

KEYNOTES:

- ① PRECAST CONCRETE TOP SLAB SUITABLE FOR HS25 WHEEL LOADING. PUMP HATCH AND VENT PIPE ARE TO BE CAST INTEGRAL WITH COVER. COORDINATE HATCH AND VENT PIPES LOCATION.
- ② REINFORCEMENT STEEL AS RECOMMENDED BY PRECAST MANUFACTURER FOR HS25 WHEEL LOAD
- ③ ALUMINUM HATCH SUITABLE FOR H20 WHEEL LOADING. CONTRACTOR SHALL PROVIDE FOUR (4) STAINLESS STEEL "J" HOOKS FOR HOLDING PUMP AND CONTROL CABLES. SIZE IN ACCORDANCE WITH PUMP SELECTION
- ④ 4" EPOXY COATED STEEL VENT PIPE WITH SS BIRD SCREEN CAST IN TOP SLAB. SEE DETAIL E/SD/4 OR F/SD/4 IF PIPE NOT CAST IN TOP SLAB
- ⑤ CONCRETE SLAB. SEE DETAIL H/SD/4
- ⑥ PRECAST MANOLE MEETING ASTM C478 (60" DIA. MINIMUM)
- ⑦ TWO ROWS OF KENT SEAL (TYP)
- ⑧ ANGLE SUPPORT ANCHOR FOR TOP SLAB. TYP OF FOUR (4). SEE DETAIL C/SD/4
- ⑨ 3/4" STAINLESS STEEL GUIDE RAIL. PROVIDE INTERMEDIATE SUPPORTS AS RECOMMENDED BY PUMP MANUFACTURER. CONTRACTOR SHALL COORDINATE LENGTH OF TOP GUIDE SUPPORT.
- ⑩ ELECTRICAL CONDUITS
- ⑪ PIPE OPENING FOR PIPING AND CONDUITS (TYP). SEE DETAIL D/SD/4
- ⑫ PUMPS AND DISCHARGE ELBOWS (FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR)
- ⑬ SCH 80 PVC TEE (SOC)
- ⑭ CLASS 150 STAINLESS STEEL 90° ELBOW (THREADED) (TYP)
- ⑮ PVC FORCEMAIN
- ⑯ STAINLESS STEEL REINFORCED PVC 90 DEGREE ELBOW (SOC X THREADED) (TYP)
- ⑰ STAINLESS STEEL UNION BALL VALVE WITH 2" NUT ADAPTOR (TYP)
- ⑱ STAINLESS STEEL SWING CHECK VALVE (TYP)
- ⑲ CLASS 150 STAINLESS STEEL UNION (TYP)
- ⑳ DIP INLET PIPE
- ㉑ SCH 40 STAINLESS STEEL. PROVIDE STAINLESS STEEL PIPE SUPPORTS
- ㉒ MNDOT 3Y46 CONCRETE FILL FOR GROUT CIRCLE. SHAPE GROUT CIRCLE IN ACCORDANCE WITH PUMP MANUFACTURER'S RECOMMENDATIONS.
- ㉓ ADDITIONAL #6 BARS WITH 180° HOOKS - GRADE 60 REINFORCEMENT STEEL TOP AND BOTTOM EACH CORNER. 2" CLEAR COVER MIN.
- ㉔ ADDITIONAL #5 BARS - GRADE 60 REINFORCEMENT STEEL BOTTOM EACH SIDE. 2" CLEAR COVER MIN.
- ㉕ PRECAST CONCRETE BASE SLAB. SIZE ACCORDINGLY
- ㉖ REINFORCEMENT AS REQUIRED FOR LOADING AND BOUYANCY FORCES
- ㉗ GEOTEXTILE FABRIC (MnDOT 3733 TYPE V)
- ㉘ 12" MIN. MnDOT 3149.2C STABILIZING AGGREGATE
- ㉙ BASE ANCHORAGE. SEE DETAIL B/SD/4

GENERAL NOTES:

- ALL ANCHOR BOLTS AND FASTENERS SHALL BE STAINLESS STEEL.
- ALL PIPING AND PIPE JOINTS SHALL BE PROPERLY RESTRAINED TO PREVENT EXCESS MOVEMENT IN ANY DIRECTION DURING OPERATION AND TESTING. PIPE SUPPORTS SHALL BE LOCATED IN FIELD.
- VENT PIPE MAY BE CAST INTEGRAL WITH SLAB OR LOCATED AWAY FROM STATION DEPENDING ON SITE CONDITIONS. SEE DETAIL E OR F/SD/4.
- PROVIDE EXTERNAL JOINT SEAL, INFRASHIELD OR EQUAL, ON ALL MANHOLE SECTION JOINTS.
- PLUG ALL LIFTING HOLES WITH NON SHRINK GROUT AND COVER WITH A PIECE OF EXTERNAL JOINT SEAL, INFRASHIELD OR EQUAL.
- LOCATE INLET PIPE(S), VENT PIPE, AND ELECTRICAL CONDUITS AS REQUIRED PER SITE CONDITIONS.
- SIZE DISCHARGE PIPING AND FITTINGS ACCORDINGLY PER LIFT STATION FLOW CONDITIONS.
- SIZE WET WELL PER LIFT STATION FLOW CONDITIONS (MINIMUM 60" DIAMETER).
- DRAWING PROVIDED FOR GENERAL LIFT STATION LAYOUT AND COMPONENTS. ADDITIONAL DESIGN CONSIDERATIONS MAY BE REQUIRED FOR VARIED SITE CONDITIONS.



GRINDER LIFT STATION NOTES

PLATE NO. LV-SS-13B

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