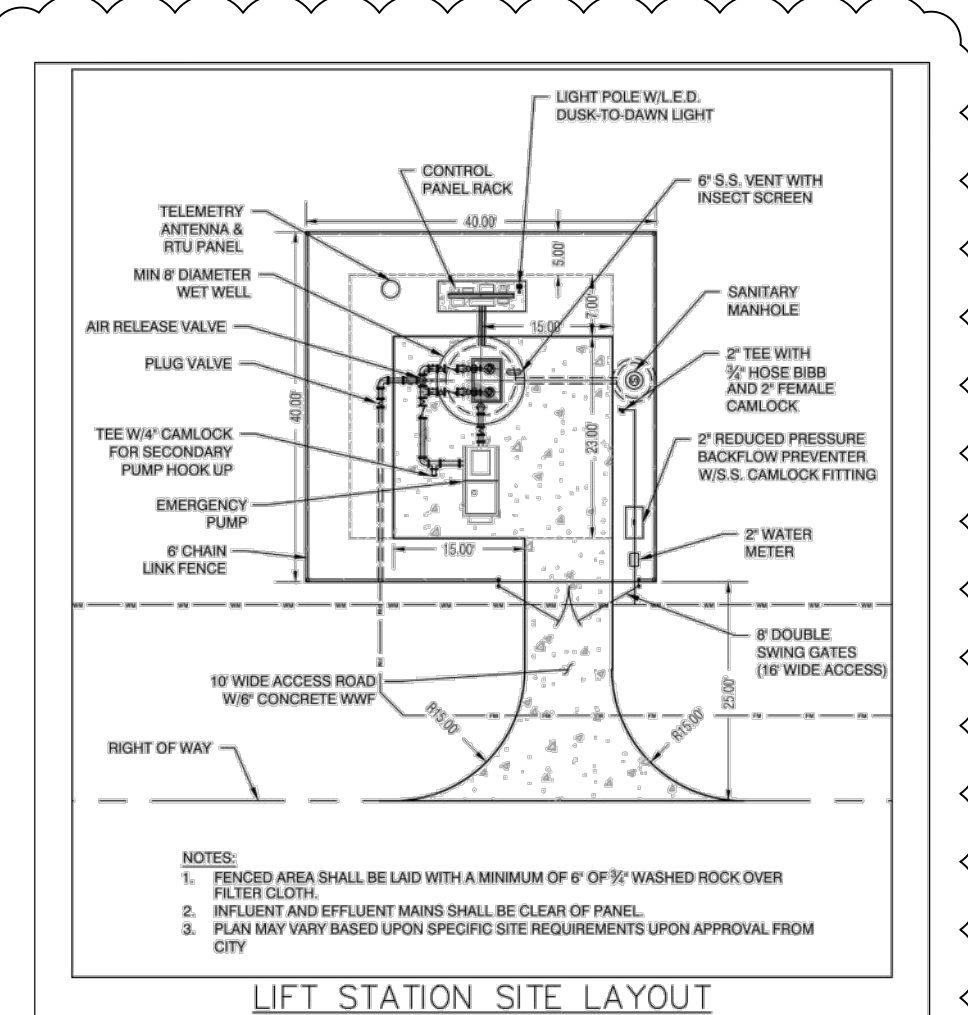
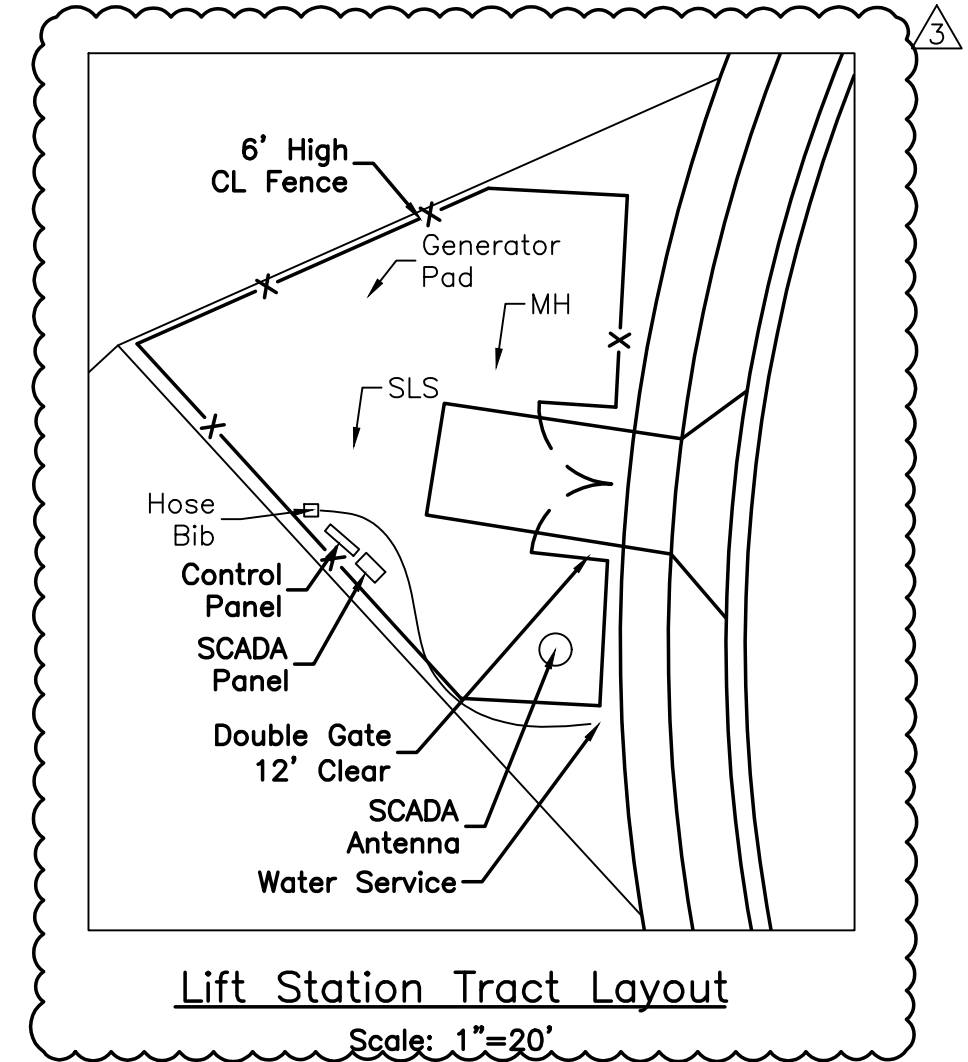
