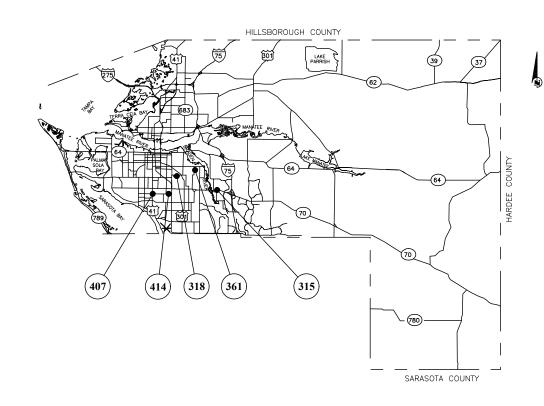


SATELLITE LIFT STATION R&R 2015 GROUP 2 402-0019707 / 5001301

APRIL 2016

L.S.NAME/NO.	RTU #	ADDRESS	PROJECT JL NO.
HORSESHOE COVE 1	315	5200 60TH ST E, BRADENTON	402-5135880
MANASOTA INDUSTRIAL PARK	318	4414 18TH ST E, BRADENTON	402-5135480
SUGAR RIDGE	361	3107 37TH TER E, SAMOSET	402-5135780
RED LOBSTER	407	5715 14TH ST E (US 41), BRADENTON	402-5135680
PALM LAKES	414	808 53RD AVE E, LOT 26, ST A, BRADENTON	402-5135580



NO.	INDEX OF SHEETS
1.	COVER SHEET
2.	GENERAL NOTES & LEGEND
3.	VICINITY MAPS
45.	HORSESHOE COVE 1
67.	MANASOTA INDUSTRIAL PARK
89.	SUGAR RIDGE
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1112.	PALM LAKES
13.	REHABILITATION DETAILS
1415.	SEWER DETAILS
16.	EROSION CONTROL

100% PLANS

PROJECT DESCRIPTION

REHABILITATE SEWAGE LIFT STATIONS TO REDUCE RISK TO PUBLIC HEALTH AND ENVIRONMENTAL POLLUTION. THE WORK SHALL CONSIST OF, BUT NOT LIMITED TO, WET WELL CLEANING, THE REPLACEMENT OF DISCHARGE PIPING, FITTINGS, VALVES, SWING CHECK VALVES, GUIDE RAILS, PIPE BRACINGS, BASE ELLS, ANDO/OR MOUNTING PLATES. WET WELL LINER MAY NEED TO BE INSTALLED, REPAIRED OR REPLACED. SEE INDIVIDUAL PLAN SHEETS FOR SPECIFIC REHABILITATION AND INSTALLATIONS REQUIREMENTS FOR EACH LIFT STATION.



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

SATELLITE LIFT STATION R&R 2015 GROUP 2

ON DESCRIBITION OF SOUTH AND THE STATE OF SOUTH AND THE SO

No. 6/6/93

No. 6/6/93

STATE OF

1/8/16

OF 16

GENERAL

- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: SHERRI ROBINSON
- AND CAN BE REACHED AT: (941) 708-7450 EXT. 7334
- 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. THE STANDARDS CAN BE DOWNLOADED FROM THE MANATEE COUNTY WEBSITE,
- 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.
- 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.
- 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.
- 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
- 8. 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.

- 9. 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.
- 10. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- 11. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- 12. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

- 13. 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.
- 14. 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.
- 15. 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 DITCHEST DURING CONSTRUCTION.
- 16. 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)
- 17. 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
- 18. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO . SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OF 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.
- 19. 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.
- 20. 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 CONTROL.
- 21. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- 22. 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 CONSTITE. 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.
- 23. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS

- 24. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
- PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 26. 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.

- 31. 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. 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 VERIEY, 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
- 32. 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.
- 33. 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.
- 34. 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
- 35. 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.

- 36. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN
- 37. 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.
- 38. 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
- 39. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.
- 40. 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.
- 41. 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.
- 42. 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.

- 43. 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.
- 44. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEPT DAILY AS PART OF DAILY CLEAN UP.
- 45. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS
- 46. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
- 47. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
- 48. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY, DEWATERING IS
- 49. 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.
- 50. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
- 51. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
- 52. 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.
- 53. 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.
- 54. 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.
- 55. 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. 56. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED
- 57. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
- 59. 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, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT
- 60. 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
- 61. 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
- 62. 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.
- 63. 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.
- 64. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.

65. 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 LICENS BY THE STATE OF FLORIDA. ALL RECORD DRAWING INFORMATION REQUIREMENTS IN SECTION 14 SHALL BE STRICTLY ENFORCED. COPY OF SECTION 14 WILL BE PROVIDED UPON REQUEST.

EMERGENCY CONTACTS

MANATEE COUNTY PUBLIC WORKS DEPT.
UTILITY ENGINEERING
SCOTT MAY, P.E.
1022 26TH AVENUE EAST BRADENTON, FL. 34208 (941) 708-7450 EXT. 7650 FAX: (941) 708-7431

TECO/PEOPLES GAS CO. DAN SHANAHAN 8261 VICO COURT SARASOTA, FL. 34240 (941) 342-4030 FAX: (941) 342-4011 EMERGENCY: 1-877-832-6911 djshanahan@tecoenergy.com

SUNSHINE STATE ONE CALL OF FLORIDA 1-(800) 432-4770

VERIZON FLORIDA INC. WAYNE SUMNER 1701 RINGLING BLVD. SARASOTA, FL. 34236 WAYNF.SUMNFR@verizon.com

FLORIDA POWER & LIGHT GREG COKER 1253 12TH AVENUE EAST PALMETTO, FL 34221 (941) 723-4430 FAX: (941) 723-4444 EMERGENCY: 1-800-4-OUTAGE Greg_Coker@fpl.com FLORIDA GAS TRANSMISSION

SAFETY HARBOR TEAM 7804 ANDERSON RD. (813) 466-3327 CELL: (727) 639-7512

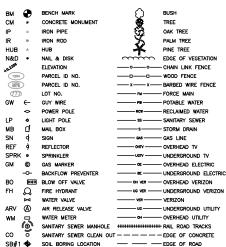
BRIGHT HOUSE NETWORKS TOM WRIGHT 5413 E. STATE ROAD 64 BRADENTON, FL. 34208-5535 (941) 748-3816 EXT. 21348 tom.wright@mybrighthouse.com

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STEPHANIE BARIOS
13051 N. TELECOM PKWY
TEMPLE TERRACE, FL 33637 PHONE: (813) 632-7600, EXT. FAX: (813) 632-7662

PEACE RIVER ELECTRIC COOPERATIVE, INC. P.O. BOX 1310 WACHULA, FL 33873 KENDELL COKER (863) 767-4660

LEGEND

EXISTING



TEL (TEL) TELEPHONE SERVICE BOX — TOE OF SLOPE

_____ TOP OF BANK

FLOW DIRECTION

GRATE INLET

ABBREVIATIONS

RIGHT OF WAY CONC CONCRETE ASPH ASPHALT SIDEWALK BOC BACK OF CURB

PROPOSED

SERVICE LIN - PROPOSED EASEMENT FIRE HYDRANT SANITARY SEWER MANHOLE BLOW OFF ASSEMBLY REDUCER TEE HORIZONTAL BEND VERTICAL BEND PLUG MASTER METER ASSEMBL SERVICE LINE & METER 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

F Manatee County

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 342

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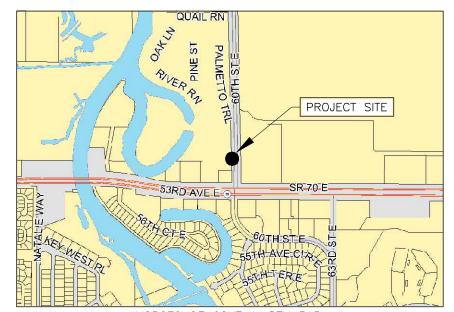
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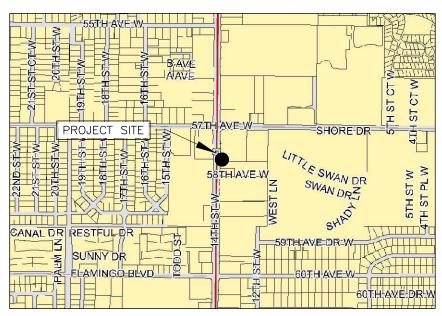
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STATE 4/8/16

STORIOR GILLIANS



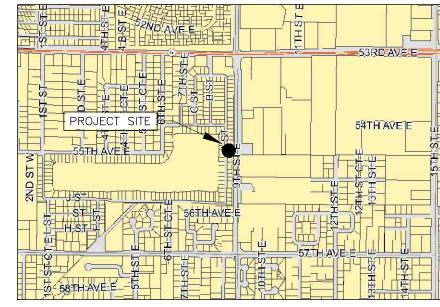
HORSESHOE COVE 1, RTU 315, 5200 60TH ST E, BRADENTON



RED LOBSTER, RTU 407,
715 14TH ST W (US 41), BRADENTON



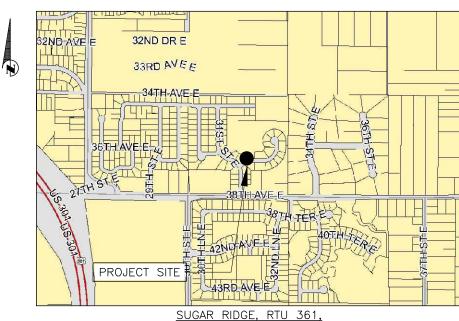
MANASOTA INDUSTRIAL PARK, RTU 318, 4414 18TH ST E, BRADENTON

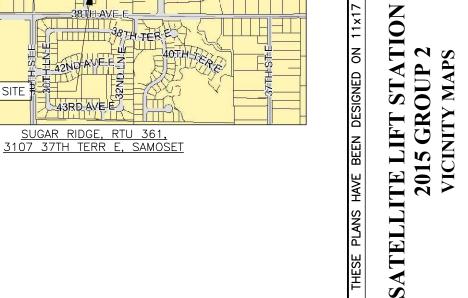


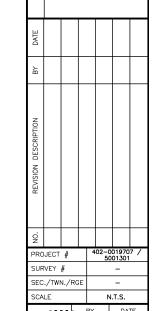
PALM LAKES, RTU 414, 808 53RD AVE E: LOT 26, "A" ST. BRADENTON

NOTE(S):

1. LIFT STATION SITE VISITS MAY BE COORDINATED WITH NICK WAGNER, 941-792-8811 x5377.





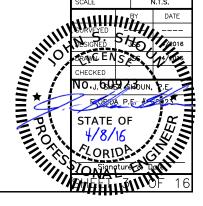


Manatee

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 3420

R&R

SHEETS



EXISTING NOTES: THE WET WELL, VALVE VAULT, AND METER VAULT CONFIGURATION SHOWN ON THESE GRAPHICS IS FOR BY-PASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR. IDENTIFICATION OF COMPONENTS TO BE REMOVED. MANATEE COUNTY GOVERNMENT WILL PROVIDE ONE THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, CONFIGURATION, ETC. FOR (1) LIFT STATION SHUT-DOWN AT NO COST TO THE CONTRACTOR. ADDITIONAL SHUT-DOWNS WILL COST ACCURACY. THE CONTRACTOR \$3,500 EACH, IF NEEDED. 2. THE CONTRACTOR/BIDDER SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. 7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN THE CONTRACTOR/BIDDER SHALL DETERMINE THE DISCHARGE PIPING ELEVATIONS DURING THE SITE 8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE. REMOVAL AND REINSTALLATION OF THE PUMPS DURING THE REHABILITATION SHALL BE DONE BY MANATEE COUNTY PERSONNEL IN COORDINATION WITH IS NAVD 88'. - WEIGHTED CHECK VALVE THE CONTRACTOR (2 TYP. REMOVE) - GATE VALVE (3 TYP., REMOVE) INFLUENT LINE (TO REMAIN) METER QUICK CONNECT. 90° BEND, DI -90° BEND, DI (REMOVE) (REMOVE) (REMOVE) (2 TYP., REMOVE) (TO REMAIN) DISCHARGE PIPING 11111 (2 TYP., REMOVE & PATCH HOLES) 11 11 1 11111 TELEMETRY ોામાં ANTENNA RACK & METERS (REPLACED BY (REMOVE) COUNTY) CONT. PANEL WET WELL TOP & ALUMINUM HATCH -VALVE VAULT TOP & ALUMINUM HATCH BACKFILL WITH COMPACTED SAW CUT & REMOVE FIRST CLEAN FILL (±6 CY) (REMOVE) 2' OF VALVE VAULT WALLS (REMOVE) (REMOVE) BACKFILL WITH COMPACTED CLEAN FILL (±6 CY) −⋈ −₩− −₩⊢ WET WELL (NO LINER) 너를 1 -PIPE SUPPORTS, TYP. - VALVE VAULT TO REMAIN; PUNCH HOLES AT THE CORNERS THRU THE BOTTOM PRIOR TO (REMOVE) DRAIN, CUT FLUSH WITH WALL BACKFILLING WITH COMPACTED (ABANDON, GROUT FILL) CLEAN FILL INFLUENT LINE (TO REMAIN), ROTATED FOR - GUIDE RAIL SYSTEM (2 TYP., REMOVE)

