

GENERAL NOTES

- ELEVATIONS SHOWN ON THE PLANS REFERENCE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D. - 1929).
- LOCATION, ELEVATION, AND DIMENSIONS OF THE EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT TIME OF THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE ONE CALL CENTER OF FLORIDA AT 1-800-432-4770 TO ARRANGE FIELD LOCATIONS. THE CONTRACTOR SHALL REPAIR ALL DAMAGES RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING HIS WORK AND SHALL COMPLY WITH ALL STATE, COUNTY, AND LOCAL ORDINANCES AND OBTAIN ANY NECESSARY WORK PERMITS THAT MAY BE REQUIRED PRIOR TO CONSTRUCTION.
- MAINTENANCE OF TRAFFIC WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE PREPARED PER FOOT STANDARDS. MOT PREPARER SHALL HOLD THE NEW WORK ZONE TRAFFIC CONTROL ADVANCED LEVEL TRAINING CERTIFICATION. A COPY OF THE CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER ALONG WITH THE MOT FOR APPROVAL BY FOOT. ALL WORK ZONES SHALL BE SET UP AND MAINTAINED BY SOMEONE WHO HAS WORK ZONE TRAFFIC CONTROL INTERMEDIATE LEVEL TRAINING.
- UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS, THE CONTRACTOR SHALL PROVIDE SUITABLE BORROW MATERIAL, APPROVED BY THE ENGINEER, AND INSTALL SAID MATERIAL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- OVERALL CLEAN UP SHALL BE ACCOMPLISHED BY THE CONTRACTOR IN ACCORDANCE WITH COUNTY STANDARDS OR AS DIRECTED BY THE ENGINEER. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE LINE ITEMS.
- THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY PROJECT ENGINEER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- ANY U.S.C. AND G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY: GEODETIC INFORMATION CENTER
ATTN: N/GC-162
6001 EXECUTIVE BLVD, ROCKVILLE, MARYLAND 20852 Ph. (301)443-8319
- THE CONTRACTOR(S) PERFORMING TRENCH EXCAVATION ON THIS CONTRACT SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S (OSHA) TRENCH EXCAVATION SAFETY STANDARDS, 29 C.F.R., S.1926.650, SUBPART P, INCLUDING ALL SUBSEQUENT REVISIONS OR UPDATES TO THE STANDARDS AS ADOPTED BY THE DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY (DLES).
- UNLESS OTHERWISE SPECIFIED IN THE PLANS, EXISTING SOO, DISTURBED BY CONSTRUCTION, SHALL BE REPLACED IN KIND (OR BETTER, AS APPROVED BY THE COUNTY'S PROJECT MANAGER).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXCESS MATERIAL AND THE PROPER DISPOSAL OF THE SAME.
- CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, AND WATERWAYS. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. THE MAINTENANCE OF EROSION CONTROL DEVICES AND THEIR COMPLETE REMOVAL ARE TO BE INCLUDED IN THE UNIT BID PRICE FOR EACH INDIVIDUAL ITEM.
- THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING DRAINAGE SYSTEM WITHIN THE LIMITS OF THE PROJECT AREA, FOR THE DURATION OF THE PROJECT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE WORK INVOLVED.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF THIS WORK PERFORMED IN THIS CONTRACT
- A VERTICAL CLEARANCE OF 18 INCHES SHALL BE MAINTAINED BETWEEN SANITARY SEWERS AND WATER MAINS. IF CLEARANCE CANNOT BE ACHIEVED BY ADJUSTING THE WATER MAIN, THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A REQUIRED 10 FEET ON EACH SIDE OF THE CONFLICT POINT. SUFFICIENT LENGTHS DI PIPE MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE STAGGERED AS FAR APART AS POSSIBLE WITH NOT LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. SPECIAL STRUCTURAL SUPPORTS FOR THE MAINS MAY BE REQUIRED. ALTERNATIVELY, THE SANITARY SEWERS, STORM SEWERS, FORCE MAINS AND RECLAIMED WATER MAINS AT THE CROSSING CAN BE PLACED IN SLEEVES OR ENCASED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE 10 FEET SEPARATION BETWEEN JOINTS.

