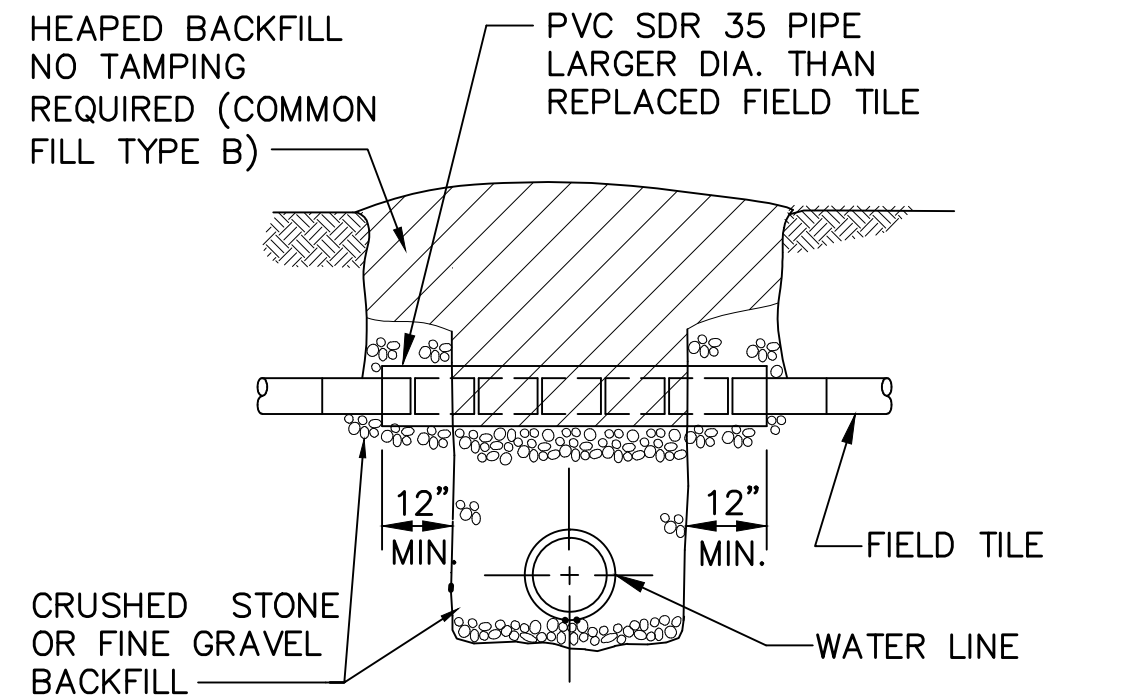
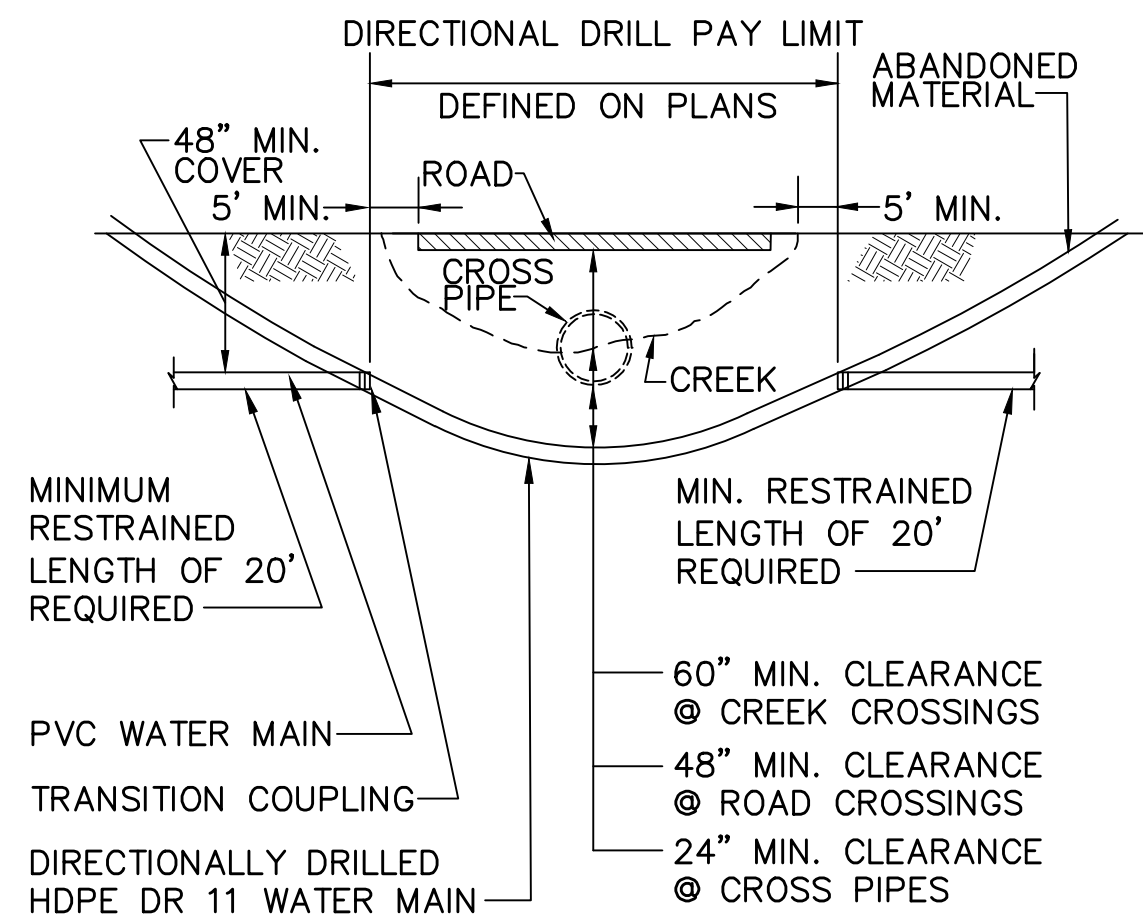


