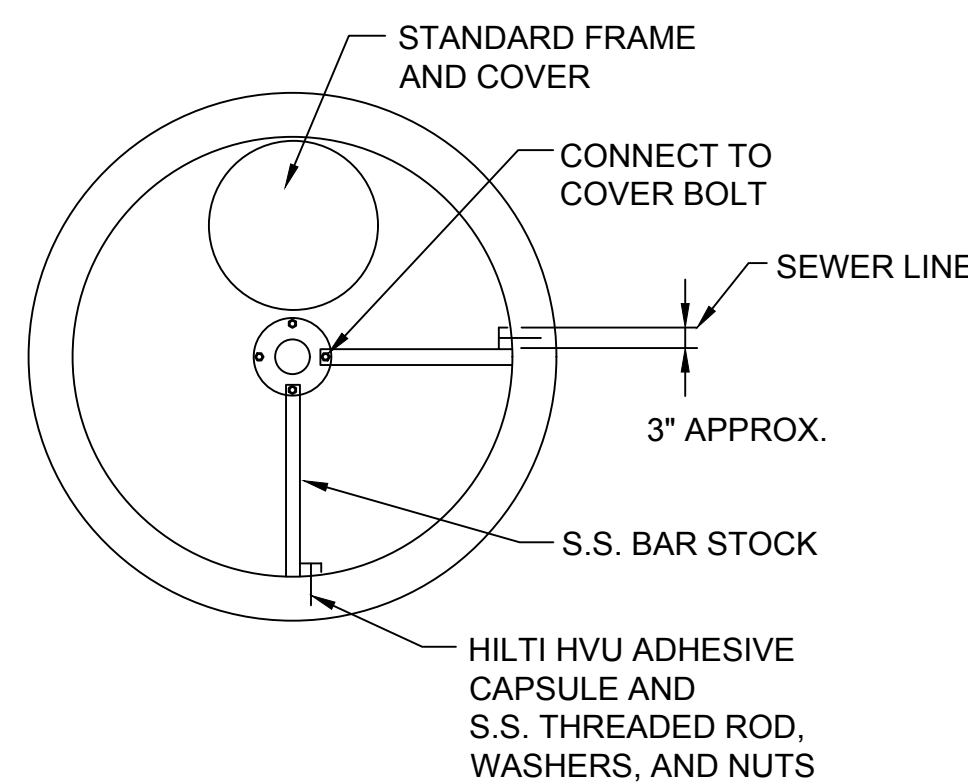


CLOSED BOTTOM AIR RELEASE VALVE VAULT (PIPE 3" AND LARGER)