- A LATERAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER.
- ALL PROPOSED MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- ALL COMPONENTS OF THE WATER MAIN SYSTEM SHALL BE PRESSURE TESTED & BACTERIOLOGICAL TESTED PRIOR TO ACCEPTANCE BY THE ENGINEER. PRESSURE & BACTERIOLOGICAL TESTS TO BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS. WATER MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST FOR TWO HOURS AT FULL WORKING PRESSURE, BUT NOT LESS THAN 180 PSI. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AT (813) 286-1711 48 HOURS IN ADVANCE OF PERFORMING TESTS. WATER MAIN MAY NOT BE PLACED INTO SERVICE UNTIL CLEARED BY COUNTY HEALTH DEPARTMENT.
- THE CONTRACTOR IS TO "PROTECT IN PLACE" THE FACILITIES THAT ARE NOT TO BE RELOCATED AND/OR REMOVED, BUT ARE TO REMAIN IN PLACE.
- THE CONTRACTOR IS TO ADJUST OR RELOCATE ALL THE FACILITIES THAT FALL IN CONFLICT IN ACCORDANCE WITH COUNTY STANDARDS.
- THE CONTRACTOR SHALL PROVIDE DETAILED RECORD DRAWINGS, ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE LINE ITEMS. RED-LINE DRAWINGS SHALL BE CURRENT WITH EACH PAY APP SUBMITTED AND WILL BE CHECKED AS PART OF THE PAY APPLICATION REVIEW PROCESS.
- ALL UTILITY CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST VERSION OF THE MANATEE COUNTY UTILITY STANDARDS.
- WHERE PARALLEL WATER AND SEWER MAINS HAVE LESS THAN 10 FOOT HORIZONTAL SEPARATION, 20-FOOT LENGTHS OF DIP SHALL BE USED WITH THE JOINTS STAGGERED AT 10 FOOT INTERVALS.
- PIPE JOINT DEFLECTION SHALL NOT EXCEED 80% OF THE MAXIMUM ALLOWED BY THE MANUFACTURER FOR THE SIZE AND TYPE OF JOINT.
- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE THE-INS WITH EXISTING SERVICES WITH THE COUNTY AND PROPERTY OWNERS.
- ACCESS TO EXISTING RESIDENCES MUST BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL PREPARE MOT AND ACCESS PLANS DETAILING EACH DRIVEWAY CROSSING.
- PIPE MATERIAL SHALL BE 8090 PVC FOR OPEN CUT INSTALLATION AND HDPE DR-11 FOR DIRECTIONAL DRILL INSTALLATION. REFER TO SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR PREPARING AND OBTAINING APPROVAL FROM MANATEE COUNTY FOR ALL MOT PLANS.
- REFER TO THE LATEST EDITION OF THE MANATEE COUNTY STANDARDS DATED MARCH, 2009 FOR TECHNICAL SPECIFICATIONS CONCERNING PIPE, FITTINGS, VALVES AND ETC.

BASIC CONSTRUCTION SEQUENCE:

- INSTALL NEW WATER LINE PIPE AND APPURTENANCES.
- PRESSURE TEST AND BACTERIAL TEST NEW WATER MAIN.
- TRANSFER SERVICES.
- CUT EXISTING PIPE AND INSTALL SHUT-OFF VALVE
- GROUT FILL EXISTING PIPE

SURVEY PROVIDED BY:

POLARIS ASSOCIATES INC.
 PROFESSIONAL SURVEYING LB 6113
 18850 U.S. HIGHWAY 19 SUITE 500
 CLEARWATER, FLORIDA 33764 (727)
 524-6500

UTILITY CONTACTS:

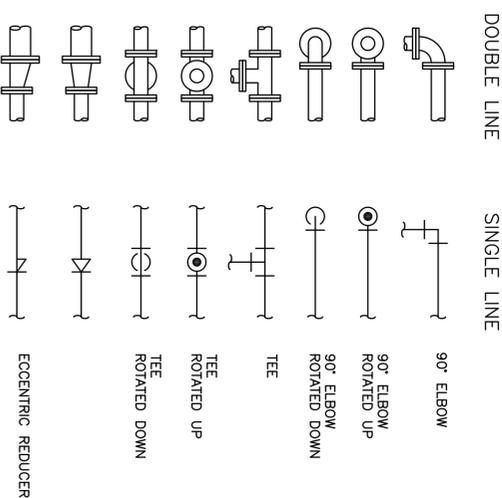
POWER FLORIDA POWER AND LIGHT (941) 739-3300
 1851 WHITEFIELD AVE.
 SARASOTA FLORIDA, 34243

TELEPHONE VERIZON (941) 752-8080
 6416 14TH STREET WEST
 BRADENTON, FLORIDA, 34207
 ATTN: D. HUTTON

GAS TECO/PEOPLES GAS
 8261 VICO COURT
 SARASOTA FLORIDA, 34240
 TEL: 941-342-4028
 ATTN: TED FEELEY

WATER/SEWER WATER / SEWER
 MANATEE COUNTY UTILITIES
 MANATEE COUNTY UTILITIES
 BRIGHT HOUSE NETWORKS
 4601 15TH STREET EAST
 BRADENTON, FLORIDA 34203
 TEL: 941-748-3816
 ATTN: WALTER KROL

