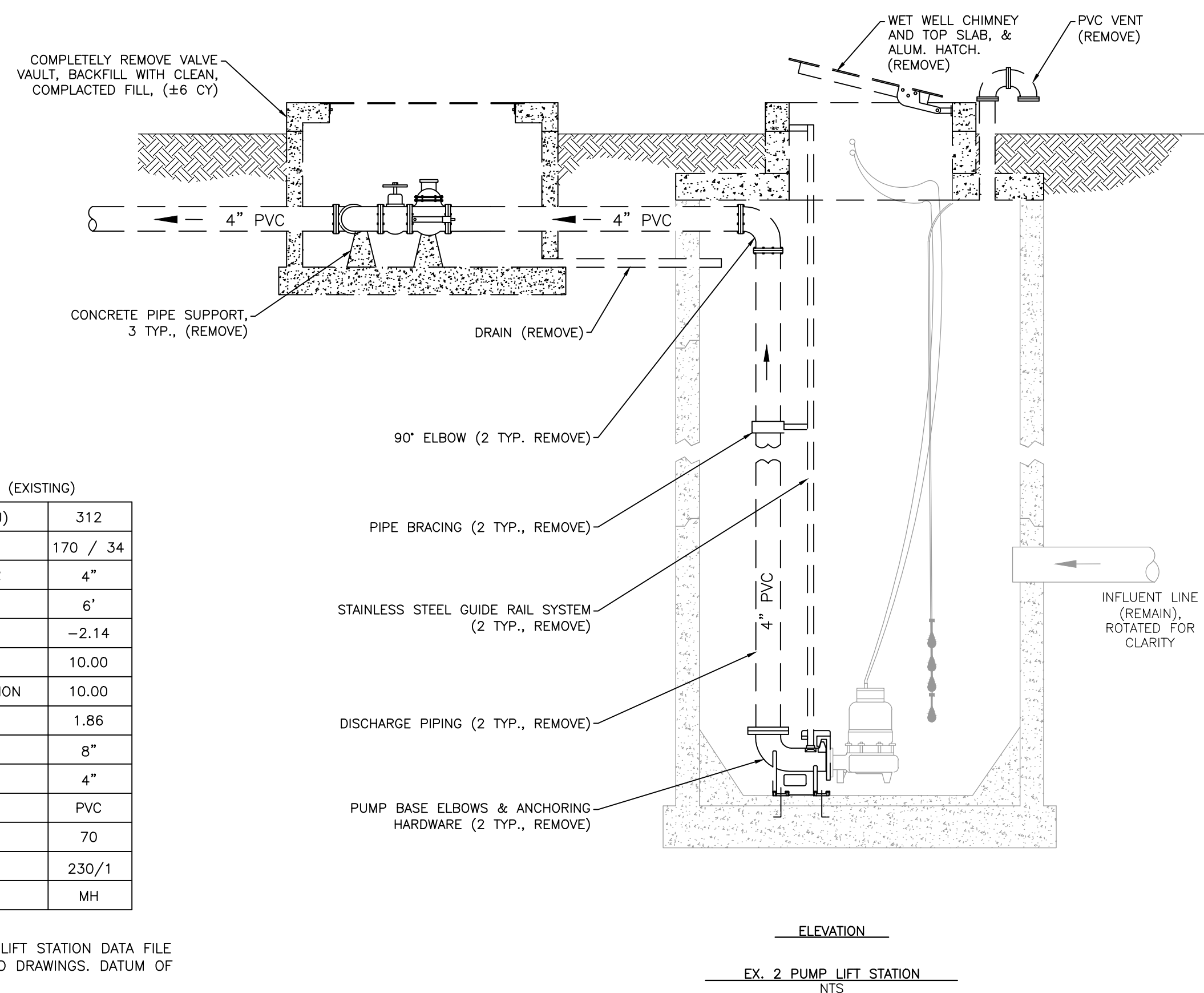
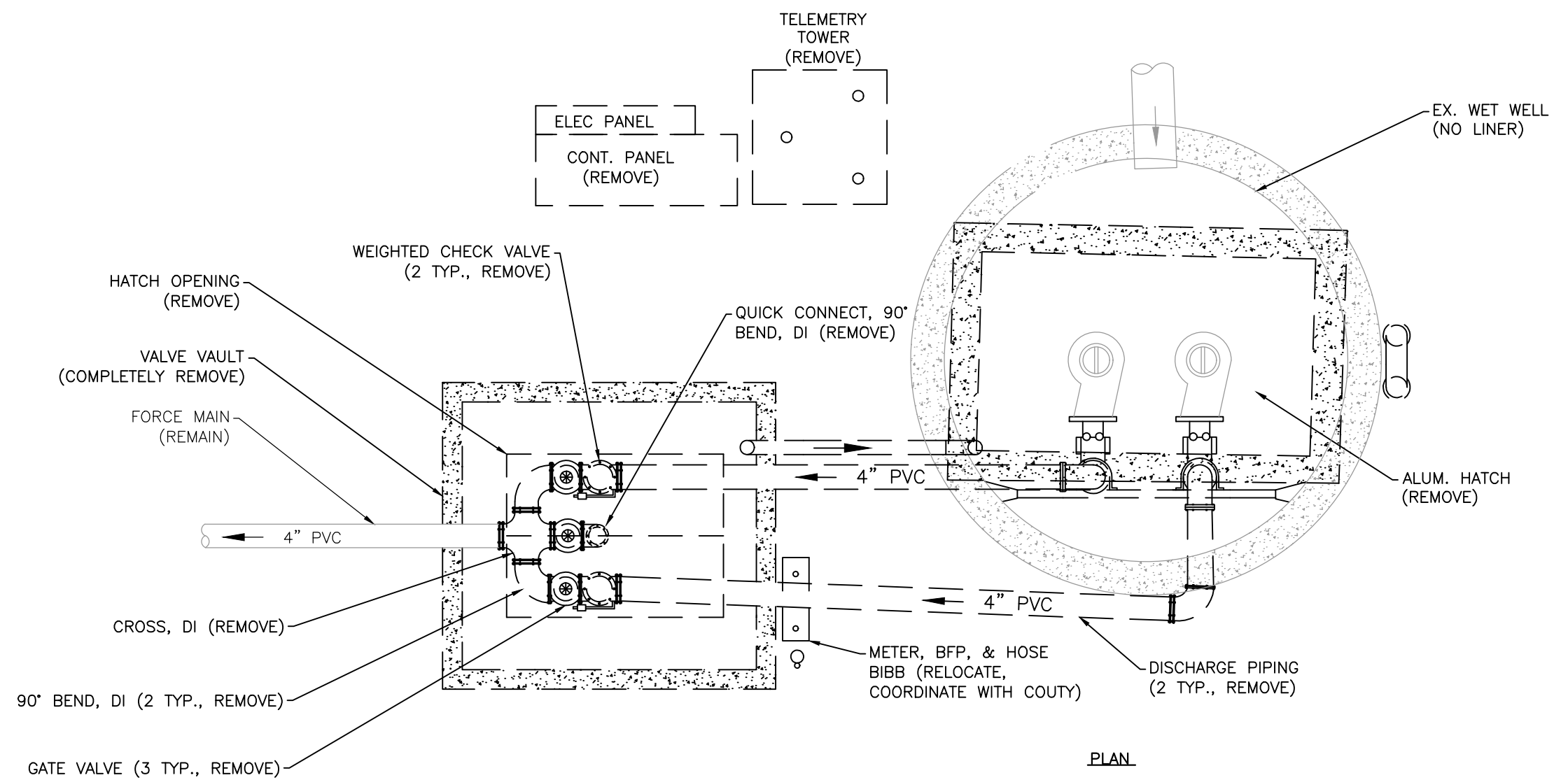


EXISTING

NOTES:

1. 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.
2. THE CONTRACTOR/BIDDER SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
3. THE CONTRACTOR/BIDDER SHALL DETERMINE THE DISCHARGE PIPING ELEVATIONS DURING THE SITE VISITS.
4. REMOVAL AND REINSTALLATION OF FIVE PUMPS DURING THE REHABILITATION SHALL BE DONE BY MANATEE COUNTY PERSONNEL IN COORDINATION WITH THE CONTRACTOR
5. BY-PASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. MANATEE COUNTY GOVERNMENT WILL PROVIDE ONE (1) LIFT STATION SHUT-DOWN AT NO COST TO THE CONTRACTOR. ADDITIONAL SHUT-DOWNS WILL COST THE CONTRACTOR \$3,500 EACH, IF NEEDED.
7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN CONDITIONS.
8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE.