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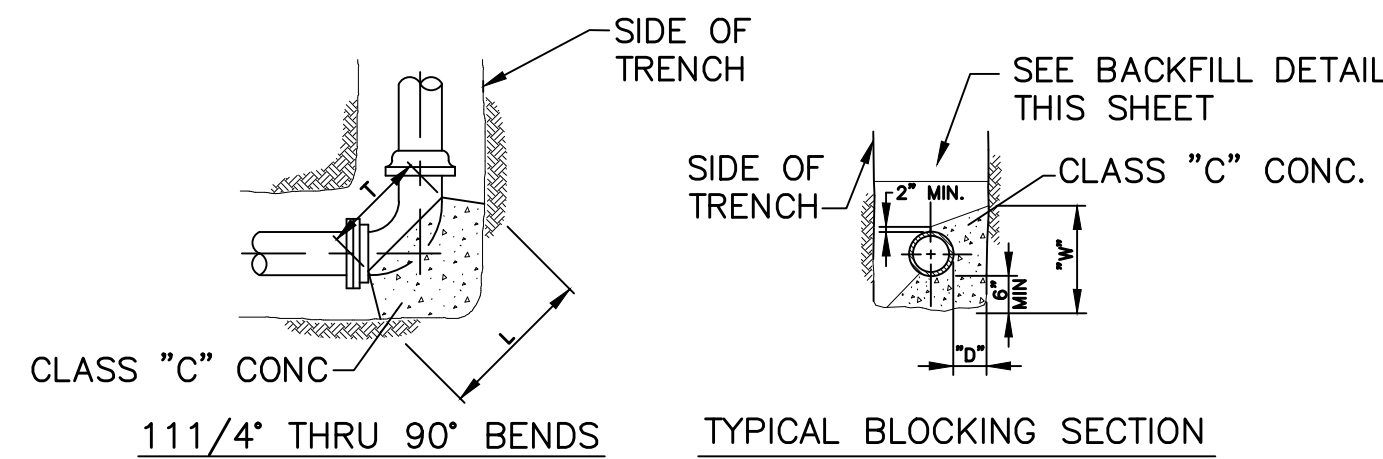
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FIELD DRAIN REPLACEMENT DETAIL
NTS

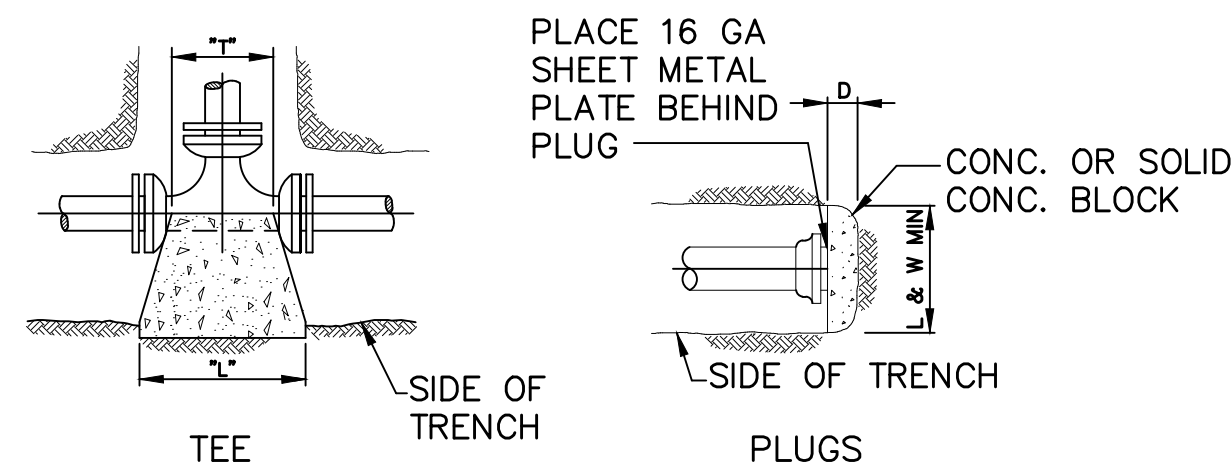


DIRECTIONAL DRILLING DETAIL
SCALE: N.T.S.

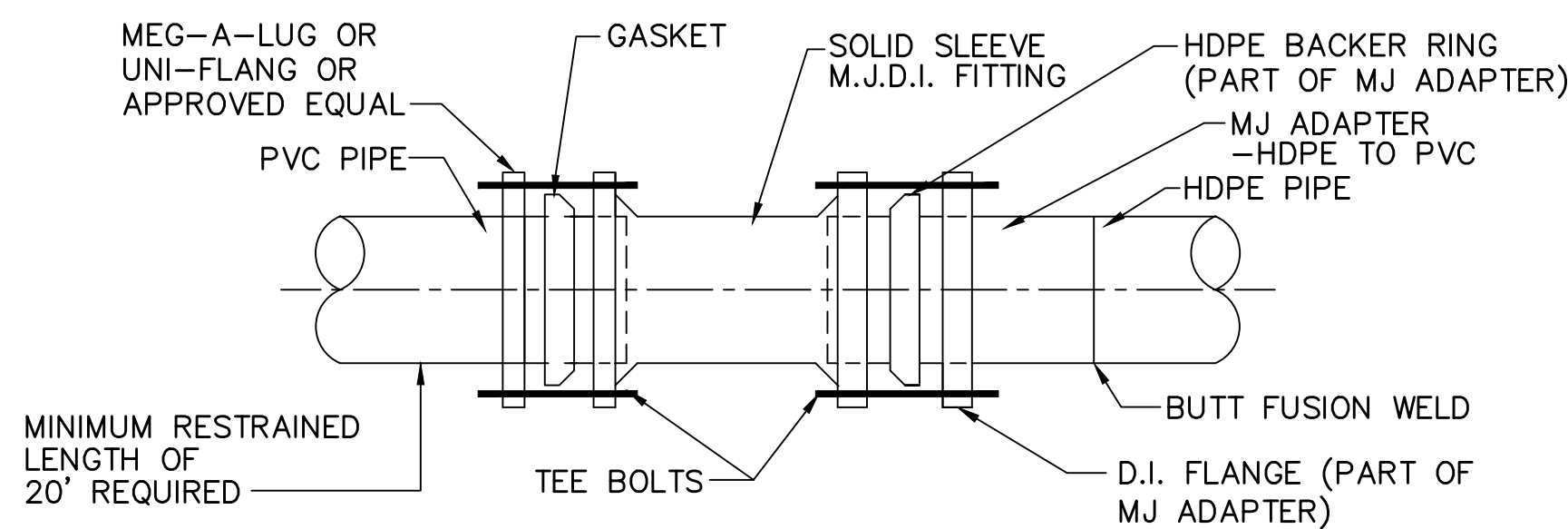


11 1/4" THRU 90° BENDS

TYPICAL BLOCKING SECTION



CONCRETE THRUST BLOCKS
NTS



HDPE/PVC TRANSITION COUPLING
SCALE: N.T.S.

