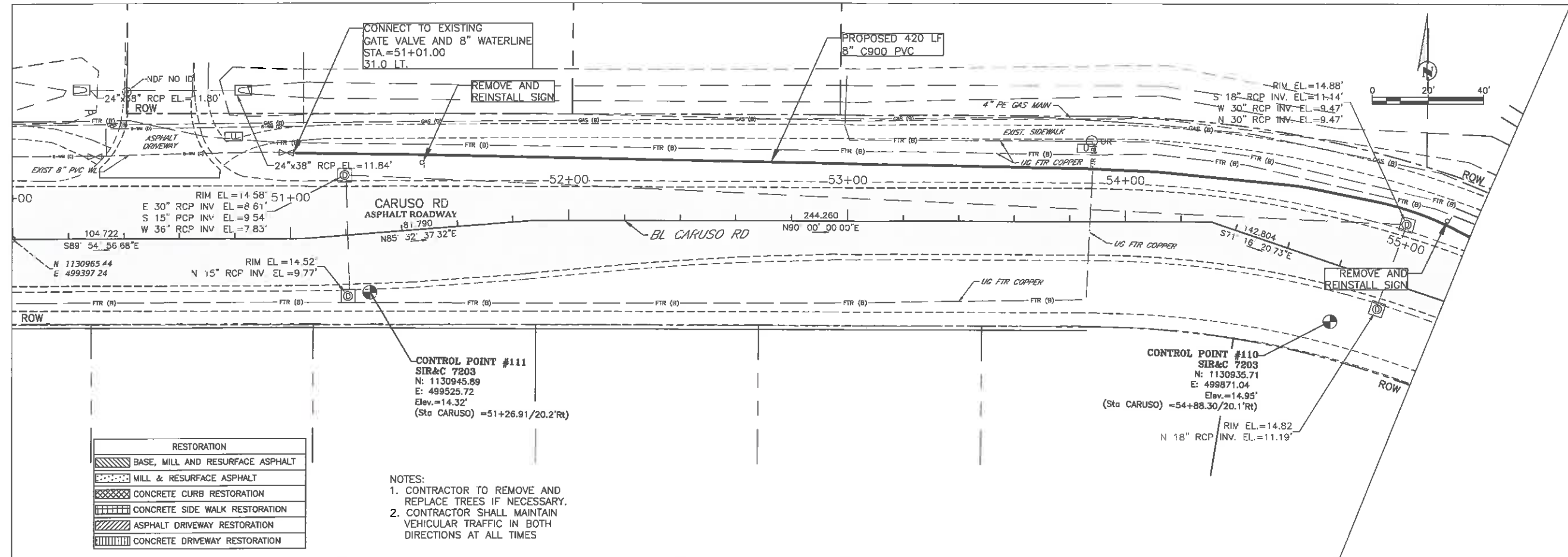
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	SURVEY #	511B116	
	SEC./TWN./RGE	15/35s/18e	
	VERT. SCALE	1"=4' 11X17	
	HORIZ. SCALE	1"=40' 11X17	
		BY	DATE
	SURVEYED	HYATT	07/12/16
	DESIGNED	AB/JEA	07/20/16
	DRAWN	JFA	07/20/16
	CHECKED	AB	07/21/16

ANTHONY BENITEZ P.E.
FLORIDA P.E. # 69130

9/22/16

Signature & Date

COPYRIGHT 2016 MANATEE COUNTY GOVERNMENT S:\PWP_Engineering\Shore\001 - WTR LINE Proj\Water Line-43rd St. E. Caruso Water Loop\dwg\Construction Drawings\3rd at east P\dwg7. 9/29/2016 6:58 AM Jim Anderson, 1/2, Ledger



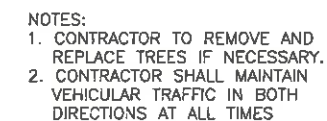
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208







