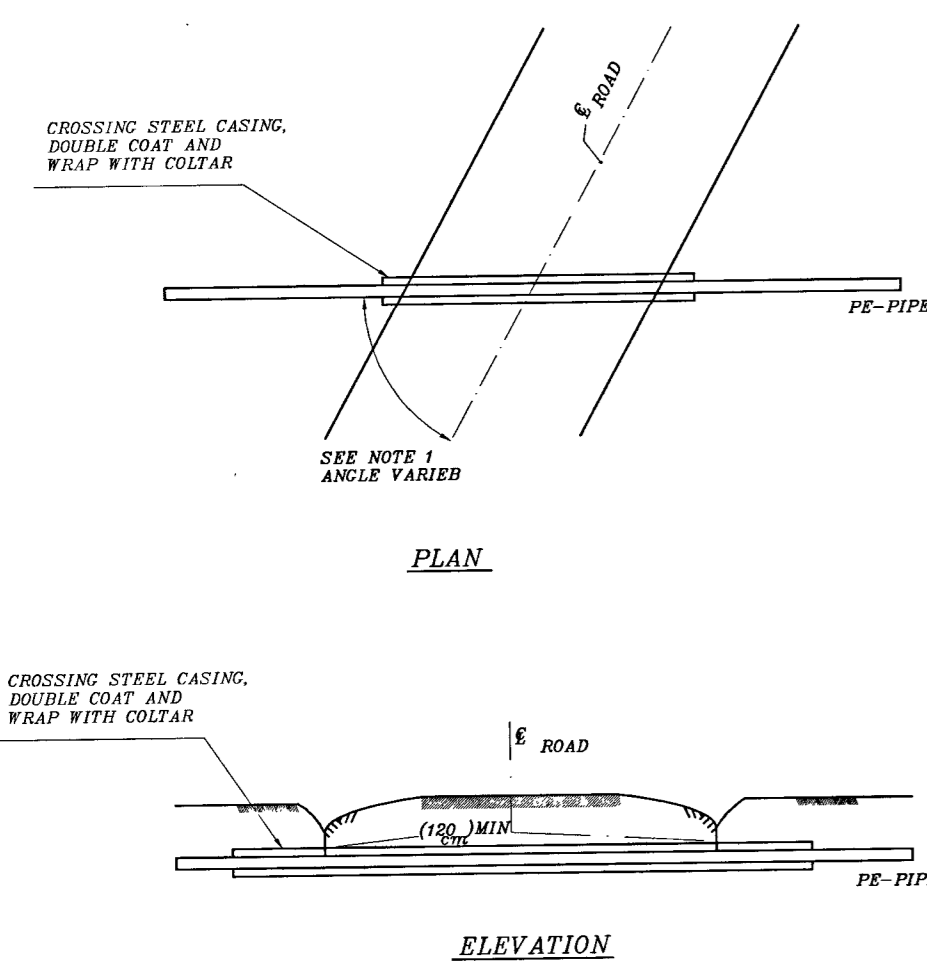
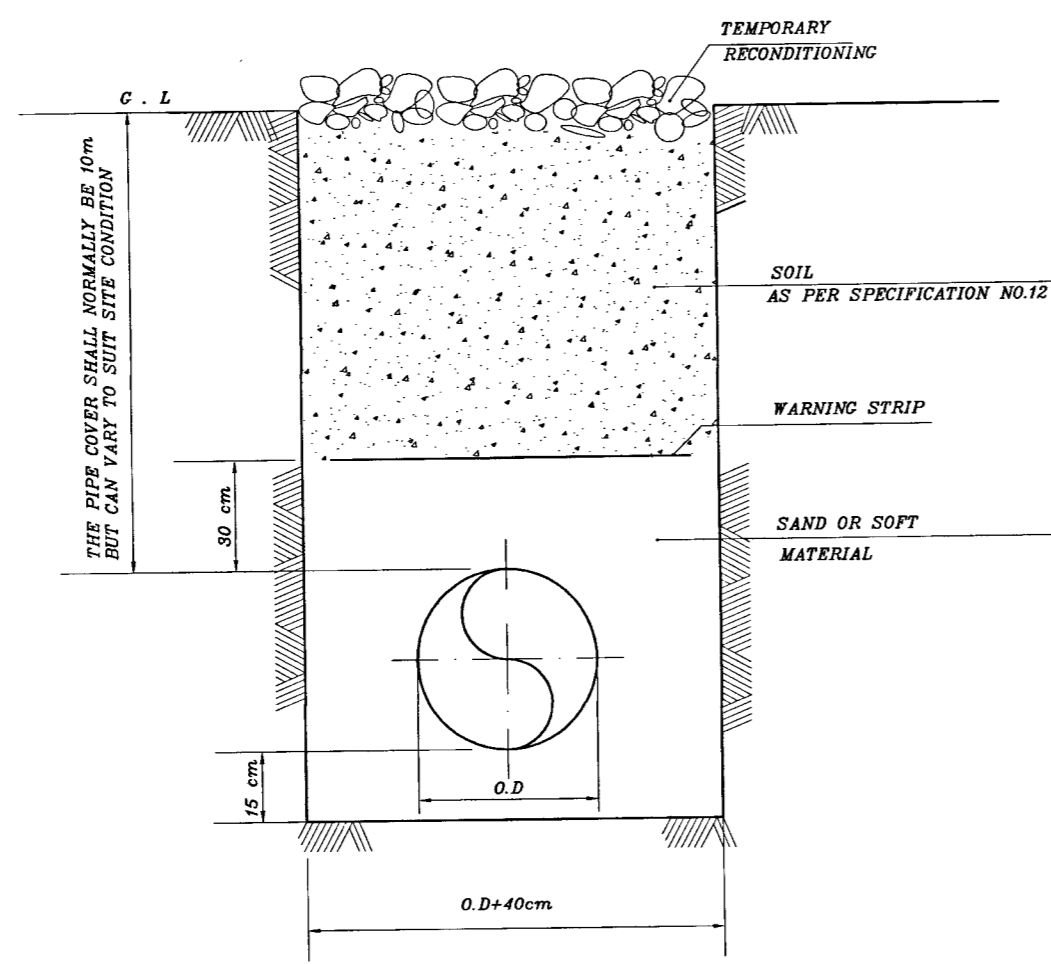


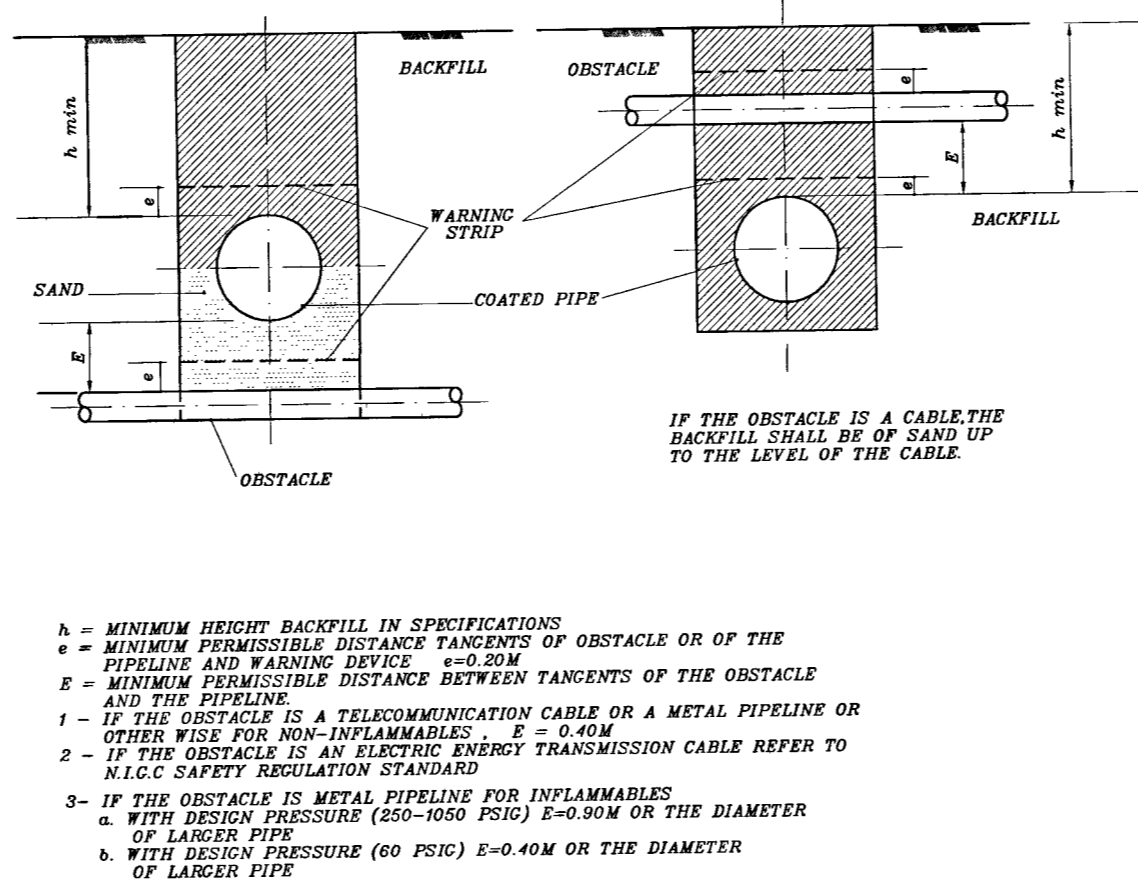