LIFT STATION SCHEDULE (EXISTING)	
RADIO TELEMETRY UNIT (RTU)	312
DESIGN CAPACITY GPM/TD	170 / 34
DISCHARGE PIPING DIAMETER	4"
WET WELL DIAMETER	6'
BOTTOM SLAB ELEVATION	-2.14
TOP ELEVATION	10.00
VALVE VAULT HATCH ELEVATION	10.00
INFLUENT INVERT ELEVATION	1.86
INFLUENT PIPE SIZE	8"
FORCE MAIN DIAMETER	4"
WET WELL VENT PIPE	PVC
ELECT. SERVICE SIZE, AMPS	70
ELECT. POWER, VOLTS/PH	230/1
EX. FORCE MAIN TIE	MH

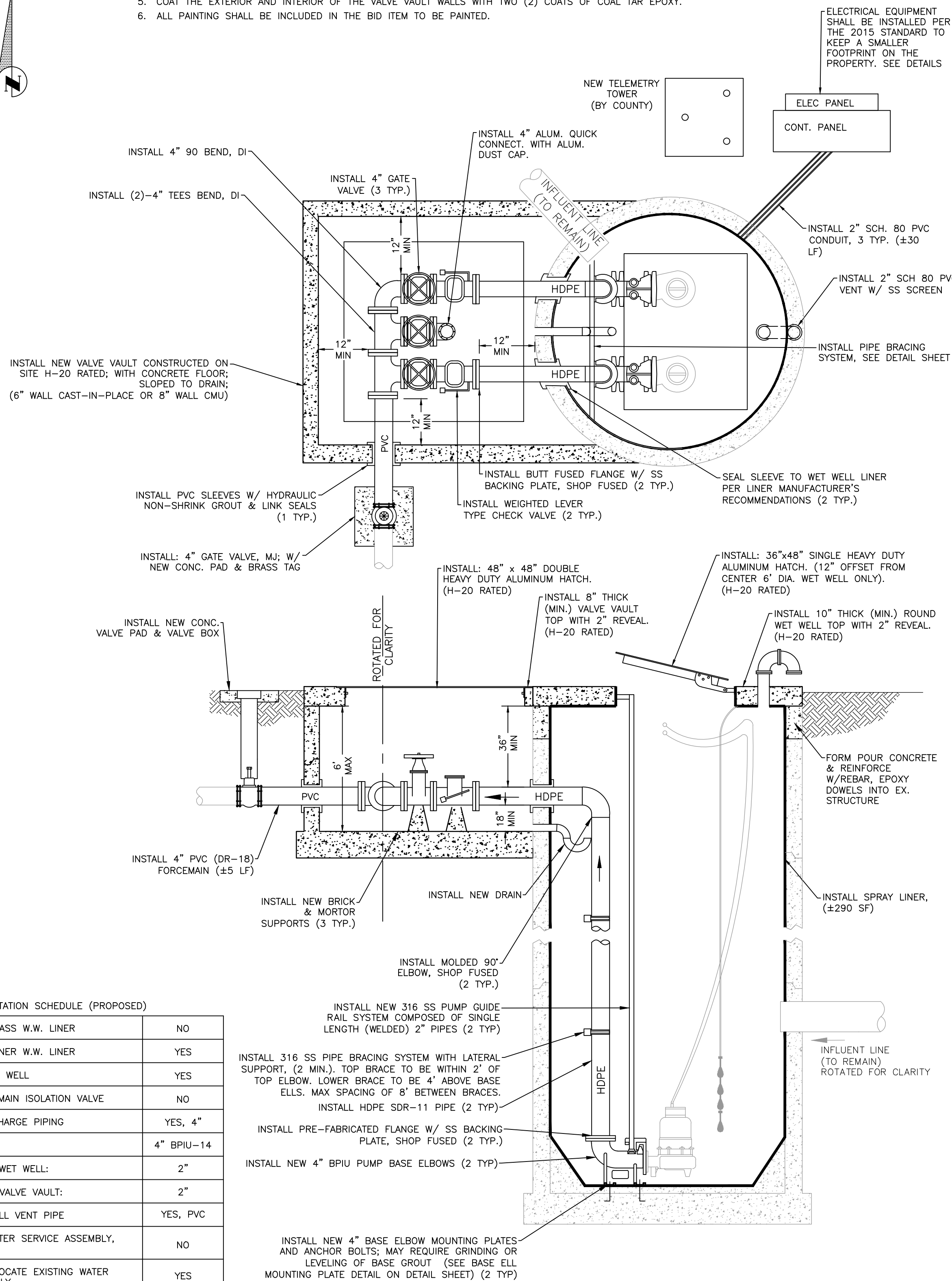
* INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO.XLS 2018) & RECORD DRAWINGS. DATUM OF ELEVATIONS IS UNKNOWN.

NO.	REVISION DESCRIPTION	BY	DATE
1	revised ex. valve vault call-out revised; revised wet well hatch size.	jss	8/20/20

PROPOSED

GENERAL NOTES:

1. CONTRACTOR SHALL NOT BACKFILL OR DISCHARGE PIPING UNTIL INSPECTOR HAS VISUALLY CHECKED IT FOR LEAKS DURING PUMP STARTUP OR PRESSURE TEST AS DIRECTED BY THE COUNTY.
2. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST MANITOWOC COUNTY PUBLIC WORKS UTILITY STANDARDS, ALL HORIZONTAL AND VERTICAL DISTANCES AND MEASUREMENTS SHALL BE FIELD VERIFIED PRIOR TO ORDERING MATERIALS AND COMMENCING WORK. ALL SURVEY DATA AND CALCULATIONS SHALL BE THE RESPONSIBILITY OF THE AWARDED CONTRACTOR.
3. COAT THE EXTERIOR AND INTERIOR OF THE CONCRETE WET WALLS AND VALVE VAULT EXPOSED ABOVE GROUND SHALL BE COATED WITH AT LEAST TWO COATS OF H-8 & SILICONE ACRYLIC CONCRETE PATCH PATIO GREEN, MANUFACTURED BY FLT PLANTS, INC.
4. ALL EXISTING DUCTILE IRON PIPE AND/OR FITTINGS LABELED TO REMAIN IN THE VALVE VAULT SHALL BE COATED WITH A BITUMINOUS COATING.
5. COAT THE EXTERIOR AND INTERIOR OF THE VALVE VAULT WALLS WITH TWO (2) COATS OF COAL TAR EPOXY.
6. ALL PAINTING SHALL BE INCLUDED IN THE BID ITEM TO BE PAINTED.



LIFT STATION SCHEDULE (PROPOSED)		
INSTALL FIBERGLASS W.W. LINER		NO
APPLY SPRAY LINER W.W. LINER		YES
INSTALL STILLING WELL		YES
INSTALL FORCE MAIN ISOLATION VALVE		NO
NEW HDPE DISCHARGE PIPING		YES, 4"
NEW BASE ELL		4" BPIU-14
LOWER TOP OF WET WELL:		2"
LOWER TOP OF VALVE VAULT:		2"
INSTALL WET WELL VENT PIPE		YES, PVC
INSTALL NEW WATER SERVICE ASSEMBLY, US-15		NO
UPGRADE / RELOCATE EXISTING WATER SERVICE ASSEMBLY		YES

INSTALL 316 SS PIPE BRACING SYSTEM WITH LATERAL
SUPPORT, (2 MIN.) TOP BRACE TO BE WITHIN 2' OF
TOP ELBOW. LOWER BRACE TO BE 4" ABOVE BASE
ELLS. MAX SPACING OF 8' BETWEEN BRACES.

INSTALL HDPE SDR-11 PIPE (2 TYP)

INSTALL PRE-FABRICATED FLANGE W/ SS BACKING
PLATE, SHOP FUSED (2 TYP.)

INSTALL NEW 4" BPIU PUMP BASE ELBOWS (2 TYP)

INSTALL NEW 4" BASE ELBOW MOUNTING PLATES
AND ANCHOR BOLTS; MAY REQUIRE GRINDING OR
LEVELING OF BASE GROUT (SEE BASE ELL
MOUNTING PLATE DETAIL ON DETAIL SHEET) (2 TYP)

CONSTRUCTION NOTES:

1. INSTALL #30 IF NEW ELECTRICAL SERVICE W/ CONDUIT.
2. INSTALL NEW 3" PVC DRAIN LINE WITH W/ PVC "P" TRAP ROTATE AND INSTALL FLUSH AGAINST WALL INSIDE WET WELL. SEAL WITH NON-SHRINK GROUT. SEAM AND SEAL TO MATCH LINER IN WET WELL. WALL PENETRATION TO BE MADE BY MECHANICAL ROTARY CORE BORING. (P-TRAP ROTATED IN DRAWING FOR CLARITY).
3. REMOVE AND INSTALL ALL NEW ELECTRICAL STRUCTURE (RACK), NEW CONTROL PANEL FOLLOWING THE 2015 NATIONAL ELECTRICAL CODE (NEC) AND ALL METER CAN AND SAFETY SWITCH (DISCONNECT). ALL INTERNAL ELECTRONIC AND EQUIPMENT SHALL BE PER THE CURRENT COUNTY REQUIREMENTS. NEW ELECTRICAL STRUCTURE SHALL BE FIELD LOCATED WITH MANATEE COUNTY PERSONNEL.
4. A TCU BUBBLER UNIT (TBU360) SYSTEM PROVIDED AND INSTALLED BY DATA FLOW SYSTEMS (DFS) FOR WET WELL LEVEL CONTROL SHALL BE INCLUDED WITH THE CONTROL PANEL.
5. INSTALL NEW PRECAST TYPE-II REINFORCED CONCRETE WET WELL BARRIER SECTION; OR FORM FOUR CONCRETE AND REINFORCE WITH REBAR, EPOXY DOWELS INTO EXISTING STRUCTURE TO RAISE TOP ELEVATION OF NEW TOP SLAB.
6. REPAIR CONCRETE WALLS, AS NEEDED, IN WET WELL, 2" MIN. THICK OVER EXISTING REBAR, (±145 SF). ALL REPAIRS TO BE VERIFIED W/ COUNTY PERSONNEL PRIOR TO WORK.
7. WET WELL CONCRETE WALLS SHALL BE INSPECTED BY COUNTY PERSONNEL PRIOR TO INSTALLATION OF NEW SPRAY LINER AND/OR OTHER REPAIR.
8. A NEW ELECTRICAL SYSTEM STUDY, ELECTRICAL STUDY ANALYSIS, AND PROPER LABELING IN COMPLIANCE WITH NFPA 70E "STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE" AND IEEE 1584 2018 "GUIDE FOR PERFORMING ARC FLASH HAZARDS CALCULATIONS" SHALL BE PROVIDED.

