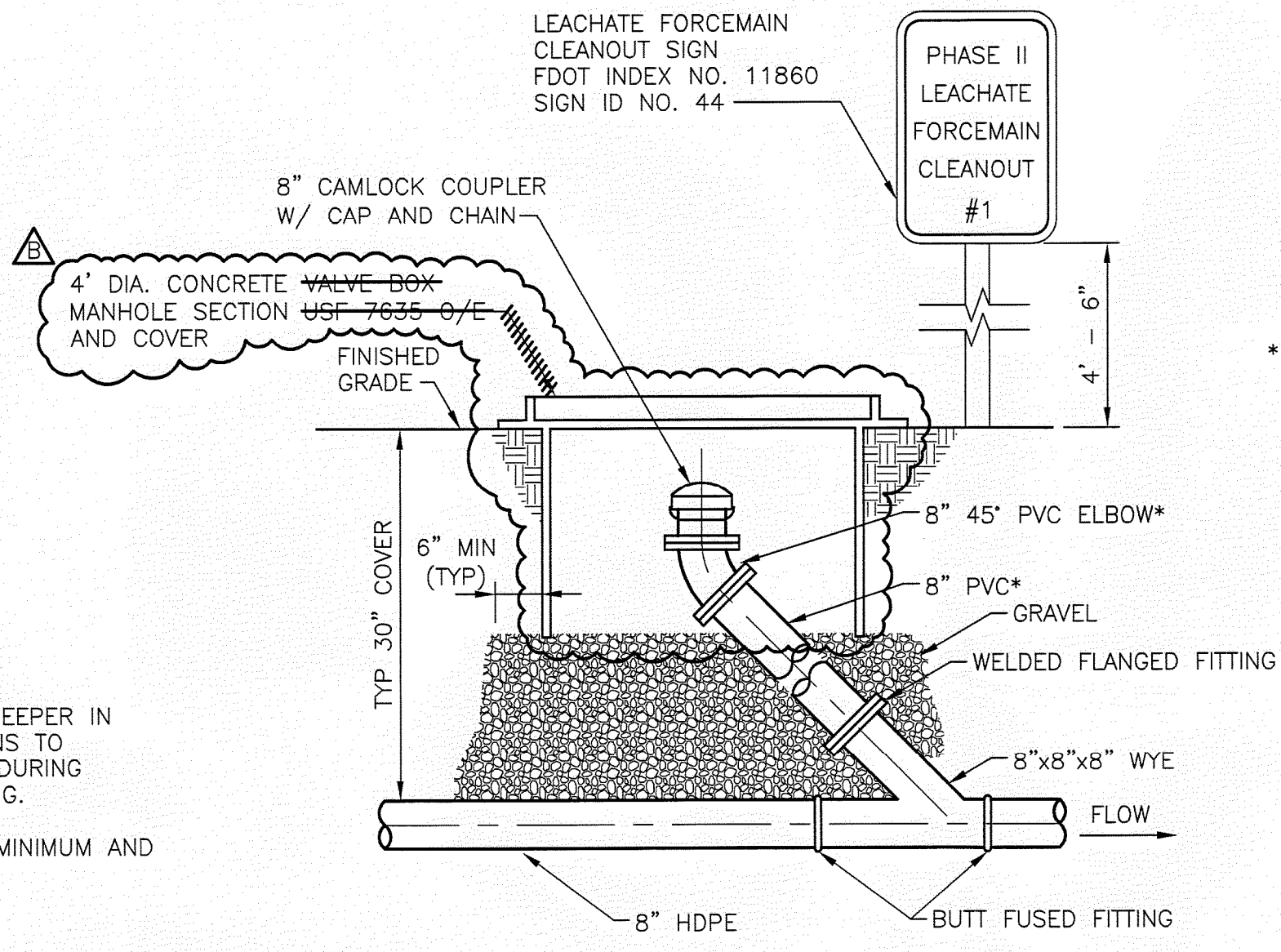


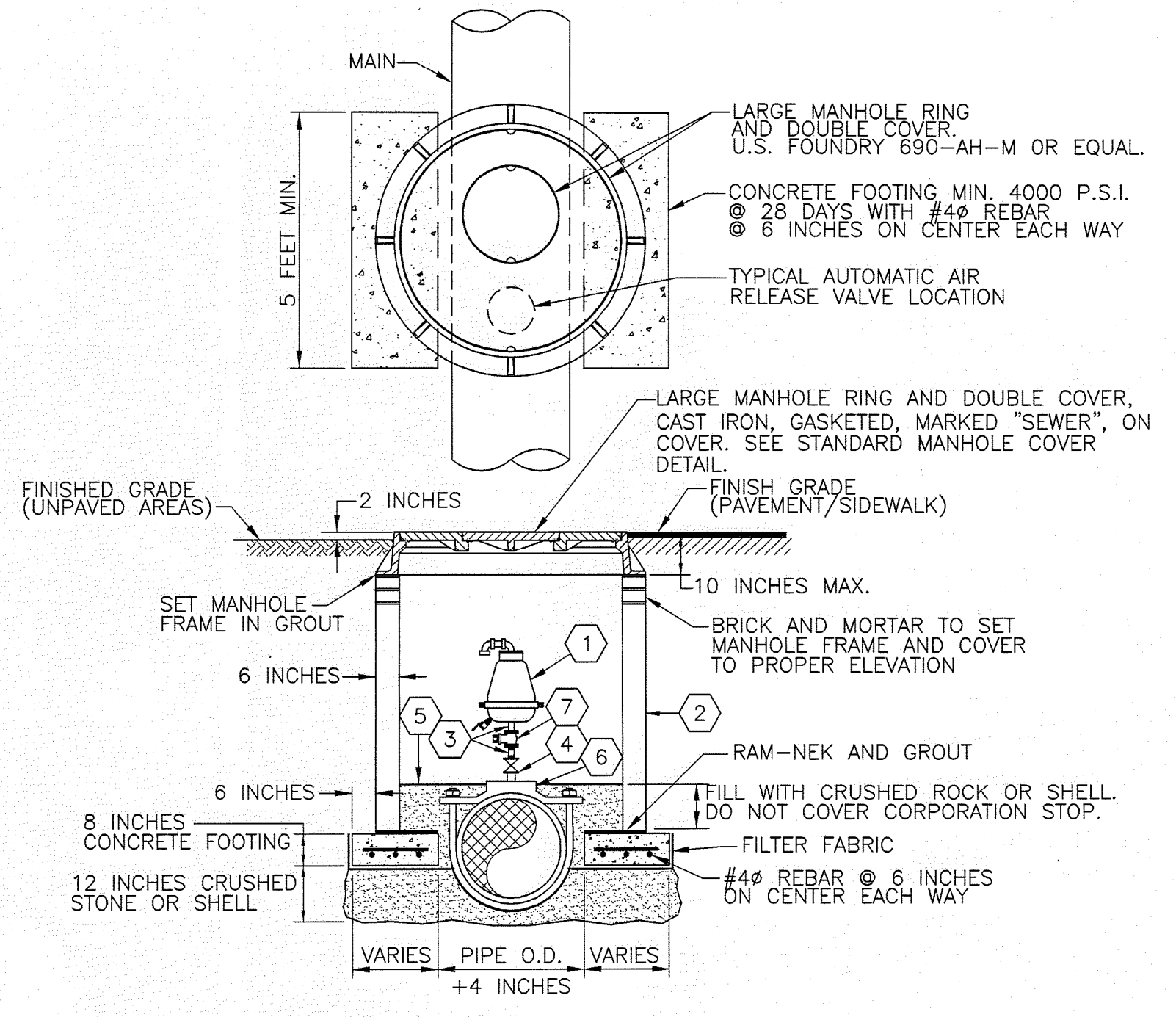
- NOTES:**
- FORCEMAIN MAY BE INSTALLED DEEPER IN ACCORDANCE WITH SPECIFICATIONS TO MAINTAIN ADEQUATE CLEARANCE DURING HORIZONTAL DIRECTIONAL DRILLING.
 - SEE DETAIL 4 THIS SHEET FOR MINIMUM AND MAXIMUM TRENCH WIDTHS.

