

# CUSTOM WASTEWATER

# DUPLEX-6' X 28' WET WELL & VALVE VAULT

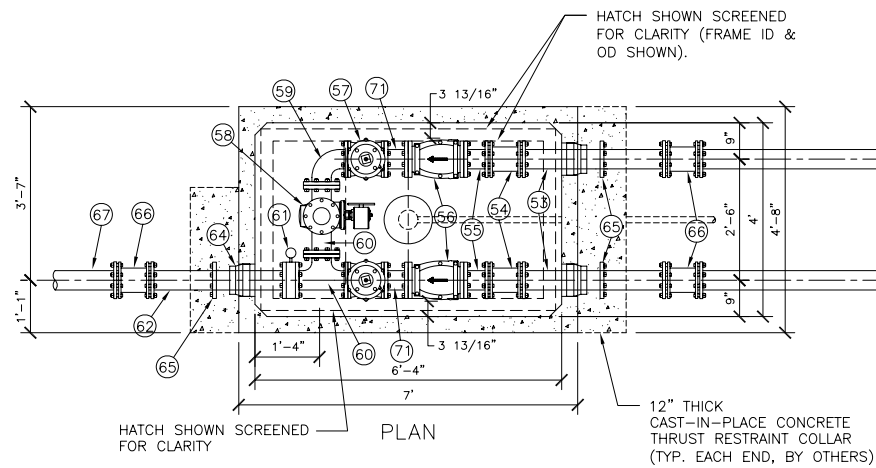
WET WELL, VALVE VAULT, ELECTRICAL CONTROLS,  
GENERATOR, ODOR CONTROLS, SCADA AND CONTROL SHELTER

**VAULT DESIGN NOTES:**  
1. ALL PIPING & VALVES WITHIN VAULT ARE 4 INCH DIAMETER.  
2. HATCH DESIGN LOADS: H-20 OCCASIONALLY LOADED  
3. VALVES AND VAULT PIPING SYSTEM FACTORY TESTED TO AFTER ASSEMBLY.

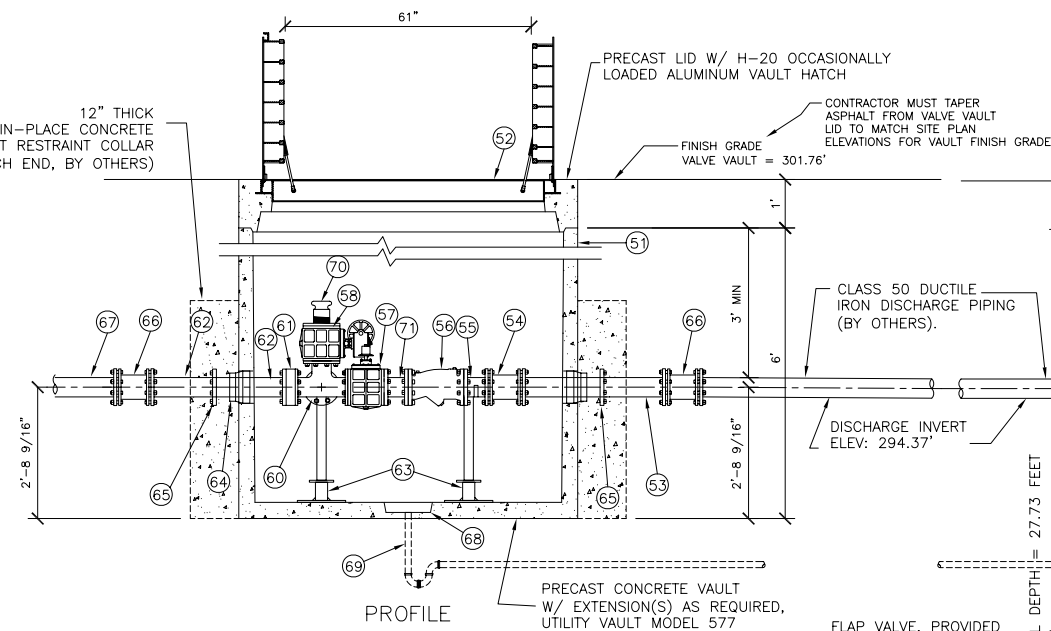
SET NON-TRAFFIC RATED TOP SLABS A MINIMUM OF 12-INCHES ABOVE ADJACENT GRADE, OR INSTALL PIPE BOLLARDS AS REQUIRED FOR PROTECTION (TYPICAL FOR BOTH WETWELL & VALVE VAULT, BY OTHERS)

NOTE: WETWELL TOP SLAB IS H-20 OCCASIONALLY LOADED.