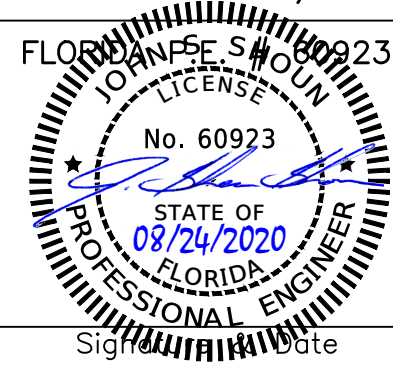
Users\sheas\onedrive - monatee county government\mon swr pro\mon swr - is upgrades\sis rdr 2020 group 1.dwg,MANATEE PALMS 2 (REHAB), 8/24/2020 10:36 AM Sheas, 1:1, ANSI full bleed D (34.00 x 22.00 inches), MC-2016.SIB

**SATELLITE LIFT STATION R&R
2020 GROUP 1
MANATEE PALMS 2 (REHAB)**



PROJECT #	402-0019707	
SURVEY #	-	
SEC./TWN./RGE	26/34/18	
SCALE	N.T.S.	
	BY	DATE
SURVEYED	----	----
DESIGNED	JSS	02/2020
DRAWN	CAK	02/2020
CHECKED	JSS	02/2020

JOHN S. SHOUN, P.E.

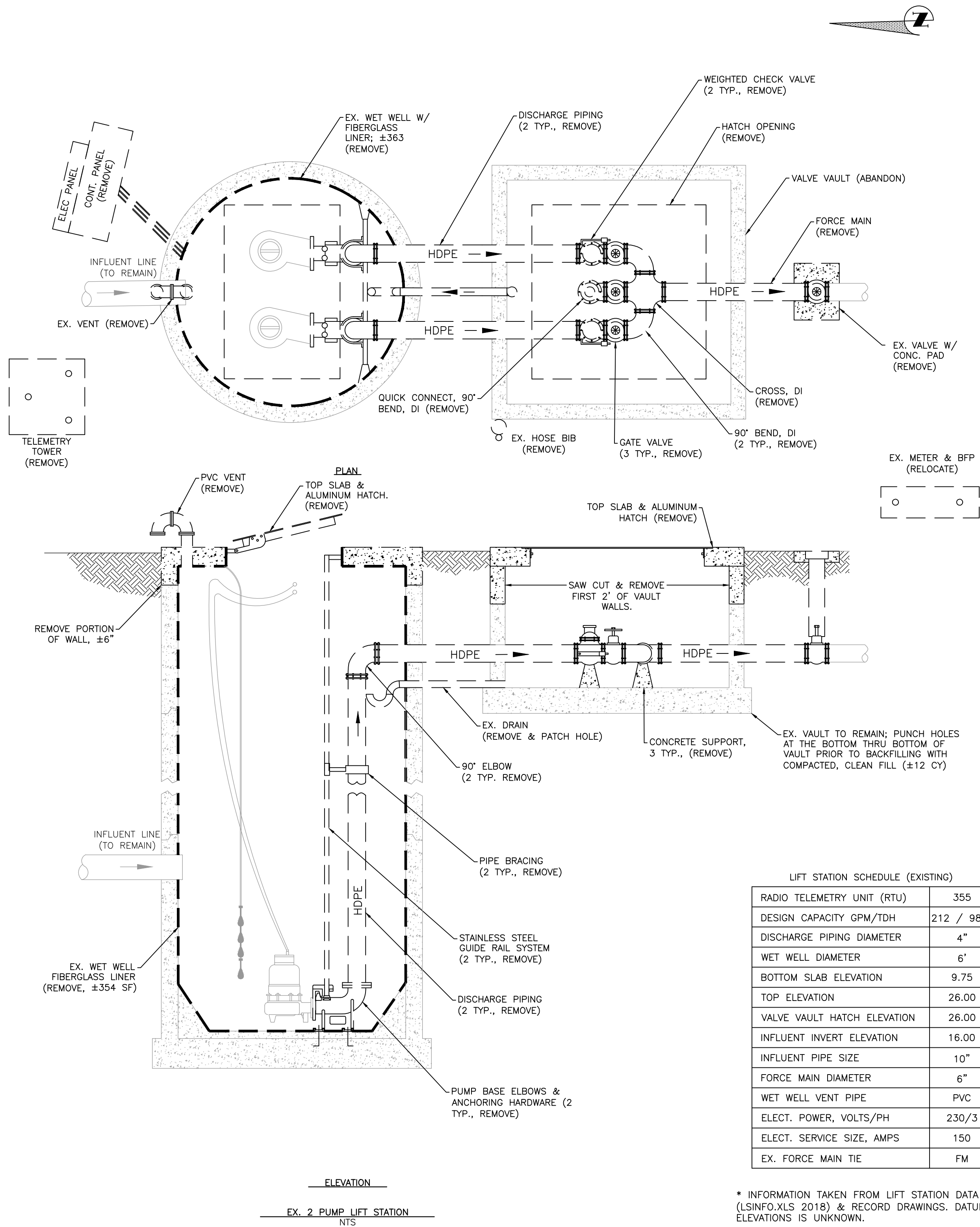


SHEET 03 OF 11

EXISTING

NOTES:

1. 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.
2. THE CONTRACTOR/BIDDER SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
3. THE CONTRACTOR/BIDDER SHALL DETERMINE THE DISCHARGE PIPING ELEVATIONS DURING THE SITE VISITS.
4. REMOVAL AND REINSTALLATION OF FIVE PUMPS DURING THE REHABILITATION SHALL BE DONE BY MANATEE COUNTY PERSONNEL IN COORDINATION WITH THE CONTRACTOR
5. BY-PASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. MANATEE COUNTY GOVERNMENT WILL PROVIDE ONE (1) LIFT STATION SHUT-DOWN AT NO COST TO THE CONTRACTOR. ADDITIONAL SHUT-DOWNS WILL COST THE CONTRACTOR \$3,500 EACH, IF NEEDED.
7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN CONDITIONS.
8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE.