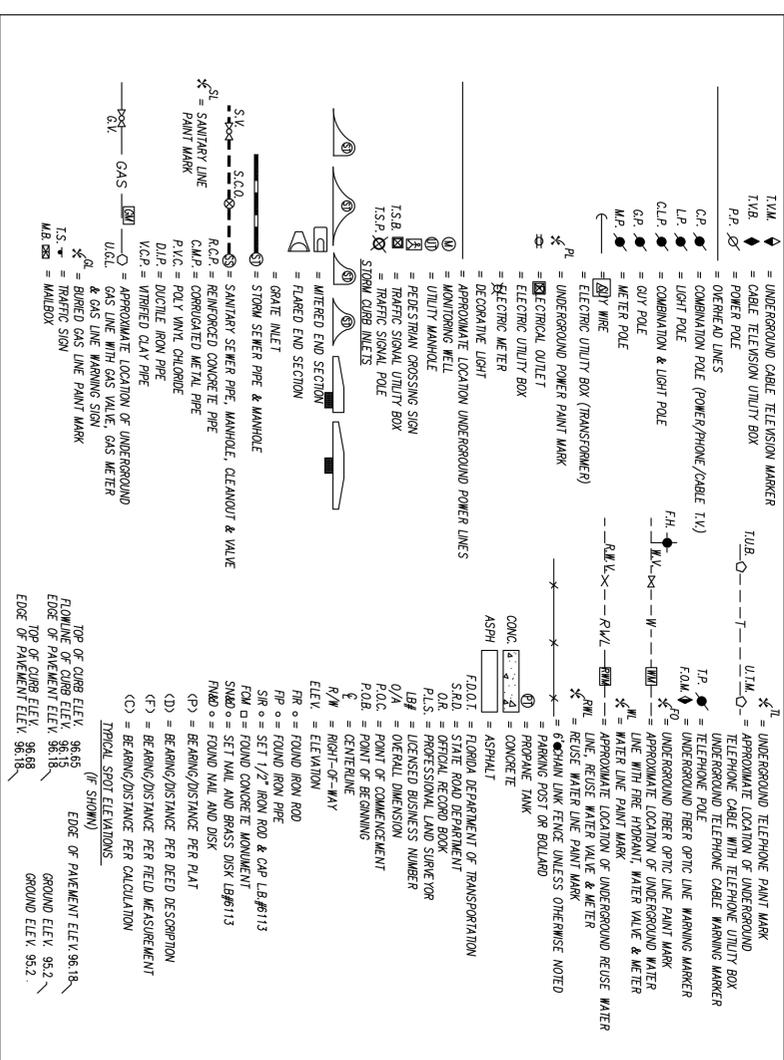
PIPE AND FITTING SYMBOLS



ABBREVIATIONS:

- ADPT. ADAPTER
- BA.V. BALL VALVE
- CONC. CONCRETE
- CONC. CONCRETE
- DI. DUCTILE IRON
- DOCK. DOCK
- ECC. ECCENTRIC
- ELEV. ELEVATION
- EXIST. EXISTING
- FLG. FLANGE
- FT. FEET
- GAL. GALVANIZED
- MIN. MINIMUM
- O.C. ON CENTER
- O/E OR EQUAL
- PE PLAN END
- PO PUSH ON JOINT
- PVC POLYVINYL CHLORIDE PIPE
- RED. REDUCER
- RMU RESTRAINED MECHANICAL JOINT
- SCH. SCHEDULE
- SW SOLVENT WELD
- THD. THREADED
- THP. TYPICAL
- W/W WITH WATER

LEGEND OF SYMBOLS AND ABBREVIATIONS



URS
 7650 West Courtney Campbell Causeway
 Suite 700
 Tampa, Florida 33607
 Phone: (813) 286-1771 Fax: (813) 286-6587
 Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

URS JOB NUMBER	12008496
PM: D. WILCOX	
ENG: D. WILCOX	
DRW: D. ELLIS	
FILE SAVE DATE:	August 27, 2009



HOLIDAY HEIGHTS WATER MAIN REPLACEMENT
 FOR
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

PHASE 2 GENERAL NOTES

PROJECT STATUS
 BID SET
 OCTOBER 2008
 G-2

DAVID A. WILCOX, P.E.
 FLORIDA P.E. NO. 34942

URS
 7650 West Courtney Campbell Causeway
 Suite 700
 Tampa, Florida 33607
 Pn: (813) 286-1711 Fax: (813) 286-6587
 Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