- 51 VAULT EXTENSION RISER(S), HEIGHT AS REQUIRED FOR PIPE COVER DEPTH SHOWN.
- 52 FLYGT ALUMINUM ACCESS HATCH PRECAST INTO VAULT TOP SLAB. FDRND-HD-33X61AO RATED ALUMINUM HATCH H-20
- 53 CL 52 DI PIPE SPOOL (PE x PE)
- 54 DI SLEEVE COUPLING, DI TO DI PIPE
- 55 DI PIPE SPOOL (FLG x PE)
- 56 FLANGED DI BODY SWING CHECK VALVE, VAL-MATIC MODEL 504. PROVIDE ONE VALVE WITH BACKFLOW DEVICE.
- 57 ECCENTRIC PLUG VALVE W/2-INCH OPERATING NUT, VAL-MATIC MODEL 5804RN.
- 58 ECCENTRIC PLUG VALVE W/HAND WHEEL OPERATOR, VAL-MATIC MODEL 5804R/7A08.
- 59 DI 90° BEND (FLG x FLG)
- 60 DI TEE (FLG x FLG)
- 61 WAFER STYLE DIAPHRAM PRESSURE SENSOR, RED VALVE SERIES 40
- 62 DI PIPE SPOOL (FLG x PE) (TYP. EACH END, BY OTHERS)
- 63 ADJUSTABLE PIPE SUPPORT, STANDON (TYP OF 4).
- 64 VAULT SEAL, KOR-N-SEAL (TYP OF 3).
- 65 RETAINER GLAND CENTERED IN THRUST COLLAR, UNI-FLANGE (TYP OF 3).
- 66 SLEEVE COUPLING (BY OTHERS)
- 67 FORCE MAIN (BY OTHERS).
- 68 PRECAST VAULT SUMP FOR SUMP PUMP OR GRAVITY DRAIN TO APPROVED POINT.
- 69 GRAVITY DRAIN (BY OTHERS). CONTRACTOR TO CONNECT DRAIN TO PUMP STATION SITE ENGINEERS REQUIREMENTS.
- 70 4" CAM-LOCK, MALE X I.P. THREADED.
- 71 DI PIPE SPOOL (FLG x FLG)