NOT TO SCALE

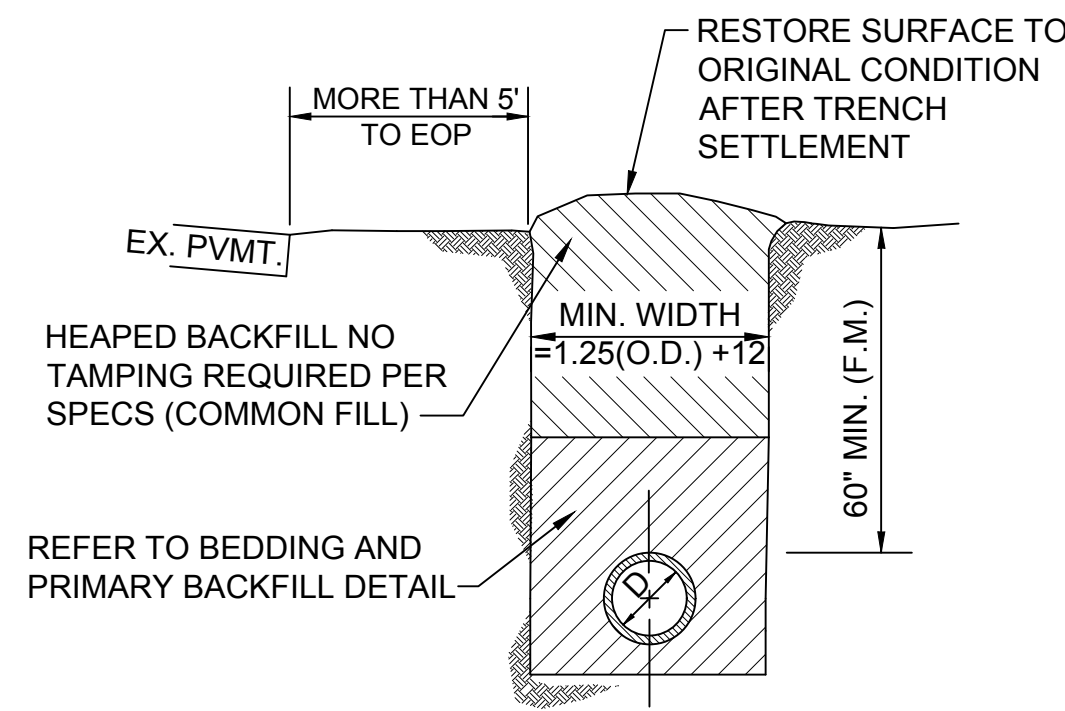


AIR RELEASE VALVE PLAN VIEW

NOT TO SCALE

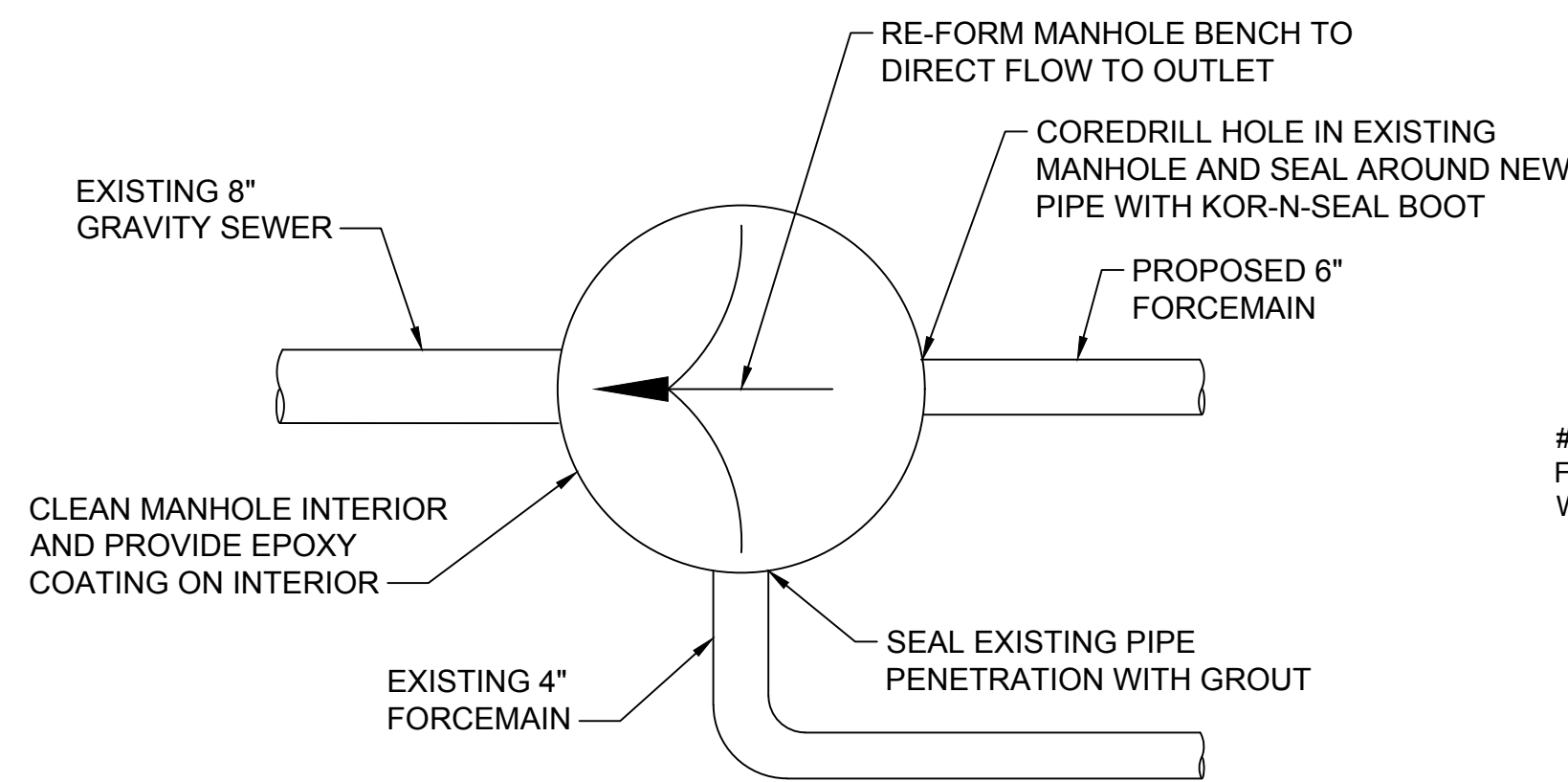
AIR RELEASE VALVE VAULT NOTES:

- AIR RELEASE VALVE VAULT SHALL BE LOCATED AT HIGH POINTS ALONG FORCEMAINS. EXACT LOCATION TO BE FIELD DETERMINED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY ADAPTER FITTINGS, SADDLES, ETC. IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS TO CONNECT TO NPT FITTINGS. CONTRACTOR SHALL SUBMIT CONNECTION SHOP DRAWINGS FOR ENGINEER'S REVIEW & APPROVAL.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING VALVE VAULT OVERALL HEIGHT (MIN. 5'-0" FROM TOP OF FORCEMAIN) TO FACILITATE COMPLETE EQUIPMENT INSTALLATION.
- AIR RELEASE VALVE SHALL BE ANCHORED TO VAULT WALL WITH (2) 2"x½" S.S. PIECES OF BAR STOCK PERPENDICULAR TO EACH OTHER TO PREVENT MOVEMENT OF VALVE PARALLEL AND PERPENDICULAR TO FORCEMAIN. S.S. BAR STOCK SHALL BE CONNECTED TO AIR RELEASE VALVE WITH COVER BOLT AND TO THE MANHOLE WALL USING HILTI HVU ADHESIVE CAPSULE OR APPROVED EQUAL WITH ALL S.S. COMPONENTS INCLUDING THREADED ROD, WASHERS AND NUTS. MINIMUM EMBEDMENT INTO CONCRETE SHALL BE 4". CONTRACTOR MAY SUBMIT ALTERNATE VALVE STABILIZATION PLAN WITH SHOP DRAWINGS FOR ENGINEER'S REVIEW AND APPROVAL.