URS JOB NUMBER
 12008496
 PM: D. WILCOX
 ENG: C. OSMAWSKI
 DRW: D. ELLIS
 FILE SAVE DATE:
 September 3, 2009

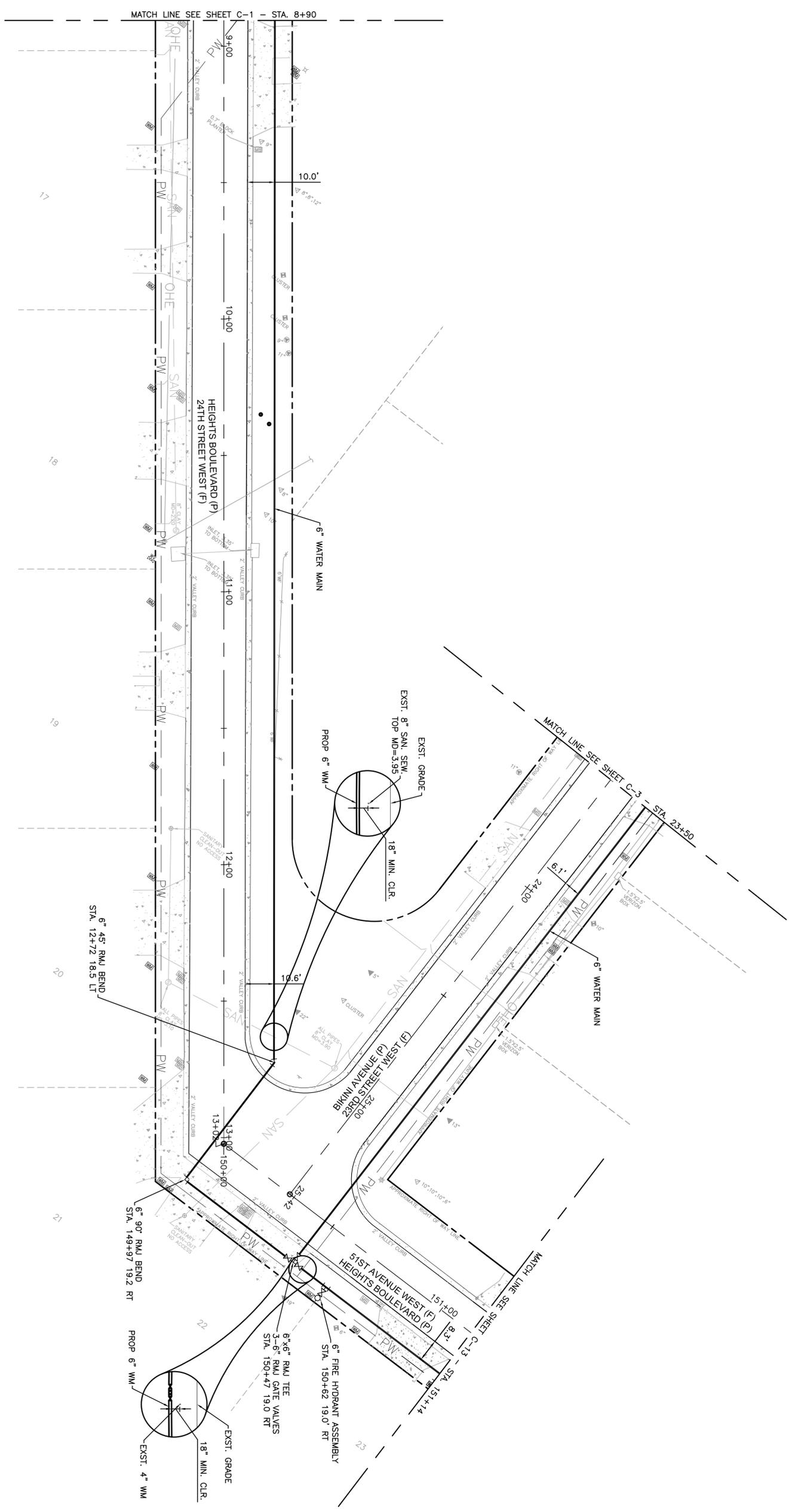


HOLIDAY HEIGHTS
 WATER MAIN REPLACEMENT
 FOR
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

PHASE 3
 24TH STREET WEST

DAVID A. WILCOX, P.E.
 FLORIDA P.E. NO. 34942

PROJECT STATUS
 BID SET
 OCTOBER 2008
C-2



URRS
 7650 West Courtney Campbell Causeway
 Suite 700
 Tampa, Florida 33607
 Ph: (813) 286-1711 Fax: (813) 286-6587
 Florida Engineering Number: 000002