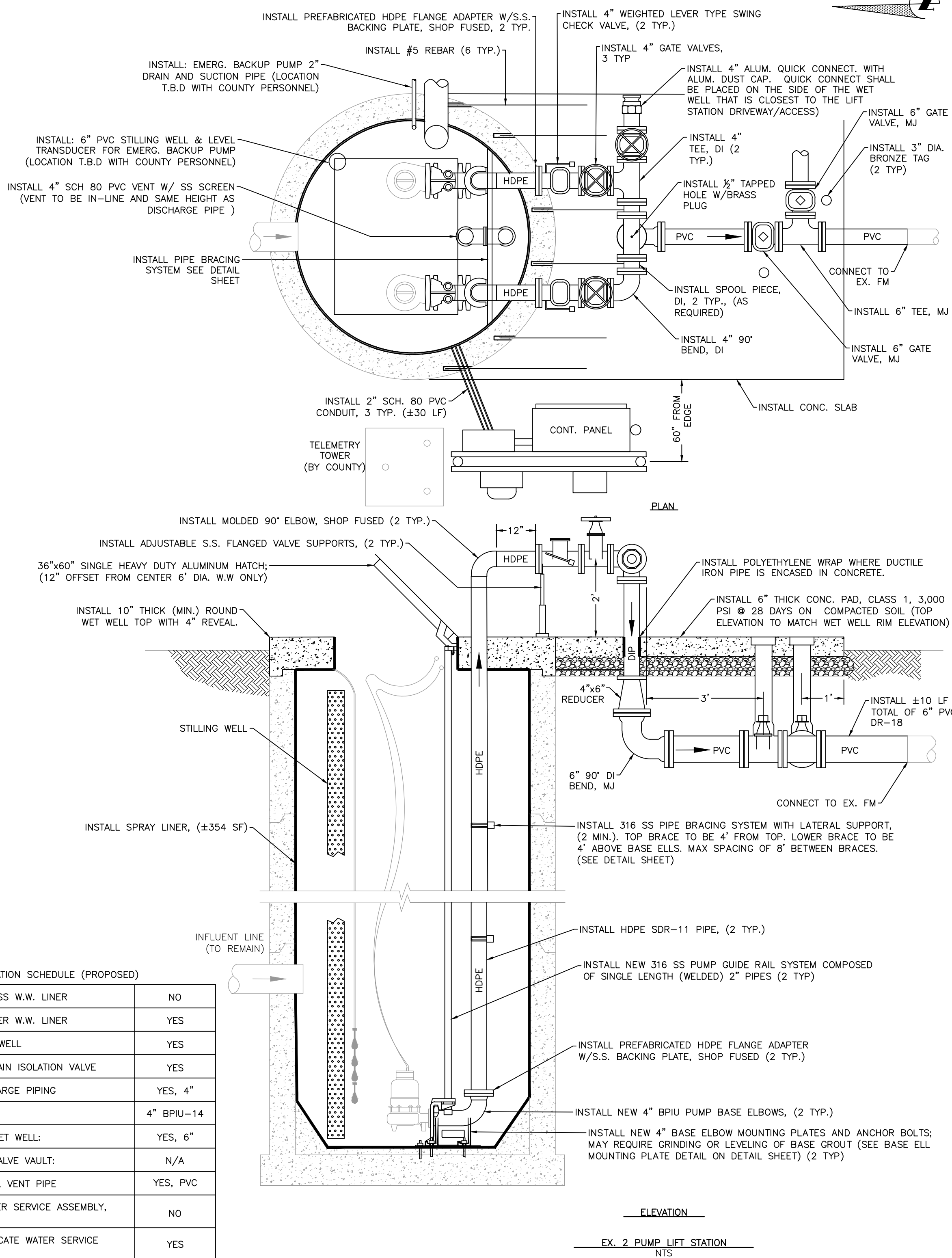
LIFT STATION SCHEDULE (EXISTING)		
RADIO TELEMETRY UNIT (RTU)		355
DESIGN CAPACITY GPM/TDH	212 /	98.2
DISCHARGE PIPING DIAMETER		4"
WET WELL DIAMETER		6"
BOTTOM SLAB ELEVATION		9.75
TOP ELEVATION		26.00
VALVE VAULT HATCH ELEVATION		26.00
INFLUENT INVERT ELEVATION		16.00
INFLUENT PIPE SIZE		10"
FORCE MAIN DIAMETER		6"
WET WELL VENT PIPE		PVC
ELECT. POWER, VOLTS/PH		230/3
ELECT. SERVICE SIZE, AMPS		150
EX. FORCE MAIN TIE		FM

* INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO.XLS 2018) & RECORD DRAWINGS. DATUM OF ELEVATIONS IS UNKNOWN.

PROPOSED

GENERAL NOTES:

1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS. ALL HORIZONTAL AND VERTICAL TANKS AND MEASUREMENTS SHALL BE VERIFIED PRIOR TO ORDERING MATERIALS AND COMMENCING WORK. ALL MEASUREMENTS AND CALCULATIONS SHALL BE THE RESPONSIBILITY OF THE AWARDED CONTRACTOR.
2. THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAN 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 AN EDGING TOOL HAVING A RADIUS OF 1/2".
3. 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.
4. 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.
5. ALL PAINTING SHALL BE INCLUDED IN THE BID ITEM TO BE PAINTED.

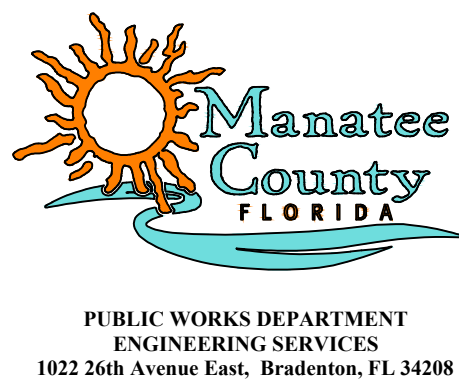


CONSTRUCTION NOTES:

1. FPL TO INSTALL NEW ELECTRICAL DROP AND NEW HANDHOLE AT BASE OF EXISTING POWER POLE.
2. INSTALL ± 30 FL NEW ELECTRICAL SERVICE.
3. REMOVE AND INSTALL ALL NEW ELECTRICAL STRUCTURE (RACK), A CONTROL PANEL, TCU ENCLOSURE, JUNCTION BOX ENCLOSURE, A METER CAN, AND A SAFETY SWITCH (DISCONNECT). NEW ELECTRICAL STRUCTURE SHALL BE FIELD LOCATED WITH MANATEE COUNTY PERSONNEL.
4. A TCU BUBBLER UNIT (TBU360) SYSTEM PROVIDED AND INSTALLED BY DATA FLOW SYSTEMS (DFS) FOR WET WELL LEVEL CONTROL SHALL BE INCLUDED WITH THE CONTROL PANEL.
5. INSTALL #3 REBAR (6 TYP.) EPOXY EMBEDDED INTO THE WET WELL TOP 3-4 INCHES DEPTH AND CAST 3-4 FEET INTO THE VALVE ASSEMBLY CONCRETE PAD TO ENSURE THE TOPS OF THE WET WELL AND VALVE ASSEMBLY PAD WILL REMAIN FLUSH.
6. INSTALL WASHED SHEL L & WEED BARRIER (+150 SY); GRADE THE AREA AROUND WELL TO ALLOW FOR POSITIVE DRAINAGE AWAY FROM LIFT STATION AND TO HAVE A 4" REVEAL ON THE WET WELL/ VALVE VAULT. COORDINATE WITH MANATEE COUNTY.
7. CONTRACTOR SHALL SEPARATE THE TELEMETRY TOWER FROM CONCRETE BASE AND SET TO SIDE OF LIFT STATION SITE. CONTRACTOR SHALL REMOVE AND DISPOSE OF CONCRETE BASE. COUNTY SHALL INSTALL NEW TELEMETRY ANTENNA.
8. REPAIR CONCRETE WALLS, AS NEEDED, IN WETWELL, 2" MIN. THICK OVER EXISTING REBAR, (+177 SF). ALL REPAIRS TO BE VERIFIED W/ COUNTY PERSONNEL PRIOR TO WORK.
9. WET WELL CONCRETE WALLS SHALL BE INSPECTED BY COUNTY PERSONNEL PRIOR TO INSTALLATION OF NEW SPRAY LINER AND/OR LINER REPAIR.
10. AN ELECTRICAL SYSTEM STUDY, ELECTRICAL SYSTEM ANALYSIS, AND CLOPPER LABELING IN COMPLIANCE WITH NFPA 70E "STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE" AND IEEE 1584 2018 "GUIDE FOR PERFORMING ARC FLASH HAZARDS CALCULATIONS" SHALL BE PROVIDED.

[illegible]

**SATELLITE LIFT STATION R&R
2020 GROUP 1
RYE RD SCHOOL (REHAB)**



PROJECT #	402-0019707	
SURVEY #	-	
SEC./TWN./RGE	26/34/19	
SCALE	N.T.S.	
	BY	DATE
SURVEYED	----	----
DESIGNED	JSS	02/2020
DRAWN	CAK	02/2020
CHECKED	JSS	02/2020

JOHN S. SHOUN, P.E.