(2 TYP., REMOVE)

(2 TYP., REMOVE)

PUMP BASE ELBOWS & ANCHORING HARDWARE

RADIO TELEMETRY UNIT (RTU)	315
L.S. DESIGN CAPACITY GPM/TDH	500/140
DISCHARGE PIPING DIAMETER	4"
WET WELL DIAMETER	6'
BOTTOM SLAB ELEVATION	-3.55
TOP ELEVATION	13.25
VALVE VAULT HATCH ELEVATION	13.16
INFLUENT INVERT ELEVATION	-0.05
INFLUENT PIPE SIZE	8"
FORCE MAIN DIAMETER	6"
WET WELL VENT PIPE	PVC
ELECT. SERVICE SIZE, AMPS/VOLT	200/480

DRAWINGS & SURVEY. DATUM FOR ELEVATIONS

FORCE MAIN

FORCE MAIN

(TO REMAIN)

(REMOVE)

VALVE -

MFTFR VAULT

(COMPLETELY REMOVE)

GENERAL NOTES:

YES

NO

YES

YES, 6"

4" BPIU-14

APPLY SPRAY LINER W.W. LINER

INSTALL STILLING WELL

NEW BASE ELL

INSTALL FORCE MAIN G.V.

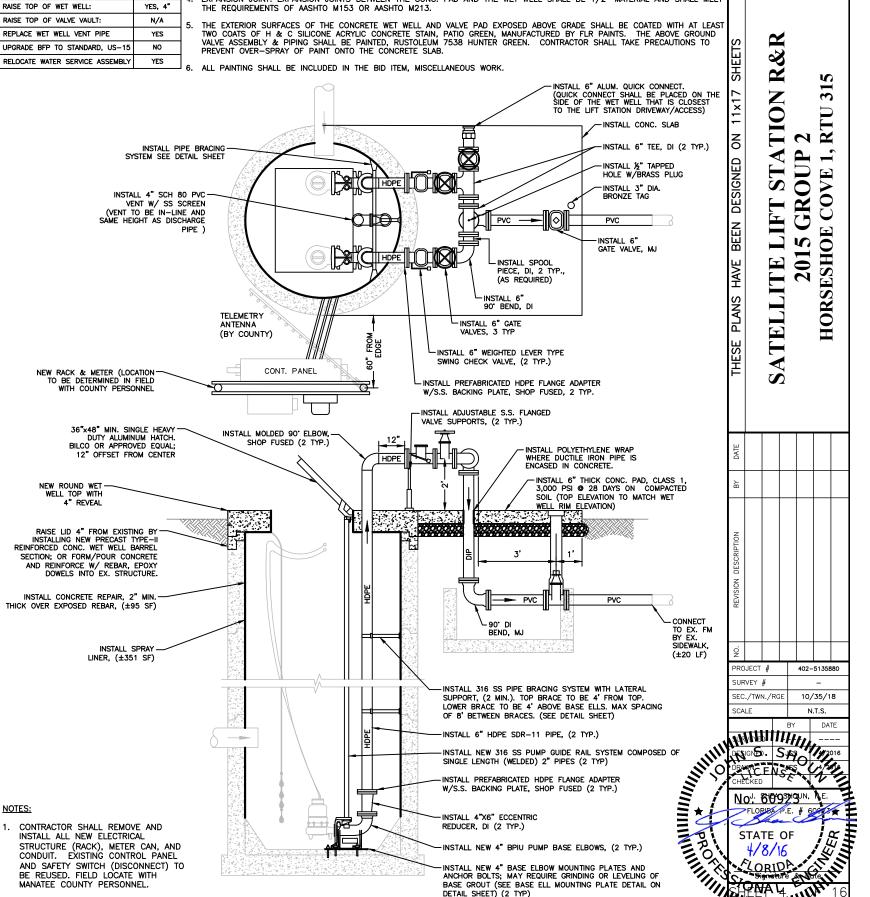
NEW HDPE PIPING IN W.W.

CONTRACTOR SHALL NOT BACKFILL OVER ELECTROFUSED COUPLINGS UNTIL INSPECTOR HAS VISUALLY CHECKED IT FOR LEAKS DURING PUMP STARTUP OR PRESSURE TEST AS DIRECTED BY THE COUNTY.

ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST MANATEE COUNTY PUBLIC WORKS UTILITY

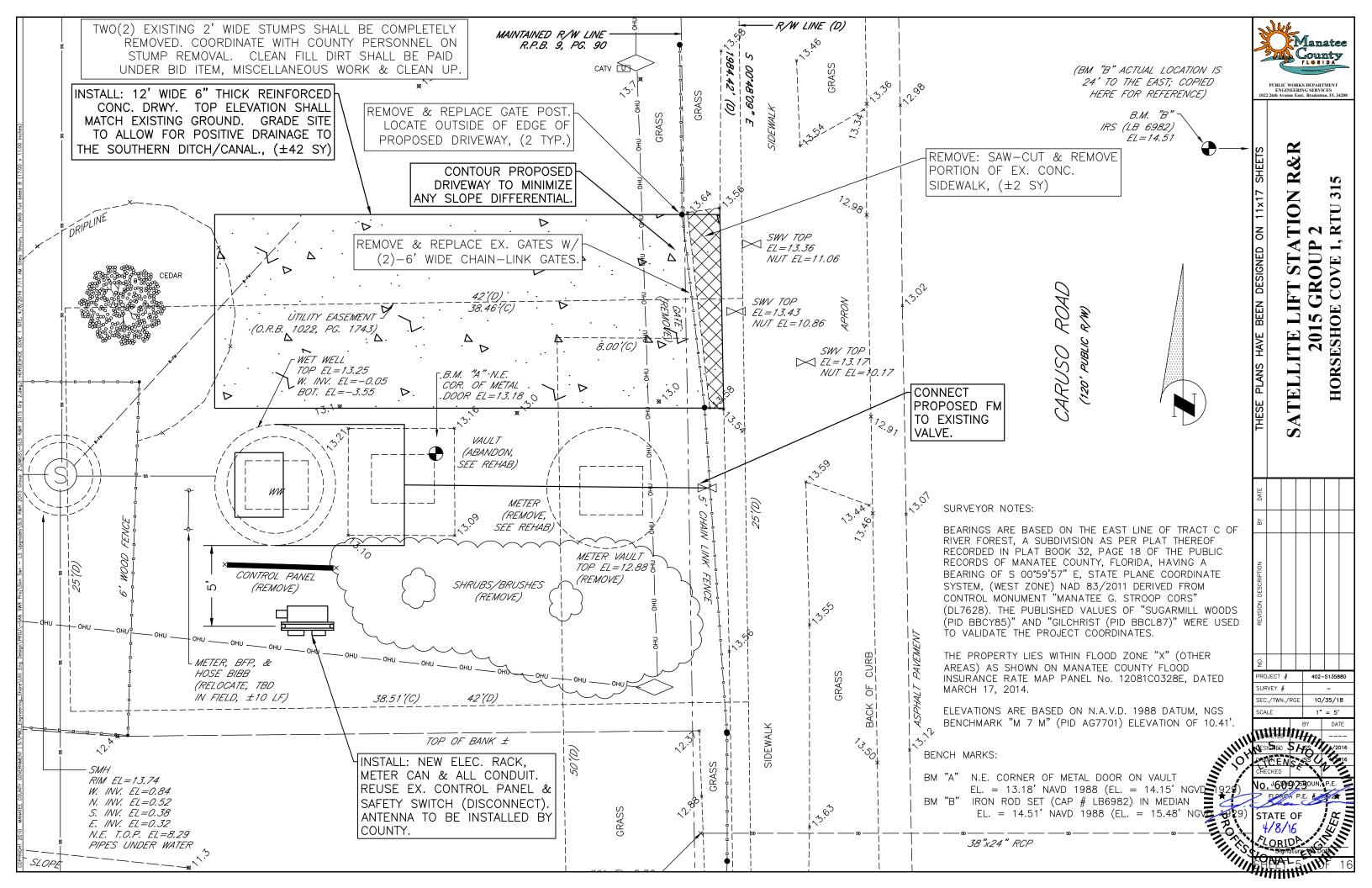
THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAT 1/4" UNDER A TEN FOOT (10') STRAIGHTEDGE, NOT MORE THAN 1/8" ON A FIVE FOOT (5') TRANSVERSE SECTION. THE EDGE OF THE CONCRETE PAD SHALL BE CAREFULLY FINISHED WITH A EDGING TOOL HAVING A RADIUS OF 1/2".

EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE CONC. PAD AND THE WET WELL SHALL BE 1/2" MATERIAL AND SHALL MEET

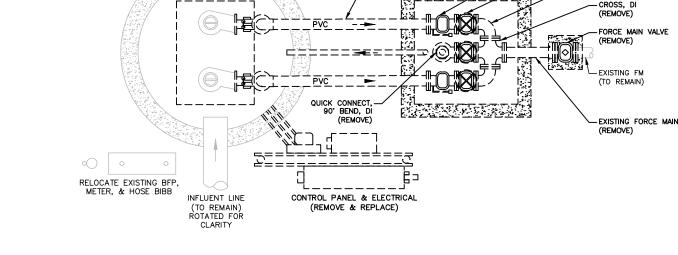


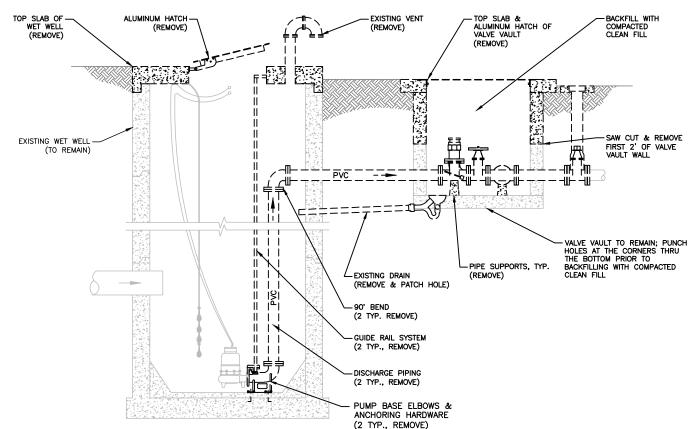
FManatee County

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 342



- THE WET WELL AND VALVE VAULT CONFIGURATION SHOWN ON THESE GRAPHICS IS FOR IDENTIFICATION OF COMPONENTS TO BE REMOVED. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, CONFIGURATION, ETC. FOR ACCURACY.
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- WET WELL VENT PIPE DI ELECT. SERVICE SIZE, AMPS/VOLT 100/240 7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN * INFORMATION TAKEN FROM LIFT STATION
 DATA FILE (LSINFO 2015 MASTER.XLS), RECORD
 DRAWINGS & SURVEY. DATUM FOR ELEVATIONS 8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE. IS NAVD 88' (REMOVE) TELEMETRY WEIGHTED CHECK VALVE (2 TYP. REMOVE) (TO REMAIN) (2 TYP., REMOVE & GATE VALVE PATCH HOLES) (3 TYP., REMOVE) 90° BEND. DI (2 TYP., REMOVE)





