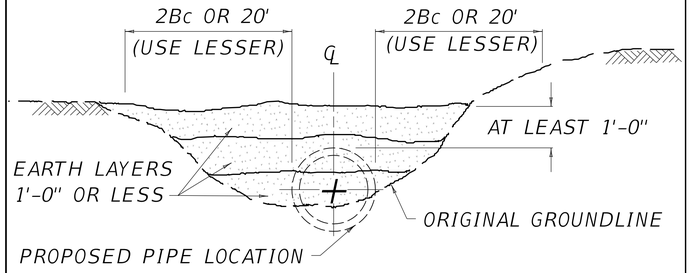
FOR TRENCH CONDITIONS

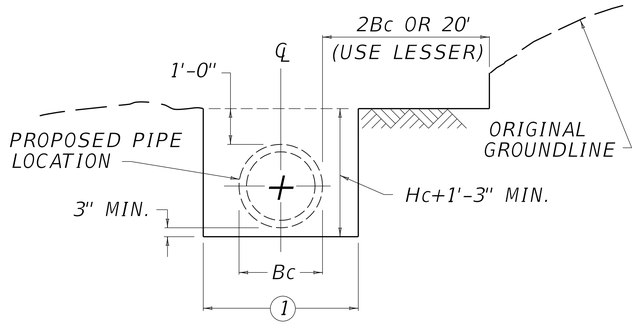
STEP 1



a. IF THE ORIGINAL GROUNDLINE IS AT LEAST 1'-0" ABOVE TOP OF PROPOSED PIPE FOR A WIDTH OF 2Bc OR 20' (WHICHEVER IS LESS) ON EACH SIDE OF THE PIPE GO DIRECTLY TO "STEP 2".

b. IF ORIGINAL GROUNDLINE IS NOT AT LEAST 1'-0" ABOVE TOP OF PROPOSED PIPE, COMPACT EMBANKMENT IN LAYERS 1'-0" OR LESS TO ELEVATION AND WIDTH SHOWN. ▨ MEET DENSITY REQUIREMENTS FOR PROPOSED EMBANKMENT .

STEP 2



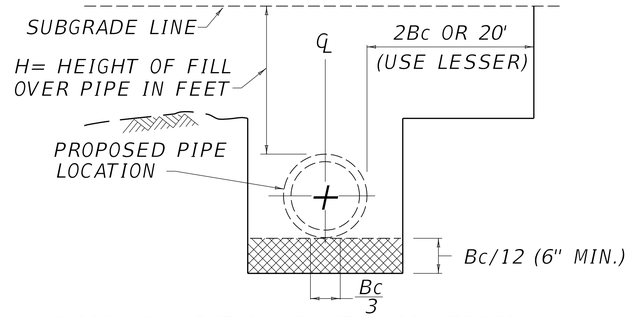
a. EXCAVATE TO WITHIN 1'-0" ABOVE TOP OF PROPOSED PIPE A WIDTH OF 2Bc OR 20' (USE LESSER) ON EACH SIDE OF PIPE.

b. EXCAVATE TRENCH TO THE WIDTH AND DEPTH SHOWN.

(1) Bc + 24" FOR PIPE 36" DIA. OR LESS.
Bc + 48" FOR PIPE GREATER THAN 36" DIA.

STEP 3

ROCK FOUNDATION DETAILS

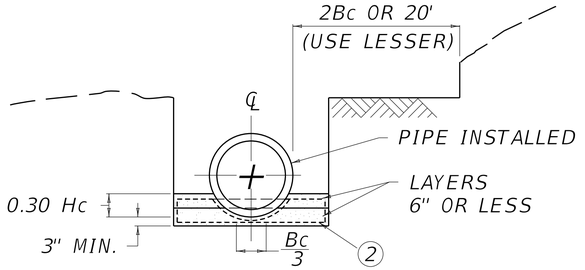


a. IF ROCK FOUNDATION IS NOT ENCOUNTERED, GO DIRECTLY TO "STEP 4".

b. IF ROCK FOUNDATION IS ENCOUNTERED, EXCAVATE TRENCH DEPTH USING FORMULA GIVEN. THIS DEPTH ▨ SHALL BE A MIN. OF 6" AND SHALL NOT EXCEED 24".

c. BACKFILL WITH COMPACTED BEDDING MATERIAL IN LAYERS OF 6" OR LESS LEAVING Bc/3 UNCOMPACTED IN THE FINAL LAYER.

