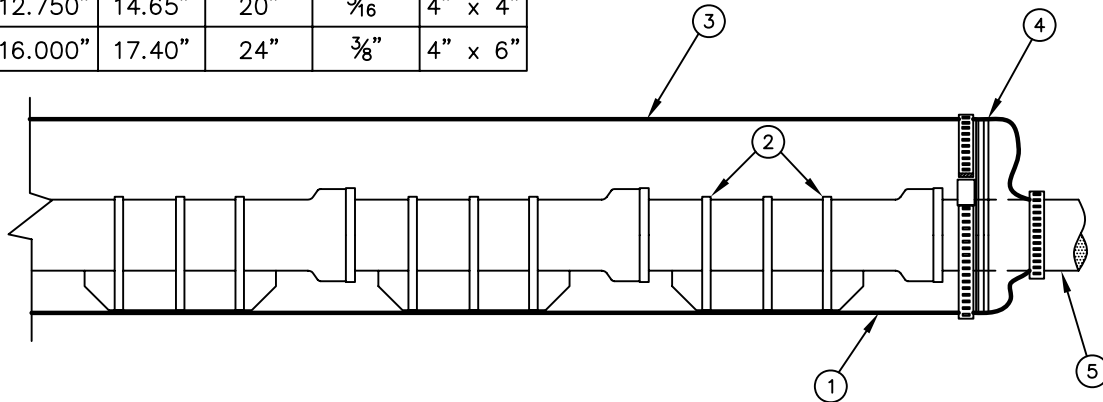
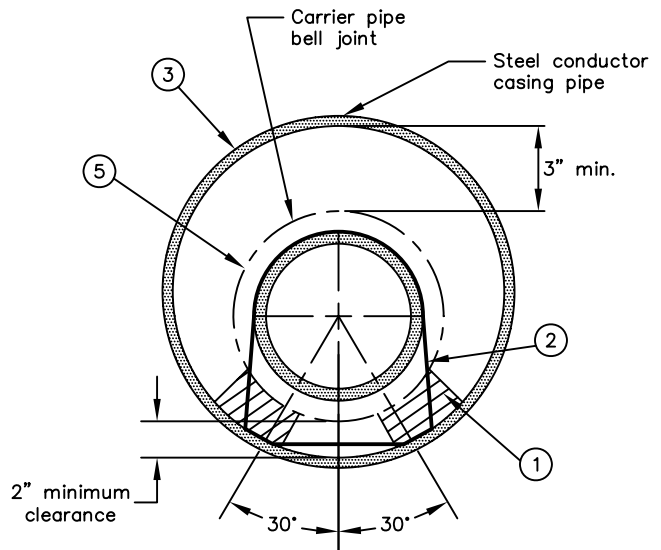


For Vitrified Clay Pipe (V.C.P.)					
Carrier Pipe			Casing Pipe		
Nominal Size	Outer Diameter	Bell Diameter	Nominal Size	Min. Wall Thickness	Nominal Size
8"	10.0"	12.5"	18"	1/4"	3" x 3"
10"	12.7"	15.9"	20"	5/16"	3" x 3"
12"	15.2"	18.8"	24"	5/16"	4" x 4"
15"	18.7"	23.1"	30"	3/8"	4" x 4"

For Polyvinylchloride Pipe (P.V.C.)					
Carrier Pipe			Casing Pipe		
Nominal Size	Outer Diameter	Coupl Diameter	Nominal Size	Min. Wall Thickness	Nominal Size
8"	8.625"	10.19"	16"	1/4"	3" x 3"
10"	10.750"	12.44"	18"	5/16"	3" x 3"
12"	12.750"	14.65"	20"	5/16"	4" x 4"
16"	16.000"	17.40"	24"	3/8"	4" x 6"



CONSTRUCTION NOTES:

- ① Unfinished redwood skids 3 feet long, beveled at both ends. Notch skids to seat straps. Size per table.
- ② Stainless steel band straps. 8 gauge by 3/4" wide. Install 3 straps per skid.
- ③ Steel casing pipe. Minimum thickness per table.
- ④ Synthetic rubber casing end seal. 1/8" thick, Model "C" end seal as manufactured by Pipe Seal Insulator, Inc.
- ⑤ Carrier pipe. Extra strength V.C.P. or Class 160 P.V.C. gasketed restrained-joint Yelomine sewer pipe as manufactured by Certainteed Corporation.

GENERAL NOTES:

1. Casing shall be installed by the bore, jack and/or tunnel method.
2. Size and thickness of casing shall be as shown in schedule. Thicknesses are minimums.
3. All steel casing pipe field joints shall be butt-welded full-circumference.
4. Skids shall be unfinished redwood. Steel casing insulators may be substituted by special permission.
5. For P.V.C. carrier pipe, skids shall be within 1 foot of each pipe end & at mid-span.
6. Each end of casing shall be sealed as indicated.
7. Backfill for casing in open cut shall be in accord with STD-106-L.
8. Casing voids shall not be filled with sand or grout. Seal ends only.

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

APPROVED:

RCE NO. 36106

PUBLIC WORKS DIRECTOR

Drawn: M. Elias

Scale: N.T.S.

Date: Jan. 2004

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DRAWING NO.

STD-410-L

CASED SEWER MAIN
FOR HIGHWAY CROSSINGS