**NO.1 TYPICAL PIPELINE UNDERCROSSING  
GRAVEL OR DIRT ROAD**



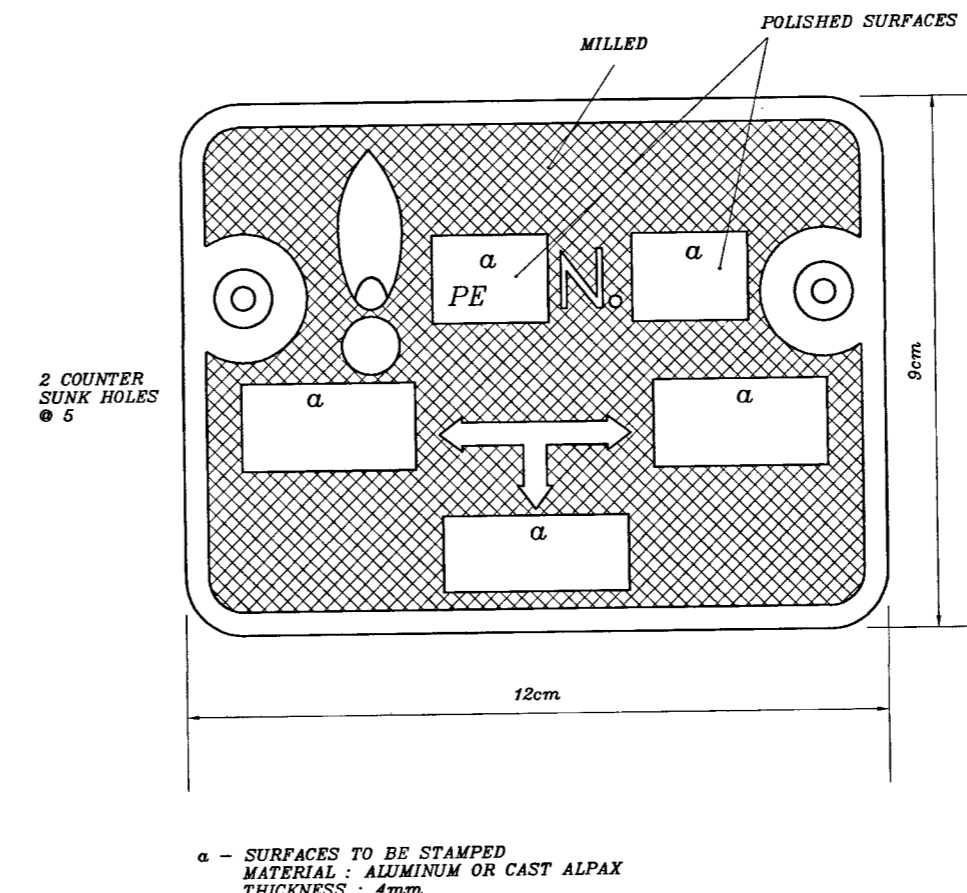