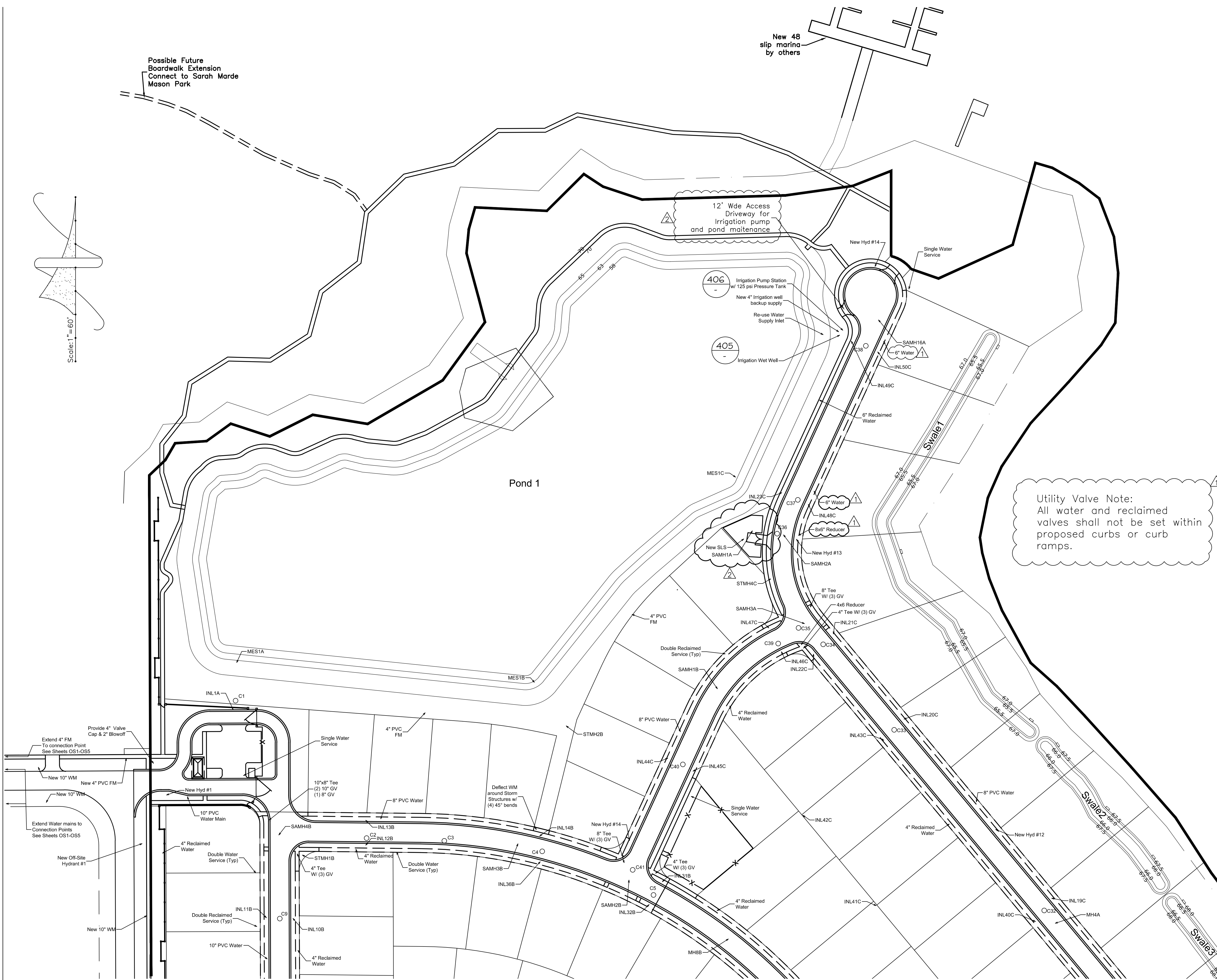