**63RD ST. E. WATER MAIN
61ST ST. E. TO S.R. 70 E.
PLAN & PROFILE STA.50+00 TO 55+20**

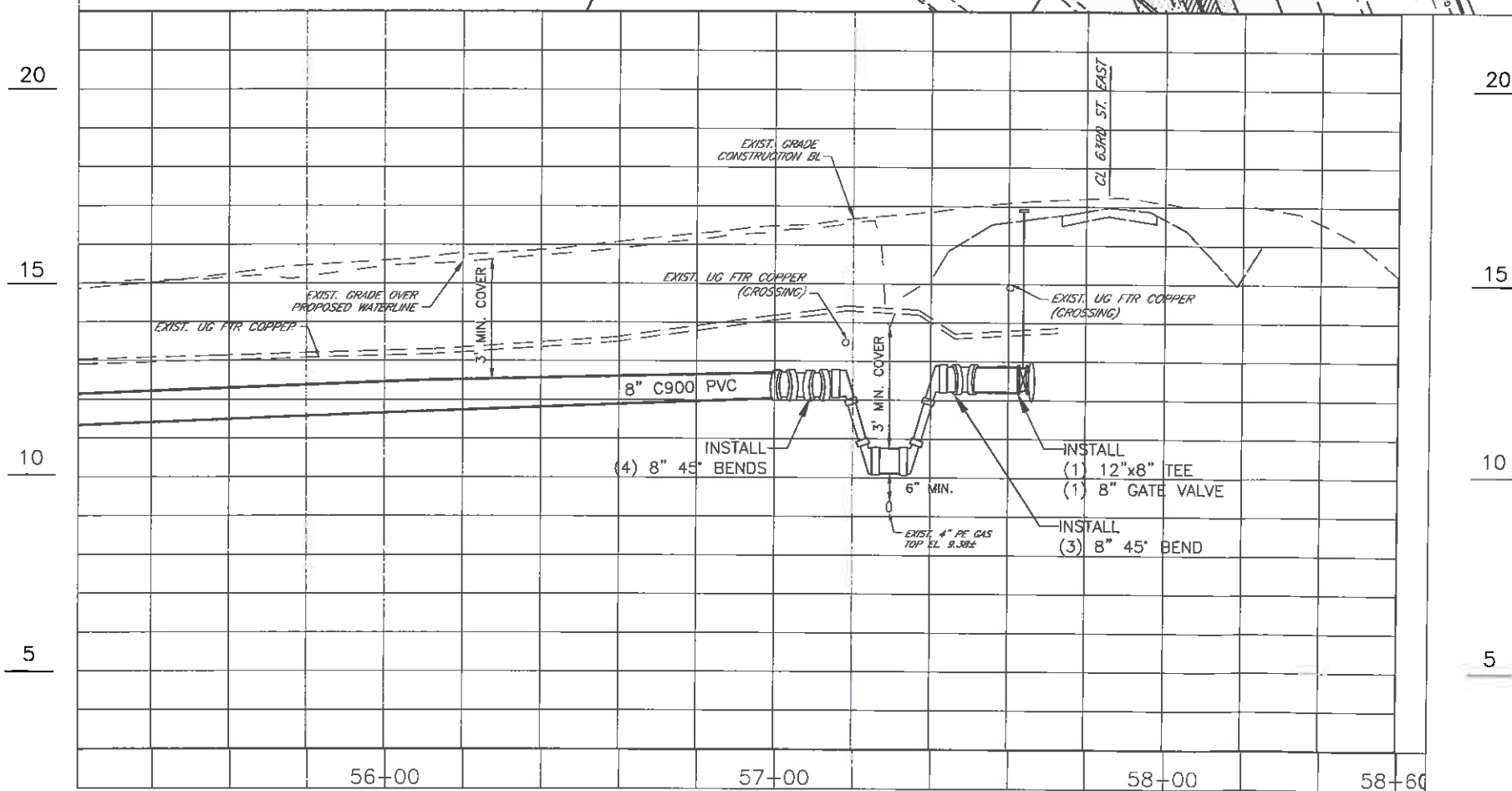
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NO.				
PROJECT #		404-6077970		
SURVEY #		5118116		
SEC./TWN./RGE		15/35s/18e		
VERT. SCALE		1"=4' 11X17		
HORZ. SCALE		1"=40' 11X17		
		BY	DATE	
SURVEYED		HYATT	07/12/16	
DESIGNED		AB/JLA	07/20/16	
DRAWN		JE	07/20/16	
CHECKED		AL	07/21/16	
		ANTHONY BENITEZ P.E.		
		FLORIDA P.E. # 69130		
		9/22/16		
		Signature & Date		
		SHEET 7 OF 11		