PROPOSED

RADIO TELEMETRY UNIT (RTU)

DESIGN CAPACITY GPM/TDH

WET WELL DIAMETER

INFLUENT PIPE SIZE

FORCE MAIN DIAMETER

TOP ELEVATION

BOTTOM SLAB ELEVATION

VALVE VAULT HATCH ELEVATION

INFILIENT INVERT FLEVATION

318

200/23

10.56

31.61

31.63

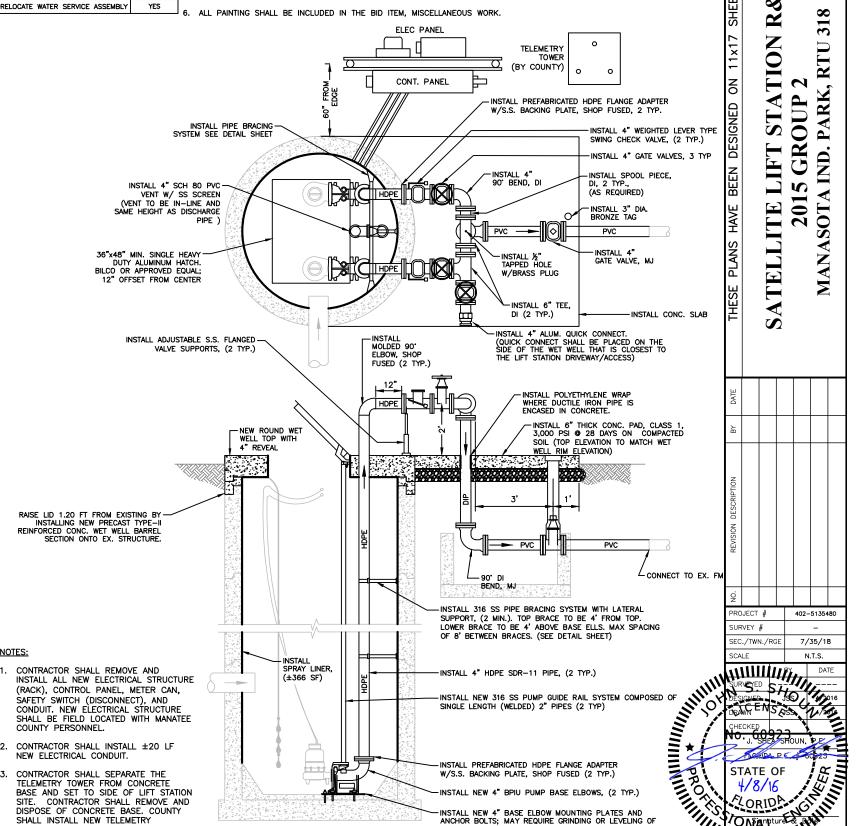
15.70 10"

6"

INSTALL FIBERGLASS W.W. LINER	NO
APPLY SPRAY LINER W.W. LINER	YES
INSTALL STILLING WELL	NO
INSTALL FORCE MAIN G.V.	YES
NEW HDPE PIPING IN W.W.	YES, 4"
NEW BASE ELL	4" BPIU-14
THE BADE LLL	. 5
RAISE TOP OF WET WELL:	YES, 1.20'
RAISE TOP OF WET WELL:	YES, 1.20'
RAISE TOP OF WET WELL: RAISE TOP OF VALVE VAULT:	YES, 1.20' N/A

GENERAL NOTES:

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- EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE CONC. PAD AND THE WET WELL SHALL BE 1/2" MATERIAL AND SHALL MEET THE REQUIREMENTS OF AASHTO M153 OR AASHTO M213.
- THE EXTERIOR SURFACES OF THE CONCRETE WET WELL AND VALVE PAD EXPOSED ABOVE GRADE SHALL BE COATED WITH AT LEAST TWO COATS OF H & C SILICONE ACRYLIC CONCRETE STAIN, PATIO GREEN, MANUFACTURED BY FLR PAINTS. THE ABOVE GROUND VALVE ASSEMBLY & PIPING SHALL BE PAINTED, RUSTOLEUM 7538 HUNTER GREEN. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT OVER—SPRAY OF PAINT ONTO THE CONCRETE SLAB.



BASE GROUT (SEE BASE ELL MOUNTING PLATE DETAIL ON

DETAIL SHEET) (2 TYP)

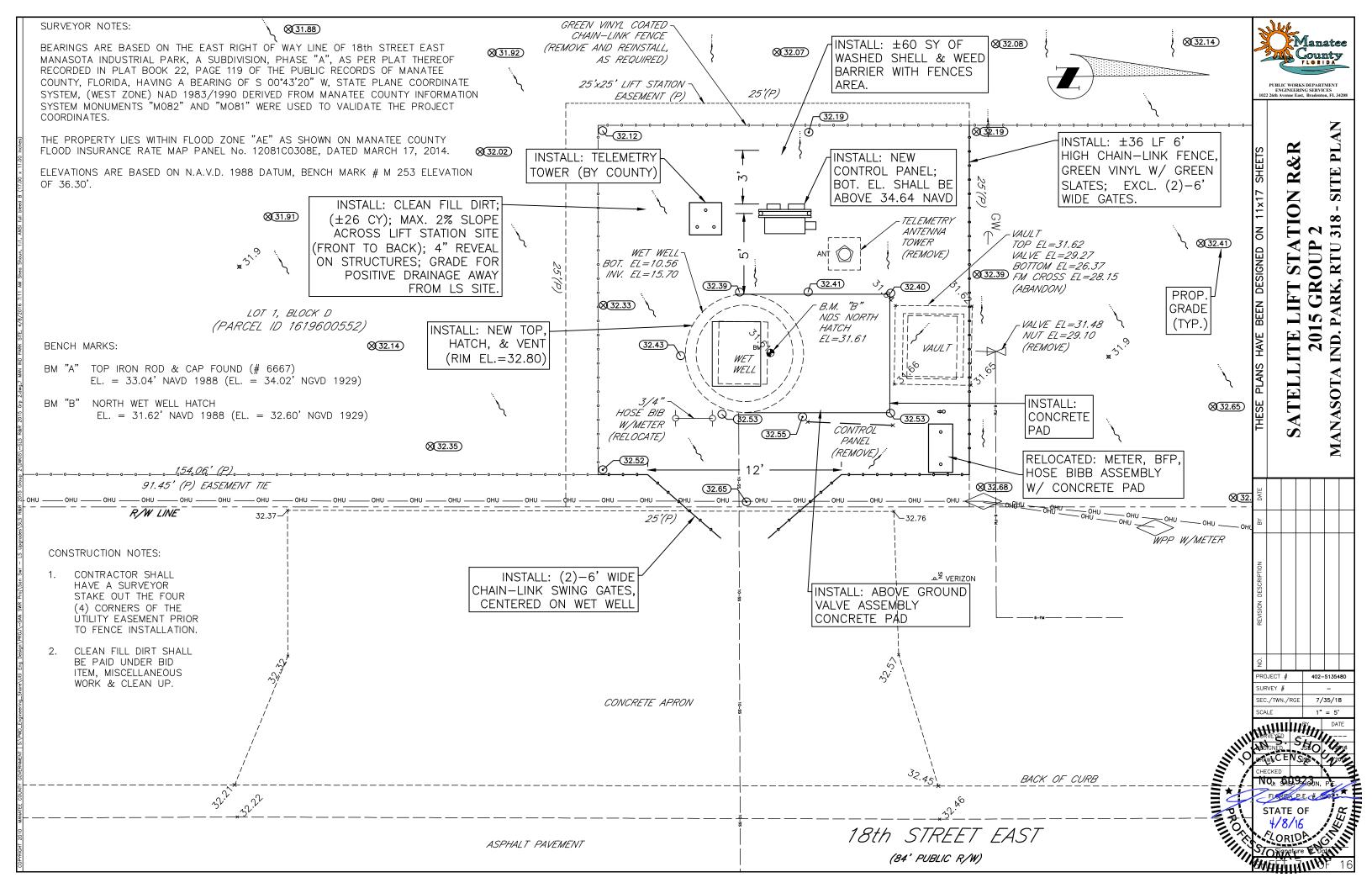


PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 122 26th Avenue East, Bradenton, FL 342

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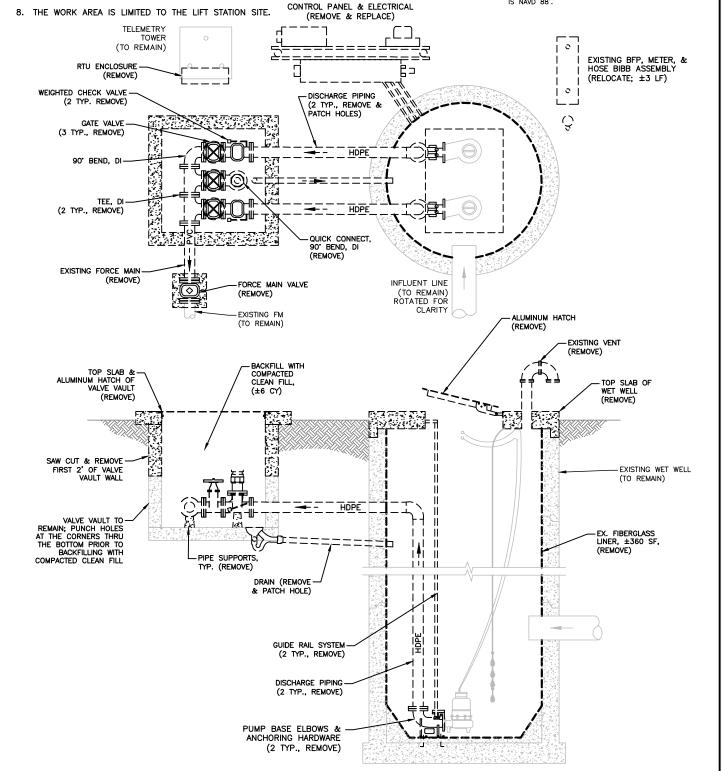
402-5135480

7/35/18



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- 7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN
- RADIO TELEMETRY UNIT (RTU) 361 DESIGN CAPACITY GPM/TDH 25/30.6 DISCHARGE PIPING DIAMETER -2.68 BOTTOM SLAB ELEVATION TOP ELEVATION 14.94 VALVE VAULT HATCH ELEVATION 14.80 INFLUENT INVERT ELEVATION 1.09 10" INFLUENT PIPE SIZE FORCE MAIN DIAMETER 4" WET WELL VENT PIPE PVC ELECT. SERVICE SIZE, AMPS/VOLT 100/240

INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO 2015 MASTER.XLS), RECORD DRAWINGS & SURVEY. DATUM FOR ELEVATIONS



GENERAL NOTES:

		1. CONTRACTOR SHALL NOT BACKFILL OVER ELECTROFUSED COUPLINGS UNTIL INSPECTOR HAS VISUALLY CHECKED IT FOR
INSTALL FIBERGLASS W.W. LINER	NO	LEAKS DURING PUMP STARTUP OR PRESSURE TEST AS DIRECTED BY THE COUNTY.
APPLY SPRAY LINER W.W. LINER	YES	2. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST MANATEE COUNTY PUBLIC WORKS UTILITY
INSTALL STILLING WELL	NO	STANDARDS.
INSTALL FORCE MAIN G.V.	YES	3. THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAT 1/4" UNDER
NEW HDPE PIPING IN W.W.	YES, 4"	A TEN FOOT (10') STRAIGHTEDGE, NOT MORE THAN 1/8" ON A FIVE FOOT (5') TRANSVERSE SECTION. THE EDGE OF
NEW BASE ELL	4" BPIU-14	THE CONCRETE PAD SHALL BE CAREFULLY FINISHED WITH A EDGING TOOL HAVING A RADIUS OF 1/2".
RAISE TOP OF WET WELL:	N/A	4. EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE CONC. PAD AND THE WET WELL SHALL BE 1/2" MATERIAL AND
RAISE TOP OF VALVE VAULT:	N/A	SHALL MEET THE REQUIREMENTS OF AASHTO M153 OR AASHTO M213.