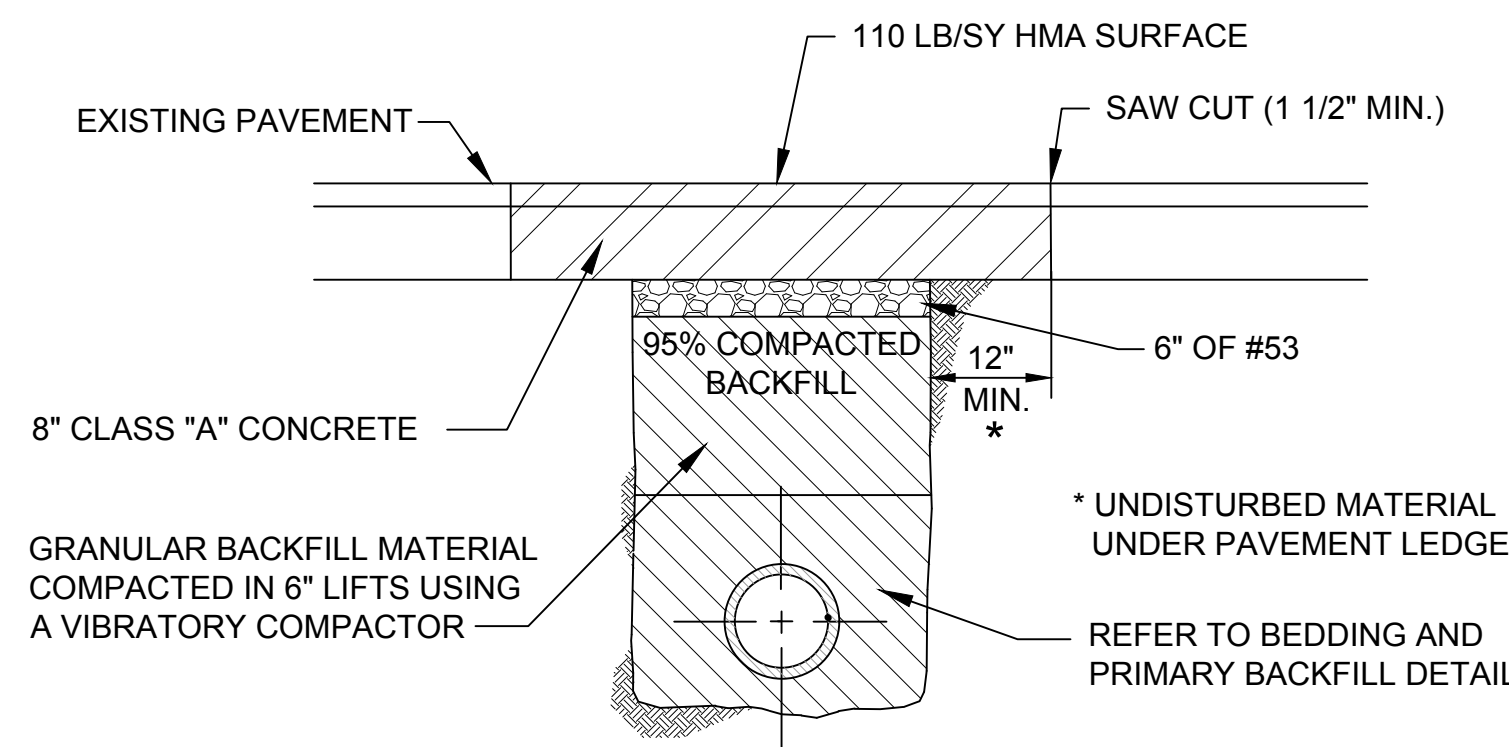
OPEN TERRAIN - METHOD "A"

