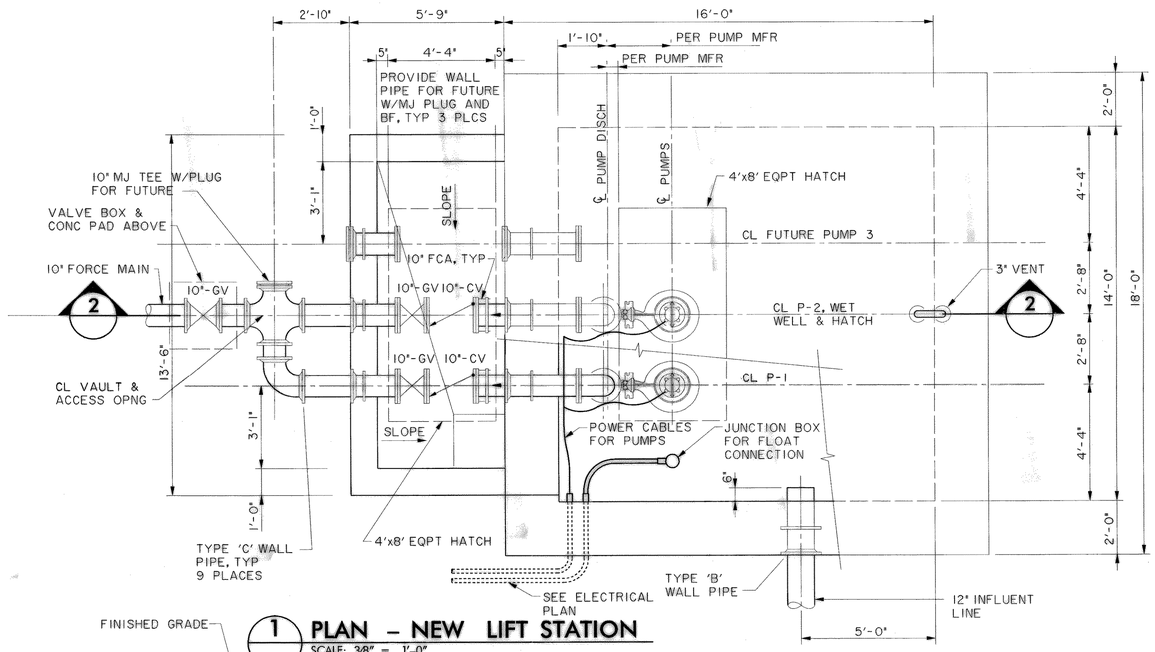
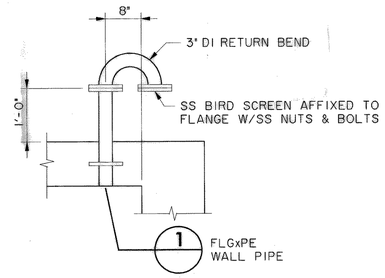