YES

NO

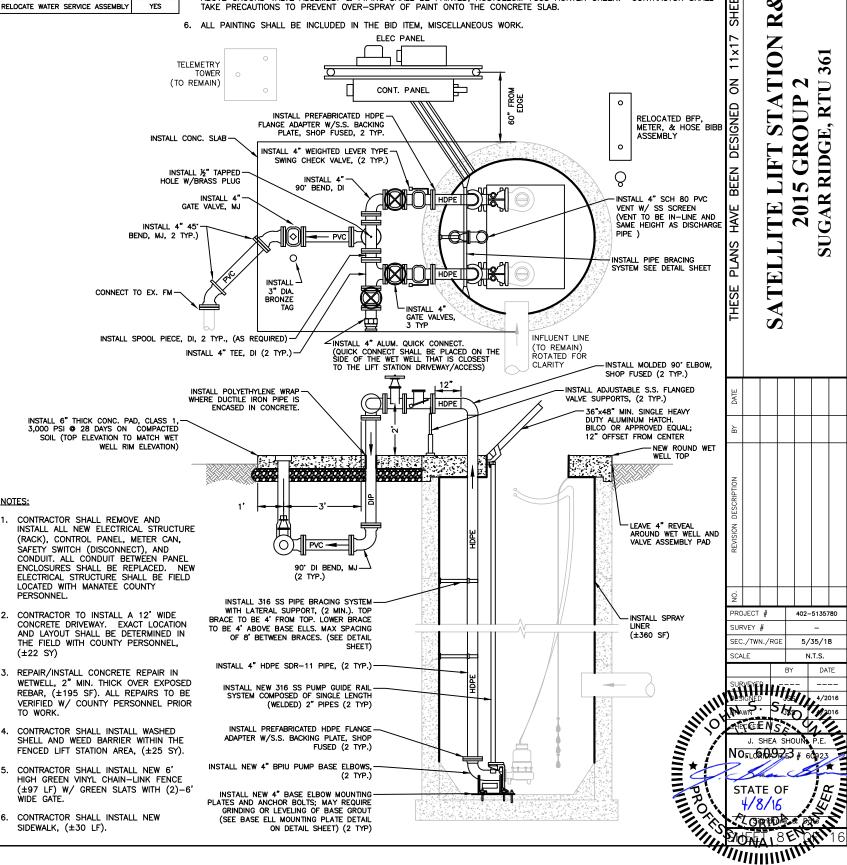
REPLACE WET WELL VENT PIPE

JPGRADE BFP TO STANDARD, US-15

CONTRACTOR SHALL INSTALL NEW

SIDEWALK, (±30 LF).

THE EXTERIOR SURFACES OF THE CONCRETE WET WELL AND VALVE PAD EXPOSED ABOVE GRADE SHALL BE COATED WITH AT LEAST TWO COATS OF H & C SILICONE ACRYLIC CONCRETE STAIN, PATIO GREEN, MANUFACTURED BY FLR PAINTS. THE ABOVE GROUND VALVE ASSEMBLY & PIPING SHALL BE PAINTED, RUSTOLEUM 7538 HUNTER GREEN. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT OVER—SPRAY OF PAINT ONTO THE CONCRETE SLAB.



(SEE BASE ELL MOUNTING PLATE DETAIL

ON DETAIL SHEET) (2 TYP)

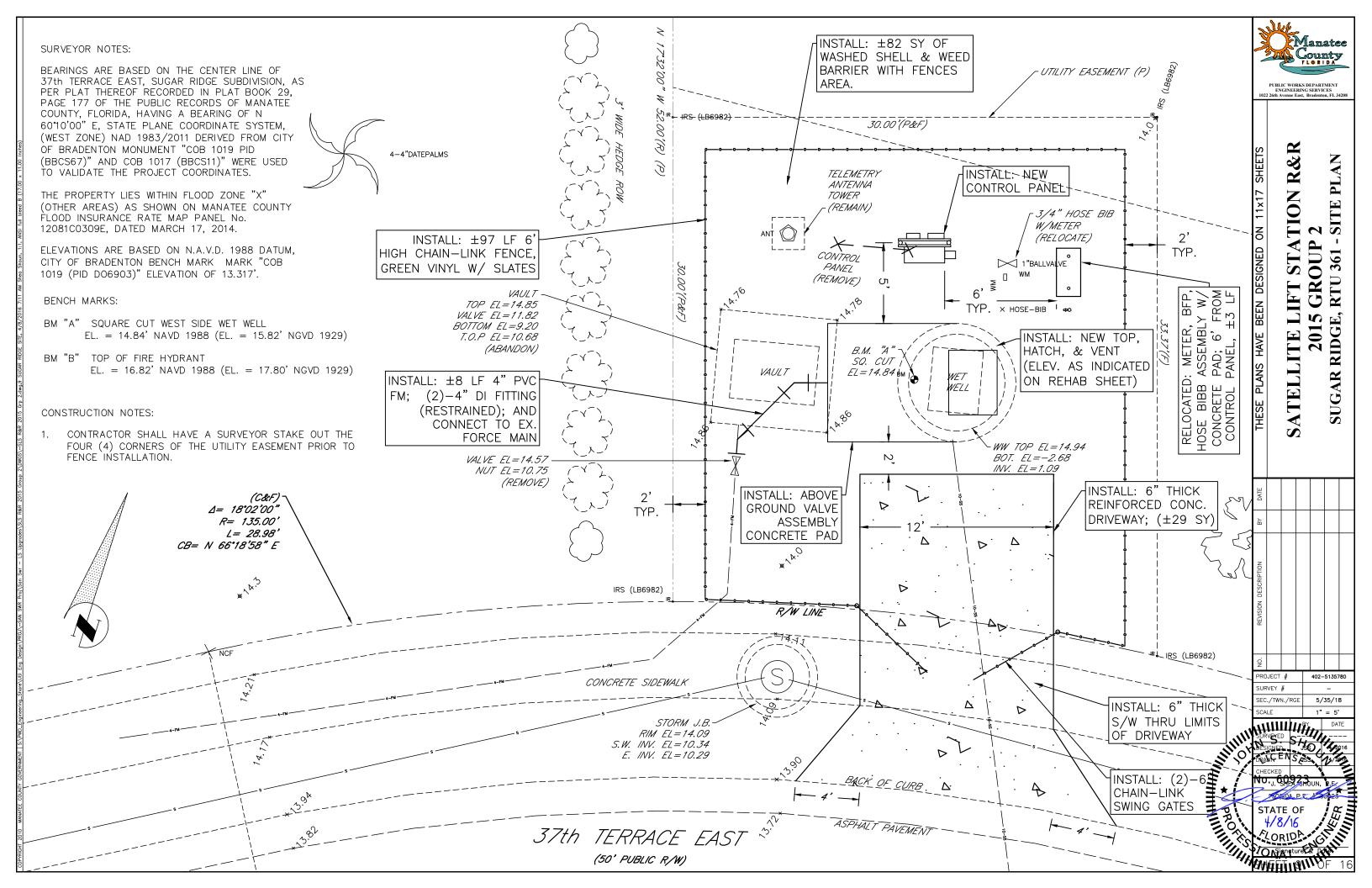
FManatee County

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 3-



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ROJECT # 402-5135780 URVEY # EC./TWN./RGE 5/35/18 CALE N.T.S.

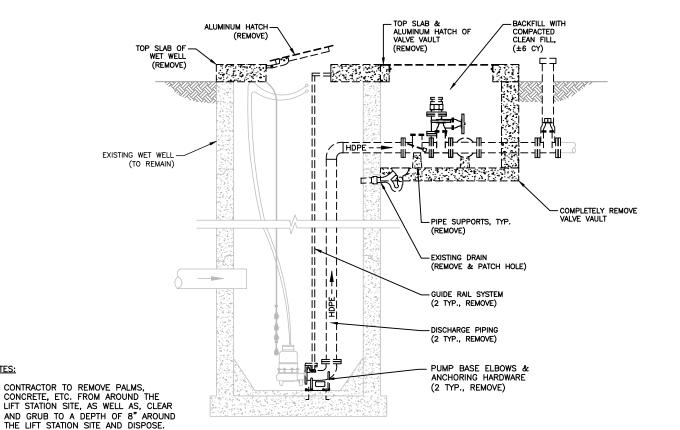


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- 7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN
- 8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE.

RADIO TELEMETRY UNIT (RTU)	407
DESIGN CAPACITY GPM/TDH	150/25
DISCHARGE PIPING DIAMETER	4"
WET WELL DIAMETER	5'
BOTTOM SLAB ELEVATION	9.35
TOP ELEVATION	19.30
VALVE VAULT HATCH ELEVATION	19.30
INFLUENT INVERT ELEVATION	11.75
INFLUENT PIPE SIZE	8"
FORCE MAIN DIAMETER	6"
WET WELL VENT PIPE	(NONE)
ELECT. SERVICE SIZE, AMPS/VOLT	70/240

INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO 2015 MASTER.XLS), RECORD DRAWINGS & SURVEY. DATUM FOR ELEVATIONS

CONTROL PANEL & ELECTRICAL (REMOVE) DISCHARGE PIPING WEIGHTED CHECK VALVE (2 TYP., REMOVE & PATCH HOLES) ===== (3 TYP., REMOVE) 90° BEND, DI (2 TYP., REMOVE) QUICK CONNECT, 90° BEND, DI FORCE MAIN VALVE (REMOVE) (REMOVE) INFLUENT LINE - EXISTING FM (TO REMAIN) ROTATED FOR (TO REMAIN) EXISTING FORCE MAIN CL ARITY (REMOVE)



GENERAL NOTES:

NO

YES

YES, 4"

4" BPIU-14

N/A

N/A

YES

INSTALL FIBERGLASS W.W. LINER

APPLY SPRAY LINER W.W. LINER

INSTALL STILLING WELL

NEW BASE ELL

INSTALL FORCE MAIN G.V.

NEW HDPE PIPING IN W.W.

RAISE TOP OF WET WELL:

RAISE TOP OF VALVE VAULT: INSTALL WET WELL VENT PIPE

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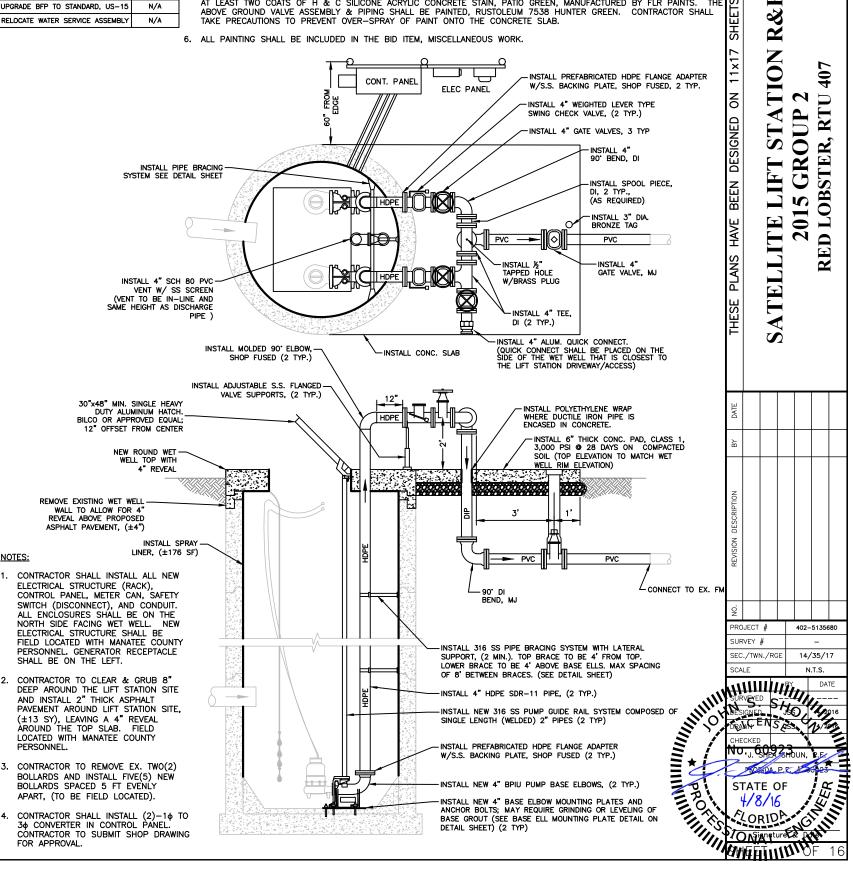
FManatee

14/35/17

County

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 343

- THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAT 1/4" UNDER A TEN FOOT (10') STRAIGHTEDGE, NOT MORE THAN 1/8" ON A FIVE FOOT (5') TRANSVERSE SECTION. THE EDGE OF THE CONCRETE PAD SHALL BE CAREFULLY FINISHED WITH A EDGING TOOL HAVING A RADIUS OF 1/2".
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NOTES

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INFLUENT LINE

(TO REMAIN)

ROTATED FOR

CLARITY

8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE.