NO.	BY	DATE	DESCRIPTION

URS JOB NUMBER
12008496

PM: D. WILCOX
 ENG: C. OSMANSKI
 DRW: D. ELLIS
 FILE SAVE DATE:
September 4, 2009



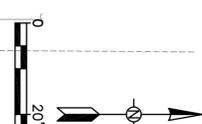
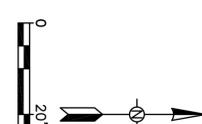
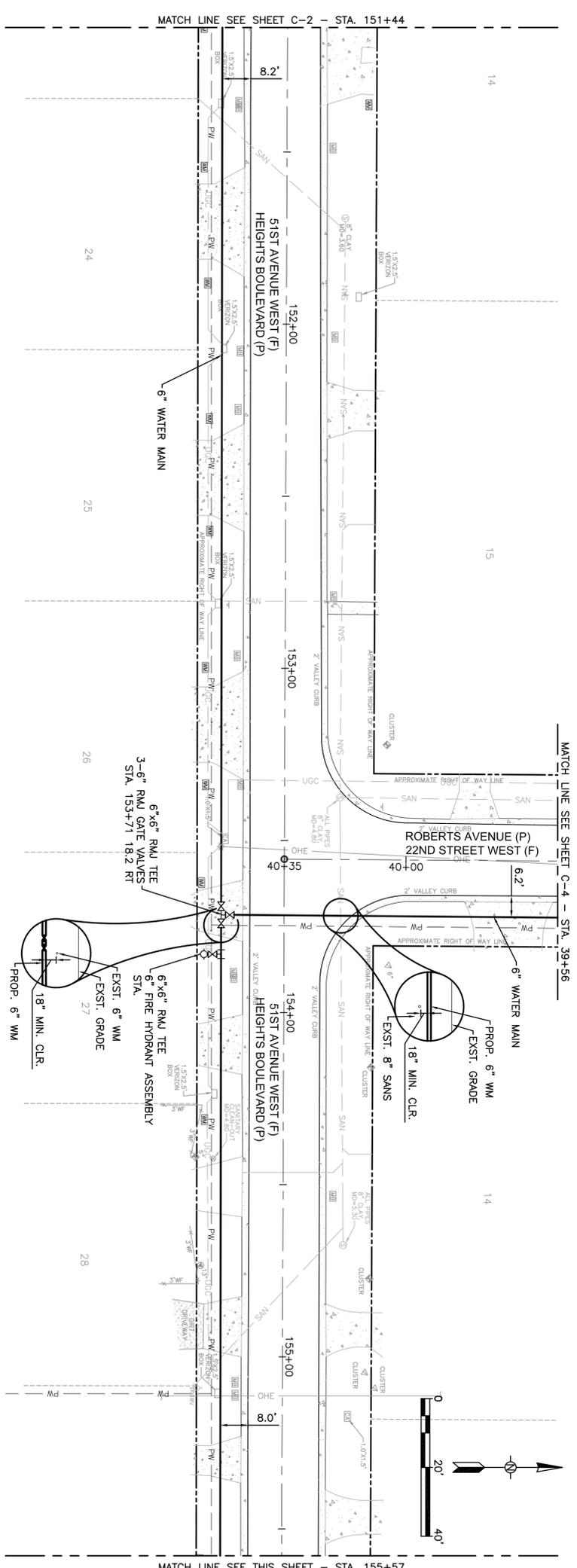
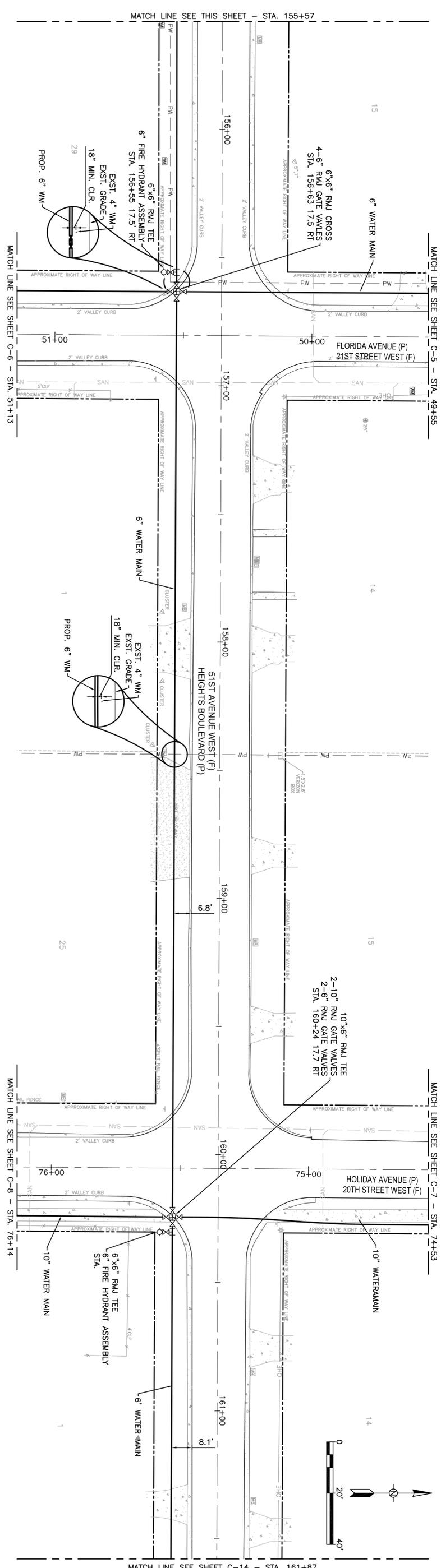
HOLIDAY HEIGHTS
 WATER MAIN REPLACEMENT
 FOR
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