NOT TO SCALE



CONNECTION MANHOLE DETAIL

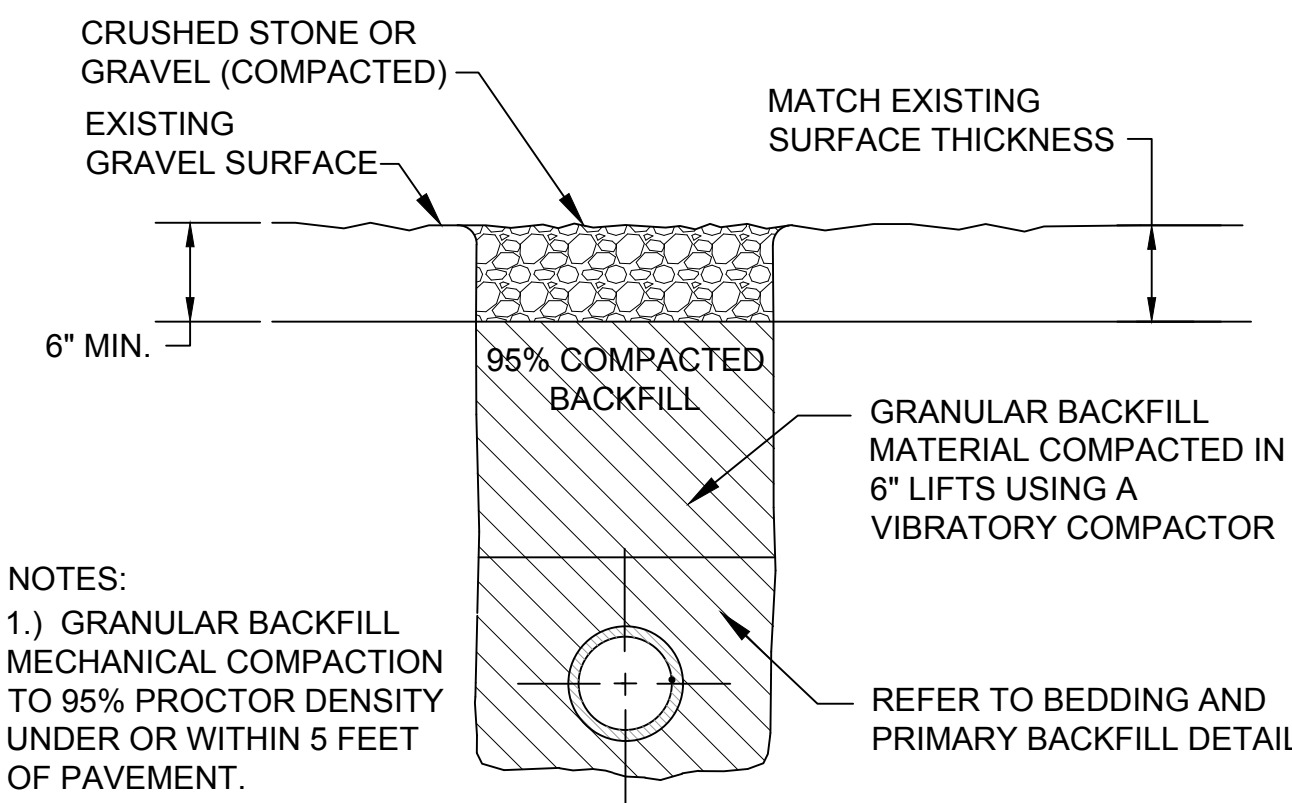
NOT TO SCALE



* TO BE USED ON PENDELETON AVENUE AND STATE STREET

PRIMARY ROADWAY PATCHING - METHOD "C"