RELOCATE EXISTING BEP

TOP SLAB OF WET WELL

(REMOVE)

CONVERT EX. LIFT STATION-TO MANHOLE; REMOVE WALL TO ALLOW FOR A

CONCENTRIC CONE W/ RING AND COVER TO BE INSTALLED

FLUSH WITH EX. GROUND.

(TO REMAIN)

METER, & HOSE BIBB

ALUMINUM HATCH

(REMOVE)

RADIO TELEMETRY LINIT (RTU) 414 DESIGN CAPACITY GPM/TDH 115/322 DISCHARGE PIPING DIAMETER 3" WET WELL DIAMETER 4' BOTTOM SLAB ELEVATION 8.30 18.30 TOP ELEVATION VALVE VAULT HATCH ELEVATION 18.27 INFLUENT INVERT ELEVATION VARIES INFLUENT PIPE SIZE (3)-8"6" FORCE MAIN DIAMETER WET WELL VENT PIPE PVC ELECT. SERVICE SIZE, AMPS/VOLT 70/240 INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO 2015 MASTER.XLS), RECORD DRAWINGS & SURVEY. DATUM FOR ELEVATIONS

WEIGHTED CHECK VALVE

(3 TYP., REMOVE)

90° BEND. DI

-CROSS, DI

(REMOVE)

(REMOVE)

FORCE MAIN

VALVE VAULT

(REMOVE)

TOP SLAB & ALUMINUM HATCH OF VALVE VAULT

PIPE SUPPORTS, TYP.

(REMOVE)

(2 TYP. REMOVE)

GATE VALVE

DISCHARGE PIPING

(2 TYP., REMOVE & PATCH HOLES)

90° BEND, DI

CONTROL PANEL & ELECTRICAL

(REMOVE & REPLACE)

FXISTING VENT

PVC _

EXISTING DRAIN

-GUIDE RAIL SYSTEM

(2 TYP., REMOVE)

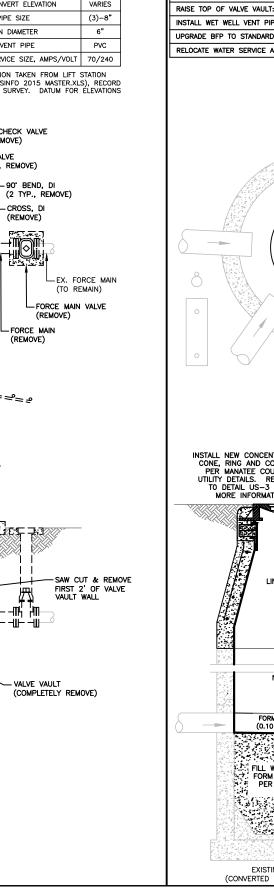
- DISCHARGE PIPING (2 TYP., REMOVE)

PUMP BASE ELBOWS & ANCHORING HARDWARE (2 TYP., REMOVE)

-90° BEND (2 TYP. REMOVE)

(REMOVE & PATCH HOLE)

(REMOVE)



(CONVERTED TO MANHOLE)

GENERAL NOTES:

NO

NO

YES

YES, 4"

4" BPIU-14

N/A

N/A

PROPOSED

INSTALL FIBERGLASS W.W. LINE

APPLY SPRAY LINER W.W. LINER

INSTALL STILLING WELL

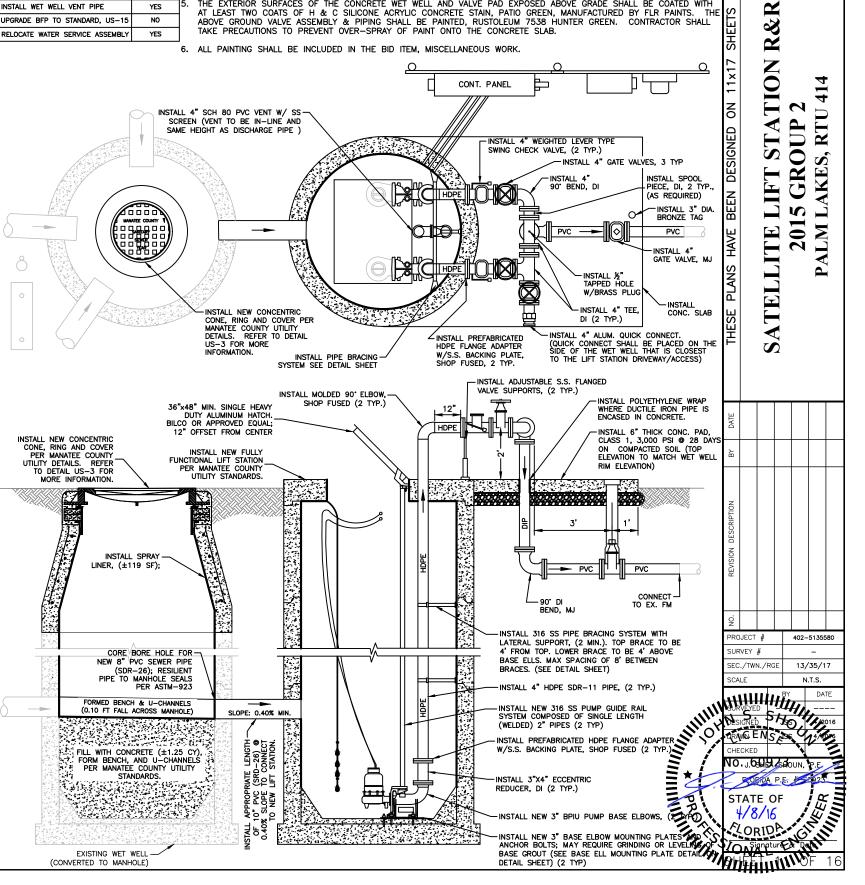
NEW BASE ELL

INSTALL FORCE MAIN G.V.

NEW HDPE PIPING IN W.W.

RAISE TOP OF WET WELL:

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- EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE CONC. PAD AND THE WET WELL SHALL BE 1/2" MATERIAL AND SHALL MEET THE REQUIREMENTS OF AASHTO M153 OR AASHTO M213.
- THE EXTERIOR SURFACES OF THE CONCRETE WET WELL AND VALVE PAD EXPOSED ABOVE GRADE SHALL BE COATED WITH

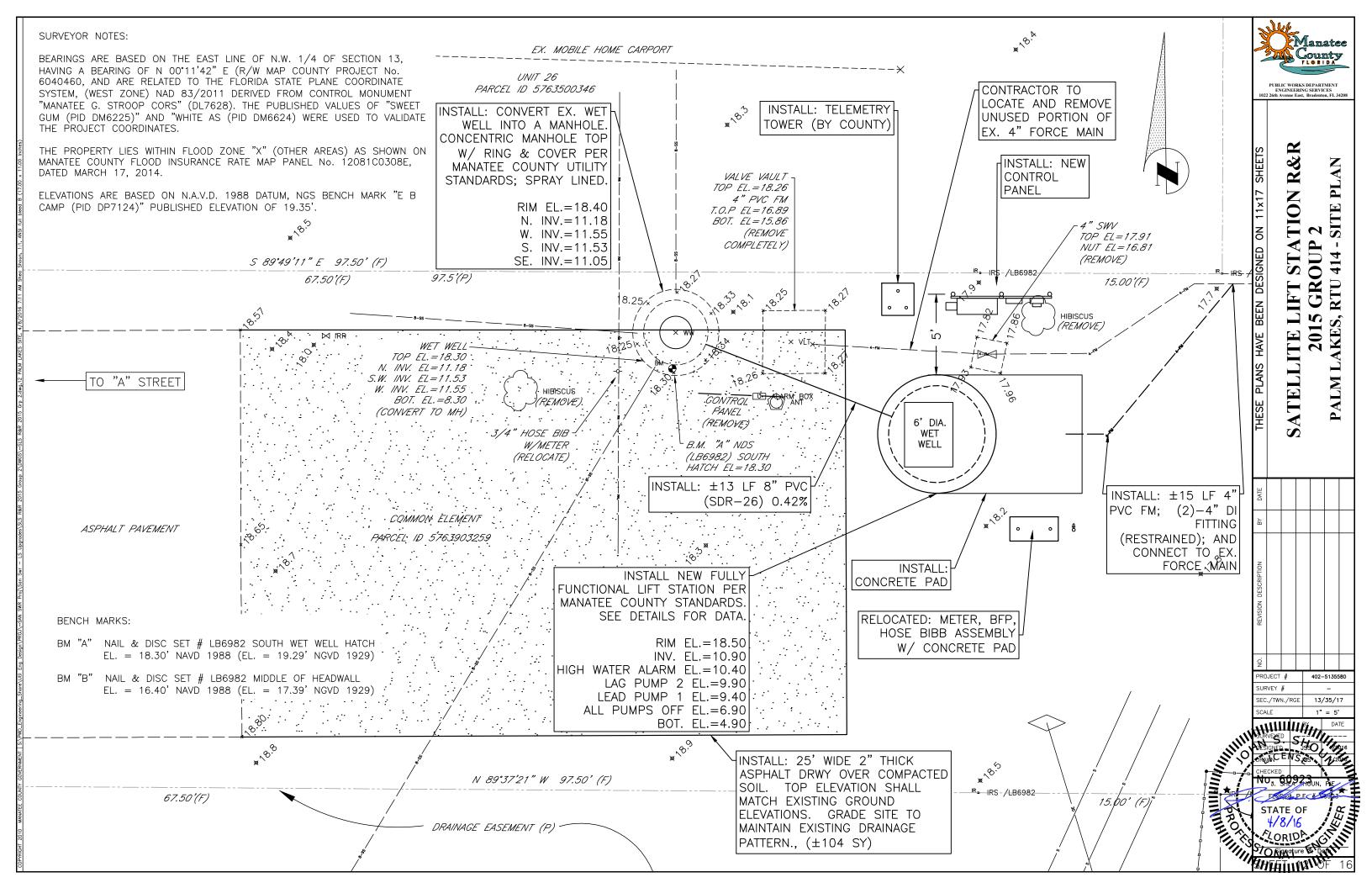




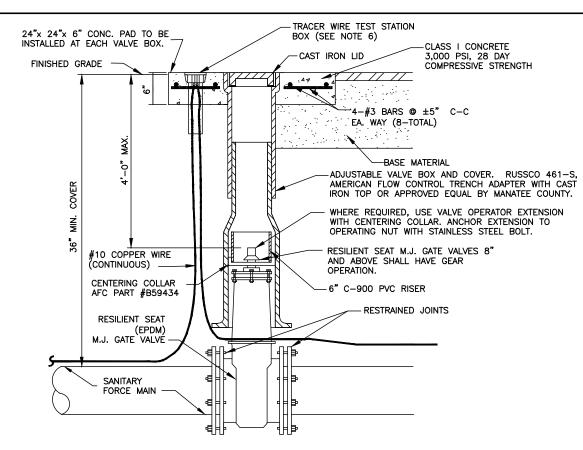
PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 3