**NO.4 TRENCH CROSS SECTION  
BASIC GRID OR DISTRIBUTION NETWORK**



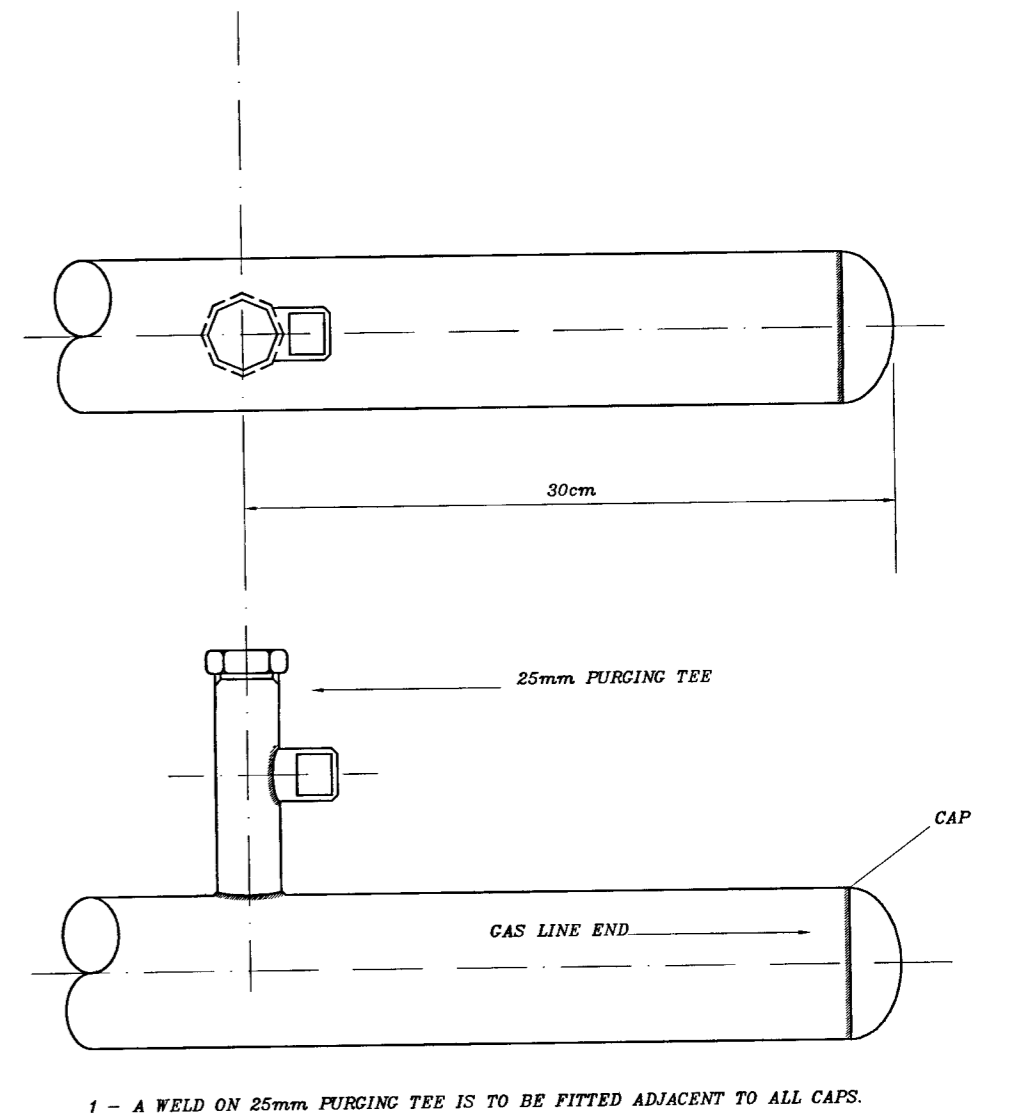