NOT TO SCALE

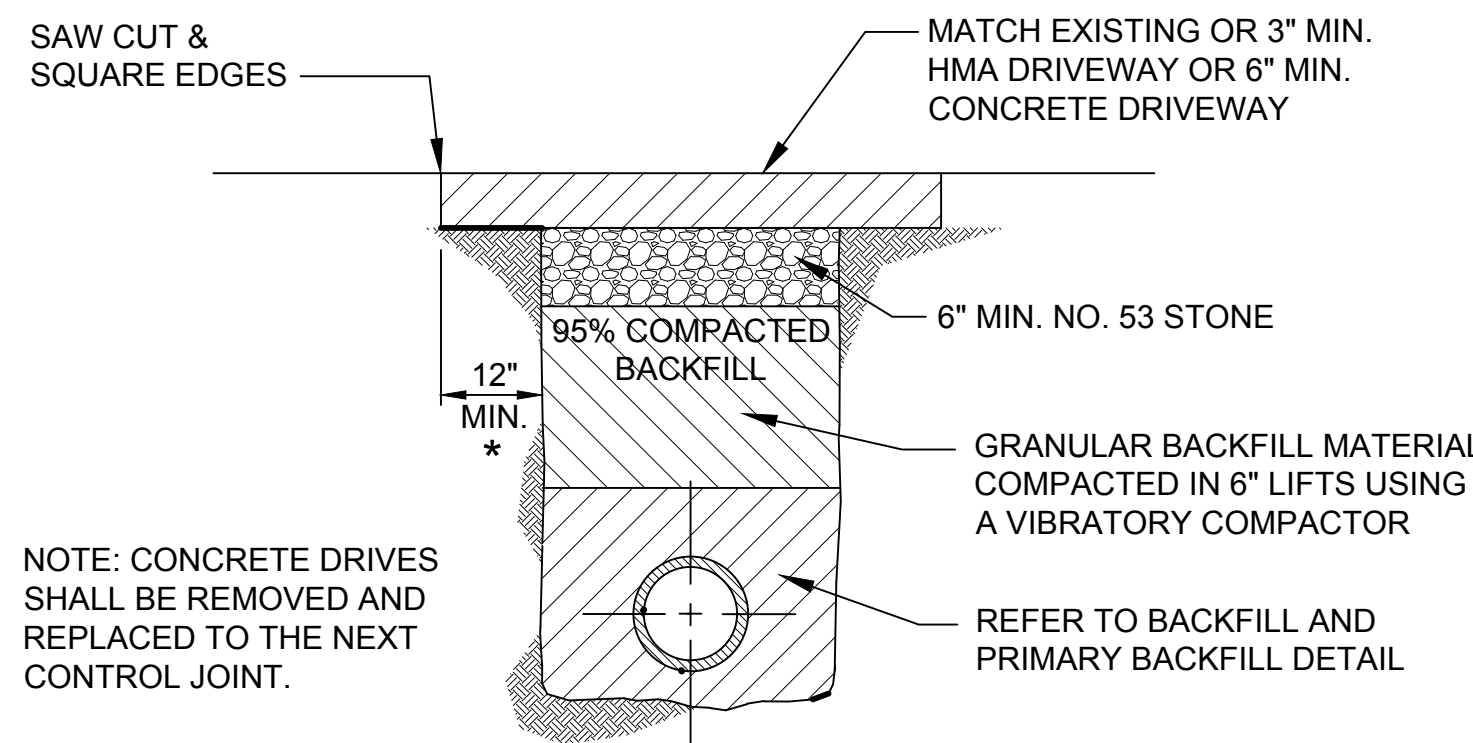


NOTES:

- GRANULAR BACKFILL MECHANICAL COMPACTION TO 95% PROCTOR DENSITY UNDER OR WITHIN 5 FEET OF PAVEMENT.

GRAVEL DRIVEWAYS - METHOD "B"

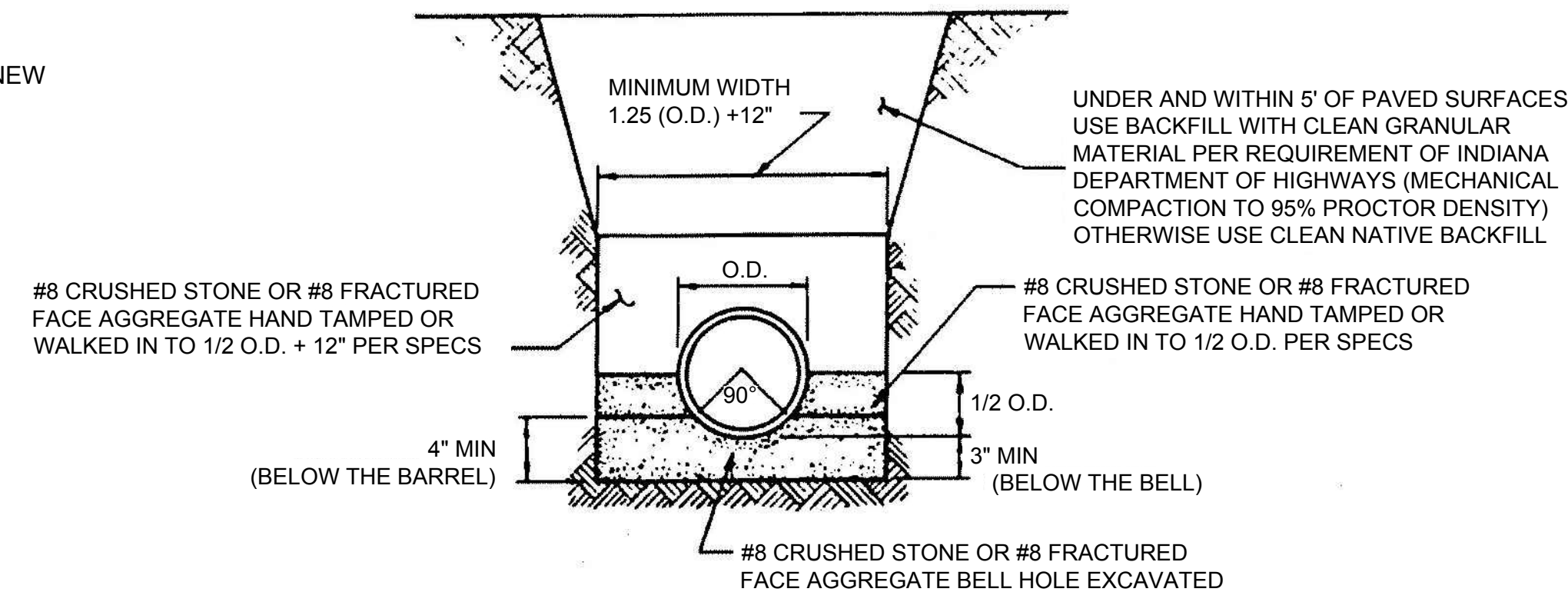
NOT TO SCALE



NOTE: CONCRETE DRIVES SHALL BE REMOVED AND REPLACED TO THE NEXT CONTROL JOINT.