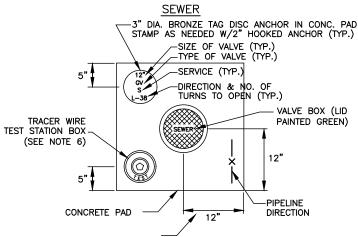
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- 1. ALL ACCESS COVERS SHALL BE ALUMINUM, WITH STAINLESS STEEL HARDWARE AND RATED FOR 300 P.S.F. LOADING. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE 2 COATS BITUMASTIC EPOXY, TOTAL 16 MILS DFT. ALL ACCESS COVERS SHALL BE EQUIPPED WITH A LOCKING STAPLE OR BAR FOR USE WITH A PADLOCK. PADLOCKS FOR WETWELL, VALVE VALUT, FENCE GATE AND CONTROL PANELS OF PUBLICLY OWNED & MAINTAINED LIFT STATIONS SHALL BE FURNISHED BY THE MANATEE COUNTY UTILITIES DEPARTMENT.
- 2. INSTALL WET WELL VENT ON THE HINGED SIDE OF THE WET WELL HATCH COVER.
- GROUND SHALL BE SLOPED AWAY FROM SLAB TO NATURAL GROUND ELEVATION IN ALL DIRECTIONS. WHERE CALLED OUT ON THE PLANS, SITE SHALL INCLUDE A WEED BARRIER FABRIC THAT IS COVERED WITH WASHED SHELL OR ROCK WITHIN LIFT STATION FENCING, SITE SHALL INCLUDE A WEED BARRIER FABRIC THAT IS COVERED WITH SHREDDED WOOD TYPE MULCH UNDER THE SHRUBS AND UP TO OUTSIDE OF THE FENCE. WEED BARRIER FABRIC THAT IS COVERED WITH SHREDDED WOOD—TYPE MULCH SHALL BE LOCATED UNDER THE TREES FOR A MINIMUM DISTANCE OF 3 FEET FROM THE TREE. SODDING OR SHREDDED WOOD-TYPE MULCH SHALL BE INSTALLED ON THE REMAINDER OF THE SITE TO THE EDGE OF THE EASEMENT.
- DUCTILE IRON OR CAST IRON VALVES AND FITTINGS SHALL HAVE A FACTORY APPLIED FUSION BONDED EPOXY EXTERIOR AND INTERIOR COATING.
- ALL FORCE MAIN PIPING AND FITTINGS WITHIN THE WETWELL AND/OR THE VALVE VAULT, FROM THE PUMP BASE ELBOW TO THE CHECK VALVE, SHALL BE DR-11HDPE. ALL CONNECTIONS TO IRON BODIED FLANGE FITTINGS IN THE WETWELL (PUMF BASE ELLS) AND TO THE VALVE VAULT CHECK VALVES SHALL BE MADE USING HDPE FLANGE ADAPTERS WITH 316 STAINLESS STEEL BACKUP RINGS. ALL HDPE CONNECTIONS SHALL BE THERMAL FUSED OR ELECTRO-FUSED. ALL PIPING DOWNSTREAM OF THE VALVE ASSEMBLY TO ISOLATION VALVE SHALL BE DUCTILE IRON
- 6. ALL PIPING SHALL BE COLOR CODED IN ACCORDANCE WITH THESE STANDARDS. GREEN-RAW SEWAGE; PURPLE (PANTONE 522C)-RECLAIMED: BLUE-POTABLE WATER.
- ANCHORS & LIFTING DEVICES SHALL NOT PENETRATE THE WALLS OF THE WET WELL.
- 8. ALL METAL APPURTENANCES INCLUDING BOLTS, NUTS AND WASHERS INSIDE THE WET WELL AND VALVE VAULT SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED (TYPE 316). ALL STAINLESS STEEL BOLTS SHALL BE TREATED WITH NEVER-SEIZE
- VERTICAL HDPE PUMP DISCHARGE PIPE IN THE WET WELL SHALL HAVE A TOP BRACE TO BE WITHIN 4' OF THE BOTTOM OF WET WELL TOP, A BOTTOM BRACE TO BE 4' ABOVE BASE ELLS, AND BE BRACED EVERY EIGHT (8) LINEAR FEET TO PREVENT EXCESSIVE BOWING, MAX SPACING OF 8' BTW BRACES. THE PIPE SHALL BE CLAMPED TO A SINGLE LENGTH OF 1-5/8" STAINLESS STEEL CHANNEL INSTALLED HORIZONTALLY AND ANCHORED TO THE WET WELL WALL AT EACH END WITH A CENTER BRACE OF 1-5/8" CHANNEL ATTACHED TO THE BACK OF THE WET WELL. THE PIPE CLAMPS SHALL BE A MINIMUM OF 1-1/2" WIDE, 12 GA. STAINLESS STEEL. WET WELLS LARGER THAN 8 FEET OR PIPING LARGER THAN 6 INCHES SHALL HAVE BRACING CONSTRUCTED FROM 1/4 INCH X 4 INCH STAINLESS STEEL (316) ANGLE. IF A VALVE VAULT IS IN USE, THE TOP BRACE TO BE WITHIN 2' OF TOP ELBOW.
- 10. ALL STRUCTURES MODIFIED/RAISED SHALL BE PRECAST TYPE II REINFORCED CONCRETE
- 11. FOR 5/8" WATER METER, PROVIDE POTABLE WATER SERVICE CONNECTION WITH 3/4" BRASS LOCKSHIELD AND LOOSE KEY HOSE BIB. PROVIDE WATTS 909 BACKFLOW PREVENTER (OR APPROVED EQUAL). ALL WATER SERVICE PIPING FROM WATER METER TO BE TYPE "K" COPPER OR BRASS, 3/4" MIN. DIAMETER FOR 5/8" METER AND 2' MIN. DIAMETER PIPING FOR 2" METER, SEE DETAIL US-15.
- 12. HOSE BIB TO BE A MAXIMUM OF 2 FEET FROM THE EDGE OF THE STRUCTURES/CONCRETE, A MINIMUM OF 6 FEET FROM THE ELECTRICAL CONTROL PANEL, 24" ABOVE THE SURROUNDING FINISH GRADE, AND ANCHORED TO A 4" PVC CONCRETE FILLED PIPE.
- 13. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR TO CONSTRUCT WATERTIGHT STRUCTURES WITH NO VISIBLE LEAKS. COMPLETED STRUCTURES THAT ARE NOT WATERTIGHT AND/OR DO NOT MEET THE REQUIREMENTS OF ASTM C-443 WILL BE
- 14. FLEXIBLE GASKET CONNECTORS SHALL MEET THE REQUIREMENTS OF ASTM C-923 LATEST REVISION AND ARE REQUIRED IN ALL MANHOLES.
- 15. ALL GATE VALVES SHALL BE RESILIENT SEAT IN ACCORDANCE WITH THESE
- 16. ELECTRICAL CONDUIT SHALL BE RUN BY THE SHORTEST ROUTE POSSIBLE FROM THE ELECTRICAL SOURCE TO THE CONTROL PANEL AND FROM THE CONTROL PANEL TO THE LIFT STATION WET WELL. NO ELECTRICAL SHALL BE INSTALLED BETWEEN THE WET WELL AND VALVE VAULT STRUCTURES.
- 17. EXISTING VALVE VAULTS SHALL HAVE A MINIMUM CLEARANCE OF 12" FROM FLANGES TO THE VALVE VAULT WALL, 18" FROM FLANGES TO THE VALVE VAULT FLOOR AND 12" FROM THE CROSS TO THE VALVE VAULT WALL AT THE FORCE MAIN EXIT POINT.
- 18. PVC RESTRAINTS SHALL BE EBAA IRON MEGA FLANGE. MEGA LUG OR APPROVED
- 19. ALL BURIED FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT, DUCTILE IRON.
- 20. MANATEE COUNTY UTILITY OPERATIONS DEPT. SHALL HAVE THE OPTION TO PICK-UP AT THE SITE ANY REMOVED ITEM SUCH AS VALVES FOR POSSIBLE REUSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL REMOVED ITEMS NOT PICKED UP BY THE COUNTY.

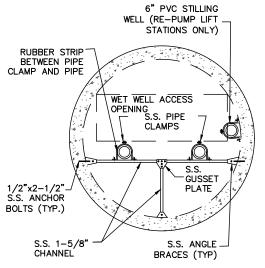




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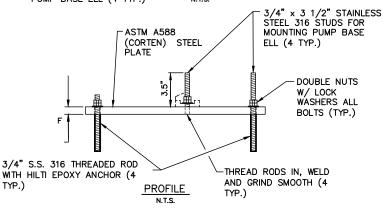
- "SV" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH DISTANCE IN FEET TO THE VALVE. IF NO CURB, INSTALL A GREEN DISC WITH "SV" AND A 1/8"x1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.
- ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE
- SANITARY VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS
- PRECAST CONCRETE PADS & THRUST BLOCKS SHALL NOT BE
- ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2"
- TEST BOX TO BE BINGHAM & TAYLOR P200NFG OR EQUAL FOR NORMAL YARD SERVICE. WHERE VALVE WILL BE IN STREET OR UNDER VEHICLE TRAFFIC, USE P525RD CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.

GATE VALVE, BOX COVER AND TAG



WET WELL PIPE BRACING DETAIL

1" ANCHOR BOLT HOLES (TYP.) AT EACH CORNER 2" (TYP.) 0 0 3/4" x 3 1/2" STAINLESS STEEL 316 PLAN STUDS FOR MOUNTING PUMP BASE ELL (4 TYP.) N.T.S.

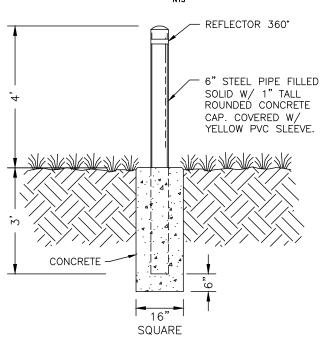


PUMP BASE ELL MOUNTING PLATE DIMENSIONS

DIMENSIONS	А	В	С	D	E	F	G
FOR 6" PUMPS	24"	20"	8.25"	5.875"	11"	3/4"	N/A
FOR 4" PUMPS	20"	16"	6"	5"	10"	1/2"	N/A

- INSTALL DOUBLE NUTS ON ALL EIGHT (8) THREADED RODS.
- THE PLATE EDGES AND ALL HOLES SHALL BE GROUND SMOOTH TO REMOVE ALL
- DIMENSIONS "C" & "E" ARE FOR BARNEY'S PUMPS, INC. BASE ELLS.

PUMP BASE ELL MOUNTING PLATE



BOLLARD DETAIL

Manatee County PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 122 26th Avenue East, Bradenton, FL 3-

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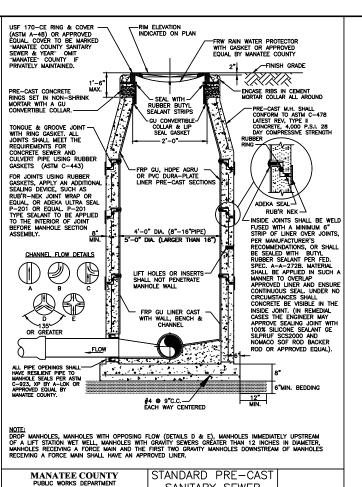
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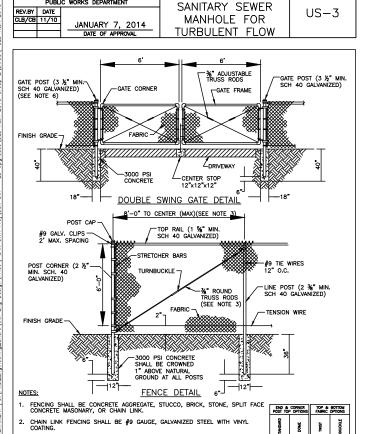
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CORIDA

Signature to Day

16





TRUSS BARS ON CHAIN LINK FENCES ARE REQUIRED FOR THE FIRST SPAN ON EACH SIDE OF THE CORNER POST AND FOR EACH GATE SECTION.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT

JANUARY 7, 2014

EAUTH SIDE UP THE CURNER POST AND FOR EACH GATE SECTION.