FORCEMAIN LOCATION ON SHOULDER 1
NTS C-24



* ALL PVC PIPE AND FITTINGS SHALL BE PRESSURE RATED CLASS 150 (DR 18) CONFORMING TO AWWA C900. PIPE AND FITTINGS SHALL BE MADE FROM CLASS 12454-B (ASTM D1784). THE FITTINGS SHALL MEET THE REQUIREMENTS OF STANDARD UNI-B-12 (UNI-BELL PVC PIPE ASSOCIATION).

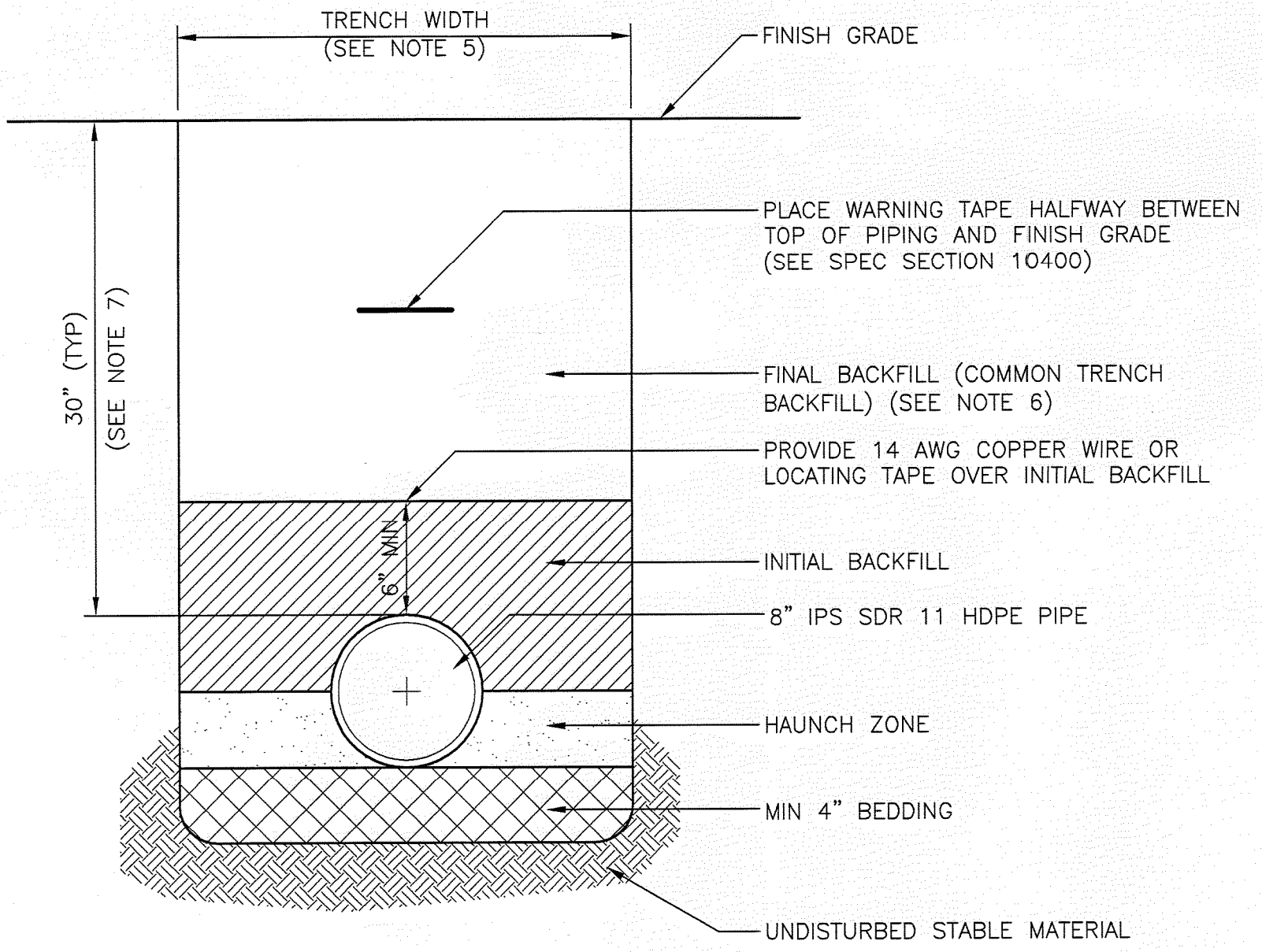
PIPE LINE CLEANOUT 2
NTS C-24



AUTOMATIC AIR RELEASE VALVE 3
NTS C-29

- KEY NOTES:**
- AUTOMATIC AIR RELEASE VALVE WITH ACCESSORIES. SEE SPECIFICATIONS.
 - PRECAST CONCRETE MANHOLE SECTION, 4 FEET DIA. UP TO 30 INCH DIA. MAINS.
 - 2 INCH "EXTRA HEAVY" BRASS PIPE PER ASTM B 43-LATEST BRASS FITTINGS SHALL BE "EXTRA HEAVY".
 - 2 INCH BRASS CORPORATION STOP BALL TYPE
 - CRUSHED ROCK OR SHELL
 - BRASS DOUBLE STRAP SERVICE SADDLE
 - 2 INCH BRASS BALL VALVE WITH HAND LEVER.

- NOTES:**
- FOR FORCEMAIN USE AUTOMATIC VACUUM AIR RELEASE VALVE WITH BACKWASH ACCESSORIES.
 - CONTRACTOR SHALL INSTALL AUTOMATIC AIR RELEASE VALVES (AARVS) AT ALL HIGH POINTS ON FORCEMAIN. CONTRACTOR SHALL COORDINATE PROPOSED LOCATIONS OF AARVS WITH ENGINEER PRIOR TO CONSTRUCTION.



- NOTES:**
- TRENCHING AND PIPE INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D2321. MAXIMUM PARTICLE SIZE = 1/2".
 - BEDDING, HAUNCHING AND INITIAL BACKFILL MATERIAL USED SHOULD BE CLASS I OR CLASS II AS PER ASTM D2487, "STANDARD METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES." THIS MATERIAL SHALL BE COMPACTED TO 95% DENSITY PER AASHTO T-99. SEE SPECIFICATIONS.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATER TO ONE FOOT BELOW TRENCH BOTTOM, SEE SPECIFICATIONS.