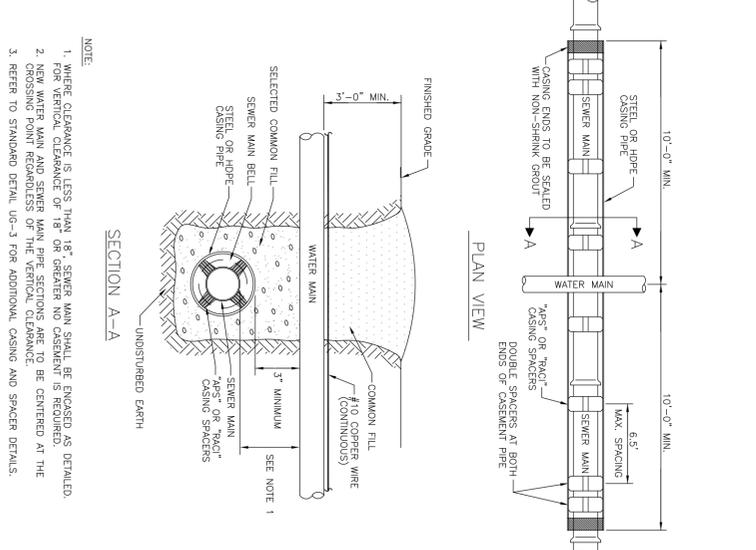
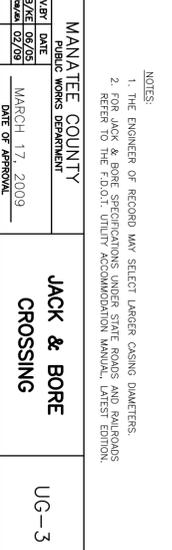
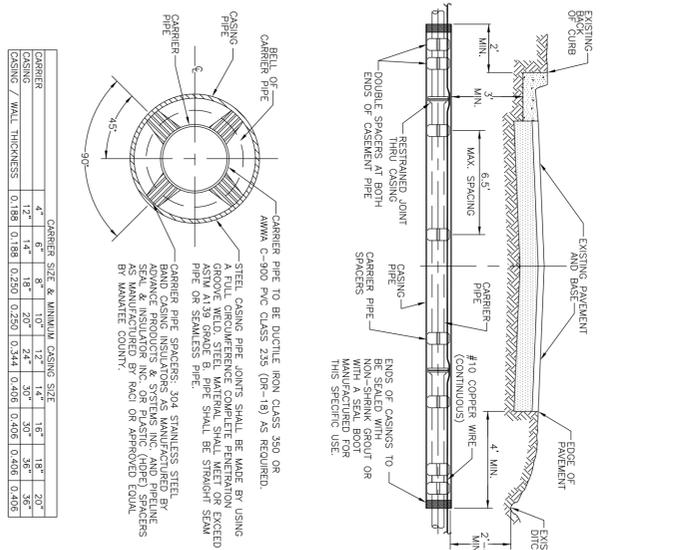
PHASE 3
 51ST AVENUE WEST

PROJECT STATUS
 BID SET
 OCTOBER 2008

DAVID A. WILCOX, P.E.
 FLORIDA P.E. NO. 34942

C-13





MANATEE COUNTY PUBLIC WORKS DEPARTMENT

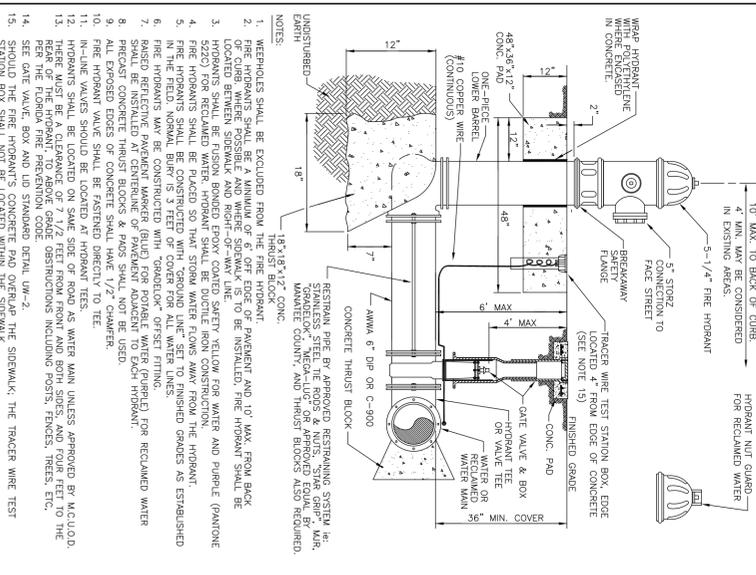
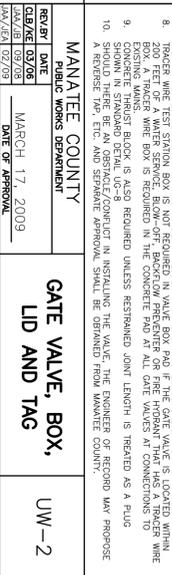
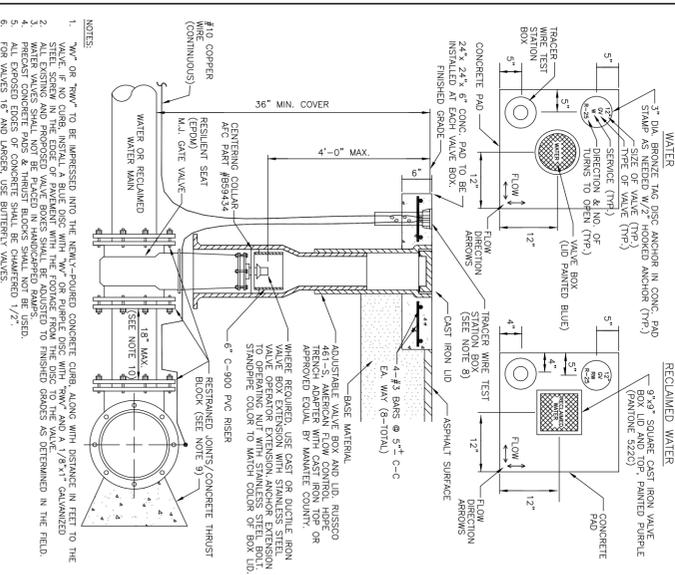
REVISIONS