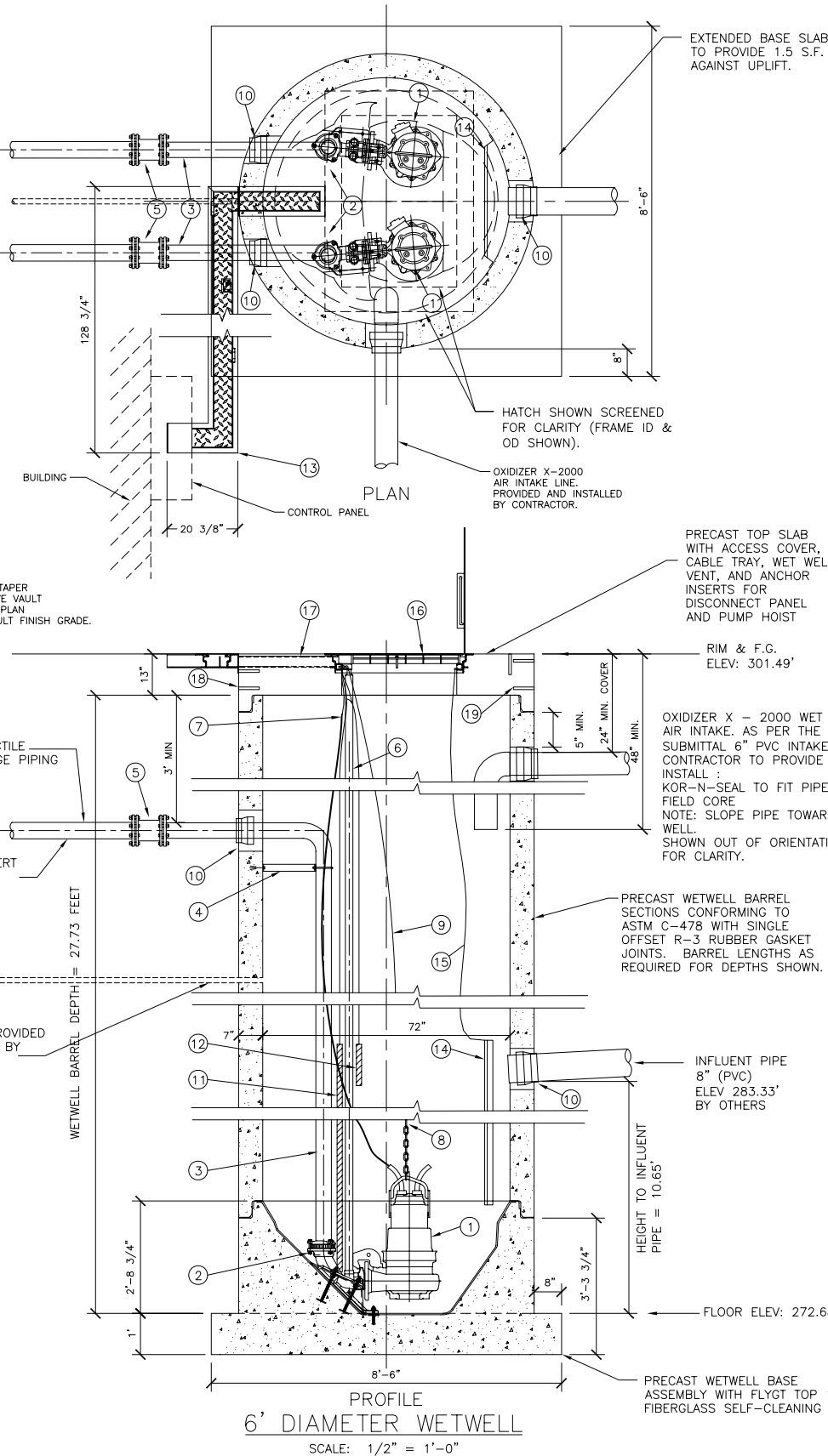


NOTE: VAULT TOP SLAB IS H-20 OCCASIONALLY LOADED



4" 577 VALVE VAULT  
WITH PUMPING  
PORT  
SCALE: 1/4" = 1'-0"

LEVEL ELEVATION	DISTANCE BETWEEN POINTS	SET POINT DESCRIPTION
283.33		SEWER INVERT IN STORAGE VOLUME FOR 10 MIN RESERVE
277.83	5.50	HIGH LEVEL ALARM
277.33	0.50	SENSOR SPACING
277.33	0.50	LAG PUMP START
276.83	0.50	SENSOR SPACING
276.83	1.50	LEAD PUMP START
275.33	2.65	SENSOR SPACING
275.33		PUMPS STOP
272.68		FLOOR



6' DIAMETER WETWELL  
SCALE: 1/2" = 1'-0"