PLUGS								
SIZE	4"	6"	8"	12"	16"	18"	20"	24"
D	16"	18"	18"	24"	24"	30"	30"	30"
L	16"	18"	22"	30"	48"	48"	48"	48"
T	10"	12"	12"	12"	12"	18"	24"	24"
W	16"	18"	22"	24"	30"	30"	48"	48"

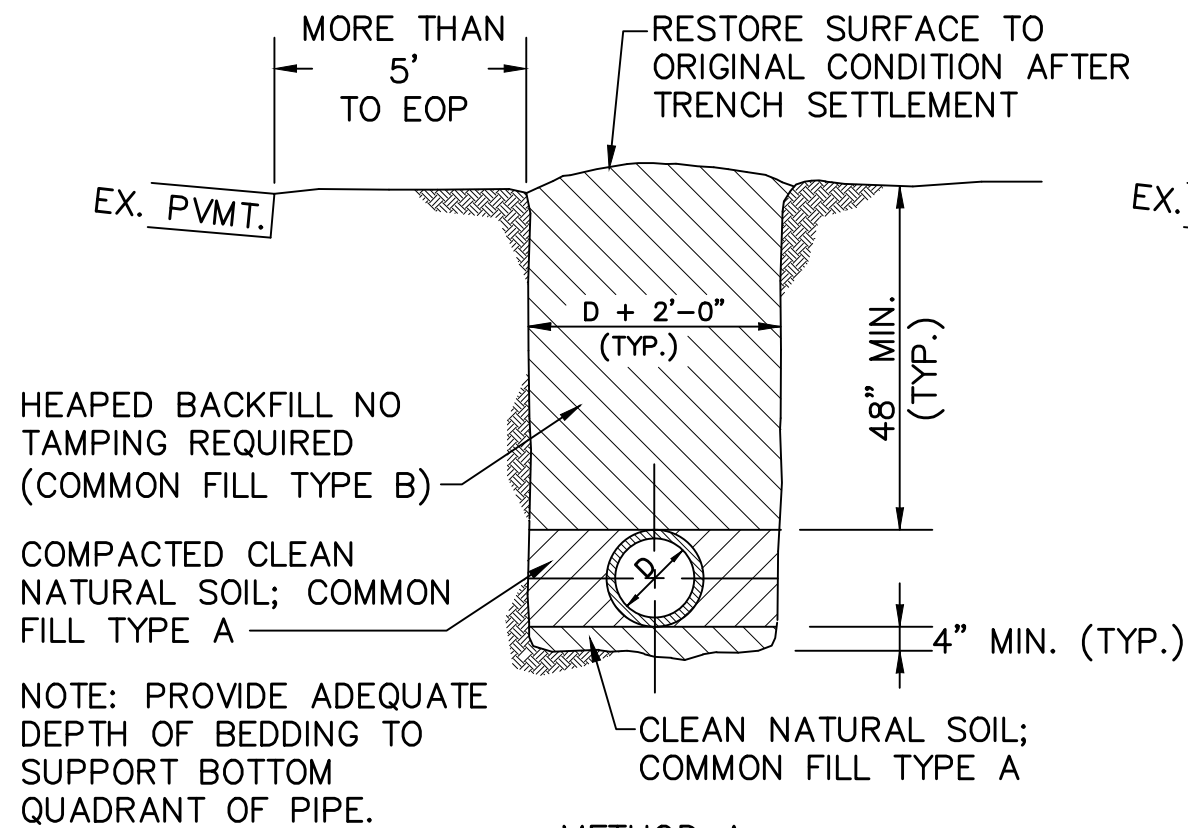
11 1/4", 22 1/2" & 45° BENDS								
SIZE	4"	6"	8"	12"	16"	18"	20"	24"
D	6"	6"	6"	6"	6"	8"	16"	16"
L	12"	14"	16"	20"	34"	40"	45"	52"
T	12"	14"	14"	16"	28"	33"	37"	46"
W	10"	12"	14"	18"	22"	25"	28"	32"

90° BENDS								
SIZE	4"	6"	8"	12"	16"	18"	20"	24"
D	8"	8"	10"	12"	12"	16"	20"	20"
L	20"	24"	27"	34"	48"	51"	54"	70"
T	10"	16"	18"	22"	36"	40"	44"	50"
W	12"	12"	16"	24"	28"	34"	40"	44"