FLORIDA DEEDS #60923

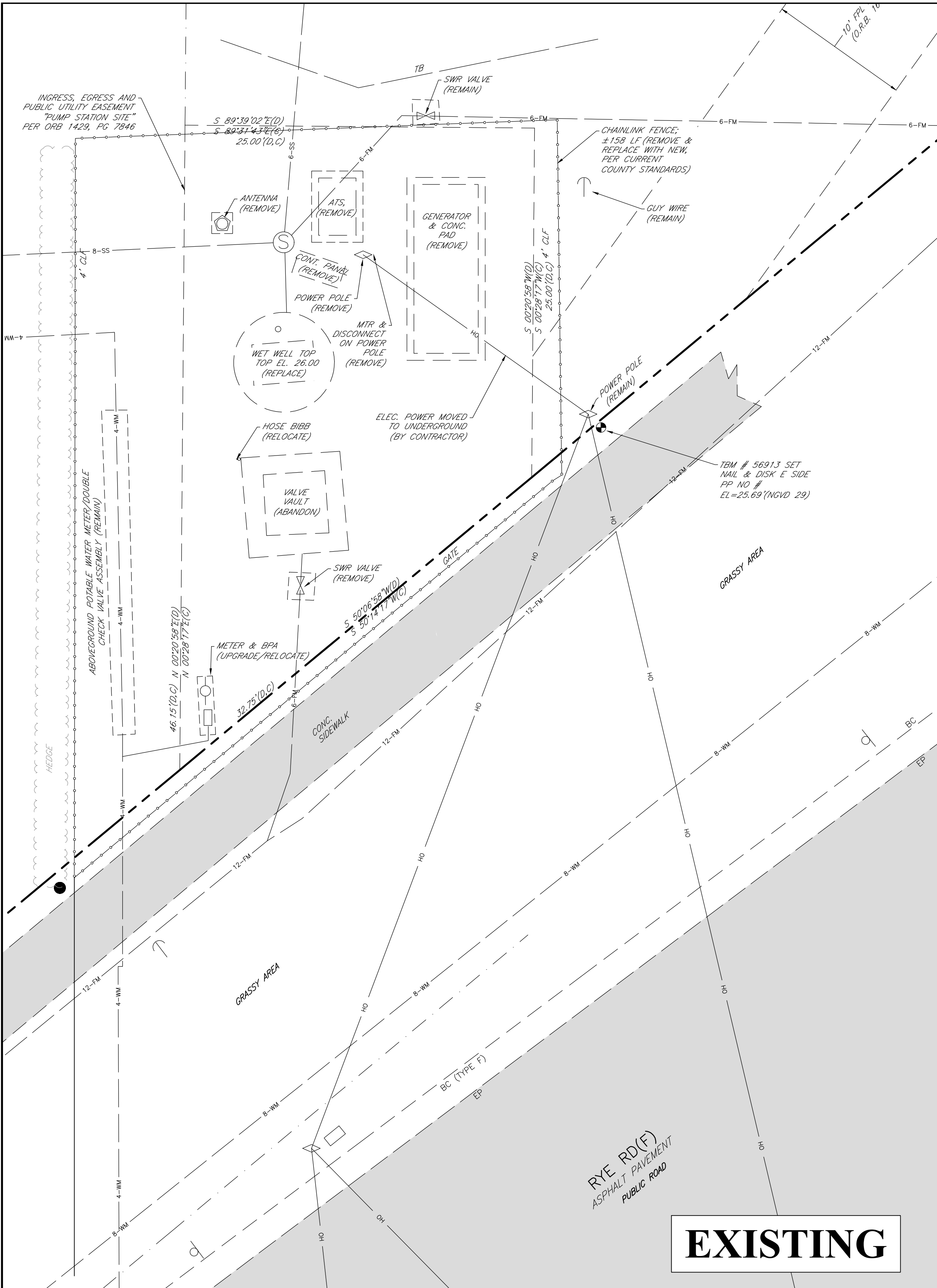
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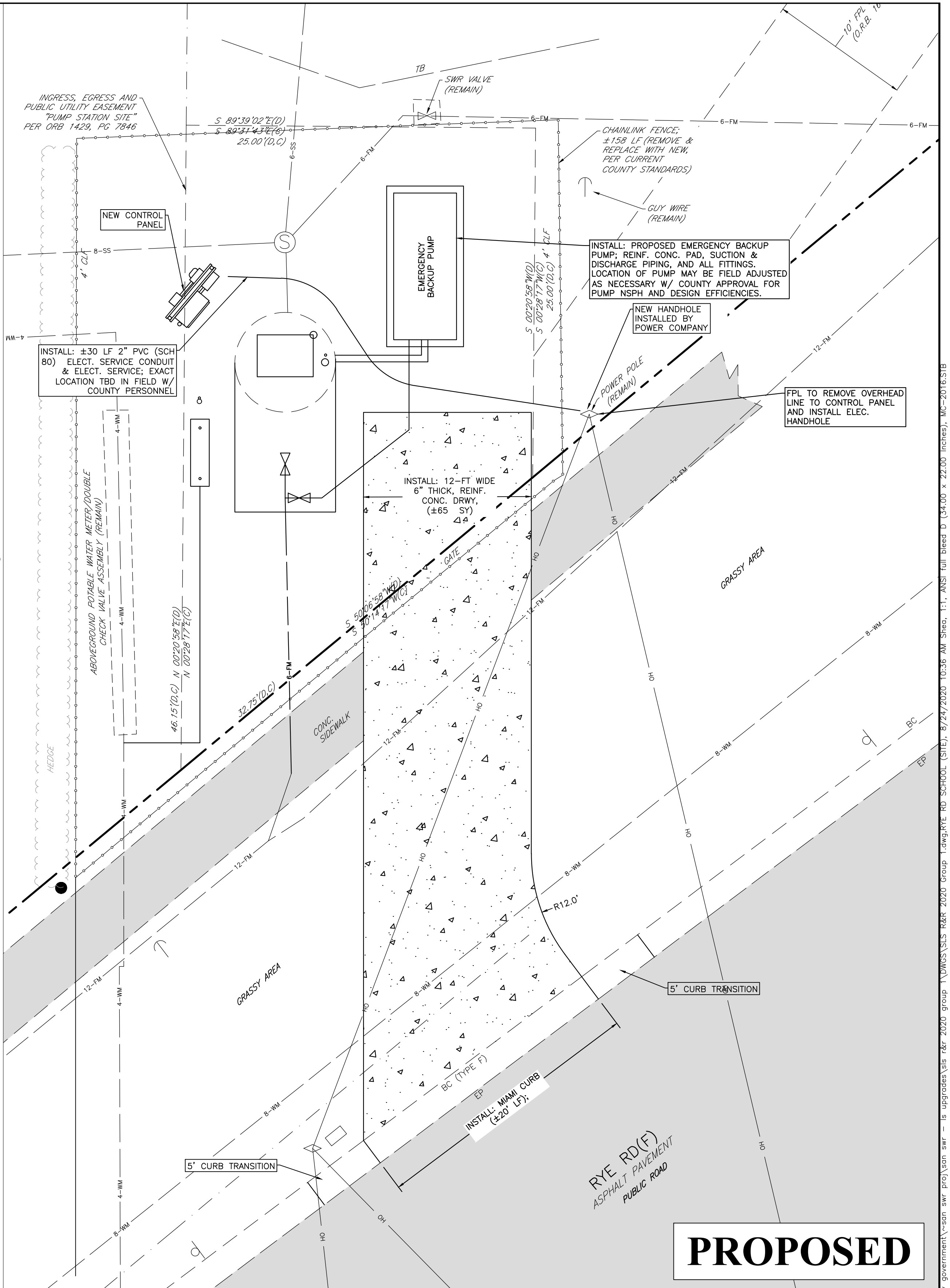
STATE OF
08/24/2020