61ST ST. E. TO S.R. 70 E.

PLAN & PROFILE STA. 55+20 TO 58+69



RESTORATION	
	BASE, MILL AND RESURFACE ASPHALT
	MILL & RESURFACE ASPHALT
	CONCRETE CURB RESTORATION
	CONCRETE SIDE WALK RESTORATION
	ASPHALT DRIVEWAY RESTORATION
	CONCRETE DRIVEWAY RESTORATION



NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		404-6077970			
SURVEY #		5118116			
SEC./TWN./RGE		15/35s/18e			
VERT. SCALE		1"=4' 11X17			
HORIZ. SCALE		1"=40' 11X17			
		BY		DATE	
SURVEYED		HYAT		07/12/16	
DESIGNED		AB/JCA		07/29/16	
DRAWN		JEA		07/29/16	
CHECKED		AB		07/21/16	
ANTHONY BENITEZ P.E.					
FLORIDA P.E. # 69130					
9/22/16					
 Signature & Date					
SHEET 8 OF 11					

1. ALL THRUST BLOCKS SHALL BE CAST IN PLACE. FITTINGS ADJACENT TO THRUST BLOCKS SHALL BE WRAPPED IN POLYETHYLENE.
2. THIS SHEET IS BASED ON WATER PRESSURE=180 PSI WITH AN ALLOWABLE SOIL BEARING PRESSURE=2000 PSF. CONCRETE STRENGTH 4,000 PSI. REINFORCEMENT #5. IF SOIL OR THRUST BLOCK SHALL BE CAST AGAINST FIRM UNDISTURBED SOIL.
3. FOR LARGER 18" CIRCULARS IT IS NECESSARY TO CHECK THAT PIPE IS SUFFICIENTLY DEEP TO ALLOW 18" MIN. SOIL COVER OVER TOP EDGE OF THRUST BLOCK.
4. RESTRAINED JOINTS MAY BE USED IN LIEU OF THRUST BLOCKS TO SAVE SPACE. THRUST BLOCKS SHALL BE USED IN SITUATIONS WHERE

[illegible]

1. RESTRAIN 11.25" BENDS 50% OF LENGTH FOR 22.5" BENDS.
2. ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.
3. ALL ISOLATION VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
4. PIPE SIZES ARE GIVEN IN INCHES.
5. RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
6. LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.
7. THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON SOIL CLASSIFICATION SP WITH AWWA TYPE 3 TRENCH CONDITIONS, 160 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.
8. RESTRAINED LENGTHS TO BE APPLIED TO PIPELINES PER DETAIL RESTRAINED LENGTHS FOR PIPE.

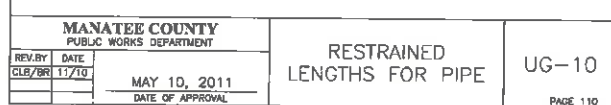
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PVC PIPE	UG-8
REV. BY CLS/BR	DATE 11/10		
MAY 10, 2011			
DATE OF APPROVAL			PAGE 10A

[illegible]