 - INITIAL BACKFILL SHOULD BE PLACED IN 6" LAYERS AND EXTENDED TO AT LEAST 6" ABOVE THE TOP OF THE PIPE.
 - MINIMUM TRENCH WIDTH = PIPE OD + 16". MAXIMUM TRENCH WIDTH = MINIMUM TRENCH + 18".
 - FINAL BACKFILL SHALL BE CLASS I, CLASS II OR CLASS III MATERIAL AS PER ASTM D2487. THIS MATERIAL SHALL BE COMPACTED TO 95% DENSITY PER AASHTO T-99. SEE SPECIFICATIONS.
 - FORCEMAIN MAY BE INSTALLED DEEPER IN ACCORDANCE WITH SPECIFICATIONS TO MAINTAIN ADEQUATE CLEARANCE DURING HORIZONTAL DIRECTIONAL DRILLING OR DURING CROSSING OF EXISTING PIPELINES.

FORCEMAIN BEDDING 4
NTS C-24

RECORD DRAWING

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THOMAS M. YANOSCHAK, P.E. 44200 Date 3/31/10
THOMAS M. YANOSCHAK, P.E. P.E. NUMBER

HDR ENGINEERING, INC.

RECORD DRAWING

HDR

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Florida Certificate of Authorization
No. 00004213

ISSUE	DATE	DESCRIPTION
B	03/2010	RECORD DRAWING
A	02/2009	ISSUED FOR CONSTRUCTION, CONFORMED TO ADDENDA

PROJECT MANAGER	T.M. YANOSCHAK
REVIEWED BY	J.C. READLING
DRAWN BY	G.J. BLUE
PROJECT NUMBER	001916-43485-018

THOMAS M. YANOSCHAK
LICENSE
No. 44200
STATE OF FLORIDA
PROFESSIONAL ENGINEER
3/31/10
Thomas M. Yanoschak, P.E.
Certificate No. 44200

SARASOTA COUNTY

Central County Solid Waste Disposal Complex
PHASE II CLASS I LANDFILL EXPANSION
CONSTRUCTION DRAWINGS

SARASOTA COUNTY FLORIDA

FORCEMAIN DETAILS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
APR 13 2010
SOUTHWEST DISTRICT TAMPA

0 1" 2"

FILENAME OOC-32.dwg
SCALE AS SHOWN

SHEET **C-32**