Possible Future Boardwalk Extension Connect to Sarah Marde Mason Park

New 48 slip marina by others



**Howey-in-the-Hills Standard Details** DATE: DEC 2023  
**DETAIL WW-10**

- ALL PUMP STATIONS SHALL BE PROVIDED WITH A DUTYABLE, ENGINE-DRIVEN STANDBY EMERGENCY BYPASS PUMP ASSEMBLY TO BE SIZED BY THE PROJECT ENGINEER. THE BYPASS PUMP SHALL BE A HORIZONTAL END SUCTION SOLID HANDLING CENTRIFUGAL PUMP CAPABLE OF HANDLING THE DESIGN FLOW OF THE PUMP STATION AND BE SELF-PRIMING FROM DRY CONDITIONS.
- THE BYPASS PUMP SHALL BE FULLY AUTOMATICALLY CONTROLLED AND INTEGRATED WITH THE MAIN CONTROL PANEL THAT RESPOND TO VARYING LIQUID LEVELS VIA FLOAT SWITCHES. AUTOMATION SHALL ALLOW FOR PUMP STATION OPERATION IN THE EVENT OF A POWER OUTAGE OR SUBMERSIBLE PUMP FAILURE. THE CONTROLLER SHALL BE EQUIPPED WITH AUTOMATIC AND MANUAL OPERATION MODES.
- THE SUB BASE DUAL FUEL TANK SHALL BE THE MANUFACTURER'S STANDARD UNIT, SIZED TO PROVIDE A MINIMUM OF 24 HOURS OF FUEL TO OPERATE THE BYPASS PUMP. HOWEVER, THE FUEL TANK SHALL BE LESS THAN 50 GALLONS IN SIZE.
- THE MAXIMUM SOUND LEVEL WITH THE COMPLETE BYPASS PUMP ASSEMBLY OPERATING SHALL NOT EXCEED 72 DBA AT 25 FEET. SILENT SYSTEM SHALL BE IN COMPLIANCE WITH EPA Tier 2 SILENT EMISSION REQUIREMENTS.
- THE UNIT SHALL BE PROVIDED WITH AN APPROPRIATE BLOCK HEATER FOR COLD STARTS. THE TRANSFORMER FOR PROVIDING POWER TO THE BLOCK HEATER SHALL BE PLACED SEPARATELY FROM THE CONTROL PANEL AND THE BYPASS PUMP SET.
- THE BYPASS PUMP UNIT SHALL BE AS MANUFACTURED BY THOMPSON PUMP & MANUFACTURING OR APPROVED EQUAL.
- THE BYPASS PUMP SET SHALL BE SHOP PRIMED AND FINISH COATED IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD PRACTICE. AN ADEQUATE SUPPLY OF TOUCH-UP PAINT SHALL BE PROVIDED. A REPRESENTATIVE OF HOWEY-IN-THE-HILLS SHALL BE PRESENT FOR THE RETAIL START-UP OF THE BYPASS PUMP ASSEMBLY. SPECIAL TOOLS AND PARTS AS REQUIRED SHALL BE PROVIDED TO THE TOWN.
- THE FOLLOWING TABLE SHALL BE COMPLETED AND SHOWN ON THE PLANS.