LANDSCAPE SCREENING SHALL BE LOCATED ON THE EXTERIOR OF LIFT STATION

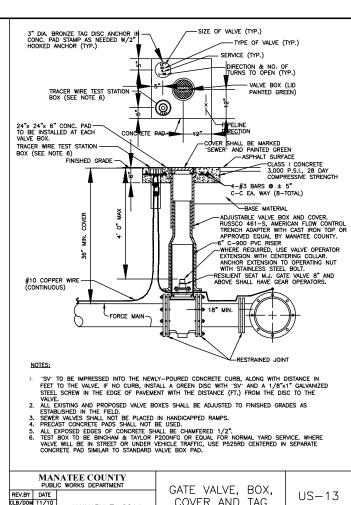
ATTEMPTION.

SWING GATES SHALL BE CAPABLE OF SWINGING BOTH INWARDS AND OUTWARDS. CANTILEVER SLIDE GATES AND ROLL SLIDE GATES MEETING FOOT DESIGN STANDARDS MAY BE USED AS AN OPTION TO SWING GATES.

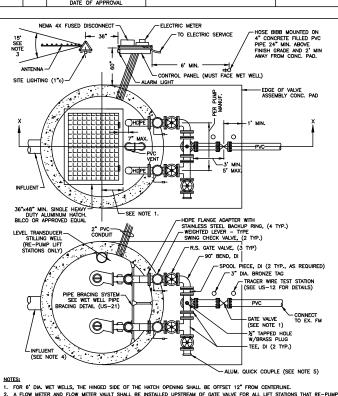
SECURITY FENCING

US-17A

GATE POSTS AND TRACK LINE POSTS SHALL BE 4 INCH SCHEDULE 40 FOR CANTILEVER SLIDE GATES AND ROLL SLIDE GATES.



PUBLIC WORKS DEPARTMENT			GATE VALVE, BOX,	
REV.BY	DATE		,,	US-13
CLB/DOM WT/BR	11/10 4/13	JANUARY 7, 2014	COVER AND TAG	
WI/ DIX	17 10	DATE OF APPROVAL		



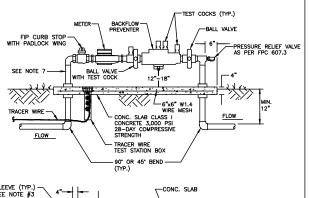
FOR 6" DIA, WET WELLS, THE HINGED SIDE OF THE HATCH OPENING SHALL BE OFFSET 12" FROM CENTERUNE.

A FLOW METER AND FLOW METER VAULT SHALL BE INSTALLED UNSTREAM OF GASE VALVE FOR ALL LIFT STATIONS THAT RE-PUMP
THE ANTINNA FOR THE RODO IELEMENT UNIT REQUIRES DIRECT LINE-OF-SIGHT SCHALLING CAPABILLY TO THE UTILITIES.

THE ANTINNA FOR THE RODO IELEMENT UNIT REQUIRES DIRECT LINE-OF-SIGHT SCHALLING CAPABILLY TO THE UTILITIES.

THE ANTINNA FOR THE RODO IELEMENT UNITS SENALL THERE HALL BE AN INDESTRUCTED LANGLE OF FIFTEEN (15) DEGREES FROM THE ANTINNA MAST (7.5 DEGREES ON BOTH SIDES OF THE DIRECT LINE-OF-SIGHT AZMUTH). NO TREE SHALL BE AN INDESCRIPT OF THE DIRECT LINE-OF-SIGHT AZMUTH). NO TREE SHALL BE AN INDESCRIPT OF THE DIRECT LINE-OF-SIGHT AZMUTH). NO TREE SHALL BE AND SCAPE BUFFER PLANTINGS AND THE MISST. LANDSCAPE BUFFER PLANTINGS AND THE PLAN DIRECT MISST. AND SCAPE BUFFER PLANTINGS AND THE MISST. LANDSCAPE BUFFER PLANTINGS AND TO SEED ADJUSTED IN COORDINATION WITH THE LOCATION OF THE CONSTRUCTED LEADING THE MISST. CAPABILL BUFFER PLANTINGS AND TO SEED AND STATE AND THE LIFE OF THE CONTROL PARKEL.

		NATEE COUNTY IC WORKS DEPARTMENT	 SEWAGE PUMP STATION	
REV.BY	DATE			US-18
JSS/SP	6/15	MONTH DAY, YEAR	PLAN VIEW	



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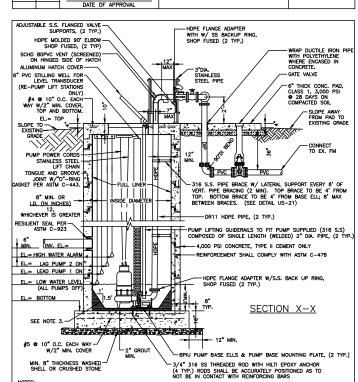
1. BACKFLOW DEVICE MUST BE INSTALLED DOWNSTREAM OF METER, AS CLOSE TO METER AS POSSIBLE

- THE SYSTEM MUST MEET ALL REQUIRMENTS OF THE FLORIDA PLUMBING CODE (LATEST EDITION) AND THE MANATEE COUNTY BACKFLOW PREVENTION ORDINANCE (LATEST EDITION).

- PRESSURE REDUCING VALVE REQUIRED UPSTREAM OF BACKFLOW IF SYSTEM PRESSURE EXCEEDS 80 PSI.
- 3' MINIMUM CLEARANCE FROM LANDSCAPING PLANTS TO EDGE OF CONCRETE SLAB AND CLEAR OPENING FOR ACCESS FROM STREET.
- THE WATER METER AND BACKFLOW PREVENTER SHALL BE LOCATED WITHIN THE LIFT STATION FENCING FOR PUBLICLY OWNED AND MAINTAINED LIFT STATIONS. THE ASSEMBLY FOR PRIVATE LIFT STATIONS SHALL BE LOCATED ADJACENT TO THE ROW LING OR WITHIN AN EASEMENT OUTSIDE OF THE FINDING.

10. SATTELITE PUMP STATIONS SHALL HAVE A 5/8-INCH WATER METER, WITH A 3/4-INCH REDUCED PRESSURE I PREVENTER. STATIONS WITH WETWELL DIAMETERS 12 FEET AND LARGER TO HAVE A 2-INCH METER AND RPZ PACYCLOW DESCRIPTED.

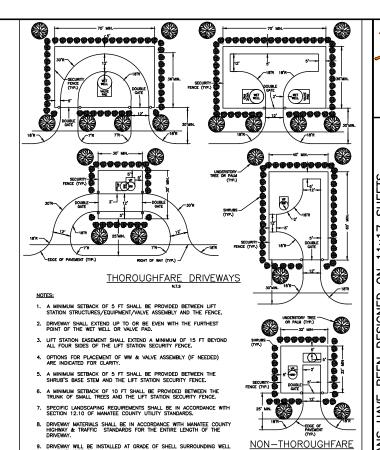
	NATEE COUNTY C WORKS DEPARTMENT	WATER METER &	
REV.BY DATE CLB/BR 11/10	JANUARY 7, 2014	BACKFLOW PREVENTER FOR PUMP STATIONS	US-16



FOR PROPER ORIENTATION OF CONTROL PANEL, SEE SHEET US-18

- THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAT $1/4^{\circ}$ UNDER A TROOT (10) STRANSVERSE SECTION. THE EDGE OF THE CONCRETE PAD SHALL BE CAREFULLY PRINSIFED WITH A EDGEN TOOL HAVING A RADIUS OF $1/2^{\circ}$.
- EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE CONC. PAD AND THE WET WELL SHALL BE $1/2^\circ$ MAT MEET THE REQUIREMENTS OF AASHTO M153 OR AASHTO M213.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT			SEWAGE PUMP STATION	
V.BY	DATE			US-19
S/SP	12/14		SECTION VIEW	00 10
S/SP	4/15	JANUARY 7, 2014		
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		NATEE COUNTY IC WORKS DEPARTMENT	MINIMUM ACCESS/EGRESS	
V.BY	DATE		AND LANDSCAPING	US-17
ISS	01/16	144U14DV 7 0014	REQUIREMENTS FOR	00 17
		JANUARY 7, 2014	PUMP STATIONS	
		DATE OF APPROVAL	FUMIT STATIONS	

<u>DRIVEWAY</u>

GENERAL LIFT STATION NOTES

- ALL ACCESS COVER'S SHALL BE ALUMINUM, WITH STAINLESS STEEL HARDWARE AND RATED FOR 300 P.S.F. LOADING. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE 2 COATS BITUMASTIC EPDOY, TOTAL IS MILS DET. ALL ACCESS COVERS SHALL BE GUIPPED WITH A LOCKING STAPLE OR BAY FOR USE WITH A PADLOCK, PADLOCKS FOR WETWELL, FENCE GATE AND CONTROL FANIELS OF PUBLICLY OWNED & MAINTAINED LIFT STATIONS SHALL BE FURNISHED THE MAINTER COUNTY UTILIESD EPPFATMENT.
- THE MANTEE COUNTY UTILITIES DEPARTMENT.

 INSTALL MET WELL VENT ON THE HINGED SIDE OF THE WET WELL HATCH COVER.

 GROUND SHALL BE SLOPED AWAY FROM SLAB TO NATURAL GROUND ELEVATION IN ALL DIRECTIONS. SITE SHALL INCLUDE A
 WEED BARRIER FABRIC THAT IS COVERED WITH SHEEDDED WOOD TYPE MULCH UNDER THE SHRUBS AND UP TO OUTSIDE
 A WEED BARRIER FABRIC THAT IS COVERED WITH SHEEDDED WOOD TYPE MULCH UNDER THE SHRUBS AND UP TO OUTSIDE
 OF THE FERCE WEED BARRIER FABRIC THAT IS COVERED WITH SHEEDDED WOOD—TYPE MULCH SHALL BE LOCATED UNDER
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 HE TIMES FOR A MINIMUM BISTORICE OF FEET FROM THE TIMES SOUTHING OR SHRUBDED WOOD—TYPE MULCH SHALL BE
- ALL FORCE MAIN PIPING AND FITTINGS IN THE WETWELL AND THE VALVE ASSEMBLY, FROM THE PUMP BASE ELBOW TO THE CHECK VALVE, SHALL BE DRITI HOPE. ALL CONNECTIONS TO IRON BOBIED FLANGE FITTINGS IN THE WETWELL (PRIME SELLS) AND TO THE CHECK VALVES SHALL BE MADE USING HOPE FLANCE ADAPTERS WITH JOS STAINLESS STEEL BACKUP RINGS. ALL HIPE CONNECTIONS SHALL BE THERMAL FUSED OR ELECTRO-FUSED. ALL PIPING DOWNSTREAM OF THE VALVE ASSY. TO THE SOLUTION VALVE SHALL BE DUCTLE BRON PIPE (C1-53).
- ANCHORS & LIFTING DEVICES SHALL NOT PENETRATE THE WALLS OF THE WET WEL
- ALL INTERIOR SURFACES OF WET WELL SHALL BE LINED. SEE STANDARD PRE-CAST SANITARY SEWER MANHOLE FOR TURBULENT FLOW DETAIL.
- OTHERWISE NOTICE, ALL STANILESS STEEL BULIS STANLE BE REACE OF THE RESTAURLE FROM TO ASSESSMENT. VERTICAL HOPE PUMP DISCHARGE (FIFE N THE WET WELL SHALL BE BRACED FOR DETAIL US-TIB. THE PIPE SHALL BE CLAMPED TO A SINGLE LENGTH OF 1-5/8" STANLESS STEEL CHANNEL INSTALED HORIZONTALLY AND ANCHORED TO THE WET WELL WALL AT EACH END WITH A CENTER BRACE OF 1-5/8" CHANNEL ATTACHED TO THE BROK OF THE WET WELL ASSESSMENT THAN 18 HOPE SHALL BY STANLESS STEEL, WET WELLS LARGER THAN 8 FEET OF THE PIPE CLAMPS SHALL BE A BROKEN CONSTRUCTED FROM 1/4 INCH X 4 NOTH STANLESS STEEL ANGLE.
- METER VALUES SHALL BE PREASED TYPE III RENN'ORGED CONCRETE.

 CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FLOTATION DURING CONSTRUCTION. ENGINEER SHALL SHEET ALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FLOTATION DURING CONSTRUCTION. ENGINEER SHALL SUBMIT FLOTATION CALCULATIONS ALONG WITH HYDRAULIC CALCULATIONS TO MCPHID ENGINEERING SERVICES DIVISION AT CONSTRUCTION PLAN REVIEW SUBMITTAL.

- CONSTRUCTION PLAN REVIEW SUBMITTAL

 12. TOP OF WET WELL'S AND VALVE SLABS SHALL BE AT THE SAME ELEVATION.

 13. THE EXTERNO SUPPRICES OF THE CONCRETE WET WELL AND VALVE ASSEMBLY PAD EXPOSED ABOVE GRADE SHALL BE COATED WITH A LEAST TWO COATS OF HAC SULCONE ACRYLIC CONCRETE STAIN, PATIO GREEN, MANUFACTURED BY PLANTS, INC. ABOVE GROUND VALVE ASSEMBLY & PIPRIOS SHALL BE PARIFED, RUSTOLEUM 7535 HUNTER GREEN, CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID OVER-SPRAY ONTO THE VALVE ASSEMBLY CONCRETE PAD.

 A FOR 5/5" MATER METER, PROVIDE POTABLE WATER SERVICE CONNECTION WITH 3/4" BRASE LOCKSHIELD AND LOSSE HOSE BIB. PROVIDE WATES GOD BACKFLOW PREVENTER (OR APPROVED EQUAL). ALL WATER SERVICE PIPRIO FROM WATER OB BETTO BE TYPE "K" COPPER OR BRASS, 3/4" MIN. DIAMETER FOR 5/8" METER AND 2" MIN. DIAMETER PIPRIOS FOR METERS AND 2" MIN. DIAMETER PIPRIOS

- B. BASE AND FIRST WALL SECTION OF WET WELL SHALL BE MONOLITHIC.

 B. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR TO CONSTRUCT WATERTIGHT STRUCTURES WITH NO VISIBLE LEAKS.
 COMPLETED STRUCTURES THAT ARE NOT WATERTIGHT AND/OR DO NOT MEET THE REQUIREMENTS OF ASTM C-443 WILL B
 REJECTED.
- NESCUELL.

 OF FLEXIBLE CASKET CONNECTORS SHALL MEET THE REQUIREMENTS OF ASTM C-923 LATEST REVISION AND ARE REQUIRED ALL MANHOLES.

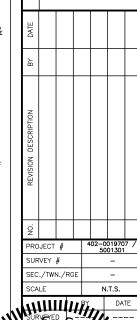
 21. ALL GATE VALVES SHALL BE RESILENT SEAT IN ACCORDANCE WITH THESE STANDARDS.

 22. ELECTRICAL SERVICE SHALL BE 3 PHASE MINIMUM UNLESS THE ELECTRICAL UTILITY PROVIDES CORRESPONDENCE SHAPPORT THAT 3 PHASE SERVICE IS UNAVAILABLE.

 23. ELECTRICAL CONDUIT SHALL BE RUN BY THE SHORTEST ROUTE POSSIBLE FROM THE ELECTRICAL SOURCE TO THE ONLINE PANEL AND FROM THE CONTROL PANEL TO THE LIFT STATION WET WELL.
- 4. A FLOW METER, BACKUP POWER GENERATOR, FUEL STORAGE LEVEL TRANSDUCER AND FORCE MAIN PRESSURE TRANSDUC SHALL BE REQUIRED FOR ALL LIFT STATIONS THAT REPUMP SEWAGE FROM OTHER LIFT STATIONS.

MANATEE COUNTY PUMP STATION REV.BY DATE CLB/BR 11/10 WT/JSS 5/14 NOTES

JANUARY 7, 2014



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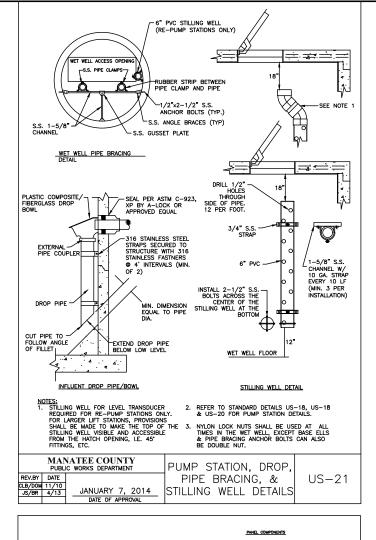
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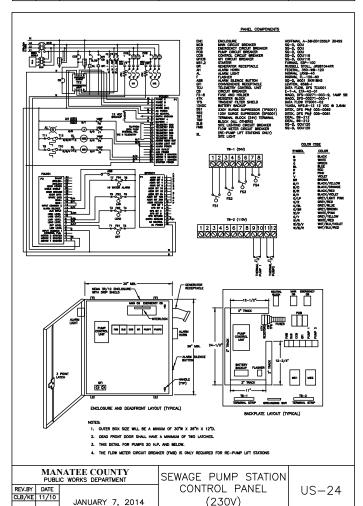
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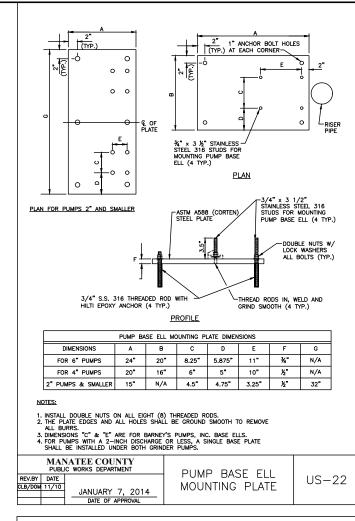
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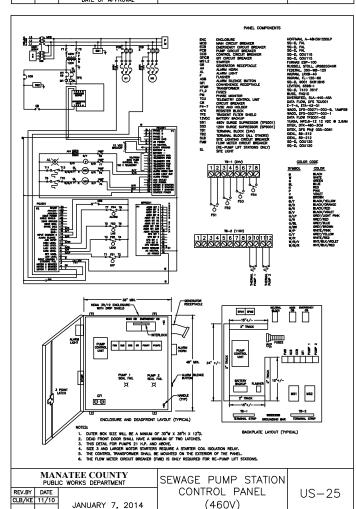
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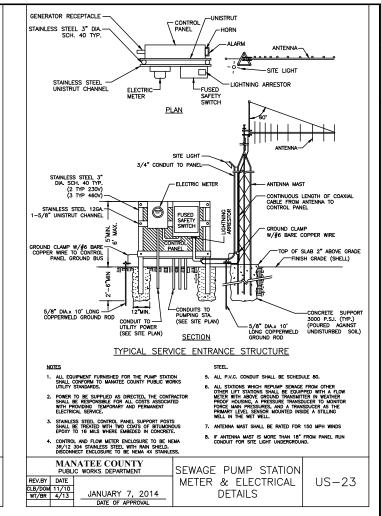
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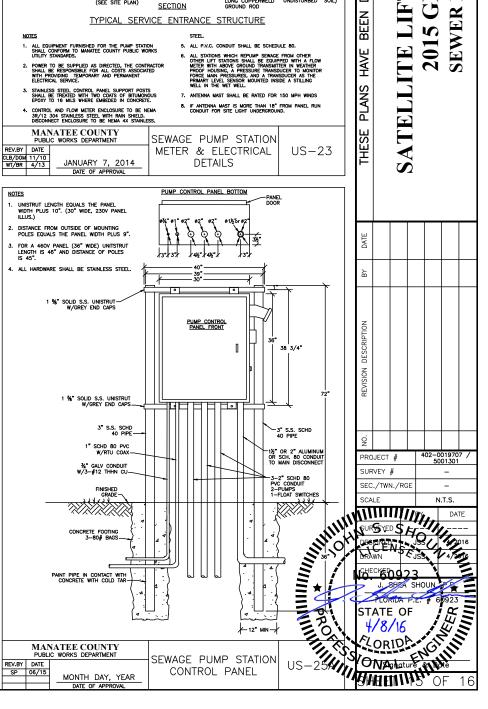
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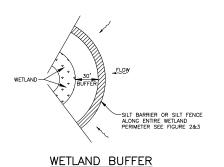
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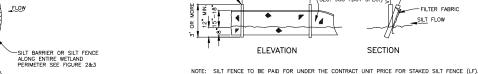
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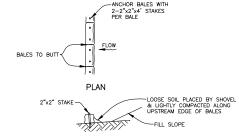
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DETAIL





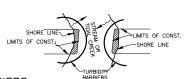




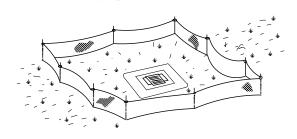
FLOATING TURBIDITY BARRIERS

STAKED TURBIDITY BARRIER

D, =5 STD. (SINGLE PANEL FOR DEPTHS 5 OR LESS). D, =5 STD. (ADDITIONAL PANEL FOR DEPTHS > 5°). CURTAIN TO REACH BOTTOM UP TO DEPTHS of 10 FEET WING(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE EVOINCER.

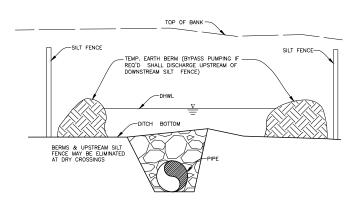


TURBIDITY BARRIERS FIGURE 4

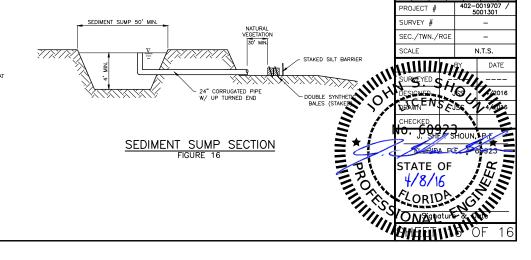


TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

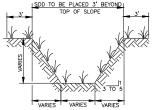


UNDERGROUND PIPE CROSSING

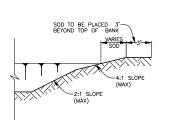


SEDIMENT SUMP SECTION FIGURE 16

FIGURE 1



TYPICAL SWALE SECTION FIGURE 5



TYPICAL RETENTION/DETENTION POND SECTION

TYPICAL SILT FENCE

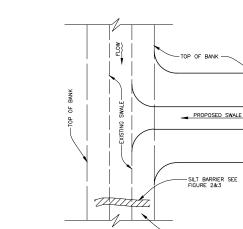
FIGURE 2

PARTIAL INLET

ANCHOR BALES WITH 2-2"x2"x4' STAKES PER BALE - ROCK BAGS DITCH BOTTOM INLET

TYPICAL BALE SILT BARRIER

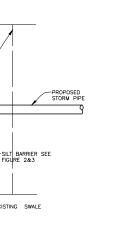
FIGURE 3



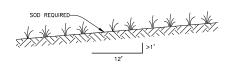
-PROPOSED INLET

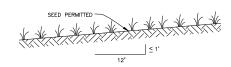
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE FIGURE 11

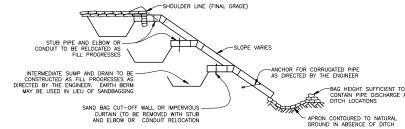
COMPLETED INLET SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



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



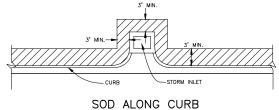




SECTION AA

TEMPORARY SLOPE DRAIN FIGURE 15

EXISTING LAKE EDGE OF WATER TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE



SOD ALONG CURB AND AROUND INLET FIGURE 14

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

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 022 26th Avenue East, Bradenton, FL 3420 R&R STATION CONTROL GROUP EROSION S 201 SATELLITE PLANS HAVE

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