NO.	BY	DATE	DESCRIPTION

URS

7650 West Courtney Campbell Causeway
 Suite 700, Florida 33607
 Phone (813) 286-1771, Fax: (813) 286-6587
 Florida Engineering Number: 000002

MANATEE COUNTY
 TYPICAL WATER & SEWER CROSSING
 UG-2



MANATEE COUNTY PUBLIC WORKS DEPARTMENT

REVISIONS

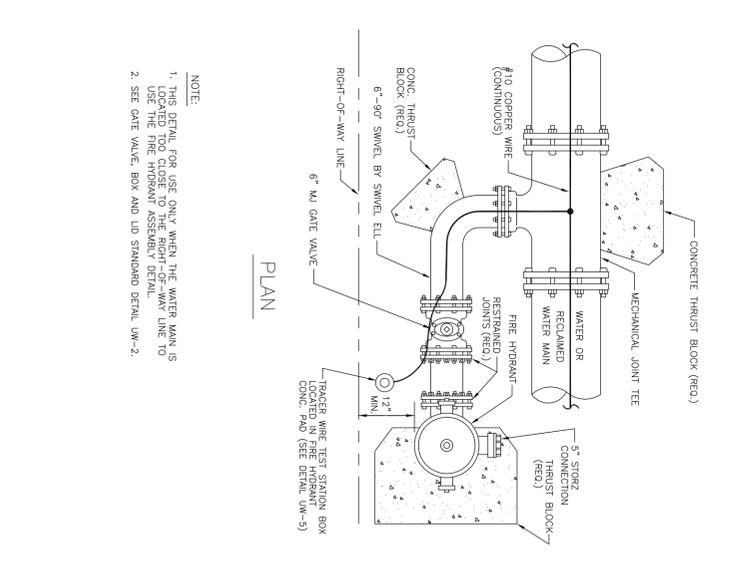
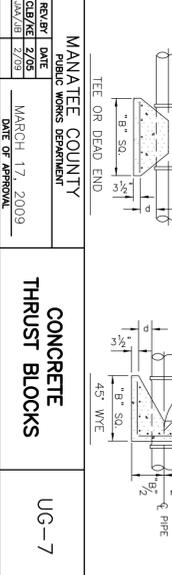
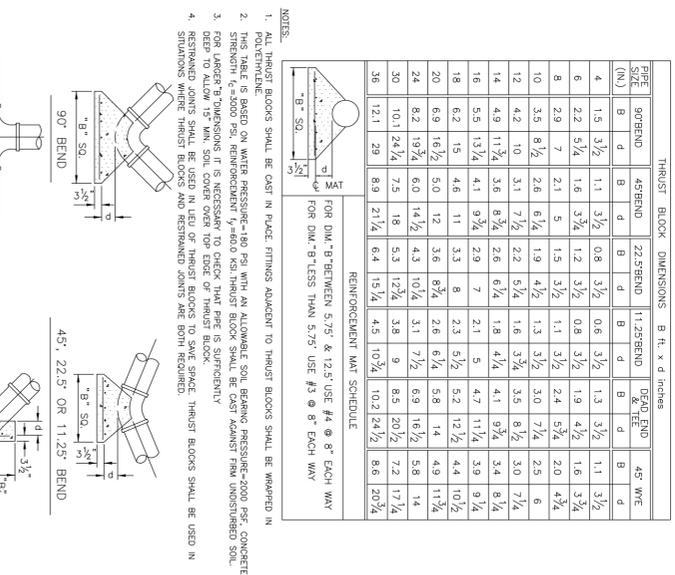
NO.	BY	DATE	DESCRIPTION