THOMPSON PUMP MODEL NO.	4JSVC	114
MUFFLERS RESIDENTIAL GRADE, BATTERY CHARGER, DUAL WALL SUBBASE FUEL STORAGE TANK		GALLONS
SOUND ATTENUATED OUTDOOR ENCLOSURE		
RAINFOODS	YES	X NO
DISTRIBUTION PANEL:	FACTORY MOUNTED	X ADJACENT TO GENERATOR ASSEMBLY

**LS BYPASS PUMP NOTES & DIMENSIONS**

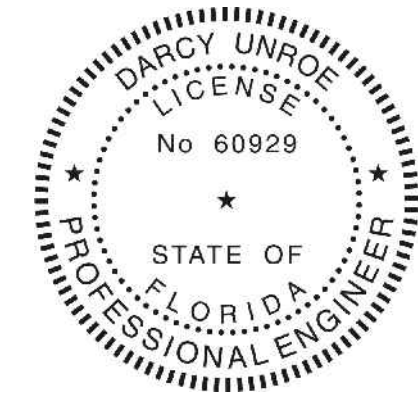
**Howey-in-the-Hills Standard Details** DATE: DEC 2023  
**DETAIL WW-10A**

Revisions		Date	Description
1	02/01/24	Town Comm	
2	5/3/23	Town Comm	
3	12/8/22	Town Comm	
4	9/19/22	Town Comm	

**Unroe Engineering, Inc**  
 Civil Engineering/Planning/Scientific Evaluation  
 PO Box 690942, Orlando, FL 32869-0942  
 Business Authorization Number: EB 0006579 ph (407) 299-0650