- 1 SUBMERSIBLE NON-CLOG SEWAGE PUMPS, FLYGT MODEL NP-3153 (274). PROVIDE ONE PUMP WITH MIX FLUSH VALVE.
- 2 3-INCH FLYGT DISCHARGE ELBOW.
- 3 STAINLESS STEEL DISCHARGE PIPING (SCHD 40) FACTORY TESTED. PROVIDE ALL PIPE PENETRATION(S) WITH RUBBER BOOTS (KOR-N-SEAL).
- 4 STAINLESS STEEL DISCHARGE PIPE ANCHOR BRACKET.
- 5 DI SLEEVE REDUCING COUPLING, 4 X 3 STAINLESS STEEL TO DI PIPING
- 6 TWO 2-INCH SCHEDULE 40 STAINLESS STEEL GUIDE BARS FOR EACH PUMP (FULL HEIGHT). ATTACH TO HATCH UNI-STRUT WITH FLYGT UPPER GUIDE BAR BRACKET.
- 7 PUMP POWER CABLE WITH QUICK CONNECT COUPLING AT PUMP DISCONNECT PANEL. PROVIDE EACH CABLE WITH A STAINLESS STEEL BASKET CABLE GRIP ATTACHED TO HOOK ON UPPER GUIDE BAR BRACKET.
- 8 STAINLESS STEEL CHAIN SLING FOR PUMP RETRIEVAL USING FLYGT GRIP-EYE. ATTACH TO PUMP LIFTING HANDLE.
- 9 1/4" STAINLESS STEEL CHAIN (S-4 ATTACHED TO PUMP HANDLE. PROVIDE CHAIN WITH 3/8" & 1/2" STAINLESS STEEL BOW SHACKLE WITH SCREW PIN ATTACHED TO PUMP HANDLE. ATTACH UPPER END OF CHAIN TO HOOK ON UPPER GUIDE BAR BRACKET.
- 10 WETWELL SEAL, KOR-N-SEAL.
- 11 PUMP LIQUID LEVEL CONTROL PROBE, FLYGT MULTI-TRODE PROBE. PROBE LENGTH = 5 FEET (1.5 METERS) NUMBER OF SENSORS = 10 SENSOR SPACING = 6-INCHES. PROVIDE MULTITRODE MTA-1 PROBE MOUNTING BRACKET MOUNTED TO HATCH UNI-STRUT.
- 12 REDUNDANT CONTROL SYSTEM. CUSTOM MULTI-TRODE 3 SENSOR PROBE FOR REDUNDANT HIGH LEVEL ALARM AND PUMP START COMMAND.
- 13 ROMTEC UTILITIES CABLE HATCH EXTENSION.
- 14 HDPE INFLUENT DEFLECTOR WITH FULL SIZE INSPECTION HOLE AND GUILLOTINE COVER.
- 15 1/8" STAINLESS STEEL LIFTING CABLE FOR INFLUENT DEFLECTOR INSPECTION HOLE COVER. PERMANENTLY ATTACH UPPER END OF CABLE TO HATCH UNI-STRUT.
- 16 FLYGT ALUMINUM ACCESS HATCH PRECAST INTO WETWELL TOP SLAB. PROVIDE WITH SAFE-HATCH SAFETY GRATE BY FLYGT.
- 17 ALUMINUM CABLE HATCH AND WETWELL VENT PRECAST INTO WETWELL TOP SLAB. PROVIDE WITH STAINLESS STEEL HINGES AND SLAM-LOCK.
- 18 STAINLESS STEEL ANCHOR INSERTS FOR PUMP DISCONNECT PANEL.
- 19 STAINLESS STEEL ANCHOR INSERTS FOR PUMP DAVIT CRANE BASE.
- 20 NOT USED.

UPON SUCCESSFUL INSTALLATION OF THE WET WELL, THE CONTRACTOR SHALL HAVE THE INTERIOR COATED WITH 5 MILS D.F.T. OF RAVEN A-10 PRIMER AND 80 - 100 MILS OF RAVEN 405 D.F.T. THE CONTRACTOR SHALL PROVIDE WRITTEN PROOF OF THE WET WELL CASTING DATE TO VERIFY THAT THE CONCRETE HAS CURED ADEQUATELY TO SAFELY APPLY THE COATINGS. (THIS ITEM IS NOT SUPPLIED BY ROMTEC UTILITIES, IT IS CONTRACTOR SUPPLIED AND INSTALLED)

NO.	DATE	DESCRIPTION	BY

**ROMTEC UTILITIES**  
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ROMTEC UTILITIES  
6' WETWELL & VAULT  
4" DISCHARGE  
SHEET 1 OF 1  
JOB NUMBER RMT0000