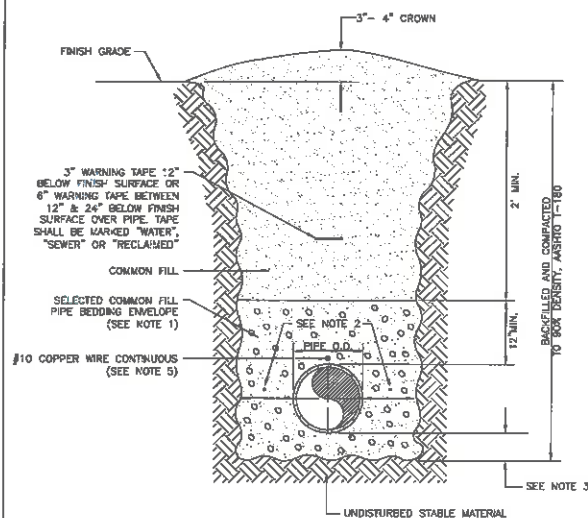
MAIN PIPE SIZE	HORIZ. BENDS				TEES										REDUCERS										PLUGS & VALVES
	90°	45°	22.5°		SIZE					LENGTH					SIZE					LENGTH					
36	100	42	20		x36 18.3	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	188	
30	88	37	18		x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1		162	
24	75	31	15		x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1			136	
20	65	27	13		x20 10.2	x16 8.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1			118	
16	54	22	11		x16 8.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1				98	
12	43	18	8		x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1					75	
10	37	15	7		x10 5.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1					63	
8	30	13	6		x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1						53	
6	24	10	5		x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1							41	
4	17	7	3		x4 2.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1	x30 15.2	x24 12.2	x18 9.1	x12 6.1	x8 4.1	x6 3.1							29	

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 CLS/BR	DATE 11/10 MAY 10, 2011 DATE OF APPROVAL		

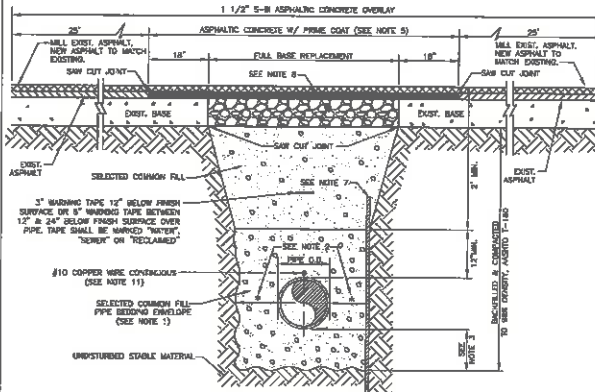


1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
3. TYPICALLY 4" TO 6".
4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.

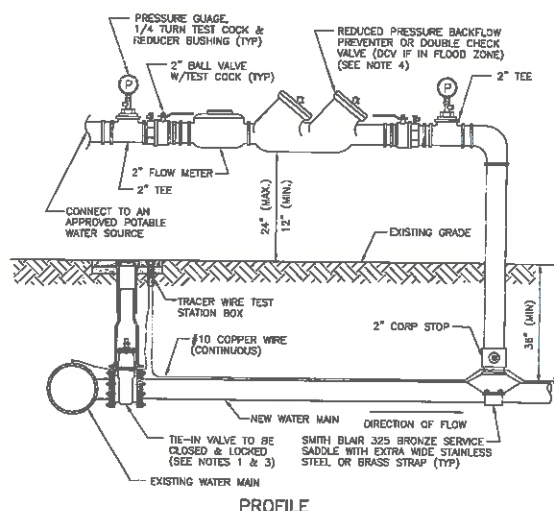


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING	UG-11
REV. BY	DATE		
WRT/KE	03/11		
MAY 10, 2011 DATE OF APPROVAL			PAGE 111

1. USE OF TYPE A-2 TO A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
3. TYPICALLY 4" TO 6".
4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. ASPHALTIC CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF 1 1/4 INCH, WHICHEVER IS GREATER.
6. MILL 25' BACK FROM TRENCH SAW CUT. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE. BUILD UP TO EXIST FINISH. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCREPANCY "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED BY MANATEE COUNTY.
7. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE.
8. BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE.
9. TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL-WEATHER SURFACE AT ALL TIMES. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.
10. RESTORE SIGNAGE & MARKING WITH THERMOPLASTIC PER FDOT STANDARDS, LATEST EDITION.
11. TRACER WIRE NOT REQUIRED FOR GRANTY SEWERS.
12. NOTES 5, THRU 10, ARE MINIMUM REQUIREMENTS FOR A TRENCH IN A ROAD. REFER TO LATEST EDITION OF MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING	UG-12
REV/RY WRY/KE	DATE 03/11		
MAY 10, 2011 DATE OF APPROVAL		PAGE 111	



