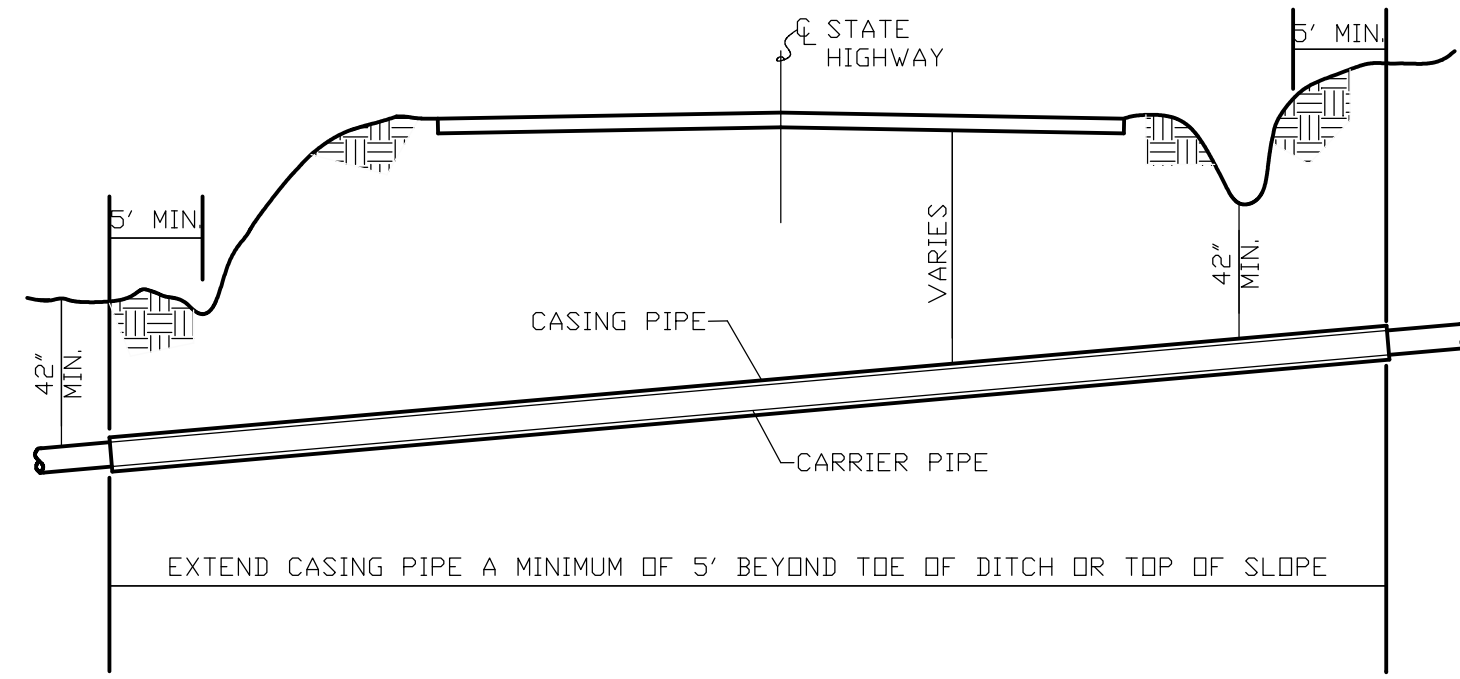
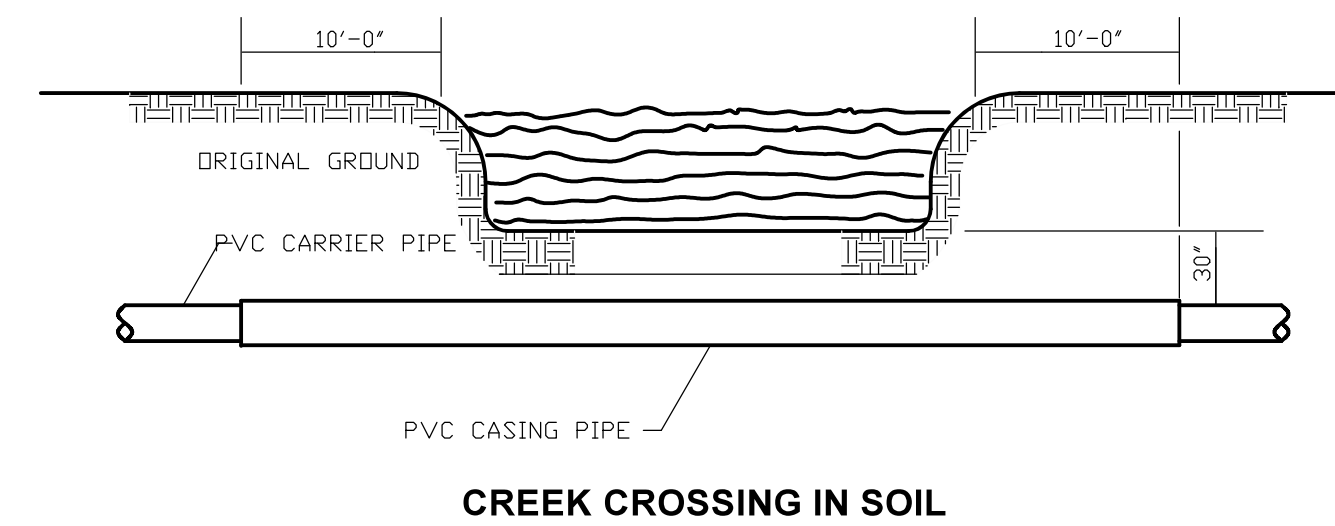
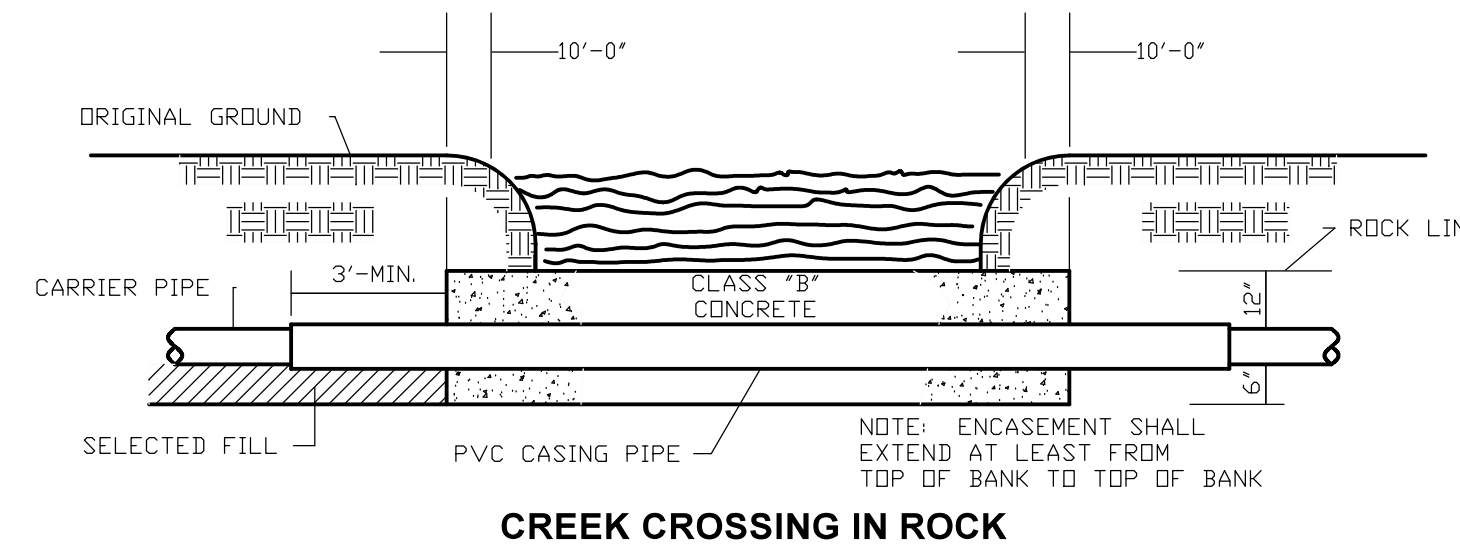


