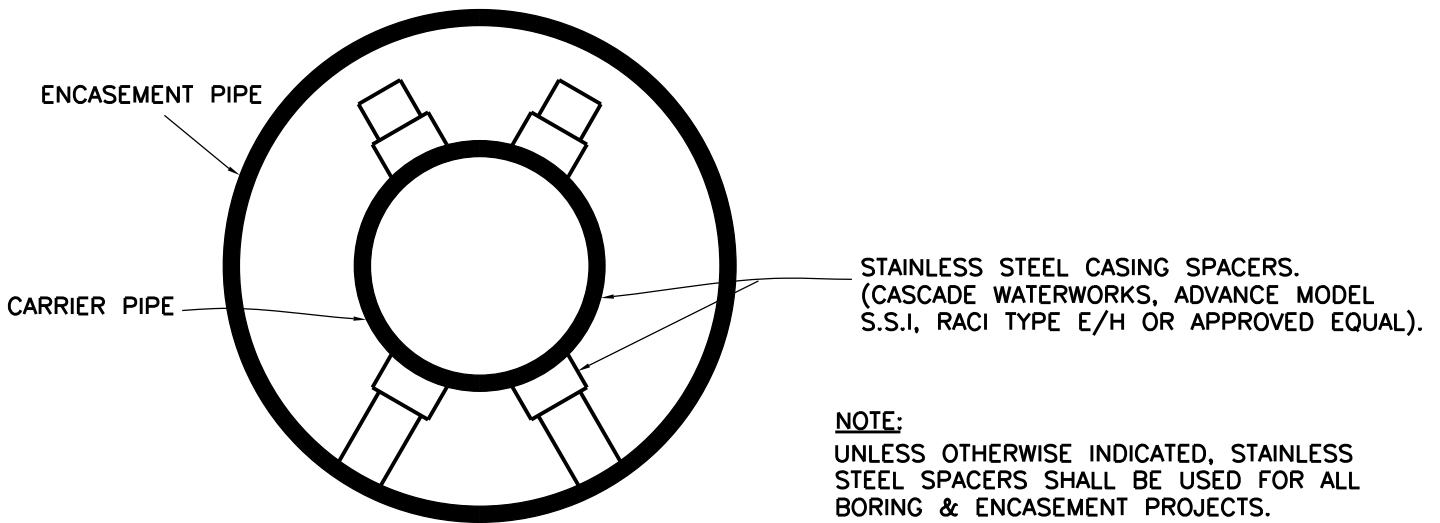


TYPICAL PLUG



NOTE:

UNLESS OTHERWISE INDICATED, STAINLESS STEEL SPACERS SHALL BE USED FOR ALL BORING & ENCASEMENT PROJECTS.

GENERAL NOTES:

1. THE PAY ITEM FOR ALL BORING AND ENCASEMENT SHALL INCLUDE ALL CARRIER PIPE, FITTINGS, ENCASEMENT PIPE, CONCRETE CRADLES, GROUT, MORTAR, BRICK ETC. AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE IN PLACE ACCORDING TO THE PLANS AND SPECIFICATIONS.
2. ALL ENCASEMENT PIPE FOR BORES SHALL BE LIMITED TO SMOOTH STEEL PIPE.

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Revision Date: 12/11

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|--------------------------------|-----------------|
| Scale : N/A | Date : 06/01/05 |
| Design : | |
| Drawn : JMK | |
| Dwg. File : TUN_001.DWG | |
| Project No. : STANDARD-DETAILS | |



**BORE OR TUNNEL FOR
SEWER OR WATER**

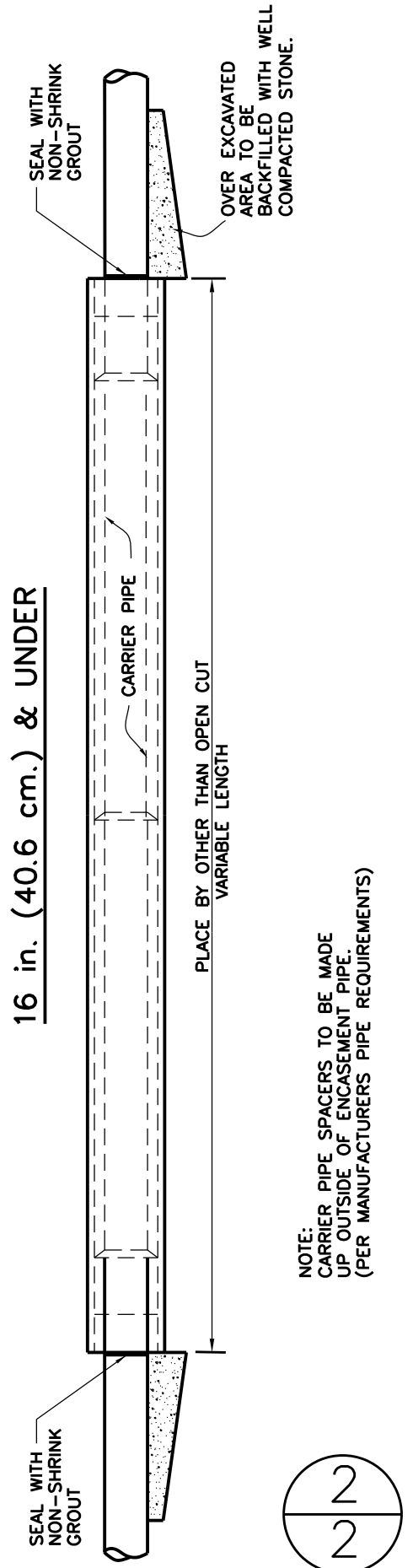
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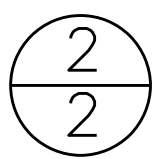
| HIGHWAY CROSSING ENCASEMENT PIPE, CLASS, COVER | | |
|---|------------------|-----------|
| ENC. PIPE I.D. | STEEL PIPE | |
| | Wall Thick | Max. Cov. |
| in.(cm.) | In.(mm.) | Ft.(M) |
| 12" (30.5) | 3/16" (4.76) | ∞ |
| 15" (38.1) | 1/4" (6.35) | ∞ |
| 18" (45.7) | 1/4" (6.35) | ∞ |
| 21" (53.3) | 5/16" (7.94) | ∞ |
| 24" (60.9) | 3/8" (9.53) | ∞ |
| 27" (68.6) | 7/16" (11.11) | ∞ |
| 30" (76.2) | 7/16" (11.11) | ∞ |
| 36" (91.4) | 1/2" (12.7) | ∞ |
| 42" (106.7) | 1/2" (12.7) | ∞ |
| 48" (121.9) | | |
| 54" (137.2) | | |
| 60" (152.4) | | |
| 66" (167.6) | | |
| 72" (182.9) | | |

NOTE: If Maximum Cover Is Exceeded,
The Wall Thickness Will Be
Calculated By The Designer.
: ∞ Infinity
a) :2-2/3" (6.8cm) x 1/2" (1.3cm) Carr.
b) :3" (7.6cm) x 1" (2.5cm) Carr.

TYPICAL HIGHWAY CROSSING FOR SEWER MAINS 6" & OVER & FOR WATER MAINS
16 in. (40.6 cm.) & UNDER



NOTE:
CARRIER PIPE SPACERS TO BE MADE
UP OUTSIDE OF ENCASEMENT PIPE
(PER MANUFACTURERS PIPE REQUIREMENTS)



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BORE OR TUNNEL
FOR SEWER OR WATER

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