PAVED DRIVEWAY - METHOD "D1"

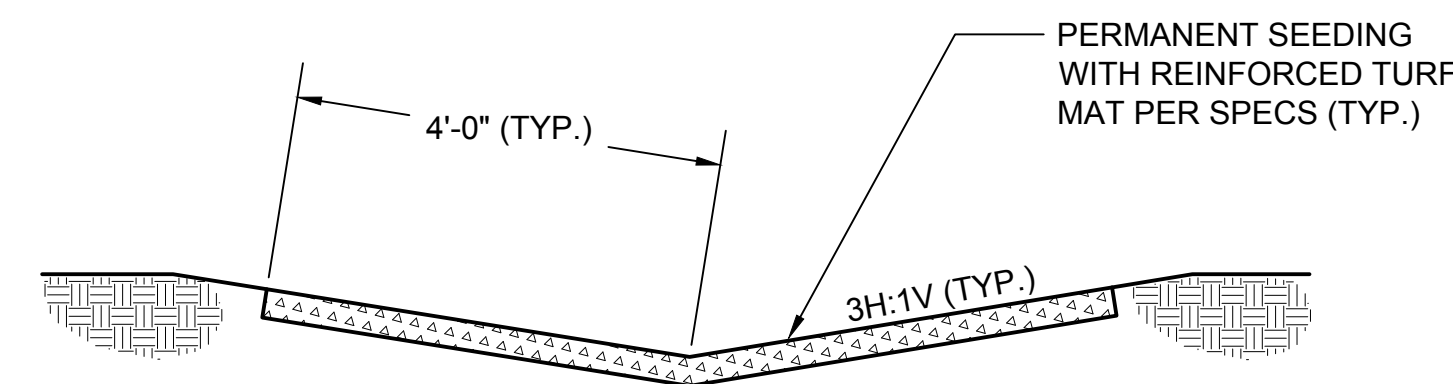
NOT TO SCALE



PIPE SIZE	8" TO 15"	18" & OVER
BEDDING BELOW THE PIPE BARREL	O.D. / 4 MIN. = 4"	O.D. / 4 MAX. = 8"