SHEET 05 OF 1

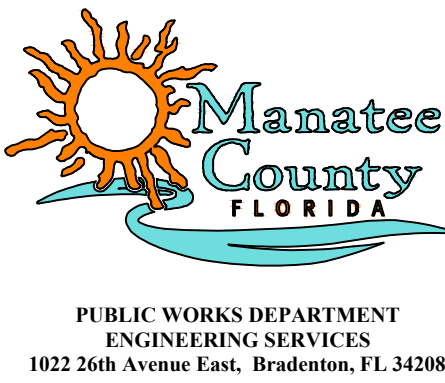


- CONSTRUCTION NOTES:**
- THIS IS NOT A SURVEY. THE ILLUSTRATED PROJECT SITE WAS TAKEN FROM AN EXISTING DRAWING, ALL ITEMS ARE CONSIDERED APPROXIMATE.
 - A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF FLORIDA SHALL BE REQUIRED TO PREPARE RECORD DRAWINGS PER THE REQUIREMENTS OF THE PROJECT SPECIFICATION FOR ALL LIFT STATION SITE IMPROVEMENTS ABOVE & BELOW GROUND, (I.E. THE CONCRETE PADS, EMERGENCY PUMP PIPING, UNDERGROUND CONDUIT INSTALLED, ETC. FOR THE LIFT STATION SITE.
 - REPLACE EXISTING WATER SERVICE SADDLE AND CORPORATION AND INSTALL A BRASS PLUG IN NEW CORPORATION. REUSE EXISTING HOLE IN MAIN, IF ADEQUATE VALVING EXISTS.(±23 LF).
 - REPLACE EXISTING WATER SERVICE SADDLE AND CORPORATION AND INSTALL A BRASS PLUG IN NEW CORPORATION. REUSE EXISTING HOLE IN MAIN, IF ADEQUATE VALVING EXISTS.
 - INSTALL NEW 6-FT HIGH BLACK VINYL CHAIN-LINK FENCE (±146 LF) W/ MATCHING DECORATIVE SLATS WITH A 18-FT WIDE CANTILEVER GATE (OPEN SOUTH). CONTRACTOR TO VERIFY REQUIRED GATE WIDTH.
- EMERGENCY BACKUP PUMP NOTES:**
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SIZING, FURNISHING, AND INSTALLING AN EMERGENCY BACKUP PUMP; THIS SHALL INCLUDE ALL PIPING AND FITTINGS OF THE SUCTION AND DISCHARGE SIDE OF THE PUMP FROM THE WET WELL AND TO THE ISOLATION GATE VALVE (CONNECTION POINT) TO ENSURE THE MOST EFFICIENT DESIGN. THE COUNTY SHALL SUPPLY ALL AVAILABLE DATA TO ASSIST IN THE CONTRACTOR ENDEAVORS.
 - CONTRACTOR IS RESPONSIBLE FOR ALL FITTINGS REQUIRED TO CONNECT THE PUMP TO THE SUCTION/DISCHARGE PIPING. FITTING SHALL BE INCLUDED IN PUMP COST.
 - CONTRACTOR RESPONSIBLE TO PULL AND TERMINATE REMOTE SENSOR WIRING AT CONTROL PANEL. MANATEE COUNTY PERSONNEL TO MOUNT AND CONNECT TO PANEL. CONTRACTOR TO COORDINATE WITH MANATEE COUNTY PERSONNEL PRIOR TO AND DURING INSTALLATION OF REMOTE SENSOR.
 - CONTRACTOR SHALL COORDINATE WITH PUMP VENDOR TO TEST AND CONFIGURE THE PUMP OPERATION AS SUBMITTED IN THE SHOP DRAWING.
 - CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO STAKE OUT EXISTING EASEMENTS BOUNDARIES PRIOR TO COMMENCING WORK. ALL EQUIPMENT, PIPING, ETC. SHALL BE WITHIN THE EASEMENTS. NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER & MANATEE COUNTY.
 - THE SUCTION AND DISCHARGE PIPING SHOWN IS ONE POSSIBILITY FOR INSTALLATION. CONTRACTOR SHALL COORDINATE WITH COUNTY PERSONNEL PRIOR TO INSTALLATION. ALL PIPING AND CONDUIT INSTALLED SHALL BE SHOWN ON THE RECORD DRAWINGS.
 - THE CAPACITY OF THE DIESEL FUEL TANK SHALL BE SIZED TO THE MINIMAL FOOTPRINT & HEIGHT TO RUN THE BACKUP PUMP CONTINUOUSLY AT MAXIMUM RATED CAPACITY FOR A MINIMUM 48 HOURS, BUT NOT TO EXCEED A MAXIMUM OF 540 GALLONS.
 - CONTRACTOR SHALL SUPPORT ALL SUSPENDED PIPING WITH S.S. ADJUSTABLE STANDS FASTENED TO A CONCRETE PAD, AS NECESSARY.
 - THE OVERALL FUEL SYSTEM IS TO COMPLY WITH ALL APPLICABLE NFPA REGULATIONS AS WELL AS THOSE REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION. THIS INCLUDES NFPA COMPLIANT LABELS FOR THE FUEL SHUT-OFF LOCATION AND APPLICATIONS OF DIESEL HAZMAT SYMBOL STICKERS.



NO.	REVISION DESCRIPTION	BY	DATE
1	revised electrical service requirements	jss	8/20/20

**SATELLITE LIFT STATION R&R
2020 GROUP 1
RYE RD SCHOOL (SITE)**



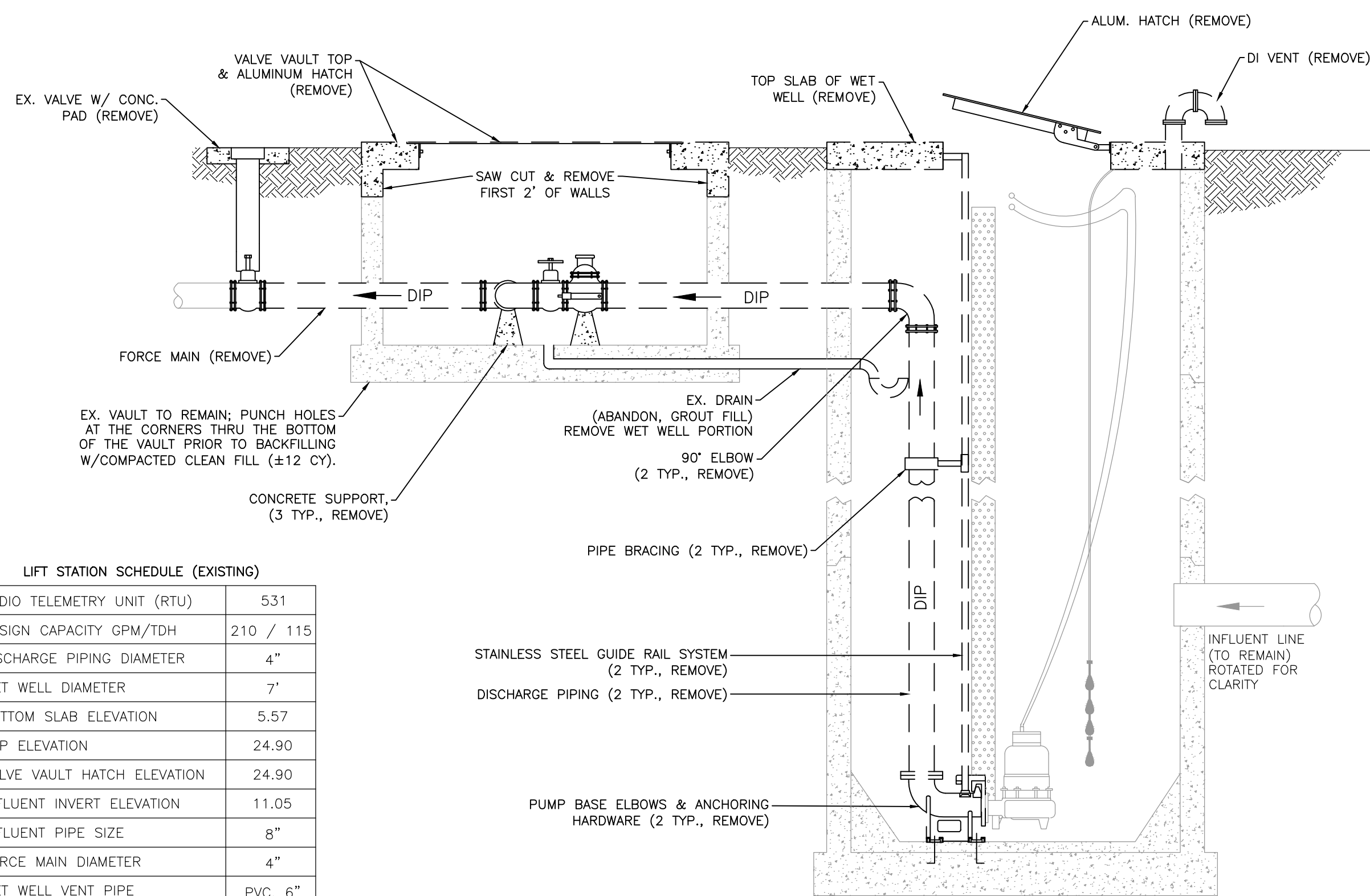
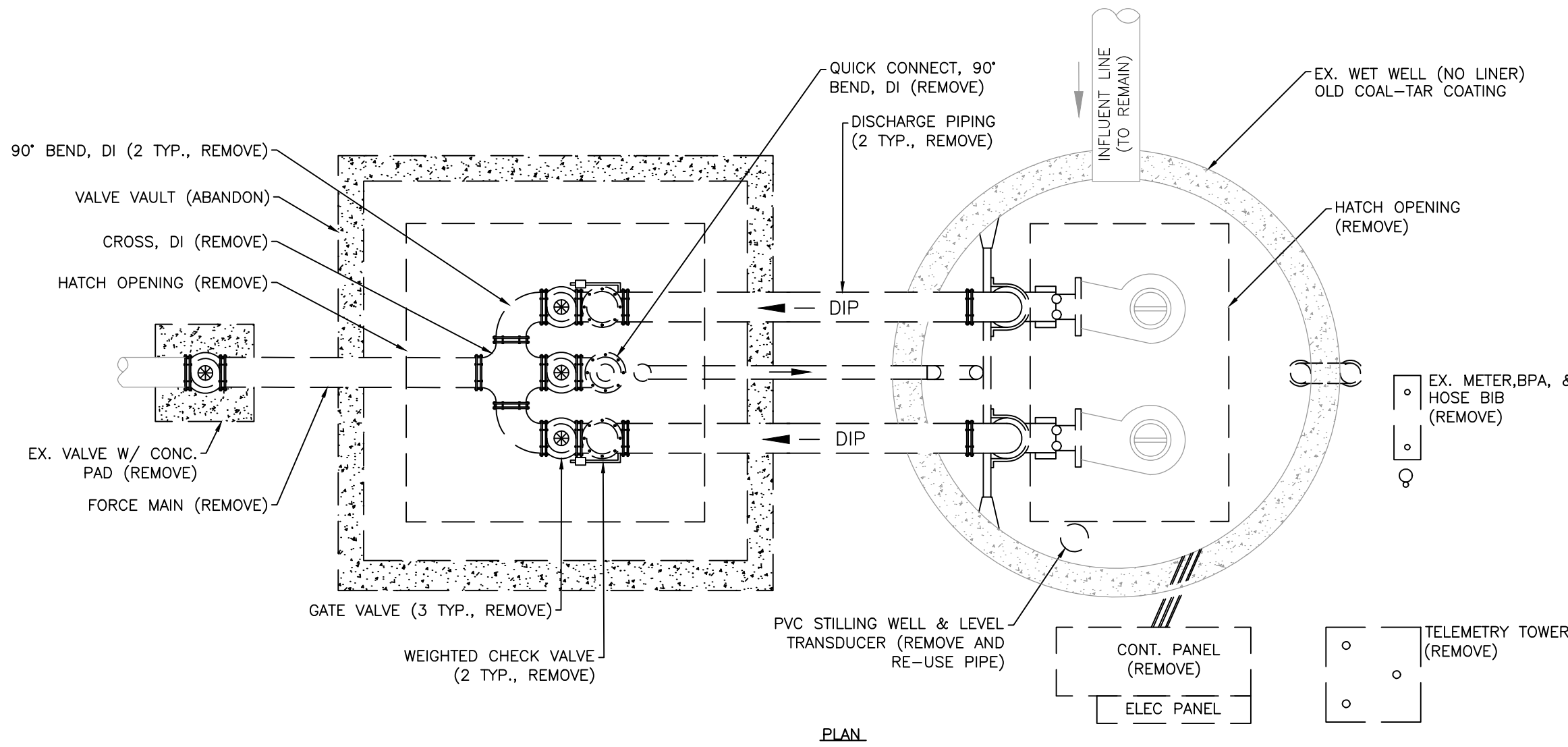
PROJECT #	402-0019707	JOHN S. SHOUN, P.E.
SURVEY #	-	FLORIDA PROFESSIONAL ENGINEER No. 60923
SEC./TWN./RGE	26/34/19	DATE 08/24/2020
SCALE	SEE PLAN	DATE
SURVEYED	----	----
DESIGNED	JSS	02/2020
DRAWN	CAK	02/2020
CHECKED	JSS	02/2020