**WATER LINE CONNECTION**  
N.T.S

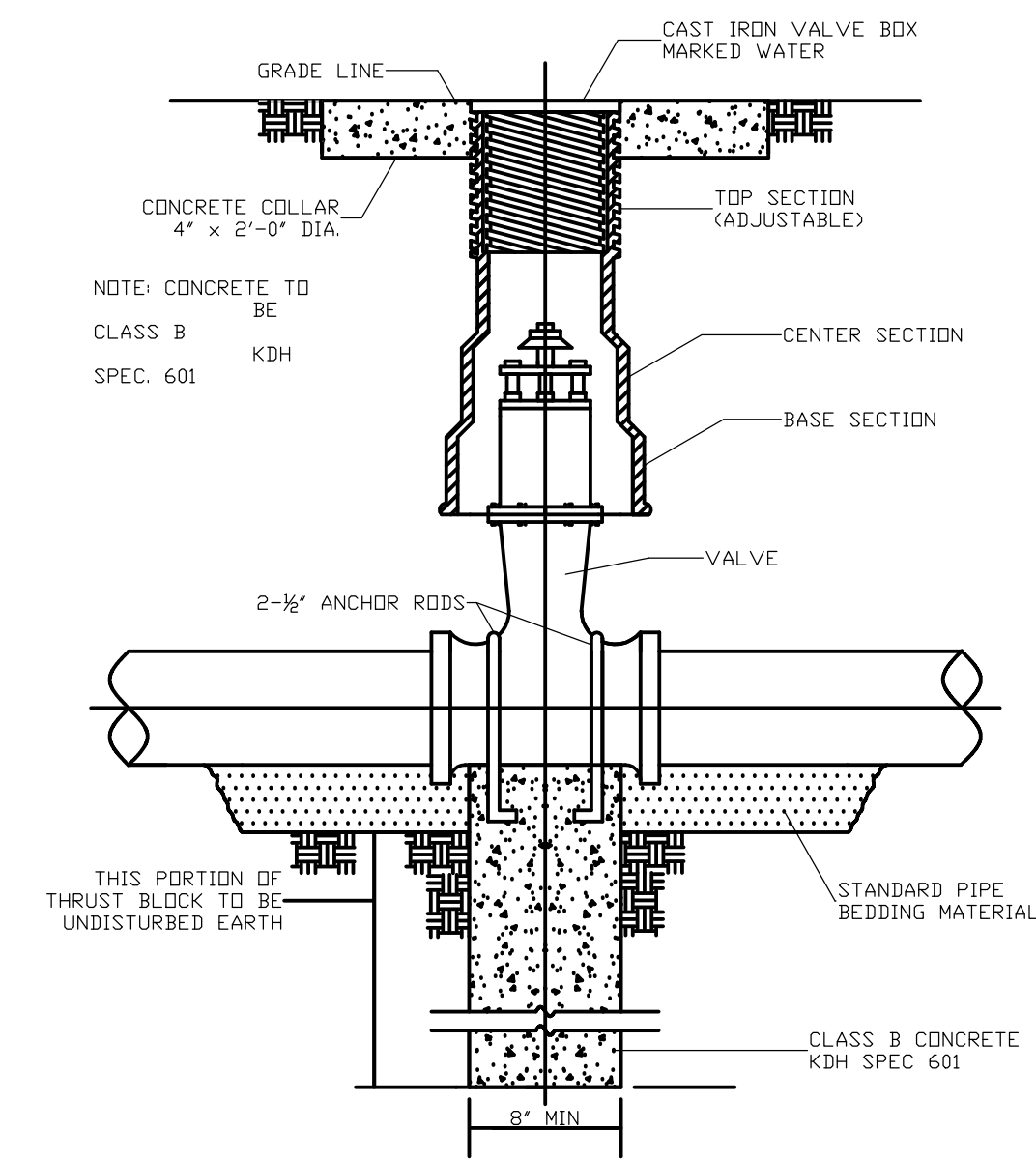


**TYP. STATE HIGHWAY ENCASED BORE CROSSING**  
N.T.S

**STATE HIGHWAY ENCASED BORE CROSSING**  
N.T.S

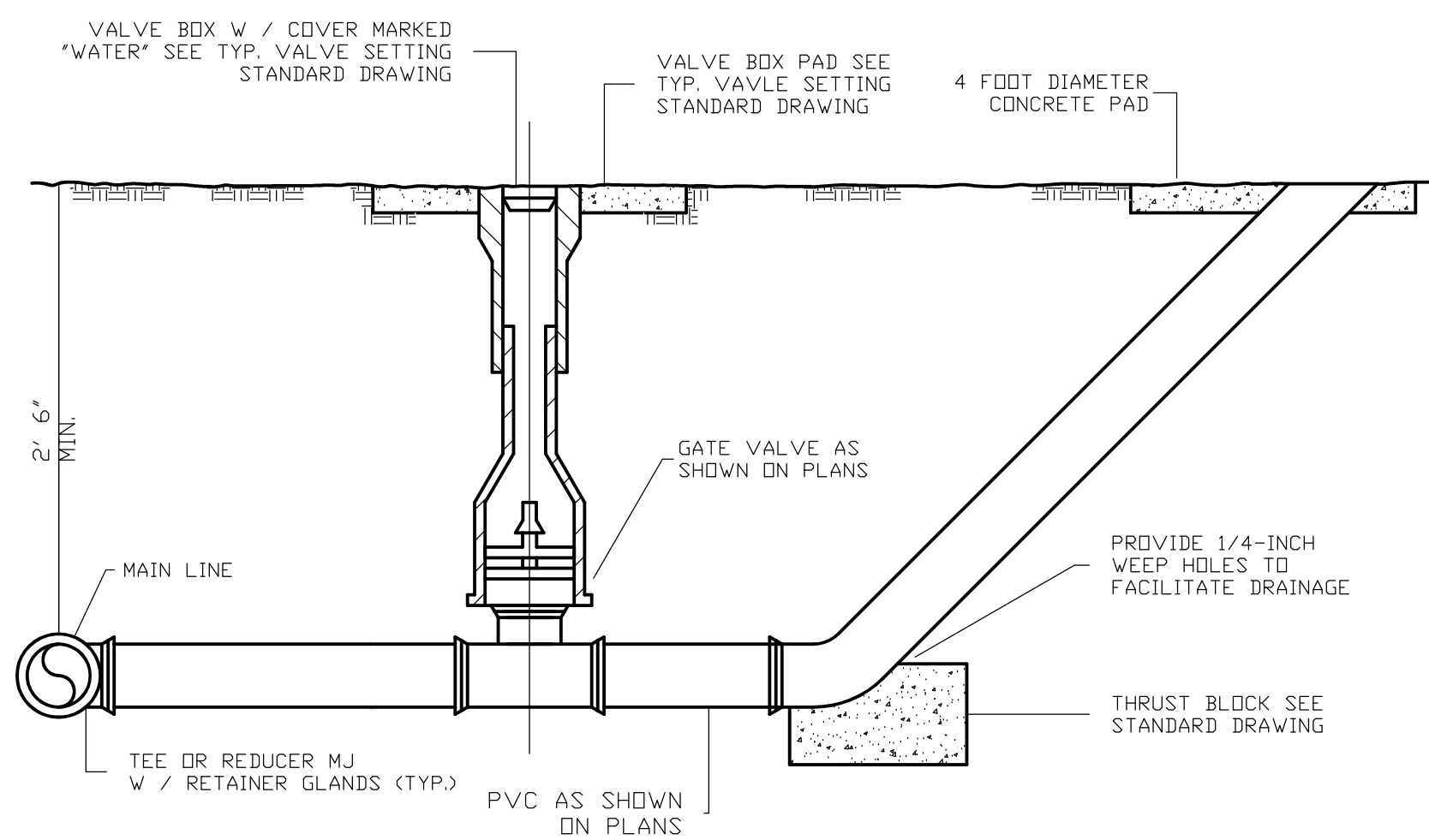


**CREEK CROSSING**  
N.T.S