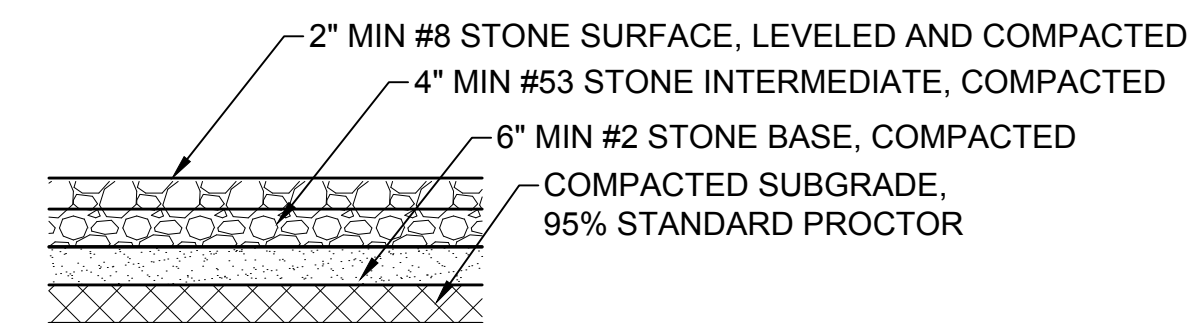
FLEXIBLE PIPE BEDDING AND PRIMARY BACKFILL DETAIL - PVC AND HDPE PIPE

NOT TO SCALE



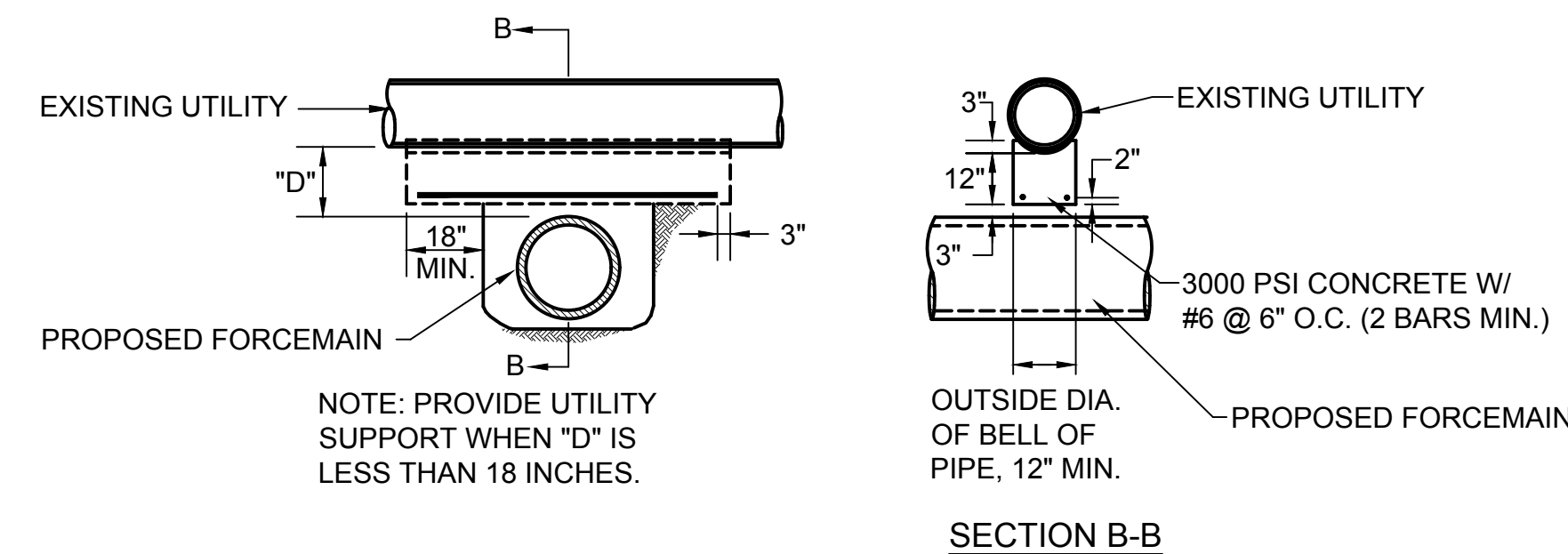
DETAIL - V-DITCH & SWALE

NOT TO SCALE



GRAVEL AREA DETAIL AROUND LIFT STATION

NOT TO SCALE



NOTES:

- PROVIDE UTILITY SUPPORT WHEN "D" IS LESS THAN 12 INCHES.
- EXISTING UTILITIES SHALL MEAN: STEEL GAS MAINS, WATER MAINS, ELECTRIC/TELEPHONE CONDUITS, FIBER OPTIC BANKS, SANITARY SEWER PIPING, STORM SEWER PIPING, ETC.

DETAIL - UTILITY CROSSING (BELOW)

NOT TO SCALE

GEORGE W. LEWIS
REGISTERED
No. 10403303
STATE OF INDIANA
PROFESSIONAL ENGINEER

GRW PROJECT NO. 4625

CLIENT PROJECT NO. --

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STANDARD DETAILS

BABY FARMS LIFT STATION AND FORCE MAIN IMPROVEMENTS
FALL CREEK REGIONAL WASTE DISTRICT

DESIGNED	GWL
DRAWN	JAJ
REVIEWED	JPT
APPROVED	GWL

REVISIONS	DATE	BY	DESCRIPTION
NO.			

DATE: NOVEMBER 2017
SCALE: N.T.S.
SHEET NO.

C-08