STEP 4



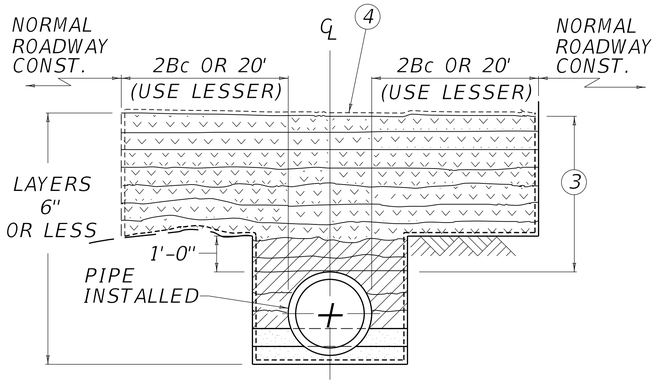
a. UNCOMPACTED 4" BEDDING IN SUBTRENCH. FOR TYPE 1 INSTALLATION COMPACT BEDDING IN LAYERS 6" OR LESS TO AN ELEVATION 0.30 Hc. ▨
LEAVE CENTER THIRD OF OUTSIDE PIPE DIA. (Bc/3) BEDDING UNCOMPACTED.

b. EXCAVATE A GROOVE IN THE COMPACTED BEDDING TO CONFORM TO THE OUTSIDE OF THE PIPE. AFTER EXCAVATION OF THE GROOVE, A MINIMUM 3" OF BEDDING SHOULD REMAIN BELOW THE OUTSIDE INVERT OF THE PIPE. THE CRADLE SHALL BE GAGED FOR SHAPE AND SLOPE BY STRIKING OR DRAWING A TEMPLATE THROUGH THE GROOVE IMMEDIATELY BEFORE PLACING EACH SECTION OF PIPE.

c. INSTALL PIPE AT CORRECT ALIGNMENT AND ELEVATION. RECOMPACT ANY LOOSE BEDDING DISTURBED DURING INSTALLATION.

(2) WRAP BEDDING MATERIAL IN GEOTEXTILE FABRIC WHEN THE STANDARD SPECIFICATIONS SPECIFIES.

STEP 5



(3) 4'-0" REQUIRED FOR CONSTRUCTION LOADING.

a. COMPACT REQUIRED BACKFILL MATERIAL IN LAYERS 6" OR LESS TO 1'-0" ABOVE TOP OF PIPE. ▨

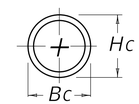
b. COMPACT REQUIRED BACKFILL MATERIAL TO ELEV. (3) ABOVE TOP OF PIPE IN LAYERS OF 6" OR LESS. ▨

c. PROCEED WITH NORMAL ROADWAY CONSTRUCTION.

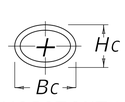
(4) WRAP BEDDING MATERIAL IN GEOTEXTILE FABRIC WHEN THE STANDARD SPECIFICATIONS SPECIFIES.

MAX. COVER HEIGHT		
CLASS	TYPE 1	TYPE 4
III	25'	9'
IV	38'	15'
V	57'	23'

2' OF COVER OR LESS	
CLASS	PIPE DIA.
V	12"-15"-18"
IV	21"-24"
III	27" & LARGER



CIRCULAR



HORIZONTAL
ELLIPTICAL

~ PIPE SHAPES ~

~ NOTES ~

1. 10' MAXIMUM COVER HEIGHT FOR HORIZONTAL ELLIPTICAL CLASS HE III PIPE.
2. COVER HEIGHTS EXCEEDING THOSE SHOWN IN TABLES REQUIRE SPECIAL DESIGNS.
3. FOR TYPE 4 INSTALLATION PLACE EMBANKMENT MATERIAL ACCORDING TO SECTION 701.03.06A OF THE CURRENT SPEC. BOOK.
4. FOR TYPE 1 INSTALLATION, WHEN THE TOP OF PIPE IS NOT WITHIN ONE PIPE DIAMETER OF THE SUBGRADE, INSTALL ACCORDING TO SECTION 701.03.06A OF THE CURRENT SPEC. BOOK.

USE WITH CUR. STD. DWG.
RDI-026

REVISION DATE: 12/01/2015
REVISION NUMBER: 0

SUBMITTED — DIVISION DIRECTOR — 12-01-2015 DATE

APPROVED — STATE HIGHWAY ENGINEER — 12-01-2015 DATE

DRAINAGE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

PIPES

PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER REINFORCED CONC. PIPE

STANDARD DRAWING NUMBER
RDI-021-01