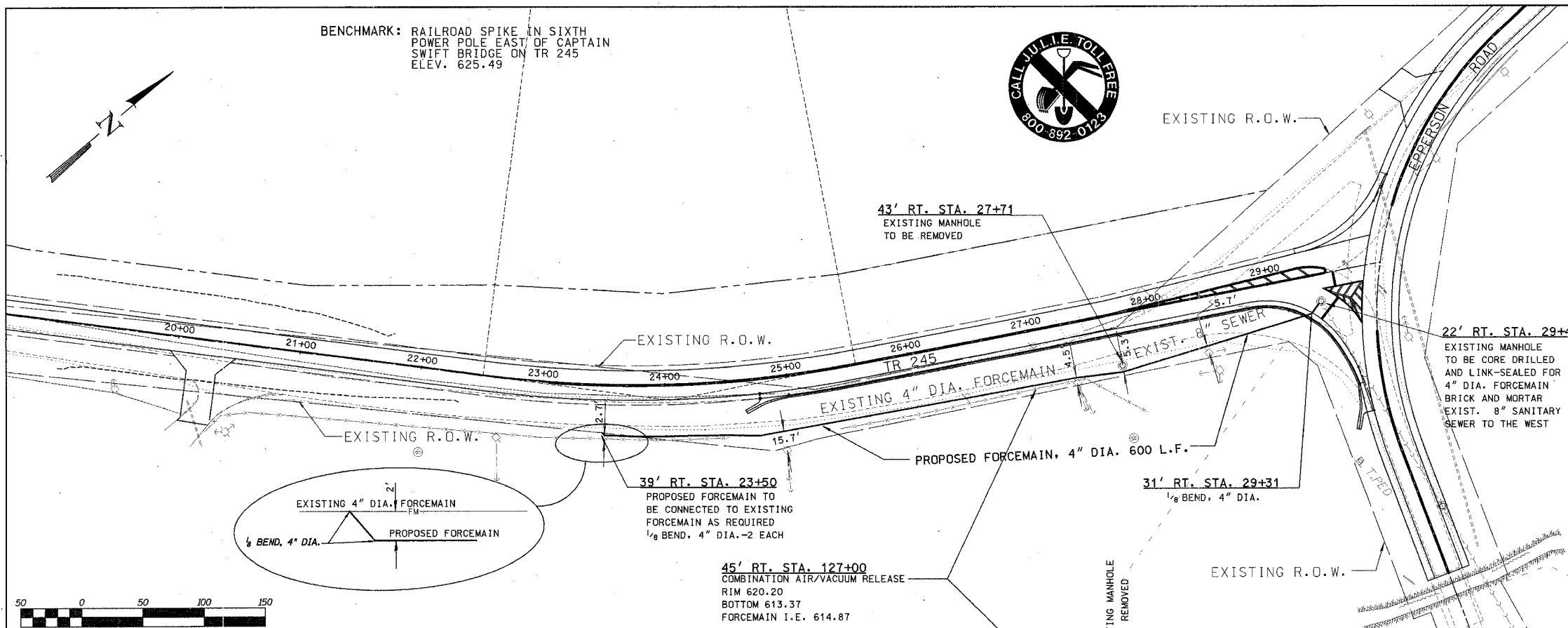


ROUTE	SECTION	COUNTY	DATE	SHEET
245	98-20101-00-BR	BUREAU	65	33
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - BR05-0K(62)		