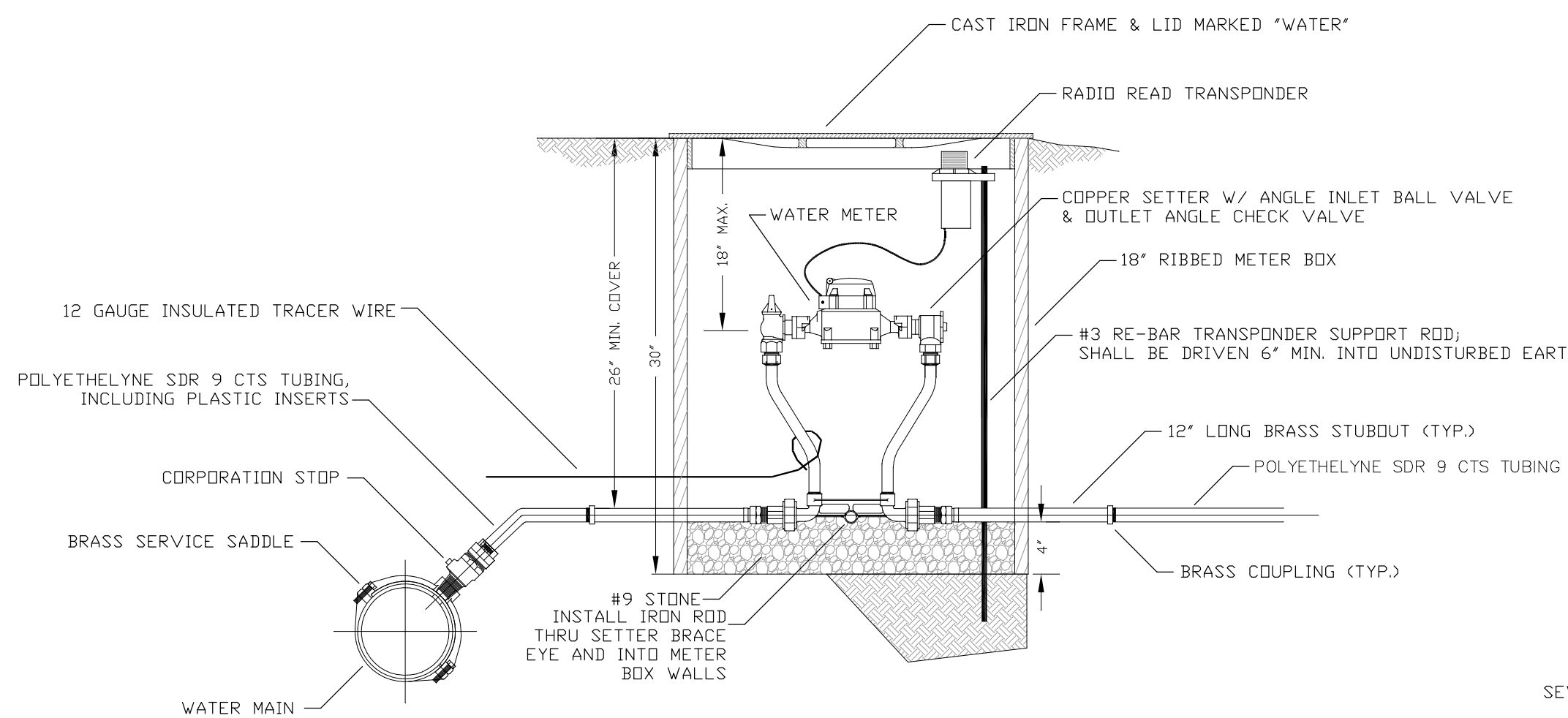


NOTE: SEE SPECIFICATION FOR PIPING MATERIALS AND PIPING JOINTS

**GATE VALVE DETAIL**  
N.T.S



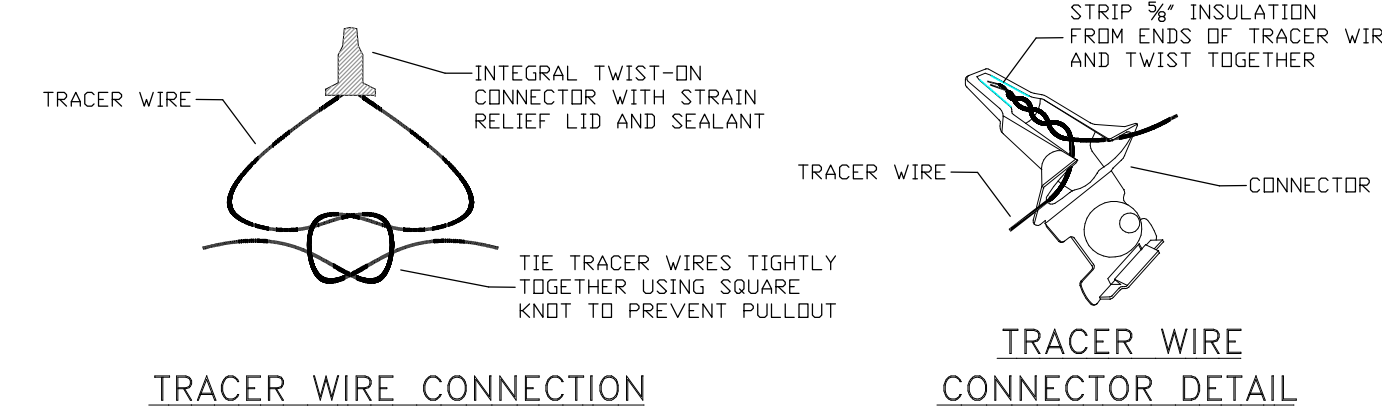
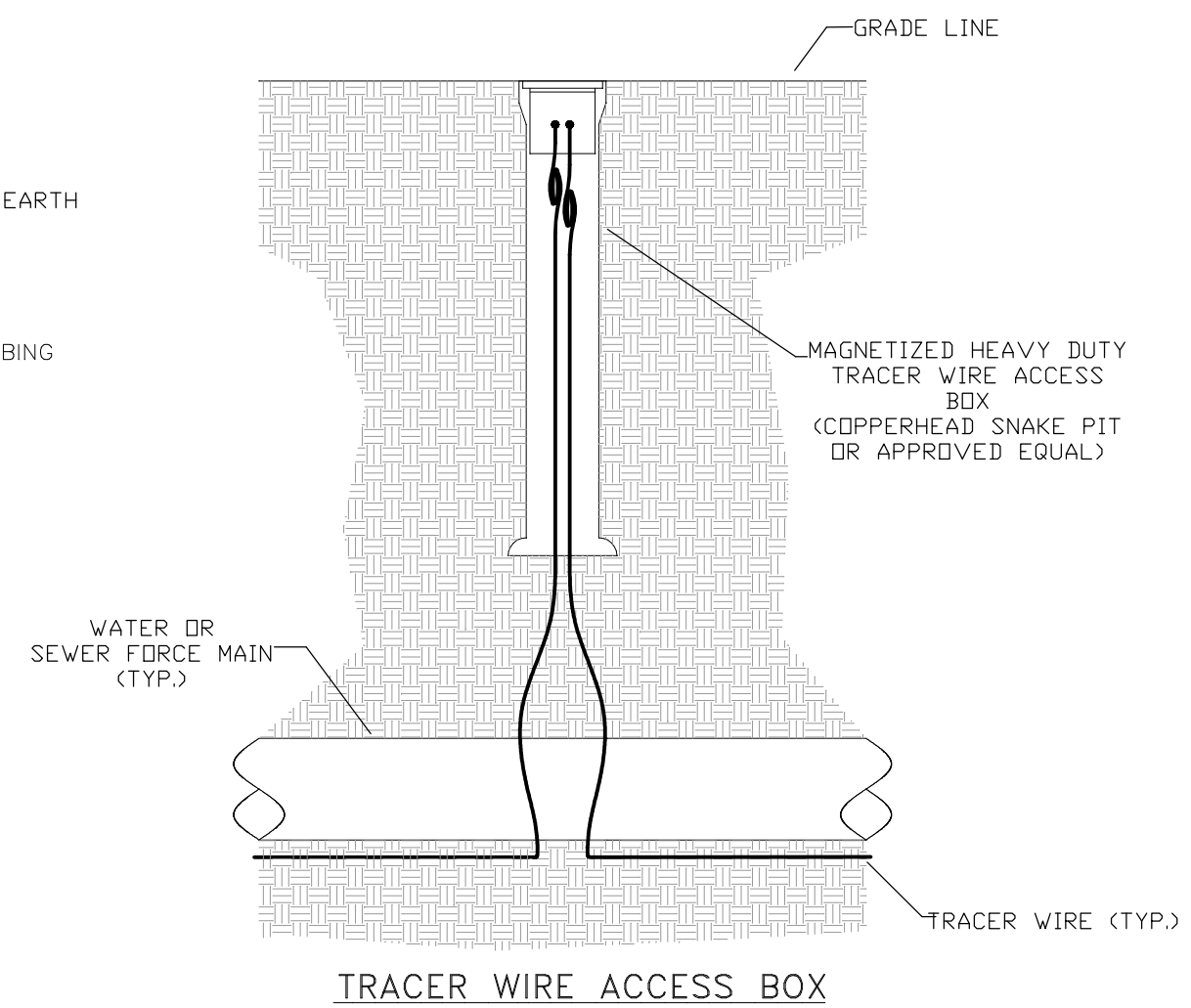
**BLOWOFF ASSEMBLY**  
N.T.S



NOTE: INSTALL 12 GA. TRACER WIRE FROM WATER MAIN TO THE METER BOX. THE SERVICE LINE TRACER WIRE SHALL BE CONNECTED TO THE MAIN LINE TRACER WIRE VIA A WATER TIGHT CONNECTION. THE WIRE SHALL BE ROUTED INTO THE METER BOX AND SHALL BE ACCESSIBLE FOR LOCATOR CONNECTION.