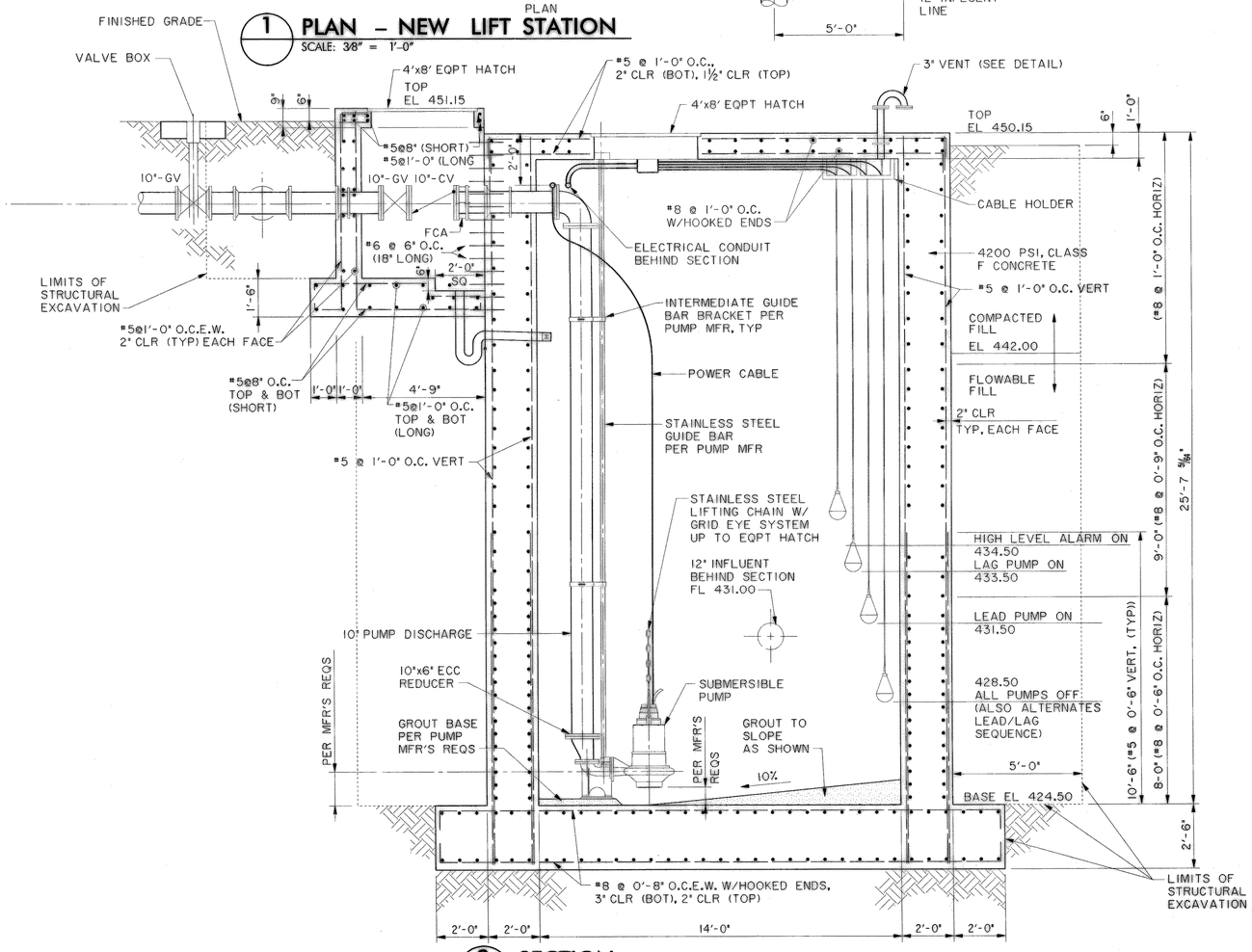
1 PLAN – NEW LIFT STATION

SCALE: 3/8" = 1'-0"



VENT DETAIL

SCALE: NTS



2 SECTION

SCALE: 3/8" = 1'-0"

GENERAL NOTES

1. EXISTING PUMPS ARE FAIRBANKS MORSE MODEL 4 X 5 - B5434WD SUBMERSIBLE NON-CLOG DRY PIT SEWAGE PUMPS WITH 100 HP SUBMERSIBLE MOTORS (ONE CW ROTATION, ONE CCW ROTATION).