**Subdivision Utility Plan - North**  
**WHISPERING HEIGHTS Subdivision**  
 Buckhill Road, Howey-in-the-Hills, Florida

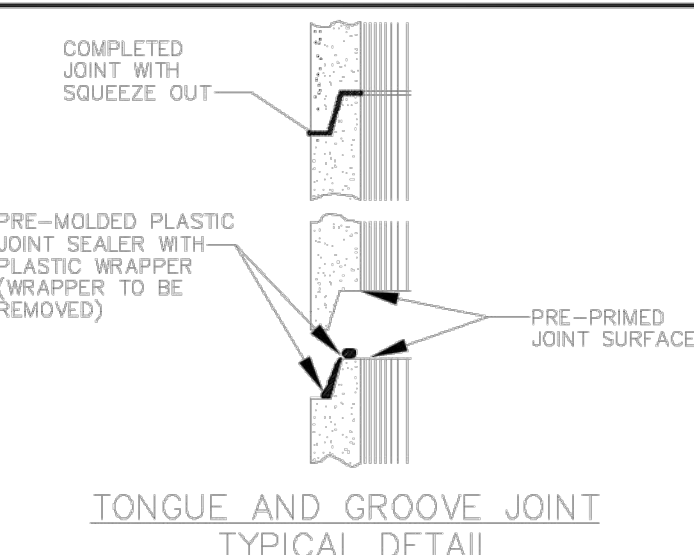
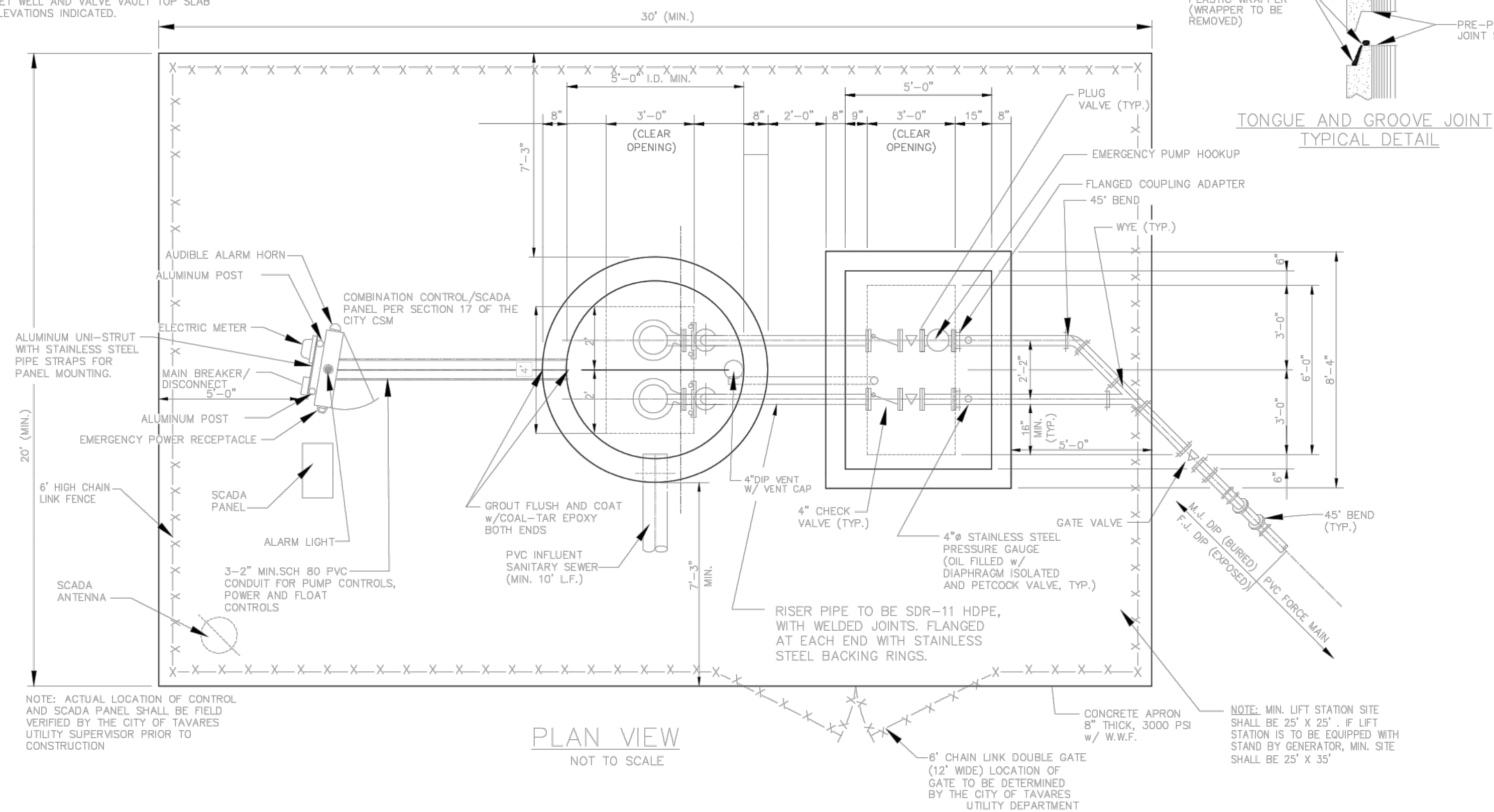
DP	Drawn
DP	Checked
1"=60'	Scale
09-07-21	Date
WH2-C8	File
Dwg. No.	
<b>C8</b>	
10	of 83



Darcy Unroe PE 60929

NOTES:

1. FINISH GRADE SHALL BE 6" BELOW NET WELL AND VALVE VAULT TOP SLAB ELEVATIONS INDICATED.



NOTES:

1. PUMPS: SHALL HAVE (2) 2" STAINLESS STEEL GUIDE RAILS PER PUMP AND A BPI FRONT DUPLEX SYSTEM.
2. LEVEL CONTROLS: SHALL BE IN ACCORDANCE WITH SECTION 17 OF THE CITY UTILITY MANUAL.
3. WET WELL ACCESS COVER: SHALL HAVE CLEAR OPENING OF 36"x48". ACCESS FRAME AND COVER SHALL HAVE A 1/4" THICK ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. DOOR PANEL(S) SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF 300 PSF. DOOR(S) SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH STAINLESS STEEL HOLD OPEN ARMS WITH ALUMINUM RELEASE HANDLES. DOOR(S) SHALL CLOSE FLUSH WITH THE FRAME. UNIT SHALL LOCK WITH A NONCORROSIVE LOCKING BAR. FRAME SHALL SUPPORT GUIDE RAILS AND CABLE HOLDER FOR ELECTRICAL WIRING. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER APPROVED ALKALI RESISTANT PAINT OR APPROVED PROTECTIVE COATING. DOUBLE DOOR ACCESS COVERS SHALL HAVE REMOVABLE CENTER BAR SUPPORT. COVER MUST BE COMPATIBLE WITH PUMP.
4. VALVE VAULT ACCESS COVER: SHALL HAVE CLEAR OPENING OF 36"x72" ACCESS AS MANUFACTURED IN ACCORDANCE WITH APPENDIX A, APPROVED MANUFACTURER LIST OF THE CITY CSM. ACCESS FRAME AND COVER SHALL HAVE A 1/4" THICK ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. DOOR PANEL(S) SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF 300 PSF. DOOR(S) SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH STAINLESS STEEL HOLD OPEN ARMS WITH ALUMINUM RELEASE HANDLES. DOOR(S) SHALL CLOSE FLUSH WITH THE FRAME. UNIT SHALL LOCK WITH A NONCORROSIVE LOCKING BAR. ALL ACCESS FRAME, COVER, HARDWARE, AND FASTENERS SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER, APPROVED ALKALI RESISTANT PAINT OR APPROVED PROTECTIVE COATING. DOUBLE DOOR ACCESS COVERS SHALL HAVE REMOVABLE CENTER BAR SUPPORT. COVER MUST BE COMPATIBLE WITH PUMP.
5. ELECTRICAL SERVICE ENTRANCE: PROVIDE METER SOCKET AND MAIN DISCONNECT MEETING APPLICABLE ELECTRIC CODES AND REQUIREMENTS OF POWER COMPANY. LIGHTNING AND VOLTAGE SURGE PROTECTION TO BE PROVIDED. COST FOR THE ELECTRICAL SERVICE AND COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. CONTROL PANEL: SHALL BE IN ACCORDANCE WITH SECTION 17 OF THE CITY CSM. PANEL SHALL BE EQUIPPED WITH THREE, 2" X 6" ALUMINUM NIPPLES TO THE SEALOFFS, WITH SCH 80 PVC TO WET WELL.
7. PAINT: INSIDE AND OUTSIDE OF VALVE VAULT SHALL BE PAINTED WITH TWO COATS OF MATERIAL IN ACCORDANCE WITH APPENDIX A, APPROVED MANUFACTURER LIST OF THE CITY CSM APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS.
8. VALVE VAULT: PRECAST CONCRETE 60"x 84" (MINIMUM) INSIDE DIMENSIONS.
9. STEEL PLACED IN BOTTOM SLAB IS TO BE IDENTICAL TO THE TOP SLAB EXCEPT THAT DIAGONAL BARS AND OPENINGS ARE ELIMINATED. STEEL IS CONTINUOUS AND SLAB IS SOLID.