**NO.7 VICINITY OF UNDER GROUND UTILITIES**



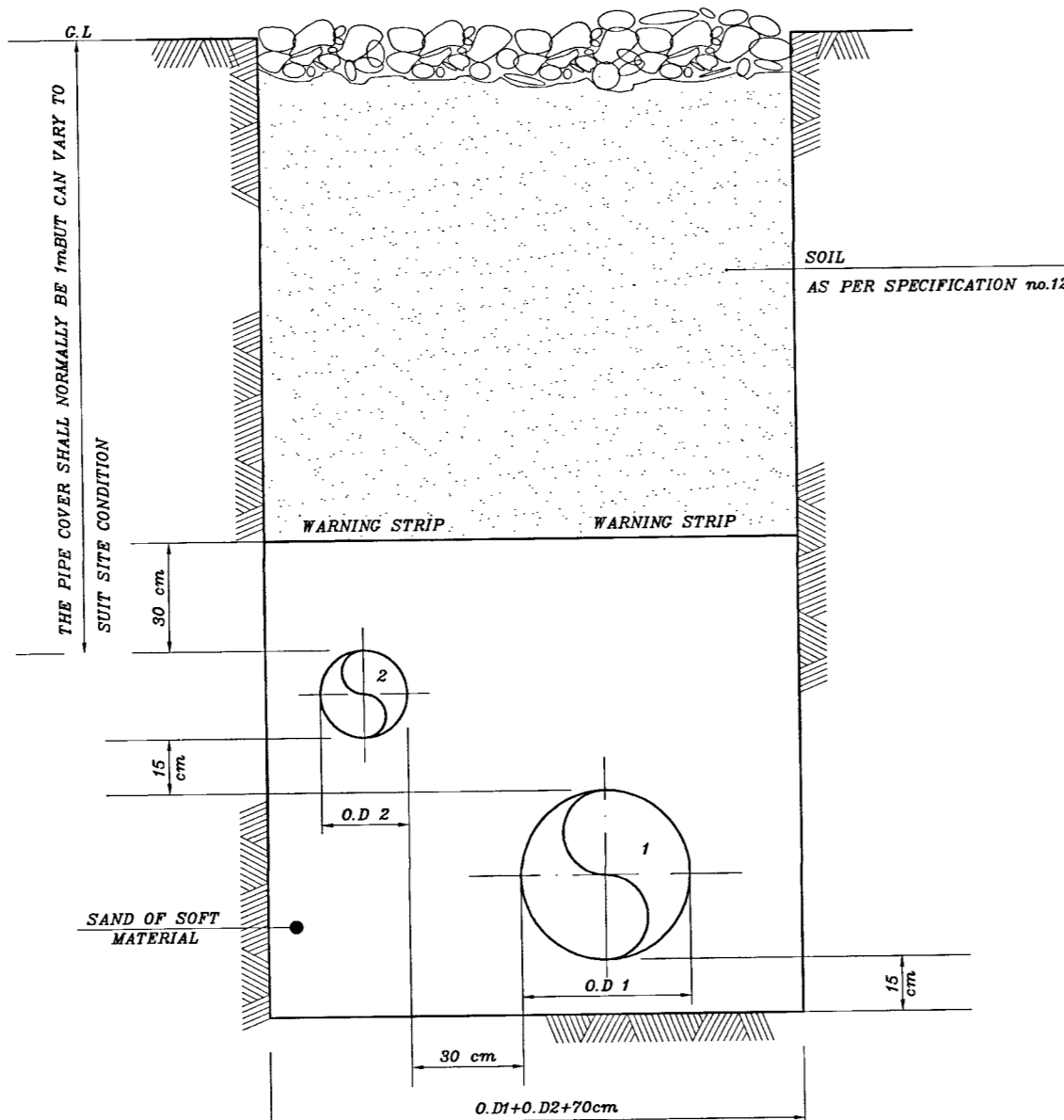
**NO.10 VALVE INDICATOR PLATE**