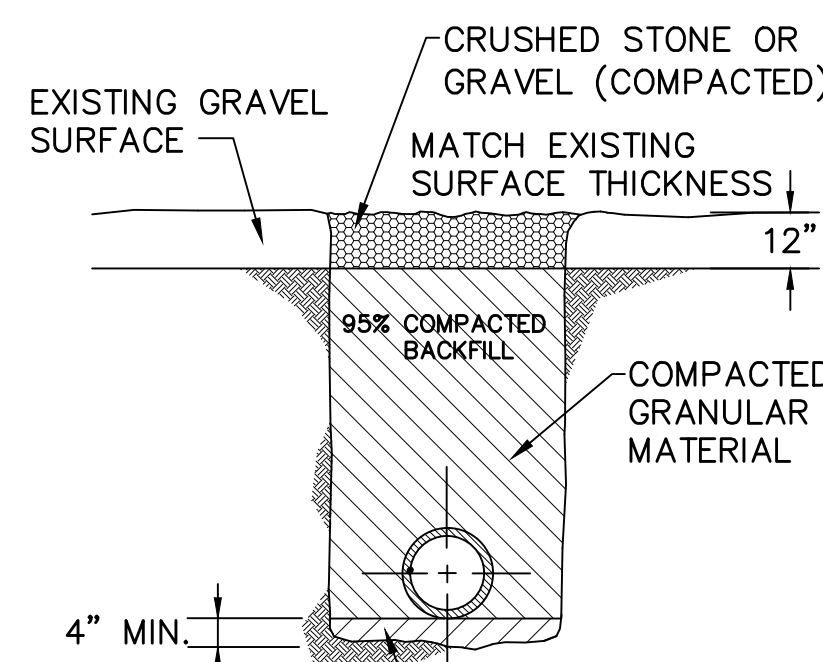
TEES								
SIZE	4"	6"	8"	12"	16"	18"	20"	24"
D	8"	8"	12"	12"	12"	16"	38"	38"
L	10"	18"	24"	27"	28"	30"	48"	48"
W	16"	12"	18"	24"	28"	34"	48"	48"
T	12"	12"	15"	18"	20"	22"	24"	24"

VERTICAL BEND & STRAIGHT PIPE								
SIZE	4"	6"	8"	12"	16"	18"	20"	24"
D	12"	15"	15"	18"	21"	21"	24"	24"
L	18"	24"	24"	30"	36"	36"	36"	42"

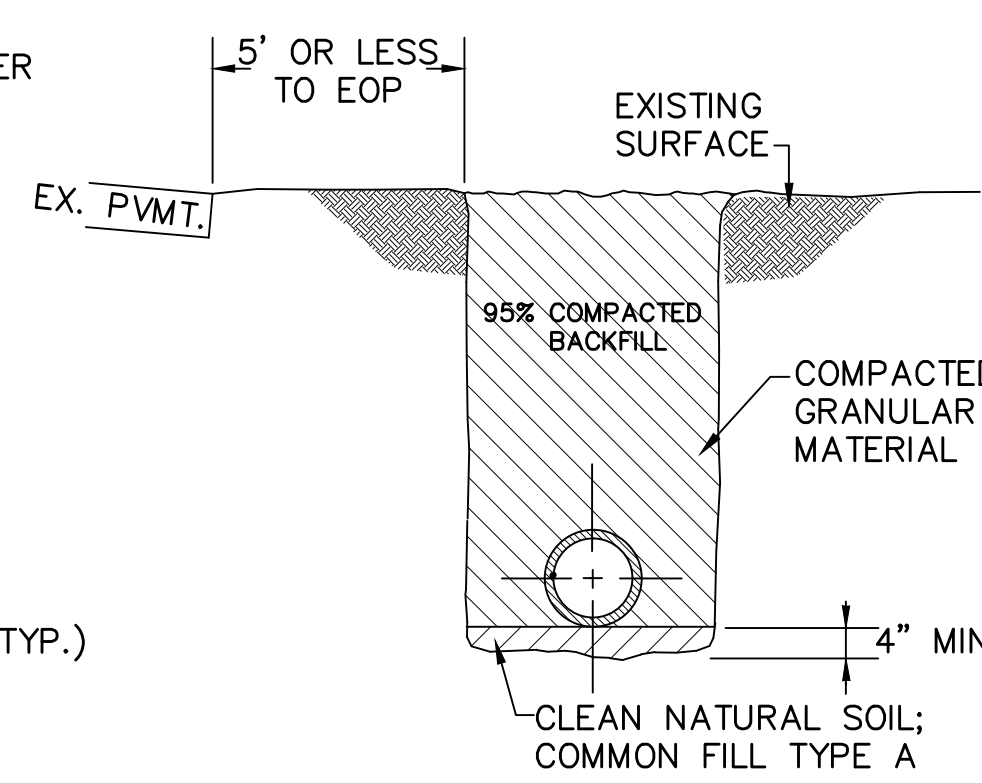
NOTE:
1. DEPTH "D" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE. BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH.