1. FOR TIE-IN VALVE, SEE DETAIL UW-4 FOR TAPPING SLEEVE VALVE, DETAIL UW-2 FOR GATE VALVE AND DETAIL UW-3 FOR BUTTERFLY VALVE.
2. CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE), ALL CORPORATION STOP TAPS SHALL BE PLACED NOT CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) PIPE DIAMETERS (WHICHEVER IS LARGER) FROM THE NEW TIE-IN VALVE (TAPPING SLEEVE & SLEEVE). A CROSS MAY BE INSTALLED IF THE EXISTING WATER MAIN IS NOT LARGER THAN THE NEW WATER MAIN.
3. IF THE EXISTING WATER MAIN IS LOCATED UNDER PAVEMENT OR CLOSE TO THE ROADWAY, BOTH JUMPER CORPORATION STOPS MAY CONNECT TO THE NEW WATER MAIN LOCATED UNDER THE ROADWAY. THE VALVE MAY BE AN ANGLE VALVE. THE BUTTERFLY VALVE SHALL BE INSTALLED AND THE VALVE MAY BE LOCATED AT THE ROAD LINE. THE PIPING AND APPURTENANCES BETWEEN THE EXISTING MAIN AND ISOLATION VALVE AND JUMPER SHALL BE DISINFECTED BY SPRAYING OR SWABING.
4. BACKFLOW PREVENTER SHALL BE STRUCTURALLY SUPPORTED.
5. SEE DETAIL UW-22 FOR ADDITIONAL JUMPER CONNECTION NOTES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION	UW-21
DATE 01/11	MAY 10, 2011 DATE OF APPROVAL		

- A. A temporary jumper connection is required at all connections between existing active potable water mains and proposed new water main improvements with the following exceptions:
 - A. Projects that include a permanent backflow preventer at the right-of-way which is adjacent to the existing water main;
 - B. Projects that include new water mains that are less than or equal to 18 linear feet in length; or
 - C. Other proposed cases that are approved by Manatee County and the construction drawings specifically state that a temporary jumper connection is not required.
2. A temporary jumper connection shall be installed to connect an approved potable water source (e.g., existing fire hydrant, existing main, existing sewer, storm water truck, etc.) as shown in the standard temporary jumper detail UW-21. A temporary jumper shall be used for filling, flushing and for disinfection of any new main of any size. The jumper connection shall be maintained until after the filling, flushing, testing and disinfection of the new main. The contractor shall be responsible for the approval and clearance for use from the Florida Department of Environmental Protection (FDEP) or the Florida Department of Health (FDOH) has been obtained.
3. Locations and orientation of jumpers associated with connections to existing water mains that are located under the roadway pavement shall be approved on a case-by-case basis.
4. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, latest edition. Unless approved otherwise, the tapping sleeve, and exterior of the existing main to be tapped, and the exterior of the piping being shown on standard temporary jumper detail UW-21 shall be disinfected by spraying with a solution as specified in AWWA C651.
5. A separate and successful hydrostatic test on the new system shall occur between the tie-in valve and the closest downstream gate valve or butterfly valve before performing a hydrostatic test on the remainder of the newly-constructed water main. The tie-in valve and the closest downstream gate valve or butterfly valve shall be closed during the hydrostatic test of the remainder of the newly constructed water main.
6. The jumper shall include a flow meter to ensure that the flow from the supply source is maintained at a minimum rate while chlorinating the new main. The chlorine concentration shall be measured at regular intervals and the chlorine flow shall be at a constant rate of not less than 25 milligrams per liter (mg/L) of free chlorine.
7. The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains continuously after disinfection and until FDEP/FDOH clearance letter is received.
8. All temporary backflow devices or "jumpers" utilized during pipeline construction must show certification that they have been tested annually according to the Florida Building Code, Plumbing Section, Chapter 3, Section 312.9.1, 312.9.2, Chapter 6, Section 608, and Resolution R87-125. Annual certification must be valid at time of installation and the contractor shall provide the certification to the contractor upon request.
9. Except as required for flush lines greater than 36 inches in diameter, the lockable tie-in valve shall remain closed and shall be locked in the closed position by Manatee County. The tie-in valve shall remain closed and locked until the new system has been approved for use by the FDEP/FDOH and all other pertinent agencies.
10. After receipt of approval for use by FDEP/FDOH, Manatee County, and all other pertinent agencies, the Contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2-inch brass or PVC stops.
11. All installation and maintenance of the temporary jumper connection and associated flow meter, backflow device, flow meter, fittings, valves, etc., shall be the responsibility of the Contractor.
12. The tie-in valve shall remain closed if the potable water source is a tank truck.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION NOTES	U/W-22
REV. BY JAN/JEA	DATE 02/09		
MAY 10, 2011 DATE OF APPROVAL			
			PAGE 140

