

MATERIAL AND EQUIPMENT LIST

1. SUBMERSIBLE RAW SEWAGE PUMP WITH CENTER DISCHARGE.
2. POWER AND CONTROL CABLE TO PUMP, HANG ON SUPPORT WITH ST. STL. KELLUM GRIPS AND LOOP CABLE OVER SUPPORT.
3. 3/16 ST. STL. LIFTING CABLE LOOPED THROUGH PUMP LIFTING BAIL ASSEMBLY WITH OTHER ENDS ATTACHED TO SUPPORT.
4. CABLE SUPPORT. 3/4" DIAMETER ST. STL. (TYP).
5. SCHEDULE 40 ST. STL. PIPE GUIDE RAILS FOR SUBMERSIBLE PUMP.
6. ST. STL. INTERMEDIATE GUIDE RAIL SUPPORT.
7. ST. STL. UPPER GUIDE RAIL SUPPORT. ATTACH TO CONCRETE WITH ST. STL. EXPANSION ANCHORS.
8. PUMP DISCHARGE ELBOW FURNISHED BY PUMP MANUFACTURER. ANCHOR WITH ST. STL. ANCHOR BOLTS.
9. FLANGED ECCENTRIC REDUCER.
10. SUPPORT FOR DISCHARGE PIPE AND GUIDE RAIL.
11. FLANGE X GROOVED END DI SPOOL. LENGTH AS REQUIRED
12. GROOVED 90° ELBOW. ST. STL.
13. 8" VENT. PVC SCHEDULE 40 WITH CAP.
14. SWING CHECK VALVE WITH LEVER AND WEIGHT OR DASH POTS.
15. GEAR OPERATED NON-LUBRICATED PLUG VALVE. PROVIDE SQUARE NUT FOR OPERATION ABOVE WITH VALVE KEY AND WITH HANDWHEEL TO FIT SQUARE NUT.
16. FLANGE X GROOVED END DI SPOOL, MINIMUM 6" LONG.
17. VICTAULIC GROOVED COUPLING (SYTLE 31).
18. COMBINATION SEWAGE AIR AND VACUUM VALVE WITH GATE VALVE, BACK FLUSH ATTACHMENTS, AND PVC AIR DISCHARGE PIPING TO WET WELL.
19. VALVE VAULT. ASSOCIATED CONCRETE OR BROOKS PRODUCTS PRECAST CONCRETE VAULT WITH ALUMINUM PARKWAY COVER AND CONCRETE BOTTOM, WITH BREAKOUT SUMP. PROVIDE HINGED MANWAY OPENINGS AND VALVE SQUARE NUT ACCESS OPENINGS.
20. ACCESS HATCH. SINGLE LEAF, ALUMINUM FRAME, ALUMINUM LOCKING COVER (CHECKERED PLATE), LIFTING MECHANISMS, AND HARDWARE STAINLESS STEEL. BILCO MIDEL J (300#/SF LOADING). VERIFY HATCH SIZE WITH PUMP FURNISHED FOR REMOVAL OF PUMP. MINIMUM HATCH SIZE IS 3' SQUARE.
21. ST. STL. WEIGHT ATTACHED TO ST. STL. CABLE AND HANG OFF 3/4" ST. STL. CABLE SUPPPORT. ATTACH FLOATS TO ST. STL. CABLE WITH NYLON TIES.
22. ADJUSTABLE PIPE SADDLE SUPPORT (GRINNEL FIG. 264, OR EQUAL) PLACED ON A GROUT LEVELING PAD AND ANCHORED TO CONCRETE SLAB WITH WEDGE ANCHORS.
23. PVC SCHEDULE 40 ODOR SCRUBBER SUPPLY VENT.
24. PROVIDE "T" LOCK ON EXPOSED CONCRETE SURFACE.
25. PROVIDE GROUT FILET.
26. ULTRASONIC LEVEL TRANSDUCER.
27. FLOOR DRAIN WITH P-TRAP FROM PUMP WASH DOWN PAD.
28. CONCRETE PUMP WASH DOWN PAD.
29. FLANGED DI SPOOL, LENGTH AS REQUIRED.
30. CRUSHED ROCK BASE MATERIAL.

31. 12" SQUARE OPENING IN CONCRETE TOP WITH CAST IRON RING AND BROOKS CB 1212 FRAME AND SOLID COVER.
32. ELECTRICAL JUNCTION BOX AND STANCHION FOR PUMP POWER/CONTROL CABLES, FLOATS, AND TRANSDUCER. MOUNT MINIMUM 42" ABOVE WET WELL ROOF.
33. 4' SCHEDULE 40 ABS DRAIN PIPING, SLOPE 2% MIN.
34. FLOOR DRAIN WITH P-TRAP
35. 1" THREADED TAP WITH CORP STOP FOR PORTABLE PRESSURE GAGE.
36. INSTALL TEE WITH VALVE AND BLIND FLANGE FACING UP (NOTE: THIS IS FOR BYPASS DUMPING).
37. INSTALL FALL THROUGH PROTECTION.
38. ALL PIPING AND HARDWARE IN WET WELL NEEDS TO BE STAINLESS STEEL.
39. INSTALL TEES AND VALVE BETWEEN DISCHARGE PIPE.