10. CONTRACTOR TO CONFIRM SERVICE ARRANGEMENTS WITH POWER COMPANY BEFORE COMMENCING WORK. CONTRACTOR TO RUN UNDERGROUND WIRING TO NEAREST TRANSFORMER OR HAND HOLE.
11. ALL FASTENERS ON FLANGES AND ETC. INSIDE WET WELL WILL BE STAINLESS STEEL.
12. DIMENSIONS BETWEEN CENTERLINE OF PIPES ARE STANDARD FOR PIPE SIZES SPECIFIED.
13. SHOP DRAWINGS OF ENTIRE INSTALLATION MUST BE APPROVED BY CITY PRIOR TO PLACEMENT OF ORDER.
14. PLUG VALVES SHALL BE CONSTRUCTED WITH RESILIENT FACED PLUGS. ON BY-PASS LINES, VALVES SHALL BE BURIED WITH ACCESS THROUGH CAST IRON VALVE BOXES. VALVES SHALL HAVE A 2" OPERATION NUT. ONE(1) 5' LONG VALVE WRENCH SHALL BE PROVIDED TO THE CITY OF TAVARES PER LIFT STATION. ALL PLUG VALVES 8" AND SMALLER SHALL BE 1/4 TURN TYPE.
15. ALL EXPOSED AND EMBEDDED CONDUITS TO BE SCHEDULE 80 PVC.
16. ALL EXPOSED METAL SHALL BE PAINTED WITH TWO (2) COATS OF EXTERIOR BLACK ENAMEL PAINT.
17. ALL EXTERNAL PIPING SHALL BE DUCTILE IRON CLASS 50 (FLANGED JOINT FOR EXPOSED PIPE & MECHANICAL JOINT FOR BURIED PIPE). ALL INTERNAL WET WELL PIPING FROM THE PUMP DISCHARGE ELBOW TO THE VALVE BOX SHALL BE MINIMUM SDR-11 HDPE.
18. ALL DIMENSIONS AND LOCATIONS OF UTILITIES TO BE FIELD VERIFIED BY CONTRACTOR.
19. PRESSURE GAUGES SHALL BE STAINLESS STEEL WITH STAINLESS STEEL DIAPHRAGM, LIQUID FILLED, 4" DIAMETER DIAL WITH 0-100 PSI RANGE. CHECK VALVES SHALL OUTSIDE LEVER AND WEIGHT.
20. PADLOCKS FOR ACCESS COVERS AND CONTROL PANEL SHALL BE KEYS ALIKE, FURNISH TWO (2) KEYS PER LOCK. BOLTS IN LOCKING DEVICE SHALL BE STAINLESS STEEL.
21. WET WELL TO BE H.D.P.E. LINED WITH A MINIMUM THICKNESS OF 2 MM, MECHANICALLY ANCHORED TO THE CONCRETE. ALL JOINTS SHALL BE EXTRUSION WELDED BY CERTIFIED WELDERS.
22. SOO ALL AREAS DISTURBED BY CONSTRUCTION.
23. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE WILL REQUIRE SHOP COATING OF SUITABLE PROTECTIVE COATING TO RESIST CORROSION.
24. BYPASS PUMPING: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BYPASS PUMPING. A BYPASS PUMPING PLAN SHALL BE SUBMITTED AT THE TIME OR PERMIT APPLICATION TO THE ENVIRONMENTAL SERVICES DIRECTOR. CITIZEN CONSIDERATION WILL BE REVIEWED WHEN BYPASS PUMPING EQUIPMENT IS REQUIRED. SOUND ATTENUATING ENCLOSURES MAY BE REQUIRED, AT THE DISCRETION OF THE ENVIRONMENTAL SERVICES DIRECTOR.
25. FIELD TESTING: THE CONTRACTOR SHALL FURNISH THE SERVICES OF THE SYSTEM SUPPLIER'S SERVICEMAN, ALL SPECIAL TOOLS, CALIBRATION EQUIPMENT, AND LABOR TO PERFORM THE TESTS. CERTIFIED COPIES OF THE TESTS SHALL BE FURNISHED IN DUPLICATE TO THE CITY ENGINEER PRIOR TO FINAL APPROVAL.
26. DRIVEWAY SHALL HAVE A MINIMUM WIDTH OF 12 FEET.