URS

12008496

PK: D. WILCOX
 ENG: D. ELLIS
 DRW: D. ELLIS
 FILE SAVE DATE: November 3, 2009

MANATEE COUNTY
 TYPICAL WATER & SEWER CROSSING
 UG-2



MANATEE COUNTY PUBLIC WORKS DEPARTMENT

REVISIONS

NO.	BY	DATE	DESCRIPTION

MANATEE COUNTY

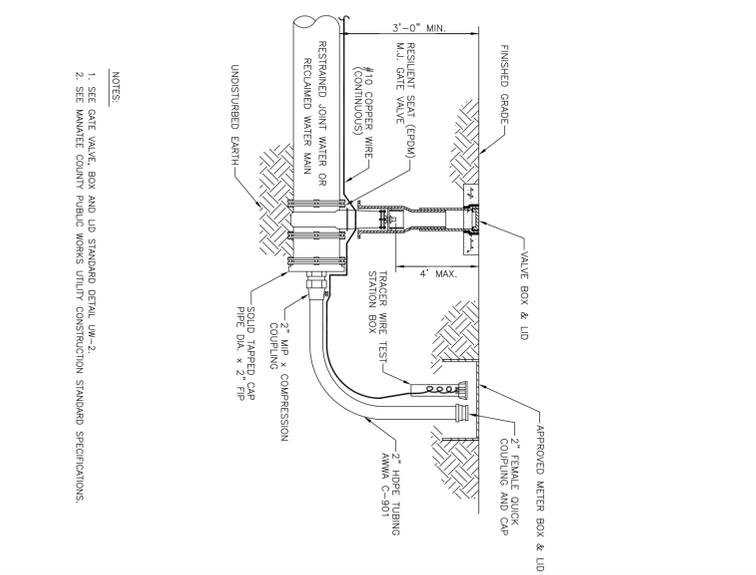
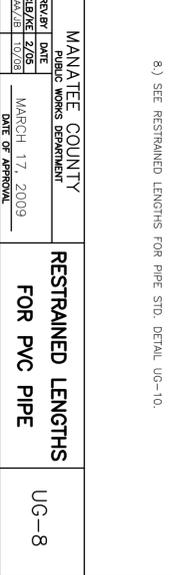
HOLIDAY HEIGHTS WATER MAIN REPLACEMENT

FOR
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

PHASE 3
 DETAILS

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

MAIN PIPE SIZE	TEES		REDUCERS		FLUGS		WELDS	
	90°	45°	22.5°	11.25°	22.5°	11.25°	22.5°	11.25°
24	30	38	18	24	12	16	10	14
20	24	30	16	20	10	14	8	11
16	18	24	12	16	8	11	6	8
12	12	16	8	11	6	8	4	6
8	8	11	6	8	4	6	3	4
4	4	6	4	6	3	4	2	3



MANATEE COUNTY PUBLIC WORKS DEPARTMENT

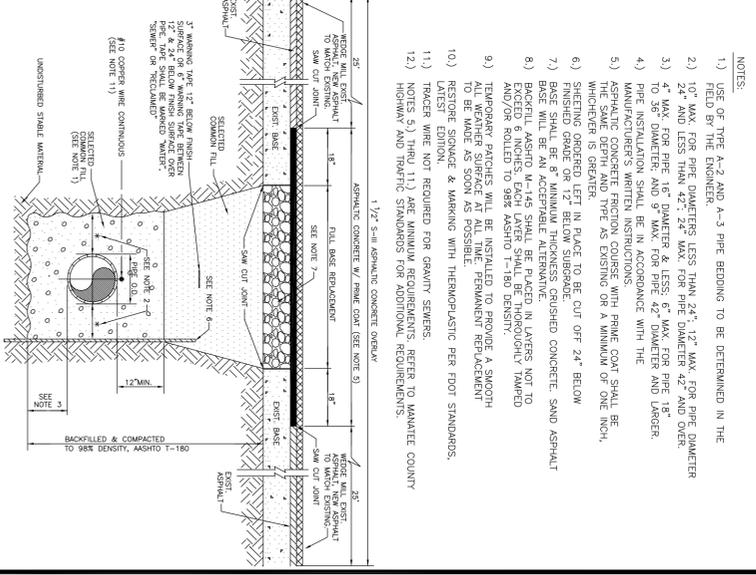
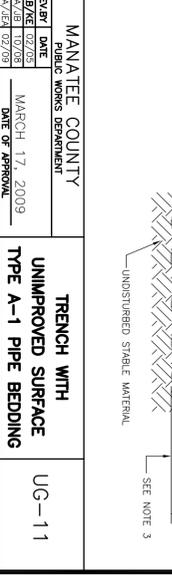
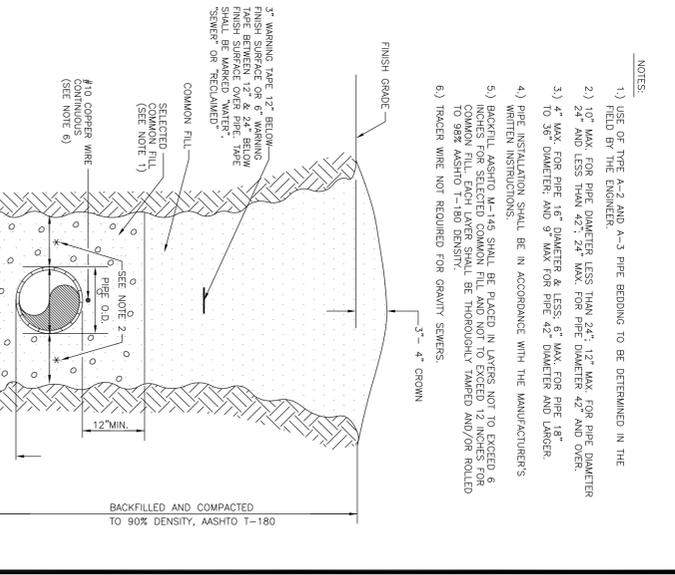
REVISIONS

NO.	BY	DATE	DESCRIPTION

MANATEE COUNTY

TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING

UG-12



MANATEE COUNTY PUBLIC WORKS DEPARTMENT

REVISIONS

NO.	BY	DATE	DESCRIPTION

MANATEE COUNTY

TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING

UG-12

PROJECT STATUS

BID SET
 OCTOBER 2008

C-15