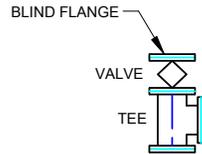
TYPICAL NOTE FOR WET WELL PIPE PENETRATIONS:

REPAIR "T" LOCK AT OPENINGS INTO CONCRETE PER "T" LOCK MANUFACTURER REQUIREMENTS. CORE DRILL HOLES IN CONCRETE, 2" LARGER THAN PIPE O.D., FILL ANNULUS WITH NON-SHRINK GROUT AND INSTALL SEALANT INSIDE AND OUTSIDE.

NOTE:

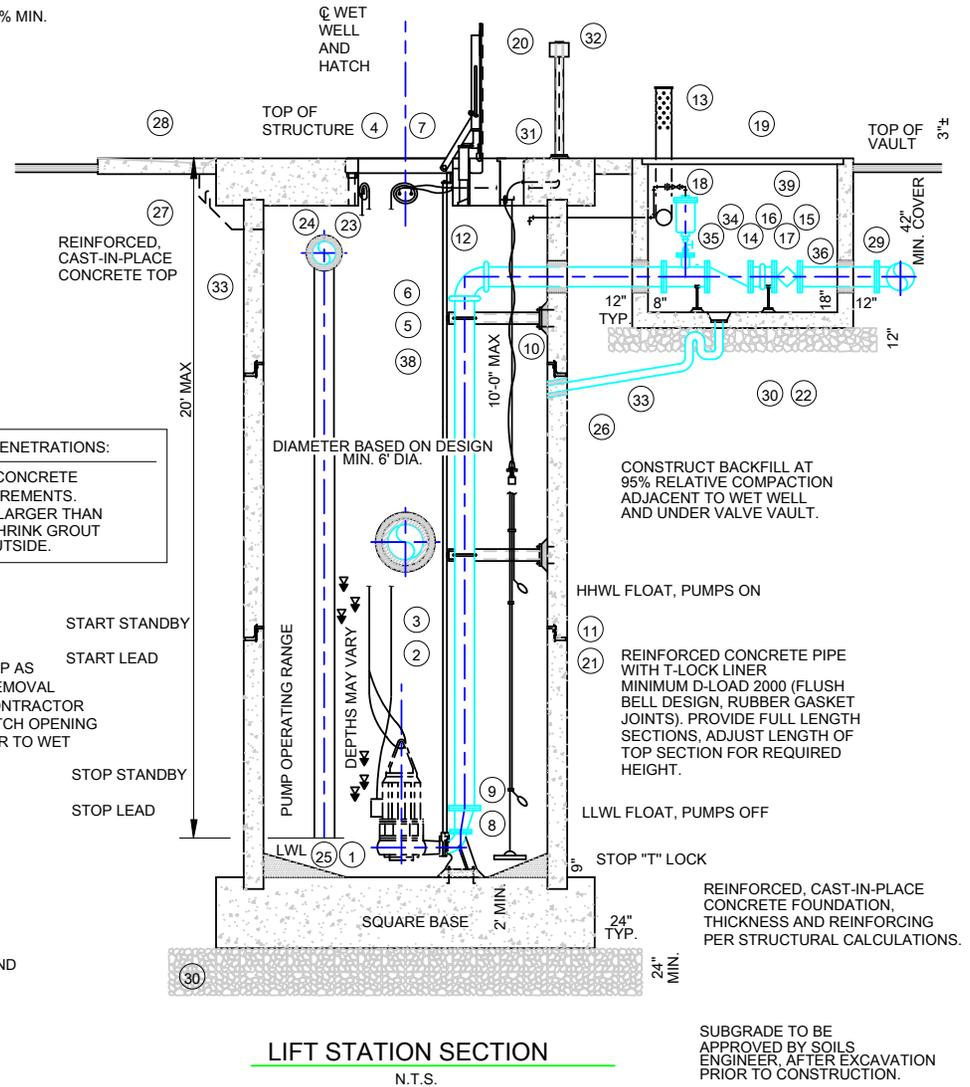
OFFSET CENTERLINE OF PUMP AS REQUIRED FOR PUMP AND REMOVAL RAIL SYSTEM FURNISHED. CONTRACTOR SHALL VERIFY REQUIRED HATCH OPENING WITH PUMP FURNISHED PRIOR TO WET WELL CONSTRUCTION.

*NOTE:
PLACE TEE ABOVE GROUND ON DISCHARGE PIPE FOR BYPASS PUMPING OPERATION.



NOTE

THESE PLANS ARE CONSIDERED GUIDELINES ONLY. THE DESIGN ENGINEER SHALL PREPARE PLANS SPECIFIC TO EACH LIFT STATION, BASED ON SITE SPECIFIC DATA, WESTERN'S GUIDELINES AND OTHER INDUSTRY STANDARDS AS REQUIRED.



APPROVED DATE: January 1, 2011
Joseph Brandy
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LIFT STATION GUIDELINES
LIFT STATION
SECTION

STD. DWG.
NO.
LS-3