2. PUMPS SHALL BE REWORKED AND RECONFIGURED TO OPERATE AS SUBMERSIBLE WET PIT PUMPS. WORK SHALL BE DONE BY:

   SMITH PUMP COMPANY, INC.
   7437 TOWER STREET
   FORT WORTH, TEXAS 76118
   PHONE: 817-589-2060
   FAX: 817-595-4900
   SALESMAN: JERRY LEE FREEDLE

   WORK SHALL INCLUDE, BUT NOT BE LIMITED TO:

   A. CW ROTATION PUMP: NEW VOLUTE AND TRIMMING TO PREVENT OVERLOADING.

   B. CCW ROTATION PUMP: NEW VOLUTE, NEW IMPELLER, TRIMMING TO PREVENT OVERLOADING, AND REVERSAL OF POLARITY OF THE MOTOR.

3. CONTRACTOR SHALL CONSTRUCT NEW FORCE MAIN, NEW WET WELL AND NEW MANHOLES PRIOR TO REMOVING ANY PUMPS FROM SERVICE IN THE EXISTING LIFT STATION. CW ROTATING PUMP SHALL BE REMOVED AND REWORKED FIRST.

4. REWORKED PUMP SHALL BE INSTALLED IN THE NEW WET WELL. FLOW SHALL BE ALLOWED INTO BOTH WET WELLS DURING THE INITIAL TESTING PHASE FOR THE NEW LIFT STATION. EXISTING FLOATS SHALL BE UTILIZED TO OPERATE BOTH LIFT STATIONS ON AN ALTERNATING CYCLE. BOTH LIFT STATIONS SHALL OPERATE DURING THIS PERIOD. AFTER SEVEN DAYS OF UNINTERRUPTED, FAILURE-FREE OPERATION FOR THE NEW LIFT STATION, ALL FLOW SHALL BE DIVERTED TO THE NEW LIFT STATION. THE CCW ROTATING PUMP CAN THEN BE REMOVED FOR REWORKING AND INSTALLATION INTO THE NEW LIFT STATION.

5. AFTER INSTALLATION OF BOTH PUMPS IN THE NEW WET WELL, THE EXISTING WET WELL AND LIFT STATION SHALL BE CLEANED OF WASTE MATERIAL AND ABANDONED IN PLACE.

6. ALL PIPING INSIDE THE LIFT STATION AND VALVE BOX SHALL BE DUCTILE IRON CLASS 51 PIPE WITH EPOXY COATING AND LINING.

7. EQUIPMENT HATCH SHALL BE BILCO DOOR TYPE 'JD' 4'x8' ALUMINUM, WITH LOCKING HARDWARE OR APPROVED EQUAL.

8. ALL MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL.

9. PEAK FLOW 1.68 MGD (1,167 GPM).
   FOR C= 100 TDH= 198 FT V= 4.78 FPS
   FOR C= 140 TDH= 164 FT V= 2.58 FPS
   MINIMUM CYCLE TIME 20.1 MINUTES

10. THE LIFT STATION SHALL BE BACKFILLED WITH MODIFIED FLOWABLE FILL WITH AN UNCONFINED COMPRESSIVE STRENGTH OF BETWEEN 25 PSI AND 100 PSI AFTER 28 DAYS UP TO ELEVATION 442.00 MINIMUM. PLACEMENT OF FILL SHALL NOT BE PLACED UNTIL LIFT STATION CONCRETE STRENGTH HAS REACHED 3000 PSI MINIMUM.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ANY TEMPORARY SHORING REQUIRED TO CONSTRUCT THE LIFT STATION.

RECORD DRAWINGS JANUARY 13, 2003
THIS RECORD DOCUMENT HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE CONSULTANT HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHARLES E. QUADE, P.E. 69396 ON DECEMBER 5, 2001.

STATE OF TEXAS
CHARLES E. QUADE
69396
REGISTERED
PROFESSIONAL ENGINEER
12/05/2001

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KENNETH A ROBERTS, P.E. 55446 ON DECEMBER 5, 2001.

STATE OF TEXAS
KENNETH A ROBERTS
55446
REGISTERED
PROFESSIONAL ENGINEER
12/05/2001

LIFT STATION
PLAN & SECTION

LINE 'C' - LIFT STATION

SIGNAL RIDGE

CITY OF ROCKWALL, TEXAS

Hulitt-Zollars, Inc.
Dallas, Ft Worth, Houston, El Paso, Albuquerque, Denver, Phoenix, Tustin, Ontario, Seattle, Tacoma

DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
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