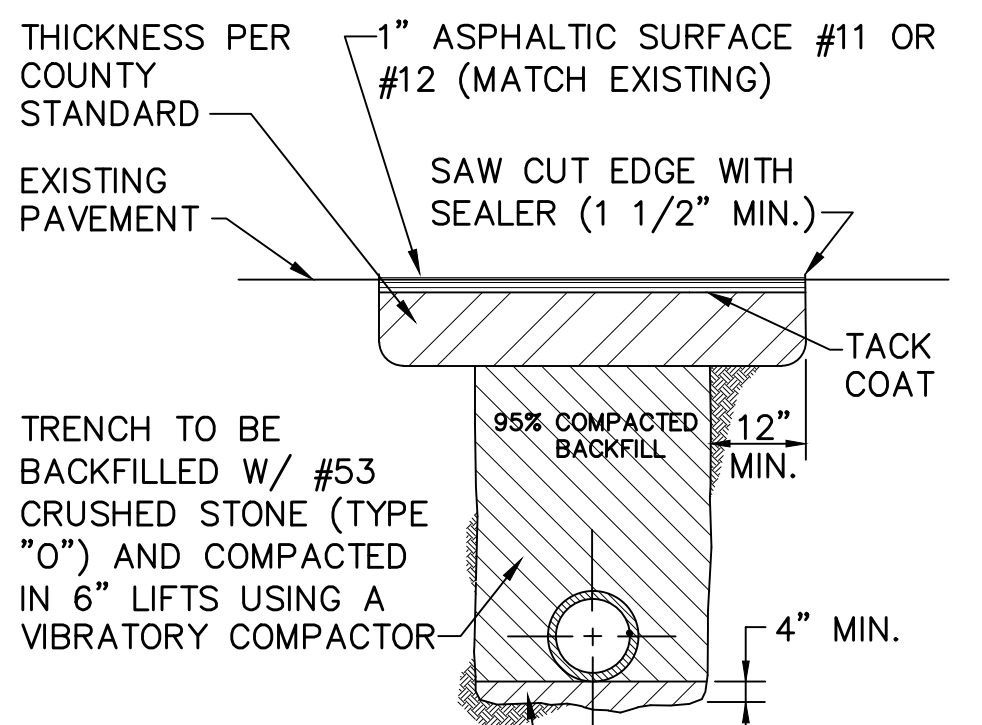
METHOD A
OPEN TERRAIN



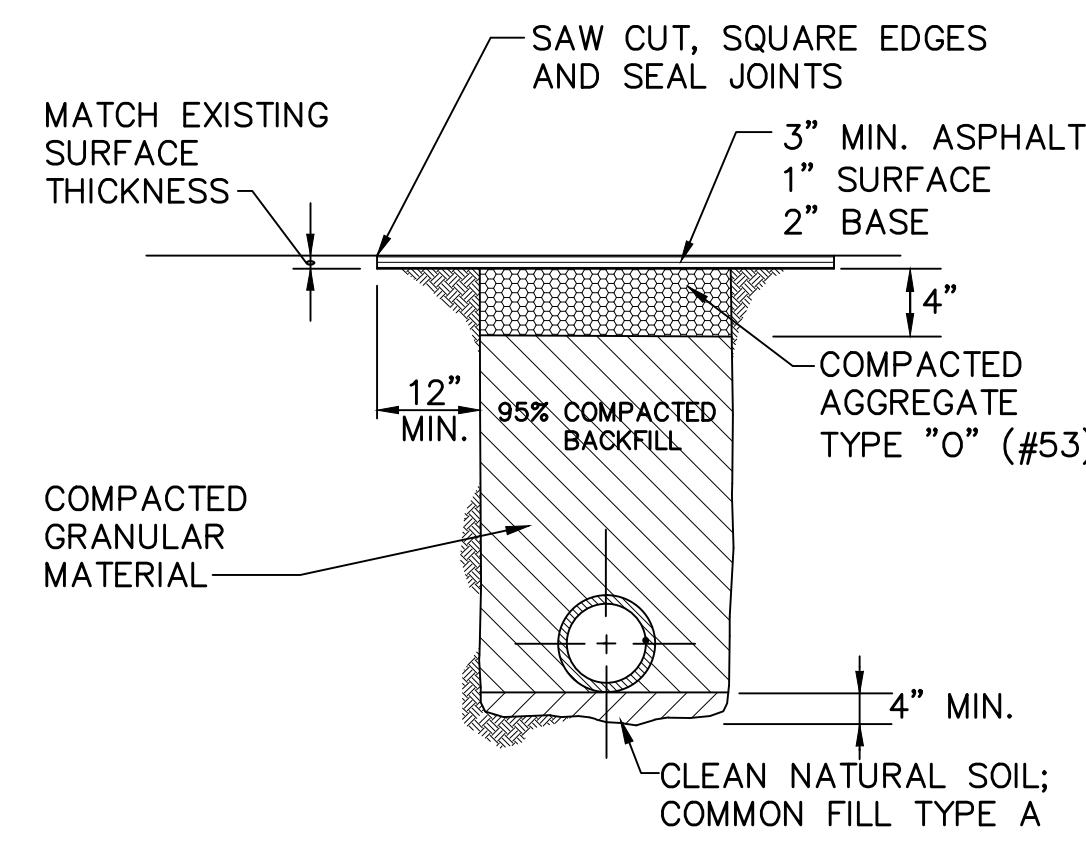
METHOD E
UNPAVED DRIVEWAYS



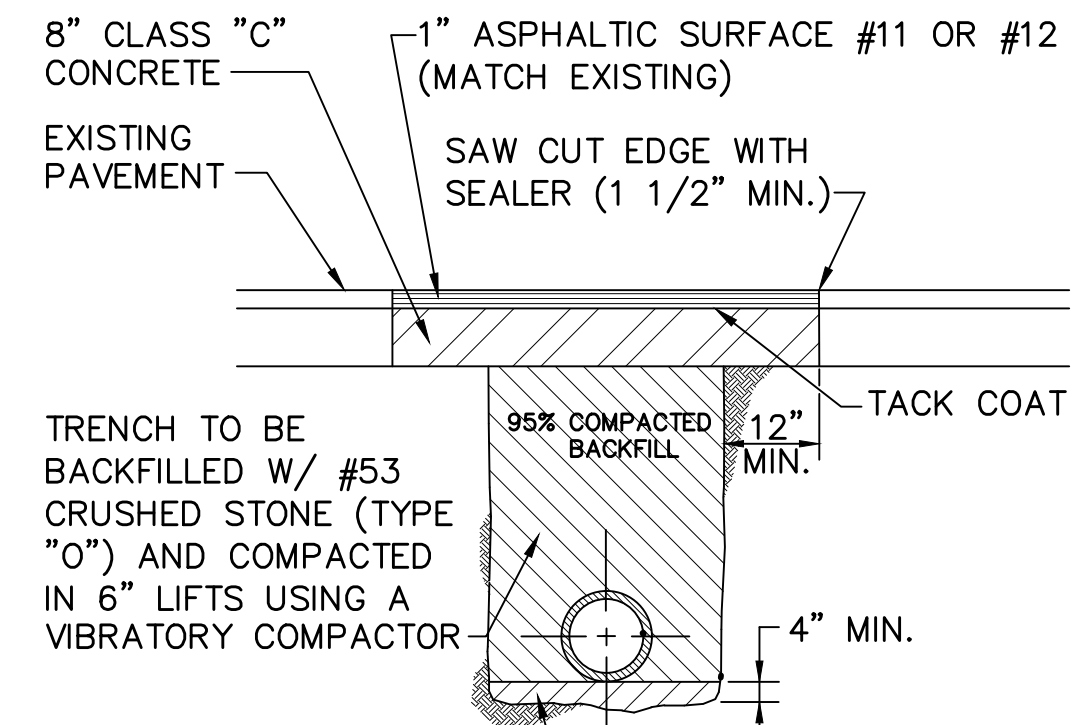
METHOD B
OPEN TERRAIN



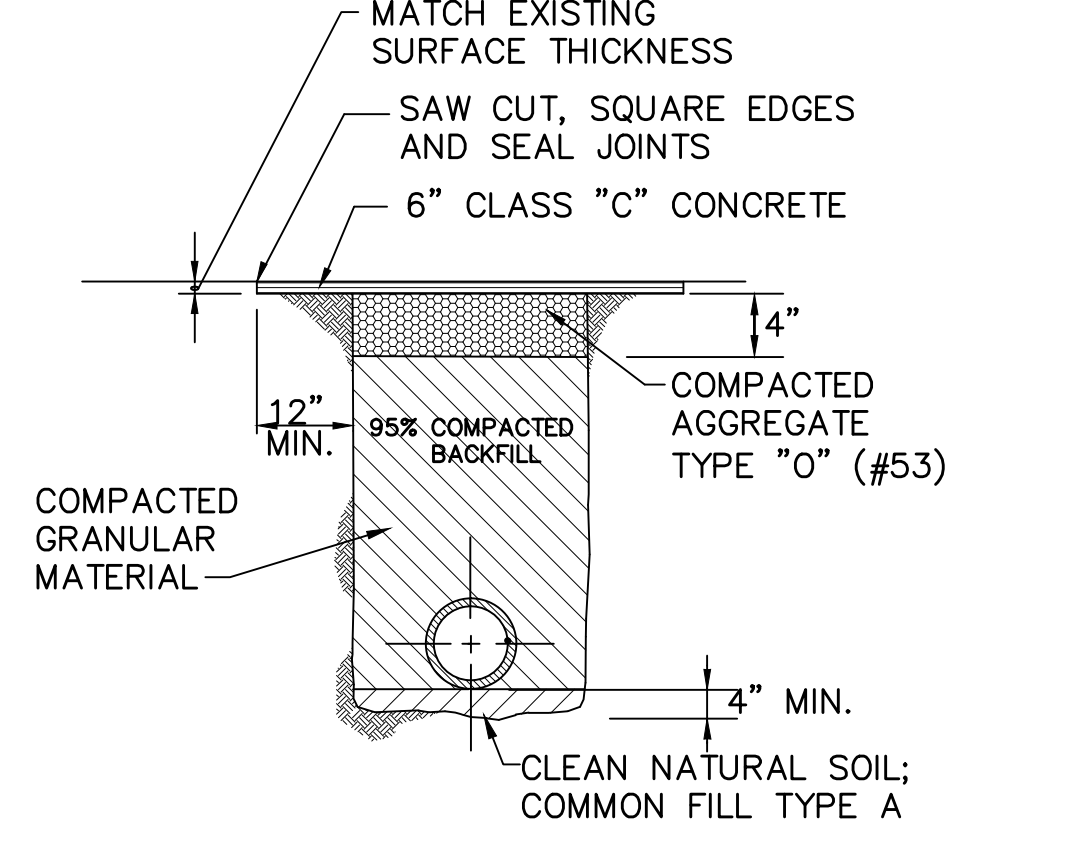
METHOD F
ASPHALT ROADS



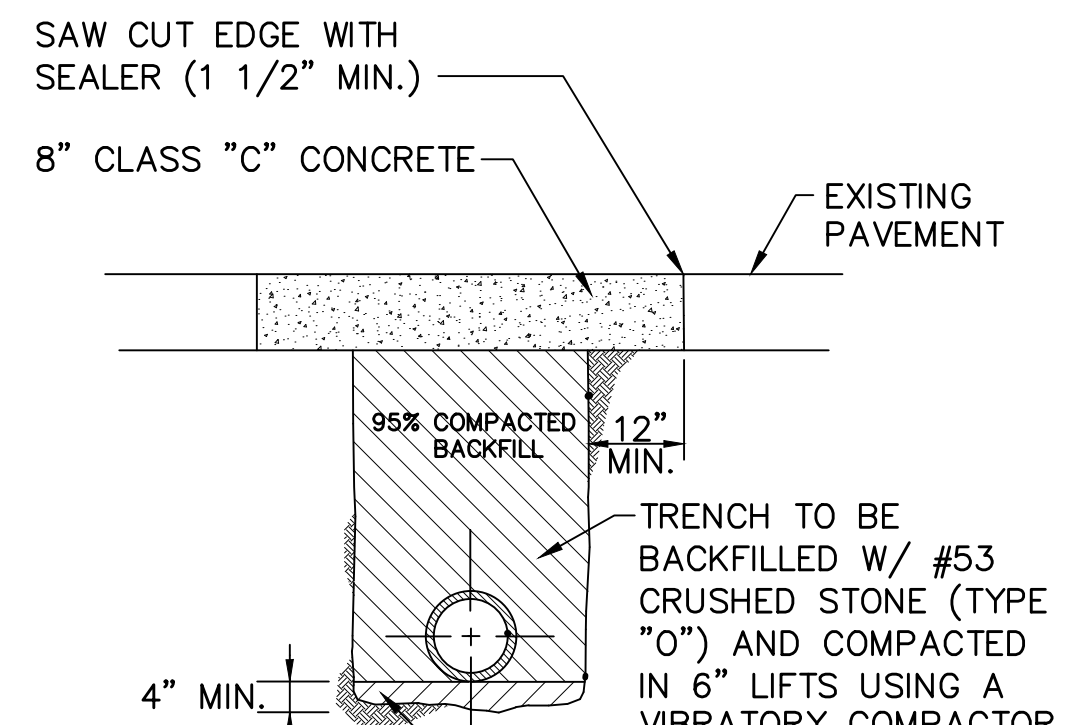
METHOD C
ASPHALT DRIVEWAYS



METHOD G