63RD ST. E. WATERMAIN
61ST ST. E. TO S.R. 70 E.

DETAILS

REVISION DESCRIPTION		BY	DATE
NO.			
PROJECT #		404-6077970	
SURVEY #		5118116	
SEC./TWN./RGE		15/35e/18e	
SCALE		N/A	
	BY	DATE	
SURVEYED	HYATT	01/02/16	
DESIGNED	AB/JEA	01/20/16	
DRAWN	JEA	07/20/16	
CHECKED	AB	07/21/16	

ANTHONY, RENITEZ P.E.

FLORIDA P.E. # 69130

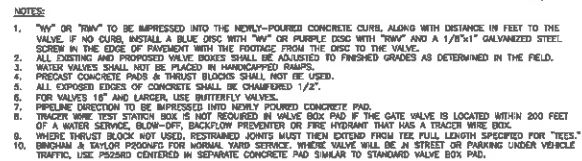
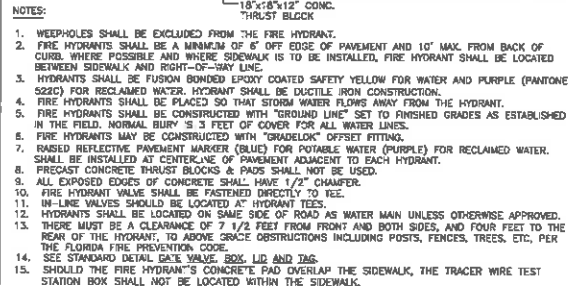
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4/21/14

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Signature & Date

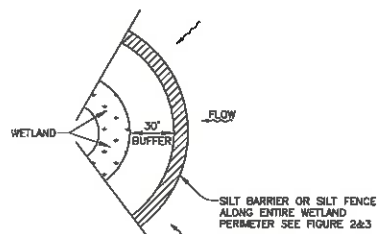
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UW-2UW-5

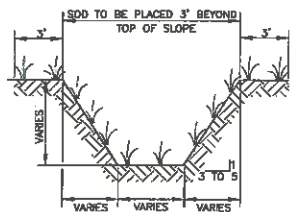
**63RD ST. E. WATERMAIN
61ST ST. E. TO S.R. 70 E.**

