



1 LIFT STATION MANHOLE
LS2 NTS

PUMP CONTROL ELEVATIONS	
LOW LEVEL ALARM	---,-
PUMP OFF	---,-
LEAD PUMP ON	---,-
LAG PUMP ON	---,-
HIGH LEVEL ALARM	---,-

KEYNOTES:

- ① PRECAST CONCRETE COVER WITH #4 @ 9" E.W. TOP AND #5 @ 4 1/2" E.W. BOTTOM, REINFORCEMENT GRADE 60
- ② 30" X 48" ALUMINUM HATCH WITH UPPER GUIDE BRACKET, CHAIN HOOK CABLE HOLDER, AND POSITIVE LOCK @ 90° OPENING. SEE PLAN AT GRADE FOR COVER HINGE ORIENTATION
- ③ VENT PIPE - SEE DETAIL 5403
- ④ PRECAST COVER CONNECTION - SEE DETAIL 5403
- ⑤ ELECTRICAL CABLE HOLDER
- ⑥ RIGID PVC CONDUIT @ ELEVATION xxx.xx - CORE DRILL & INSTALL WATERTIGHT SEAL AROUND CONDUIT. ROUTE UNDERGROUND. SEE ELECTRICAL SITE PLAN
- ⑦ CORE DRILL FOR ELEC CONDUIT AND SEAL WITH NON-SHRINK GROUT
- ⑧ PUMP GUIDE RAILS
- ⑨ PRECAST JOINT WITH BUTYL RUBBER JOINT SEAL (KENT, RAMNEK, OR CONSEAL) (TYPICAL)
- ⑩ ON-SITE MATERIAL (SEE NOTE #3 FOR COMPACTION)
- ⑪ PIPE SEAL GASKET - SEE DETAIL 5403
- ⑫ PIPE CONNECTION - SEE DETAIL 5403
- ⑬ DIP PUMP DISCHARGE (TYP OF 2)
- ⑭ GROUT CIRCLE AS RECOMMENDED BY PUMP MANUFACTURER
- ⑮ CONCRETE BASE SLAB CONNECTION - 5403
- ⑯ 12" THICK CONCRETE SLAB WITH #6 @ 12" E.W. BOTTOM AND #6 @ 6" E.W. TOP, REINFORCING GRADE 60
- ⑰ PUMP CONTROL LEVEL FLOATS
- ⑱ SUBMERSIBLE PUMP (2 REQUIRED) INSTALL PER MANUFACTURER. GROUT CIRCLE AS RECOMMENDED BY PUMP MANUFACTURER
- ⑲ FLANGED BALL CHECK VALVE (FLYGT HDL OR EQUAL) (2 REQ'D)
- ⑳ S.S. CHAINS AND SHACKLES
- ㉑ MJ GATE VALVE WITH GEAR OPERATOR, EXTENSION AND VALVE BOX TO GRADE 5403
- ㉒ MJ GATE VALVE WITH GEAR OPERATOR, EXTENSION AND VALVE BOX TO GRADE (SEE DETAIL 5403 (2 REQ'D) MJ REDUCER
- ㉓ MJ REDUCER
- ㉔ POLY WRAP DIP
- ㉕ CLASS 5 MATERIAL - SEE GENERAL NOTE NO. 2
- ㉖ MnDOT 3733 TYPE 5 GEOTEXTILE FABRIC
- ㉗ UNEXCAVATED SOILS
- ㉘ PUMP CONTROLS AND POWER CABLES, S.S. FLOAT CABLES AND PRESSURE TRANSDUCER WITH 2 FLOAT BACKUP
- ㉙ FIBERGLASS FALL PROTECTION GRATING
- ㉚ BUTYL JOINT WRAP

GENERAL NOTES:

1. AT LEAST ONE SOIL BORING AND ACCOMPANYING GEOTECHNICAL REPORT IS REQUIRED AT THE LIFT STATION SITE
2. DESIGN ALLOWABLE NET SOIL BEARING PRESSURE : 2500 PSF (ASSUMED)
3. COMPACT BACKFILL TO 100% STANDARD PROCTOR ABOVE AND BELOW PIPES
4. PARTS OF SECTION VIEW OF DRAWING ARE ROTATED FOR CLARITY
5. SEE PLAN VIEW AND SITE PLAN FOR ORIENTATION OF PIPES
6. CONTRACTOR TO VERIFY EXISTING CONDITIONS
7. PAINT ALL INTERIOR MANHOLE CONCRETE AND PIPING WITH (2) COATS OF EPOXY PAINT
8. COMPACT BACKFILL TO 100% OF STANDARD PROCTOR DRY DENSITY FOR INSTALLATION OF THE LIFT STATION.
9. BED AND BACKFILL PIPE TRENCHES TO 1 FOOT ABOVE FORCEMAIN AND ALL OTHER NEW SANITARY LINES WITH GRANULAR MATERIAL. SEE DETAIL 5403
10. INSTALL CHECK VALVES IN A LOCATION THAT IS EASILY ACCESSIBLE FOR MAINTENANCE.

FILE NAME: G:\ENG\SPCS\5401A

ENGINEERING DEPARTMENT

REVISED: 1-22

PLATE: 5401-A

LIFT STATION STANDARD DETAIL (ELEVATION)

CITY OF CHANTHANSEN

11/15/2023 10:58:11 AM
 C:\Users\jgibson\AppData\Local\Temp\AutoCAD\AutoCAD.Application.Data\2023\11\15\11/15/2023 10:58:11 AM.dwg
 User: jgibson