DATE: FEB 2022

DETAIL WW-11

Howey-in-the-Hills

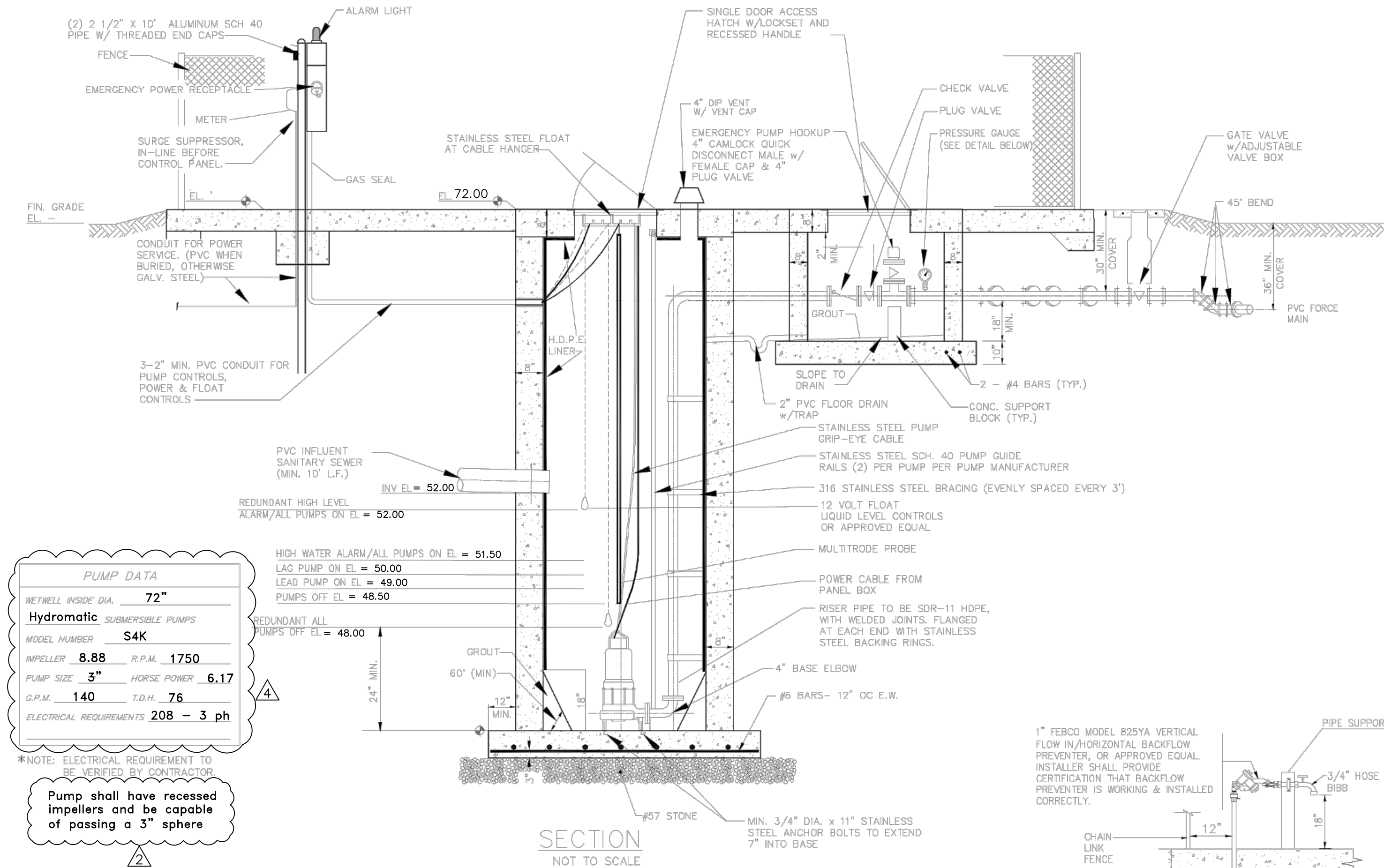
Standard Details

Revisions		Revisions	
#	Date	Description	Date
1	11/22/23	Town Comm	
2	12/9/22	Town Comm	
3	9/19/22	Town Comm	

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**SANITARY SEWER LIFT STATION**  
 WHISPERING HEIGHTS Subdivision  
 Buckhill Road, Howey-in-the-Hills, Florida

DP	Drawn
DP	Checked
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09-07-21	Date
WH2-C19	File
Dwg. No.	
<b>C19</b>	
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PUMP DATA	
WETWELL INSIDE DIA.	72"
Hydromatic SUBMERSIBLE PUMPS	
MODEL NUMBER	S4K
IMPELLER	8.88 R.P.M. 1750
PUMP SIZE	3" HORSE POWER 6.17
G.P.M.	140 T.O.H. 76
ELECTRICAL REQUIREMENTS	208 - 3 ph

\*NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR  
 Pump shall have recessed impellers and be capable of passing a 3" sphere