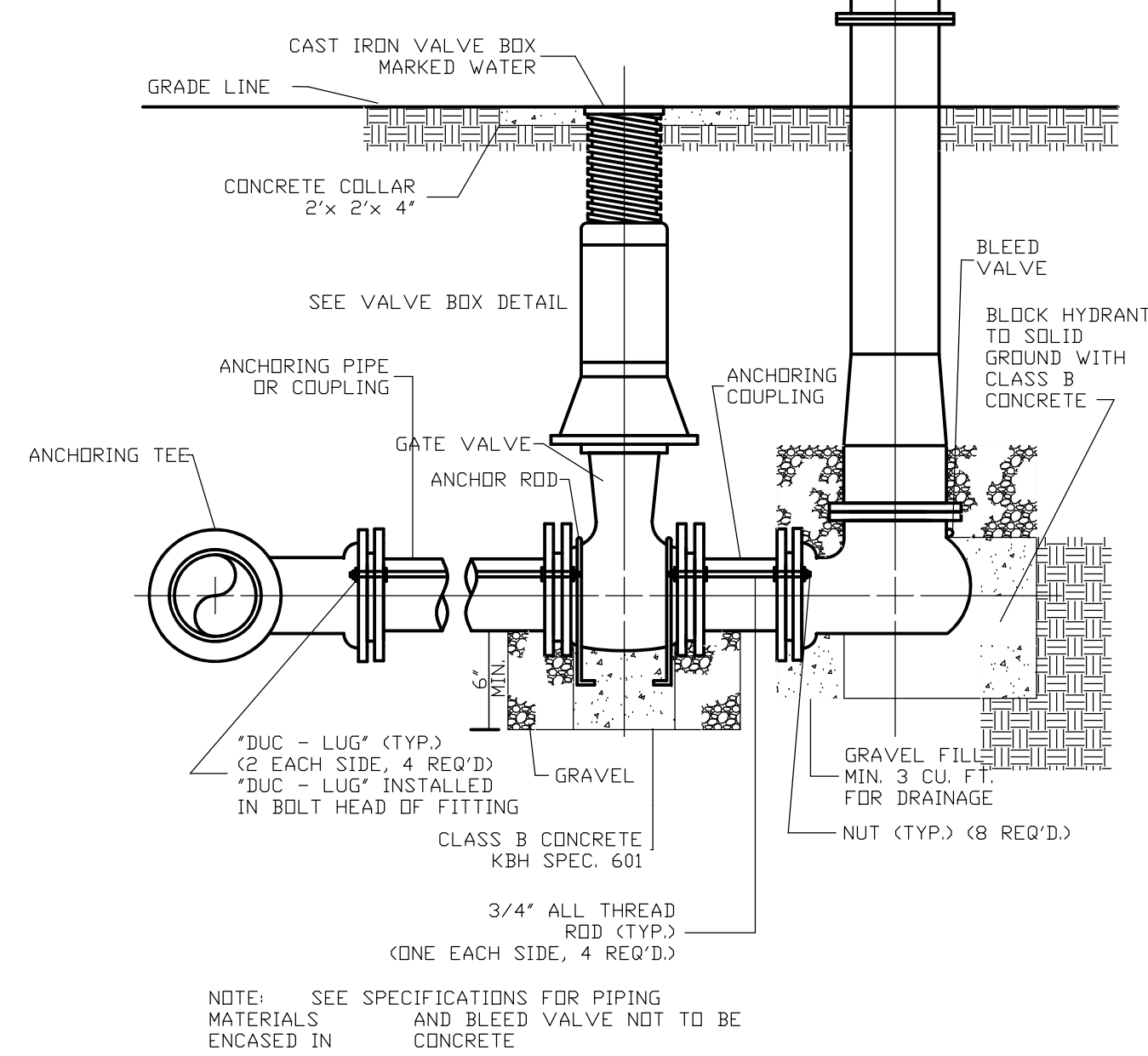
METER SETTING SHALL BE PLACED 2 FEET INSIDE PROPERTY LINE UNLESS OTHERWISE DIRECTED BY ENGINEER.

**METER SETTING**  
N.T.S



NOTES:  
FOR OPEN CUT INSTALLATION, TRACER WIRE IS TO BE #12 AWG STRANDED COPPER WITH 30 MIL BLUE HMWPE INSULATION FOR TRENCHLESS INSTALLATION, TRACER WIRE IS TO BE #12 AWG STRANDED COPPER WIRE WITH 45 MIL BLUE HDPE INSULATION.  
TRACER WIRE SHALL BE INSTALLED WITH THE PIPE AT THE TRENCH BOTTOM. ACCESS BOXES SHALL BE INSTALLED AT EACH VALVE, HYDRANT AND AIR RELEASE VALVE. TRACER WIRE ACCESS BOXES SHALL BE SPACED NO FURTHER THAN 1000' APART. A MINIMUM OF 3 FEET OF TRACER WIRE SHOULD BE COILED UP INSIDE OF EACH ACCESS BOX.

**TRACER WIRE DETAILS**  
N.T.S



**FLUSH HYDRANT ASSEMBLY**  
N.T.S

NOTE: SEE SPECIFICATIONS FOR PIPING MATERIALS AND BLEED VALVE NOT TO BE ENCASED IN CONCRETE

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556 CARLTON DRIVE  
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STANDARD DRAWINGS

CITY OF WALTON  
BOONE COUNTY, KENTUCKY

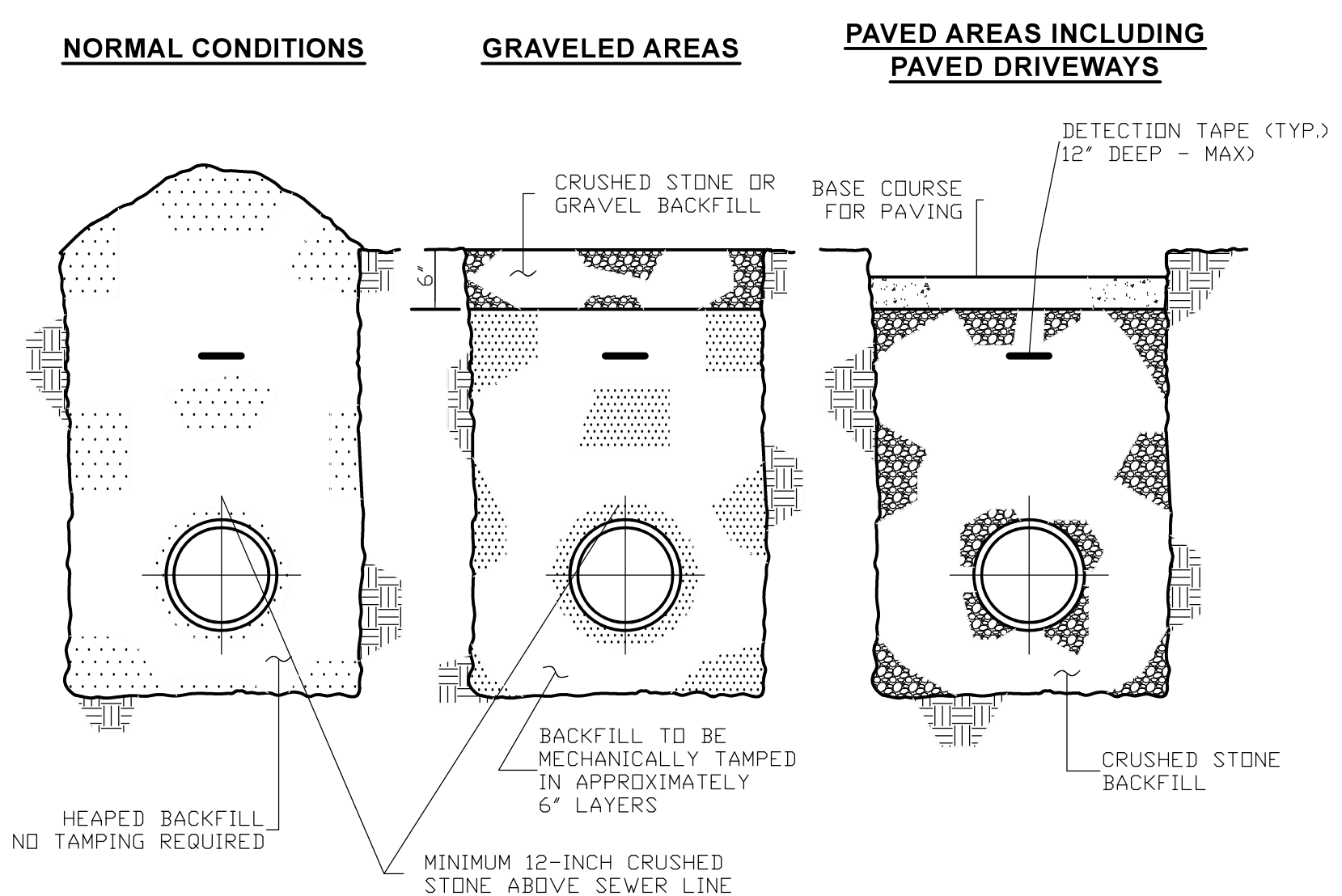
DESCRIPTION:

CUSTOMER:

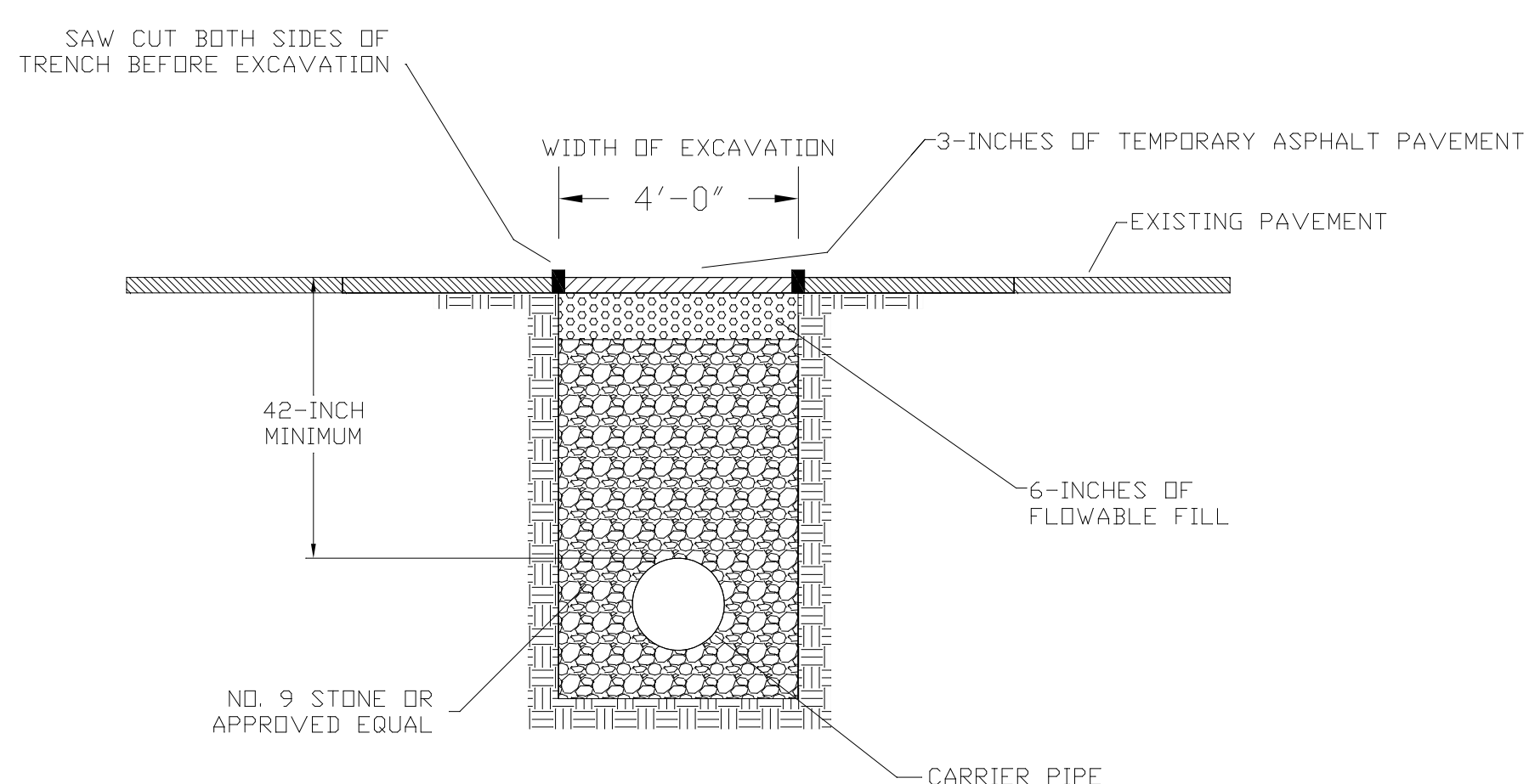
PROJECT NO. 1814  
DATE: APRIL 2018  
DRAWN BY: JRC  
CHECKED BY: DSB  
CHECKED BY: DMB  
SCALE: AS NOTED