BENCHMARK: RAILROAD SPIKE IN SIXTH POWER POLE EAST OF CAPTAIN SWIFT BRIDGE ON TR 245 ELEV. 625.49

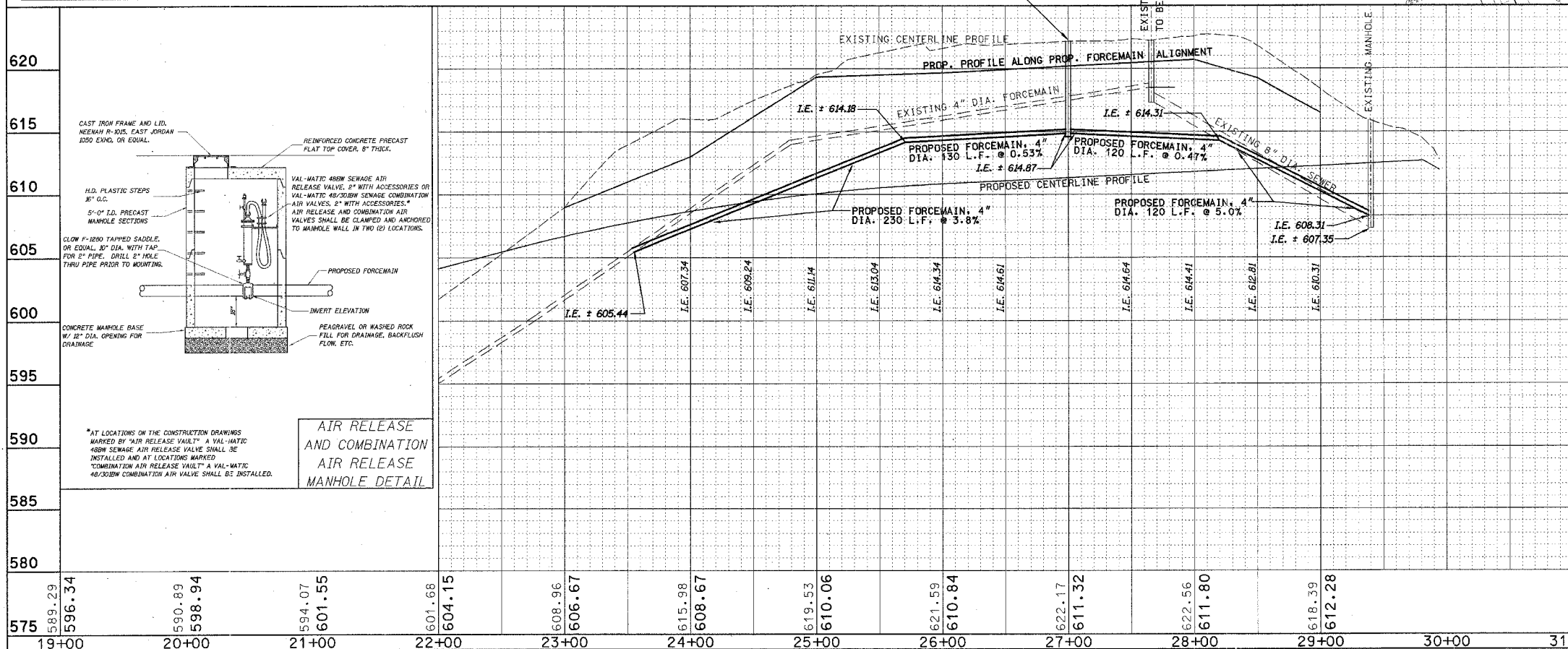


**SCHEDULE OF QUANTITIES**

FORCEMAIN, 4" DIA. - 600 L.F.  
 1/8 BEND, 4" DIA. - 3 EACH  
 COMBINATION AIR/VACUUM RELEASE - 1 EACH  
 GRANULAR CRADLE & INITIAL BACKFILL - 144 C.Y.  
 GRANULAR SELECT BACKFILL - 15.6 C.Y.

**NOTES**

- 1.) ALL WORK ASSOCIATED WITH THE FORCEMAIN WILL BE PERFORMED BY THE CITY OF PRINCETON AND ALL MATERIALS PURCHASED BY THE CITY. THIS WORK SHALL BE COORDINATED WITH THE CONTRACTOR.
- 2.) ALL FORCEMAIN CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, FIFTH EDITION.
- 3.) ACCEPTABLE MATERIAL FOR FORCEMAIN CONSTRUCTION IS HIGH DENSITY POLYETHYLENE PIPE (HDPE), SDR 11 WITH FUSION WELDED JOINTS.
- 4.) EXISTING MANHOLE SHALL BE COMPLETELY REMOVED AND BACKFILLED WITH SAND. BOTH THE INLET AND OUTLET LINES SHALL BE PLUGGED SHUT WITH A NON-SHRINK GROUT.
- 5.) DUCTILE IRON FITTINGS SHALL BE CAST IRON OR DUCTILE IRON CONFORMING TO AWWA C110 AND/OR AWWA C-153 AND SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA. ALL FITTINGS SHALL BE EQUIPPED WITH MEGA-LUG THRUST RESTRAINTS AND THRUST BLOCKING.



6.) COMBINATION AIR/ VACUUM RELEASE

THE MANHOLE SHALL BE 5'-0" I.D. PRECAST MANHOLE COMPLETE WITH FRAME, LID, STEPS, ETC. THERE SHALL BE NO CONCRETE BASE FOR THE BOTTOM OF THE MANHOLE. PRECAST MANHOLE BARREL SECTIONS SHALL BE INSTALLED ON GRAVEL DRAINAGE FILL. GRAVEL SHALL BE CLEAN WASHED PEA GRAVEL OR CLASS X AGGREGATE.

CITY SHALL DRILL A 2" DIAMETER HOLE IN THE TOP OF THE FORCEMAIN AND FURNISH AND INSTALL A MALLEABLE IRON SERVICE SADDLE WITH A 2" THREADED OUTLET, FOR MOUNTING THE AIR RELEASE VALVE ASSEMBLY. SERVICE SADDLE SHALL BE CLOW F-11280 OR EQUAL.

AIR RELEASE ASSEMBLY SHALL BE DESIGNED TO OPERATE OVER A 0 - 75 PSI SERVICE RANGE AND SHALL BE COMPLETE WITH VALVES, QUICK DISCONNECT COUPLINGS, AND BACKFLUSHING HOSE. THE INLET VALVE SHALL BE 2" DIAMETER WITH A 1/2" DIA. OUTLET AND A 5/16" VENTING ORIFICE FOR A MAXIMUM WORKING PRESSURE OF 75 PSI. VALVE SHALL BE CONSTRUCTED OF CAST IRON BODY AND COVER, STAINLESS STEEL TRIM AND FLOAT, WITH AN ADJUSTABLE RESILIENT ORIFICE BUTTON TO INSURE POSITIVE SEATING.

THE BACK WASH ACCESSORIES SHALL BE FURNISHED AND ASSEMBLED TO THE VALVE, CONSISTING OF AN INLET SHUT-OFF VALVE, BLOW-OFF VALVE, CLEAR WATER INLET VALVE, RUBBER SUPPLY HOSE AND QUICK DISCONNECT COUPLINGS.

COMBINATION AIR/VACUUM RELEASE VALVE ASSEMBLY SHALL BE VALMATIC MODEL 48/301BW OR EQUAL.

**FORCEMAIN LAYOUT SHEET**  
**SECTION 98-20101-00-BR**  
**T.R. 245 OVER BIG BUREAU CREEK**  
**STA. 13+70 (S.N. 006-4288)**  
**BUREAU COUNTY**  
 WHA # 1104D04