DETAILS

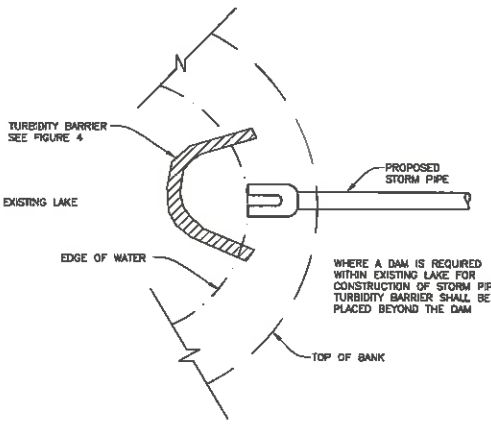
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SURVEY #		5118116			
SEC./TWN./RGE		15/35s/18e			
SCALE		N/A			
	BY	DATE			
SURVEYED	HYATT	01/02/16			
DESIGNED	AB/JEA	07/20/16			
DRAWN	JEA	07/20/16			
CHECKED	AB	07/21/16			
ANTHONY BENITEZ P.E.					
FLORIDA P.E. # 69130					
9/22/16					
 Signature & Date					
SHEET 10 OF 11					



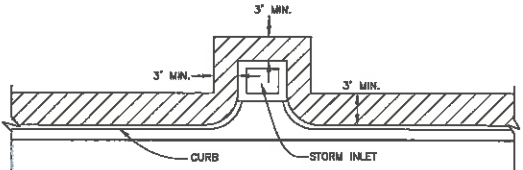
WETLAND BUFFER
FIGURE 1



TYPICAL SWALE SECTION
FIGURE 5

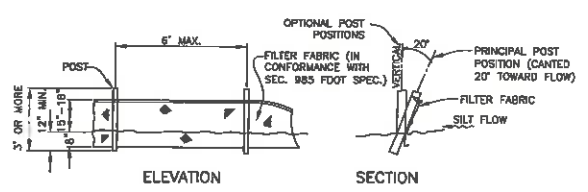


TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9

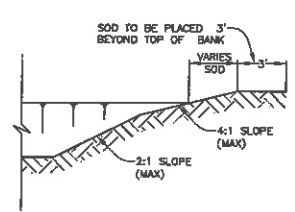


SOD ALONG CURB AND AROUND INLET
FIGURE 14

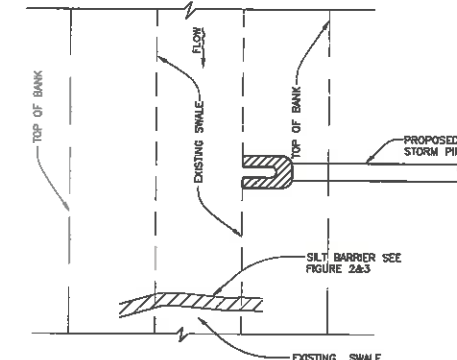
NOTE:
REFERENCE THE FDOT DESIGN STANDARDS
LATEST EDITION FOR ALL TEMPORARY
EROSION CONTROL MEASURES.



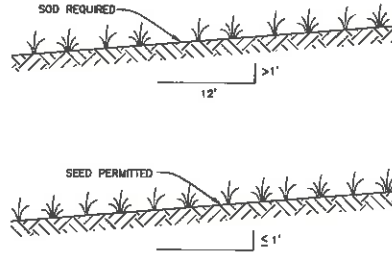
TYPICAL SILT FENCE
FIGURE 2



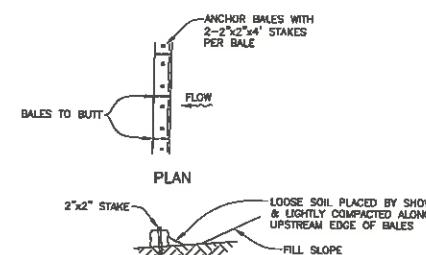
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



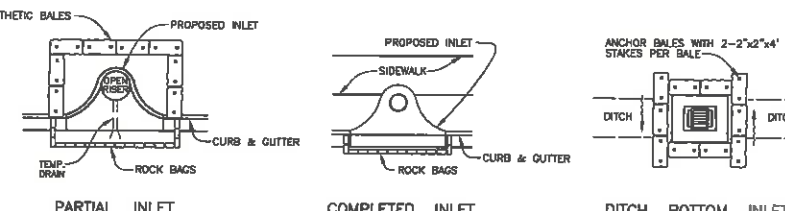
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