CONCRETE ROAD UNDER ASPHALT SURFACE

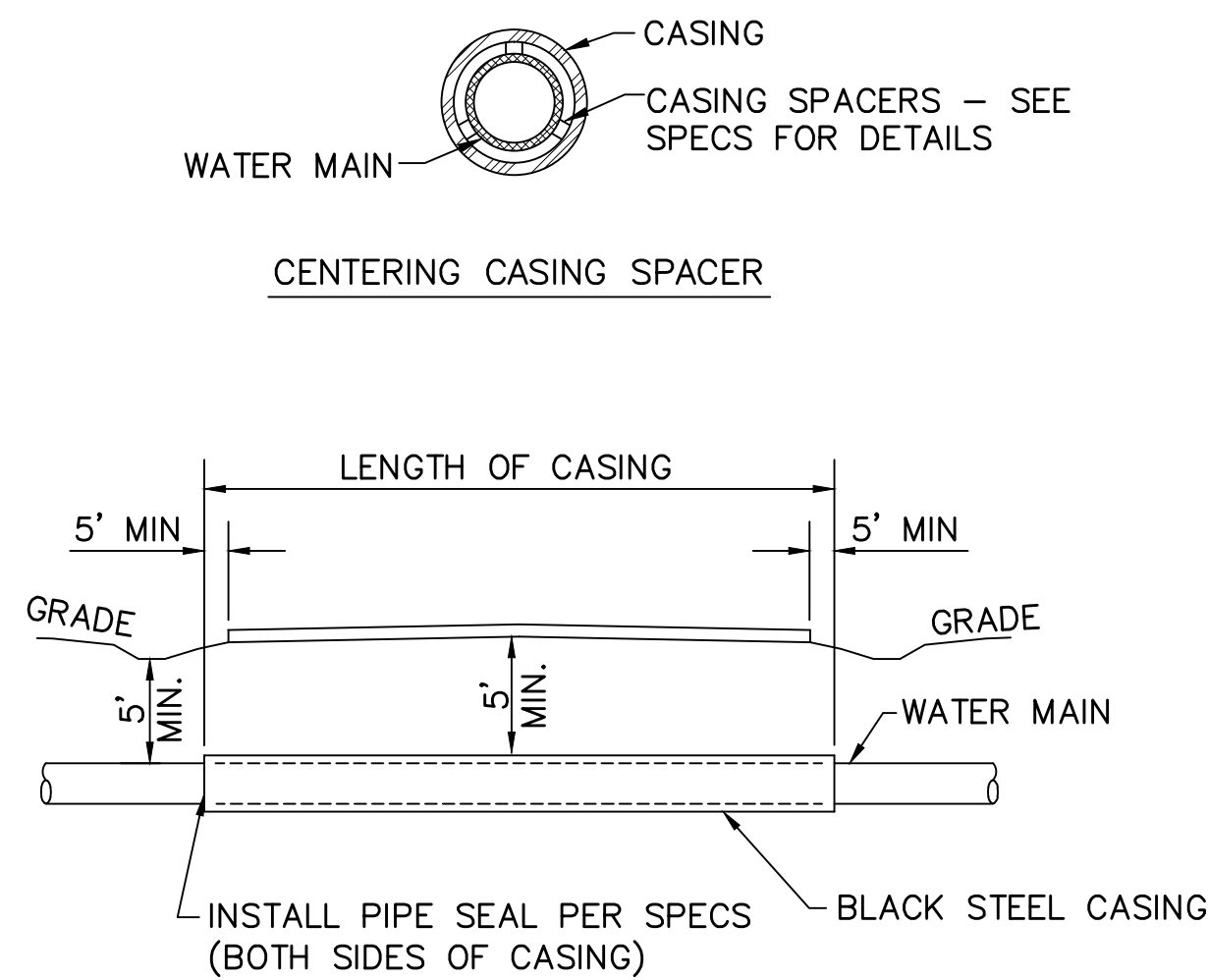


METHOD D
CONCRETE DRIVEWAYS

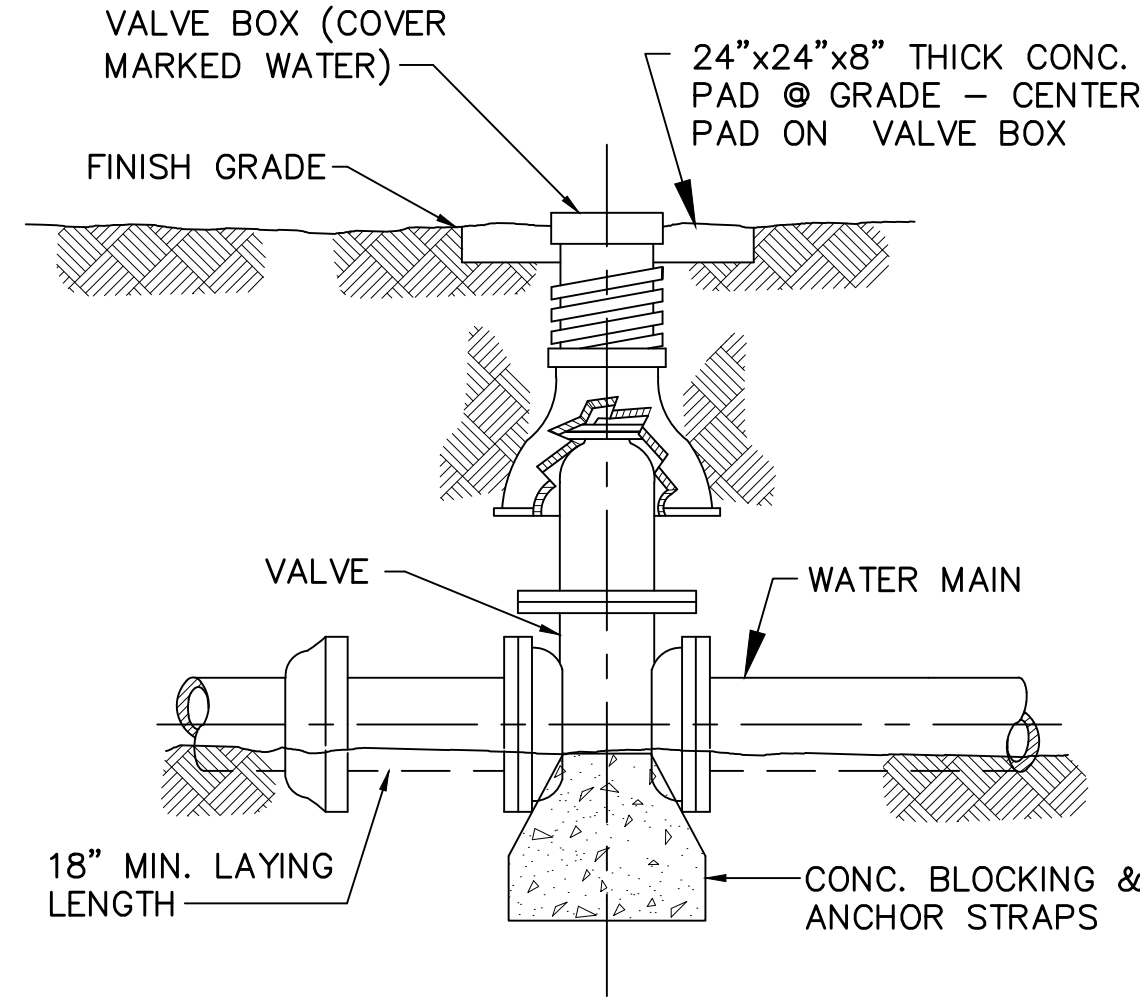


METHOD H
CONCRETE ROAD

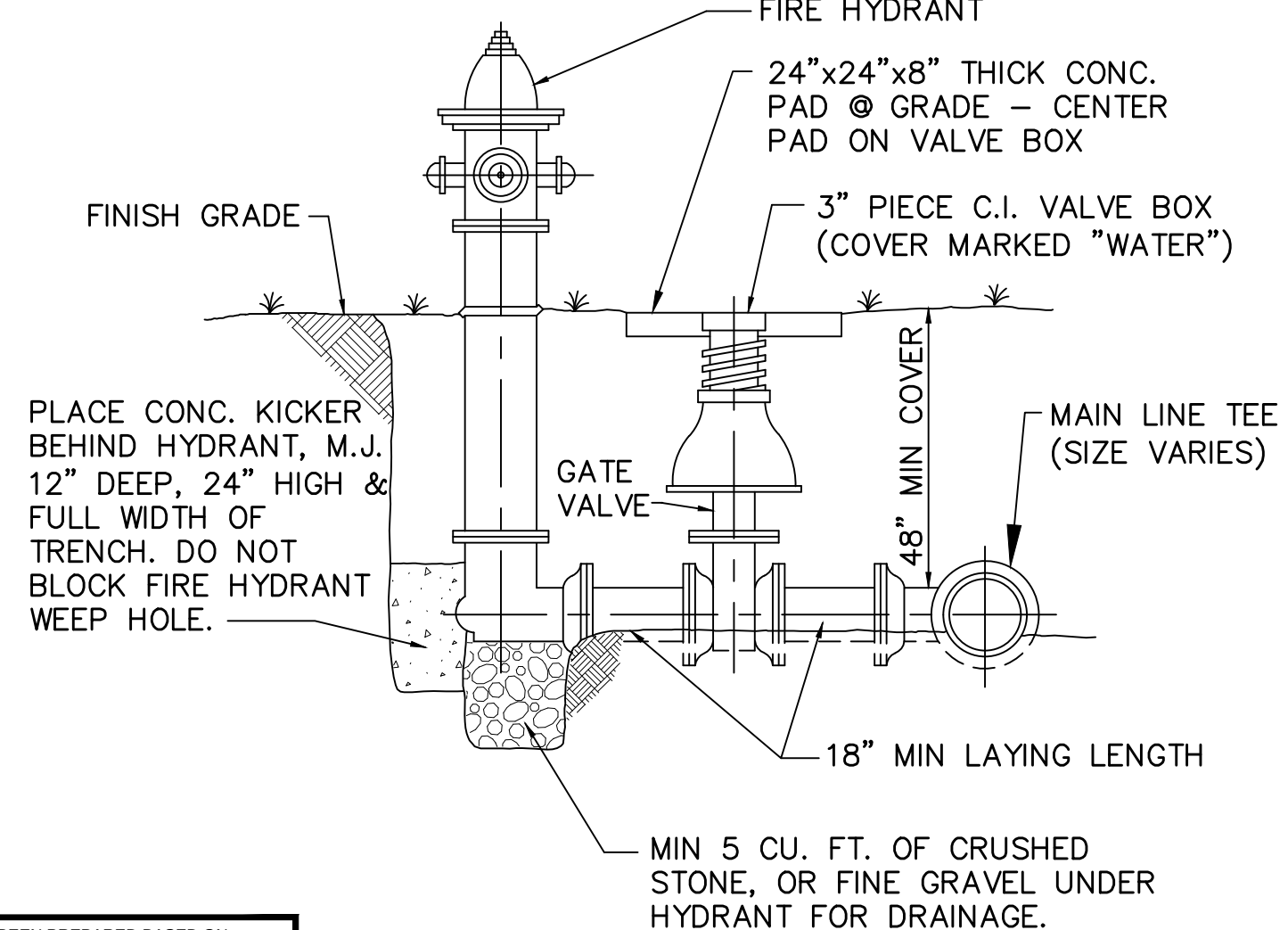
BEDDING / BACKFILL / PAVEMENT REPLACEMENT DETAILS
NTS



TYPICAL CASING DETAIL
NTS



TYPICAL WATER VALVE SETTING
NTS



FIRE HYDRANT ASSEMBLY
NTS

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ENGINEER/ARCHITECT: ALEX L. WHITE
CONSTRUCTION COMPANY: BRACKNEY, INC.
DATE: AUGUST 2013

STANDARD DETAILS CONTRACT G-4 WATER MAIN IMPROVEMENTS HOOSIER HILLS REGIONAL WATER DISTRICT DIVISION "G" SYSTEM IMPROVEMENTS

GRW
Engineers, Architects, Planners
LEICESTON LOUISVILLE NASHVILLE INDIANAPOLIS
FORT MITCHELL KNOXVILLE ARLINGTON

CLIENT CONTRACT NO. G-4		GRW PROJECT NO. 3235-04	
DRAWING SCALE CHECK:		THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED	
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DESIGNED: DRC	DATE: AUGUST 2013	DRAWN: GCR	SCALE: N.T.S.
REVIEWED: ALW		APPROVED: GAW	SHEET NO. WD-1