SHEET:  
SD-1

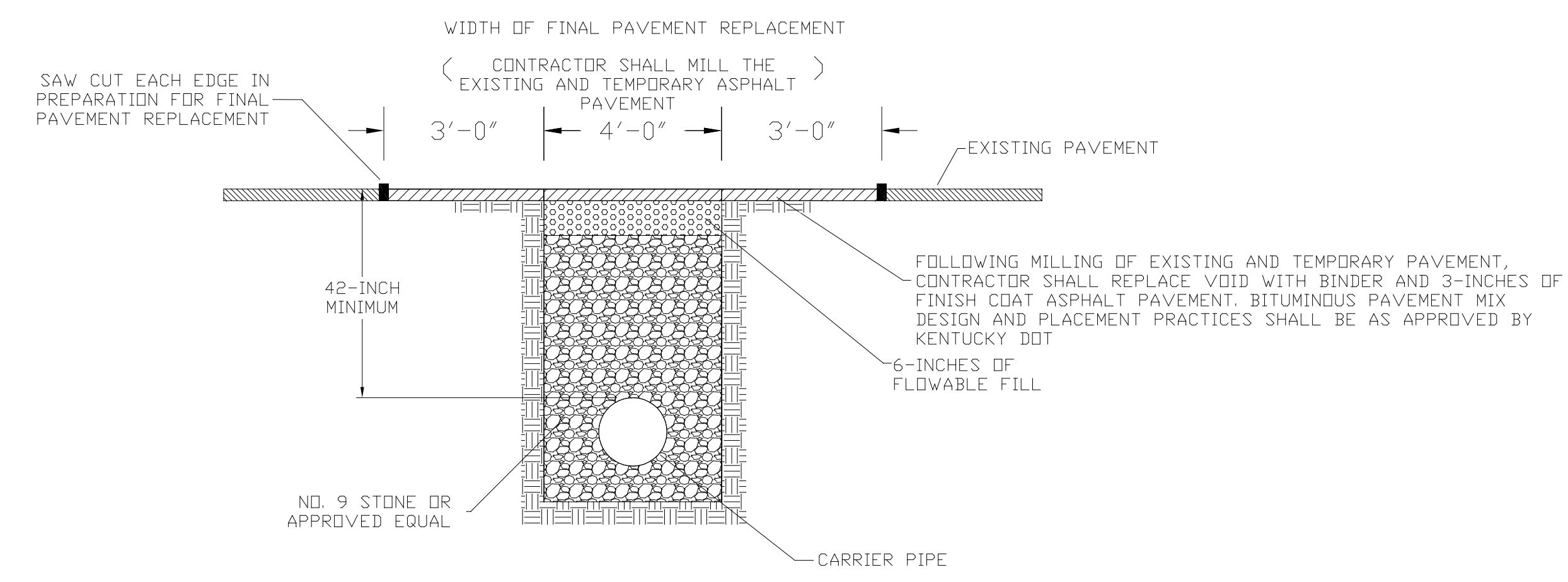




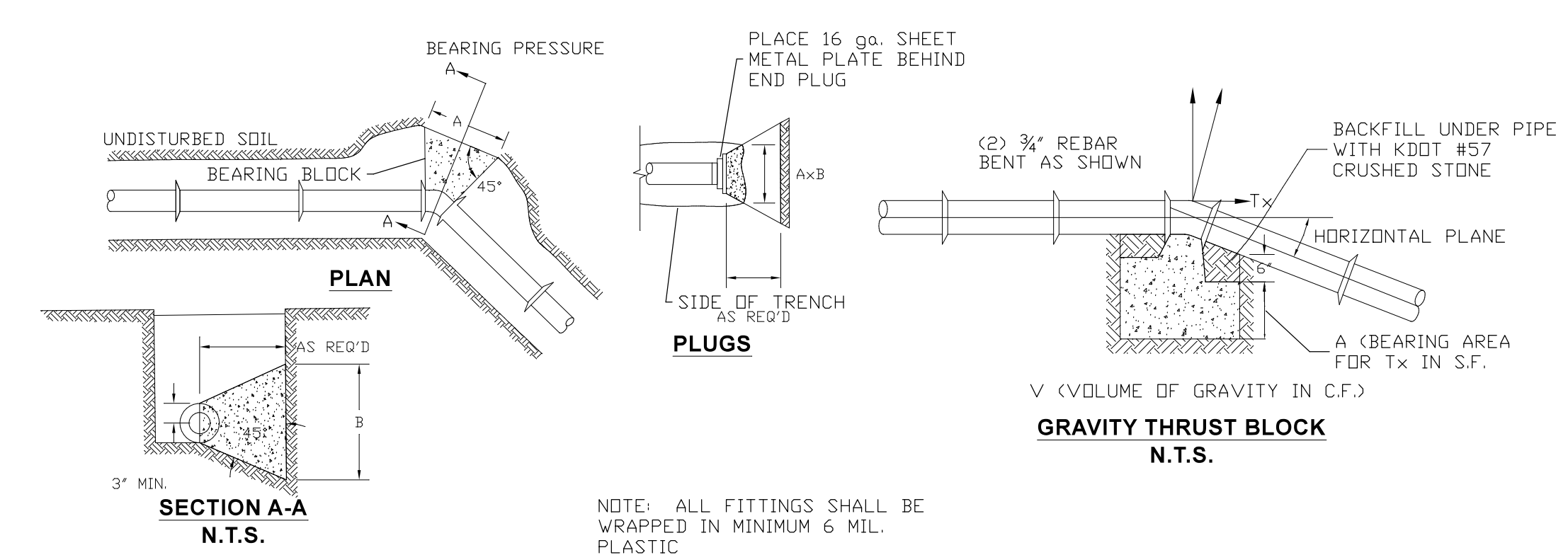
**BACKFILLING**  
N.T.S.