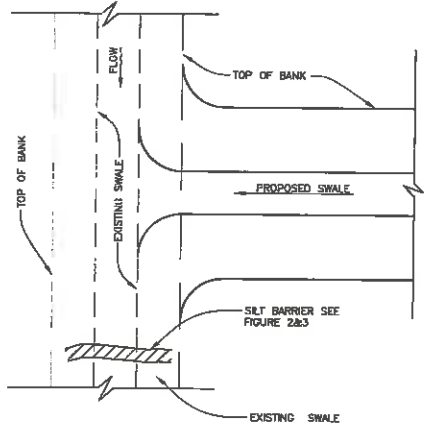
GRASS SLOPES
FIGURE 13



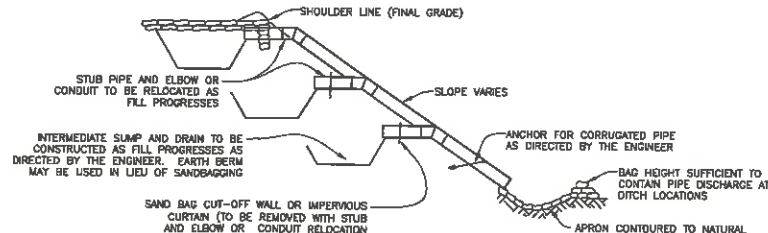
TYPICAL BALE SILT BARRIER
FIGURE 3



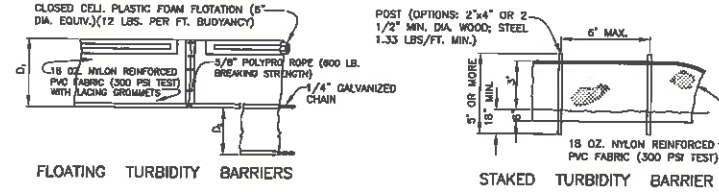
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11

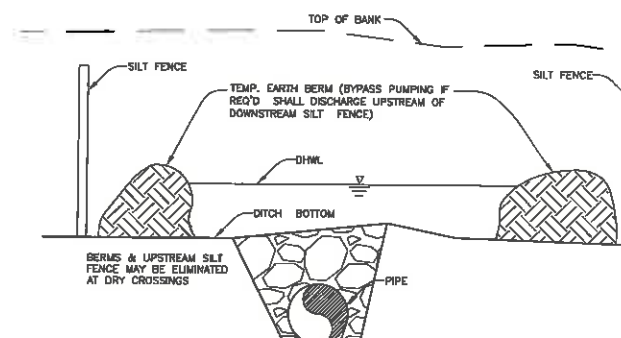


**SECTION AA
TEMPORARY SLOPE DRAIN**
FIGURE 15

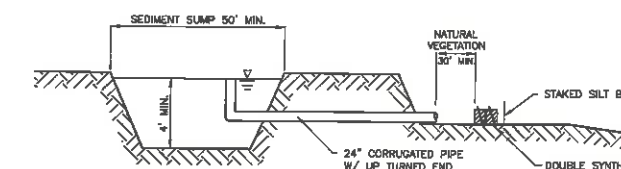


TURBIDITY BARRIERS
FIGURE 4

TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



UNDERGROUND PIPE CROSSING
FIGURE 12



SEDIMENT SUMP SECTION
FIGURE 16



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 24th Avenue East, Bradenton, FL 34208

63RD ST. E. WATERMAIN
61ST ST. E. TO S.R. 70 E.
EROSION CONTROL

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PROJECT # 404-6077970
SURVEY # 5118116
SEC./TWN./RGE 15/35a/18e
SCALE N/A
SURVEYED BY DATE
DESIGNED AB/JEA 07/20/16
DRAWN JEA 07/20/16
CHECKED AB 07/21/16
ANTI-ONY BENITEZ P.E.
FLORIDA P.E. # 89130
9/22/16
Signature & Date
SHEET 11 OF 11