SHEET 06 OF 11

EXISTING

NOTES:

1. 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.
2. THE CONTRACTOR/BIDDER SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
3. THE CONTRACTOR/BIDDER SHALL DETERMINE THE DISCHARGE PIPING ELEVATIONS DURING THE SITE VISITS.
4. REMOVAL AND REINSTALLATION OF THE PUMPS DURING THE REHABILITATION SHALL BE DONE BY MANATEE COUNTY PERSONNEL IN COORDINATION WITH THE CONTRACTOR
5. BY-PASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. MANATEE COUNTY GOVERNMENT WILL PROVIDE ONE (1) LIFT STATION SHUT-DOWN AT NO COST TO THE CONTRACTOR. ADDITIONAL SHUT-DOWNS WILL COST THE CONTRACTOR \$3,500 EACH, IF NEEDED.
7. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DAMAGED LANDSCAPING TO EXISTING OR DESIGN CONDITIONS.
8. THE WORK AREA IS LIMITED TO THE LIFT STATION SITE.



LIFT STATION SCHEDULE (EXISTING)

RADIO TELEMETRY UNIT (RTU)	531
DESIGN CAPACITY GPM/TDH	210 / 115
DISCHARGE PIPING DIAMETER	4"
WET WELL DIAMETER	7"
BOTTOM SLAB ELEVATION	5.57
TOP ELEVATION	24.90
VALVE VAULT HATCH ELEVATION	24.90
INFLUENT INVERT ELEVATION	11.05
INFLUENT PIPE SIZE	8"
FORCE MAIN DIAMETER	4"
WET WELL VENT PIPE	PVC, 6"
ELECT. POWER, VOLTS/PH	230/3
ELECT. SERVICE SIZE, AMPS	200
EX. FORCE MAIN TIE	MH

* INFORMATION TAKEN FROM LIFT STATION DATA FILE (LSINFO.XLS 2018) & RECORD DRAWINGS. DATUM OF ELEVATIONS IS UNKNOWN.

ELEVATION

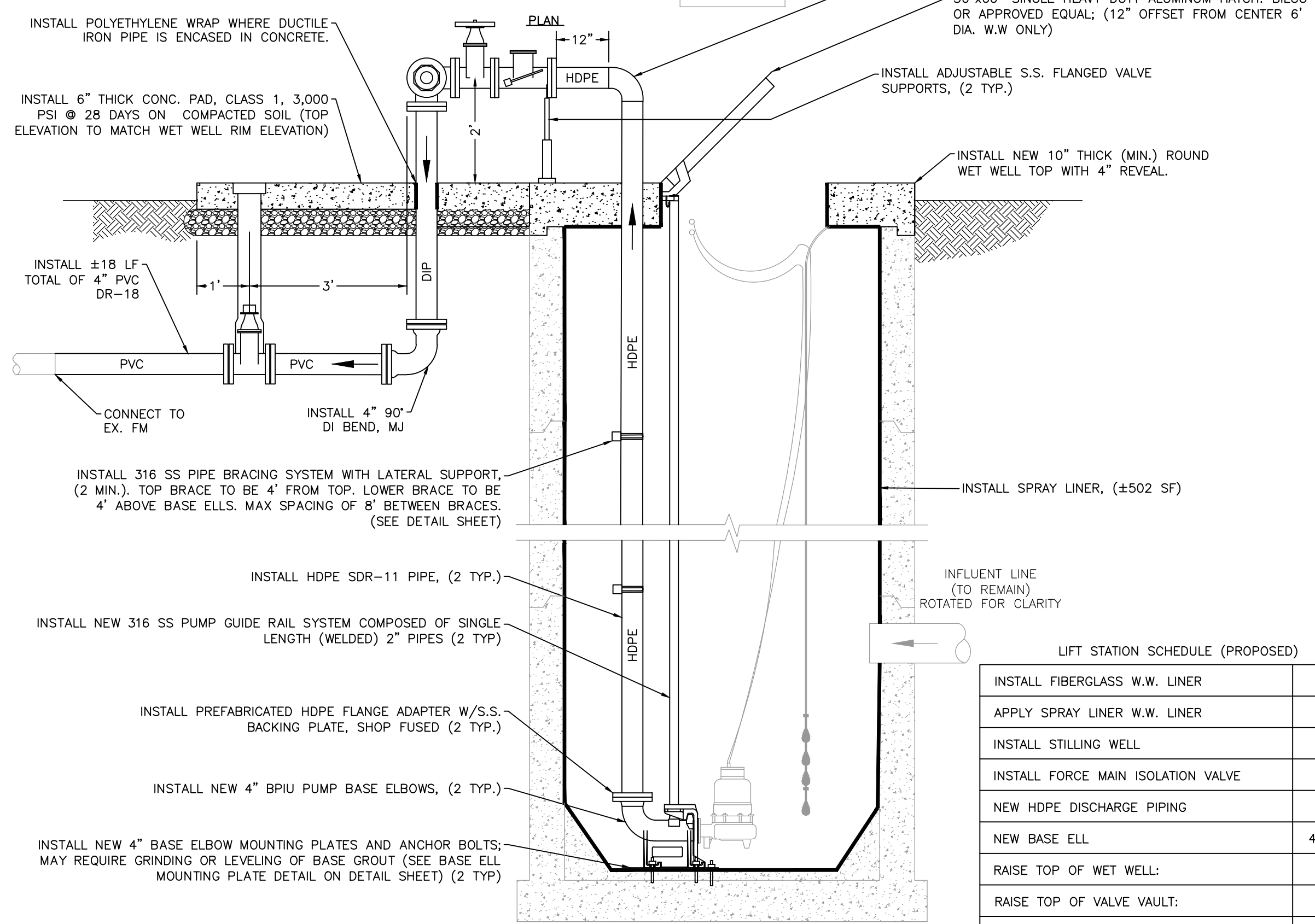
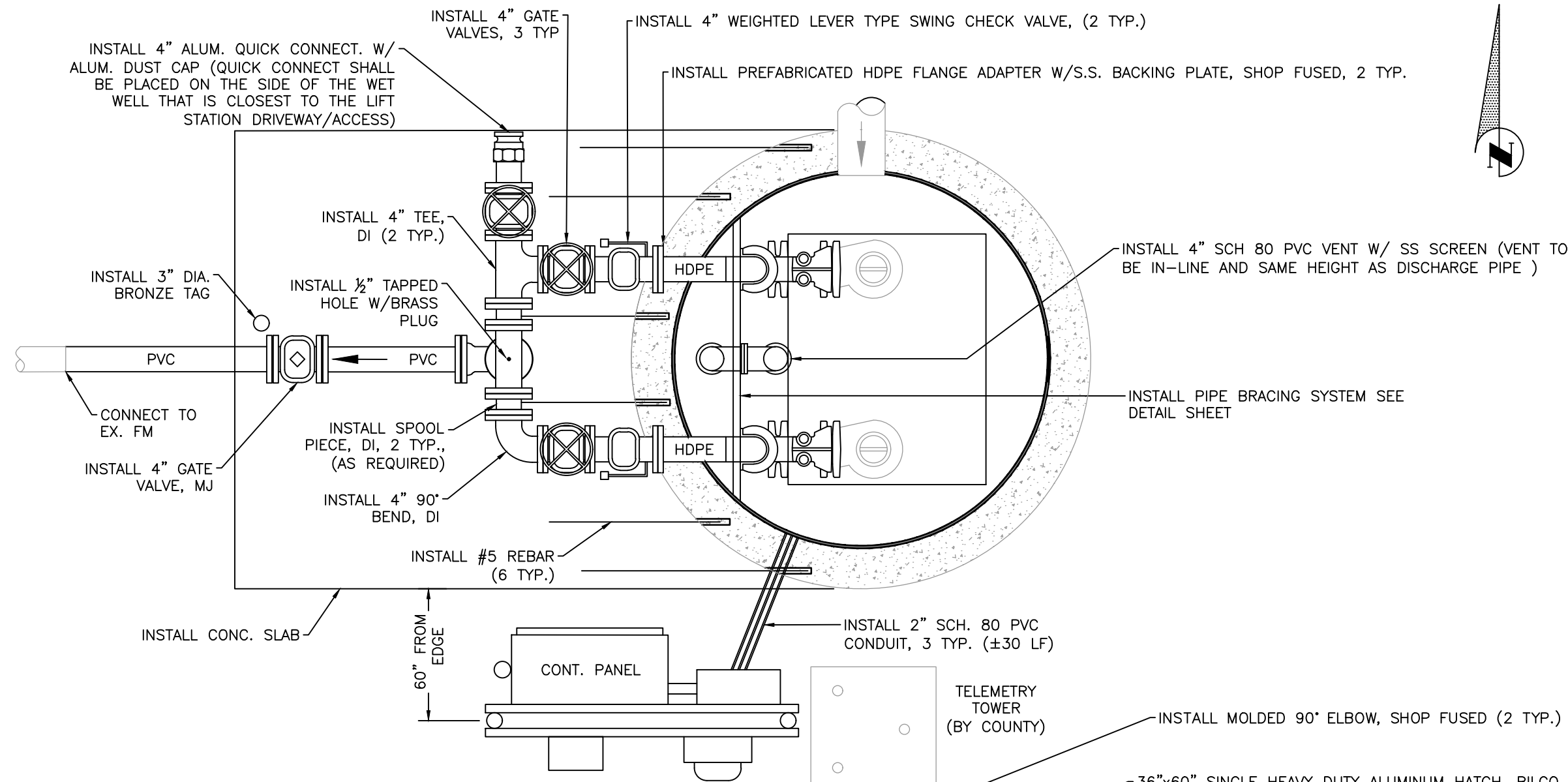
EX. 2 PUMP LIFT STATION
NTS