**OPEN CUT INSTALLATION & TEMPORARY PAVEMENT REPLACEMENT DETAIL**



**STATE HIGHWAY BITUMINOUS PAVEMENT REPLACEMENT**  
N.T.S.



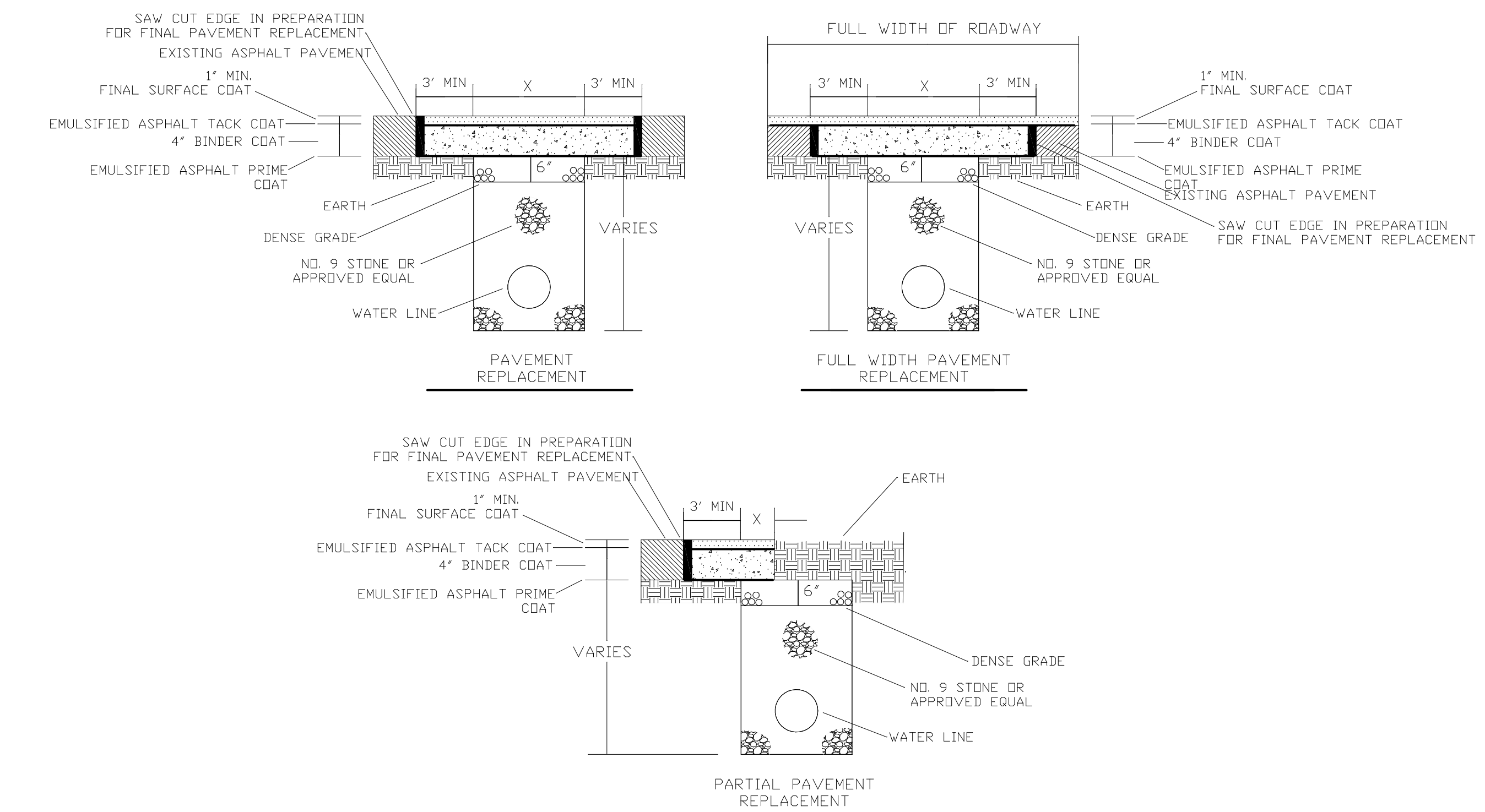
- NOTES:**
- THRUST RESTRAINT TABLE IS BASED ON PIPELINE PRESSURE OF 200 PSI AND EARTH BEARING CAPACITY OF 1500PSF. DURING CONSTRUCTION, THE SPECIFIC SOIL TYPE MAY BE EVALUATED AND CONCRETE THRUST BLOCK SIZE REVISED AT THE DISCRETION OF THE ENGINEER.
  - ON LARGE DIAMETER PIPES WHERE LIMITATIONS OR CONSTRUCTION DIFFICULTIES RENDER CONCRETE THRUST BLOCKS NOT FEASIBLE OR IMPRACTICAL, JOINT SYSTEM MAY BE USED. THIS RESTRAINED JOINT SYSTEM MUST BE APPROVED BY THE ENGINEER.
  - CONCRETE SHALL BE 2500 PSI MINIMUM CONFORMING TO KBH SPECIFICATIONS 601.
  - ACCESSIBILITY TO FITTINGS AND BOLTS MUST BE MAINTAINED.

PIPE SIZE (INCHES)	HORIZONTAL THRUST BLOCK SCHEDULE									
	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE, DEAD END	
	A	B	A	B	A	B	A	B	A	B
4	2'-6"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"
6	3'-8"	1'-6"	2'-6"	1'-3"	2'-0"	1'-0"	2'-0"	1'-0"	3'-0"	1'-6"
8	4'-4"	2'-3"	3'-3"	1'-8"	2'-4"	1'-2"	2'-0"	1'-0"	4'-0"	2'-0"
10	5'-6"	2'-0"	4'-0"	2'-0"	3'-0"	1'-6"	2'-2"	1'-1"	4'-8"	2'-4"
12	6'-6"	2'-9"	5'-0"	2'-6"	3'-6"	1'-9"	2'-6"	1'-3"	5'-6"	2'-9"
14	7'-8"	3'-10"	5'-8"	2'-10"	4'-2"	2'-1"	3'-0"	1'-6"	6'-5"	3'-3"
16	8'-9"	4'-4"	6'-6"	3'-3"	4'-8"	2'-3"	3'-4"	1'-8"	7'-6"	3'-8"
18	10'-0"	5'-0"	7'-3"	3'-8"	5'-4"	2'-8"	4'-0"	2'-0"	8'-6"	4'-0"
20	11'-0"	5'-6"	8'-0"	4'-0"	6'-0"	3'-0"	4'-4"	2'-2"	9'-2"	4'-7"
24	13'-4"	6'-8"	9'-6"	4'-10"	7'-2"	3'-10"	5'-4"	2'-6"	10'-10"	5'-6"

- NOTES:**
- THRUST RESTRAINT TABLE IS BASED ON PIPELINE PRESSURE OF 200 PSI AND EARTH BEARING CAPACITY OF 1500PSF. DURING CONSTRUCTION, THE SPECIFIC SOIL TYPE MAY BE EVALUATED AND CONCRETE THRUST BLOCK SIZE REVISED AT THE DISCRETION OF THE ENGINEER.
  - ON LARGE DIAMETER PIPES WHERE LIMITATIONS OR CONSTRUCTION DIFFICULTIES RENDER CONCRETE THRUST BLOCKS NOT FEASIBLE OR IMPRACTICAL, JOINT SYSTEM MAY BE USED. THIS RESTRAINED JOINT SYSTEM MUST BE APPROVED BY THE ENGINEER.
  - CONCRETE SHALL BE 2500 PSI MINIMUM CONFORMING TO KBH SPECIFICATIONS 601.
  - ACCESSIBILITY TO FITTINGS AND BOLTS MUST BE MAINTAINED.

PIPE SIZE (INCHES)	VERTICAL THRUST BLOCK SCHEDULE							
	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND	
	V	A	V	A	V	A	V	A
4	25	2.5	18	1	10	1	5	1
6	57	5.7	40	1.6	22	1	11	1
8	101	10	71	3	38	1	20	2
10	157	16	111	5	60	1	32	3
12	226	23	161	7	86	2	45	5
14	308	31	219	9	117	2.5	62	6
16	402	40	285	12	153	3	81	8
18	509	51	361	15	194	4	102	10
20	628	63	446	18	239	5	126	13
24	903	90	650	24	341	7	183	18

**THRUST BLOCK DETAIL**  
N.T.S.



ANY TRENCH THAT DISTURBS PAVEMENT SHALL BE BACKFILLED WITH STONE REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND DEPTH AS EXISTING PAVEMENT  
ANY PUBLICLY TRAVELED AREA (I.E. CITY STREETS, BUSINESS ENTRANCES, BUSINESS AND PUBLIC PARKING LOTS, ETC.) SHALL BE TEMPORARILY RESTORED AT THE END OF EACH WORK DAY USING AN APPROVED COLD PATCH ASPHALT PAVEMENT

**NON STATE HIGHWAY BITUMINOUS PAVEMENT REPLACEMENT**  
N.T.S.

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556 CARLTON DRIVE  
LAWRENCEBURG, KY 40342

STANDARD DRAWINGS

CITY OF WALTON  
BOONE COUNTY, KENTUCKY

DESCRIPTION:

CUSTOMER:

PROJECT NO. 1814  
DATE: APRIL 2018  
DRAWN BY: JRC  
CHECKED BY: DSB  
CHECKED BY: DMB  
SCALE: AS NOTED

SHEET:  
**SD-2**