[illegible]

PROPOSED

GENERAL NOTES:

1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS. ALL HORIZONTAL AND VERTICAL DISTANCES AND MEASUREMENTS SHALL BE FIELD VERIFIED PRIOR TO ORDERING MATERIALS AND COMMENCING WORK. ALL MEASUREMENTS AND CALCULATIONS SHALL BE THE RESPONSIBILITY OF THE AWARDED CONTRACTOR.
2. THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL BE NOT MORE THAN 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 AN EDGING TOOL HAVING A RADIUS OF 1/2".
3. 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.
4. THE EXTERIOR SURFACES OF THE CONCRETE WET WELL AND VALVE PAD EXPOSED ABOVE GROUND 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.
5. ALL PAINTING SHALL BE INCLUDED IN THE BID ITEM TO BE PAINTED.



ELEVATION

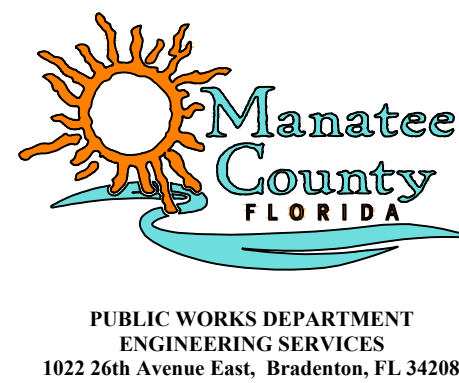
EX. 2 PUMP LIFT STATION
NTS

LIFT STATION SCHEDULE (PROPOSED)

INSTALL FIBERGLASS W.W. LINER	NO
APPLY SPRAY LINER W.W. LINER	YES
INSTALL STILLING WELL	NO
INSTALL FORCE MAIN ISOLATION VALVE	YES
NEW HDPE DISCHARGE PIPING	YES, 4"
NEW BASE ELL	4" BPIU-14
RAISE TOP OF WET WELL:	NO
RAISE TOP OF VALVE VAULT:	N/A
INSTALL WET WELL VENT PIPE	YES
INSTALL NEW WATER SERVICE ASSEMBLY, US-15	YES
UPGRADE / RELOCATE WATER SERVICE ASSEMBLY	YES

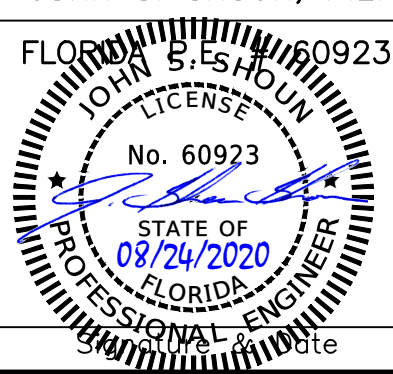
CONSTRUCTION NOTES:

1. REMOVE AND INSTALL ALL NEW ELECTRICAL STRUCTURE (RACK), A CONTROL PANEL, TCU ENCLOSURE, JUNCTION BOX ENCLOSURE, A METER CAN, AND A SAFETY SWITCH (DISCONNECT). NEW ELECTRICAL STRUCTURE SHALL BE FIELD LOCATED WITH MANHOLE COUNTY PERSONNEL.
2. A TCU BUBBLER UNIT (TBU360) SYSTEM PROVIDED AND INSTALLED BY DATA FLOW SYSTEMS (DFS) FOR WET WELL LEVEL CONTROL SHALL BE INCLUDED WITH THE CONTROL PANEL.
3. INSTALL #5 REBAR (6" TYP) EPOXY EMBEDDED INTO THE WET WELL TOP 3" INCHES DEEP AND CAST 4 FEET INTO THE VALVE VAULT ASSEMBLY CONCRETE PAD TO ENSURE THE TOPS OF THE WET WELL AND VALVE ASSEMBLY PAD WILL REMAIN FLUSH.
4. CONTRACTOR SHALL SEPARATE THE TELEMETRY TOWER FROM CONCRETE CORE AND SET TO THE SIDE OF LIFT STATION SILE. CONTRACTOR SHALL REMOVE AND DISPOSE OF CONCRETE BASE. COUNTY SHALL INSTALL NEW TELEMETRY ANTENNA.
5. REPAIR CONCRETE WALLS, AS NEEDED, IN WETWELL, 2" MIN. THICK OVER EXISTING REBAR, (+251 SF). ALL REPAIRS TO BE VERIFIED W/ COUNTY PERSONNEL PRIOR TO WORK.
6. WET WELL CONCRETE WALLS SHALL BE INSPECTED BY COUNTY PERSONNEL PRIOR TO INSTALLATION OF NEW SPRAY LINER AND/OR LINER REPAIR.
7. REPLACE EXISTING WATER SERVICE SADDLE AND CORPORATION AND INSTALL A BRASS PLUG IN NEW CORPORATION. REUSE EXISTING HOLE IN MAIN, IF ADEQUATE VALVING EXISTS.(+55 LF).
8. REPLACE EXISTING WATER SERVICE SADDLE AND CORPORATION AND INSTALL A BRASS PLUG IN NEW CORPORATION. REUSE EXISTING HOLE IN MAIN, IF ADEQUATE VALVING EXISTS. (+55 LF).
9. INSTALL A 12-FT WIDE 6-INCH THICK REINFORCED CONCRETE DRIVEWAY. EXACT LOCATION AND LAYOUT SHALL BE DETERMINED IN THE FIELD WITH COUNTY PERSONNEL. (+24 SY).
10. EX. MANHOLE FRAME & COVER SHALL BE ADJUSTED TO MATCH THE PROPOSED CONCRETE DRIVEWAY ELEVATION.
11. AN ELECTRICAL SYSTEM STUDY, ELECTRICAL STUDY ANALYSIS, ELECTRICAL SAFETY PLAN, ELECTRICAL SAFETY PLAN 70E "STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE" AND IEEE 1584 2018 "GUIDE FOR PERFORMING ARC FLASH HAZARDS CALCULATIONS" SHALL BE PROVIDED.



PROJECT #	402-0019707	
SURVEY #	-	
SEC./TWN./RGE	7/34/19	
SCALE	N.T.S.	
	BY	DATE
SURVEYED	----	----
DESIGNED	JSS	02/2020
DRAWN	CAK	02/2020
CHECKED	JSS	02/2020

JOHN S. SHOUN, P.E.



SHEET 07 OF 11

\\Users\sheads\one drive - manatee county government\...san swr proj\san swr - is upgrades\sls r&r 2020 group 1\OWGS\SLs R&R 2020 Group 1.dwg,RIVER WILDERNESS 3 (REHAB), 8/24/2020 10:36 AM Shea, 1:1, ANSI/ul/bleed D (34.00 x 22.00 inches), MC-2016.SIB