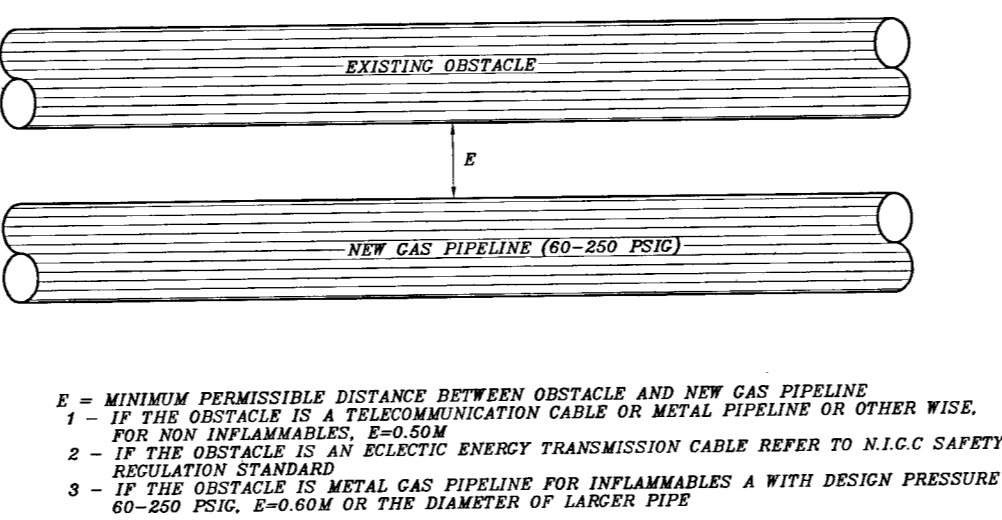
**NO.12 TYPICAL INSTALLATION OF A PURGING POINT**



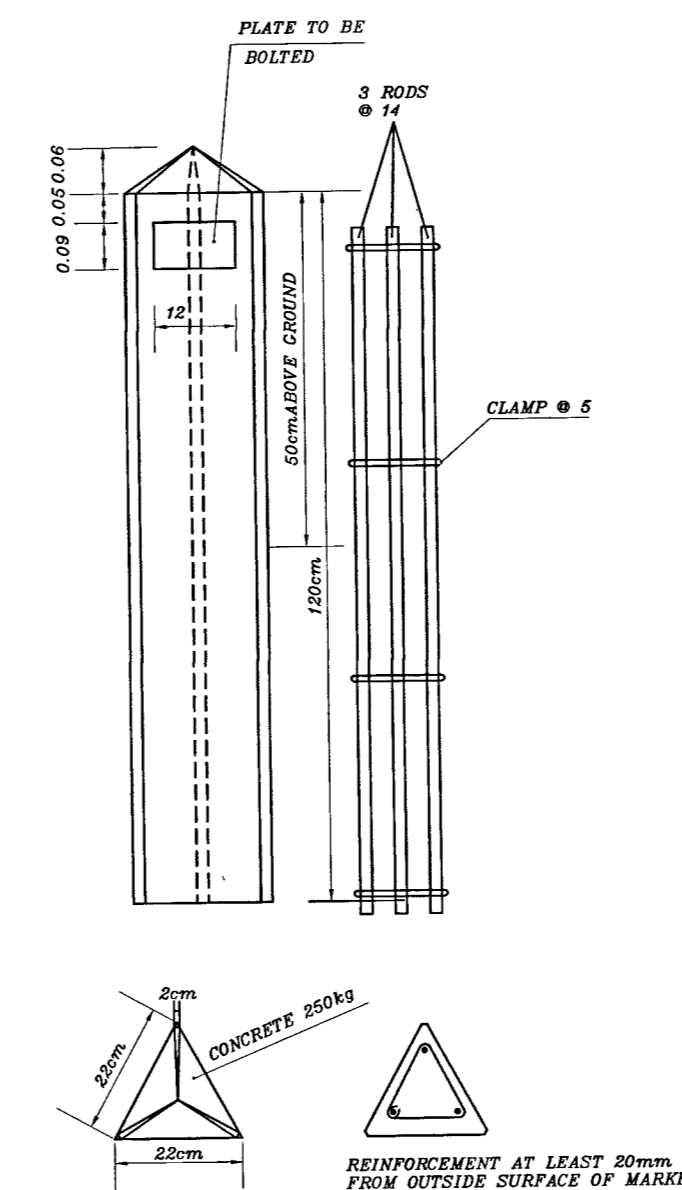
**NO.5 TRENCH CROSS SECTION  
BASIC GRID AND DISTRIBUTION PIPELINE IN THE SAME TRENCH FOR PIPELINE UP TO 250mm**



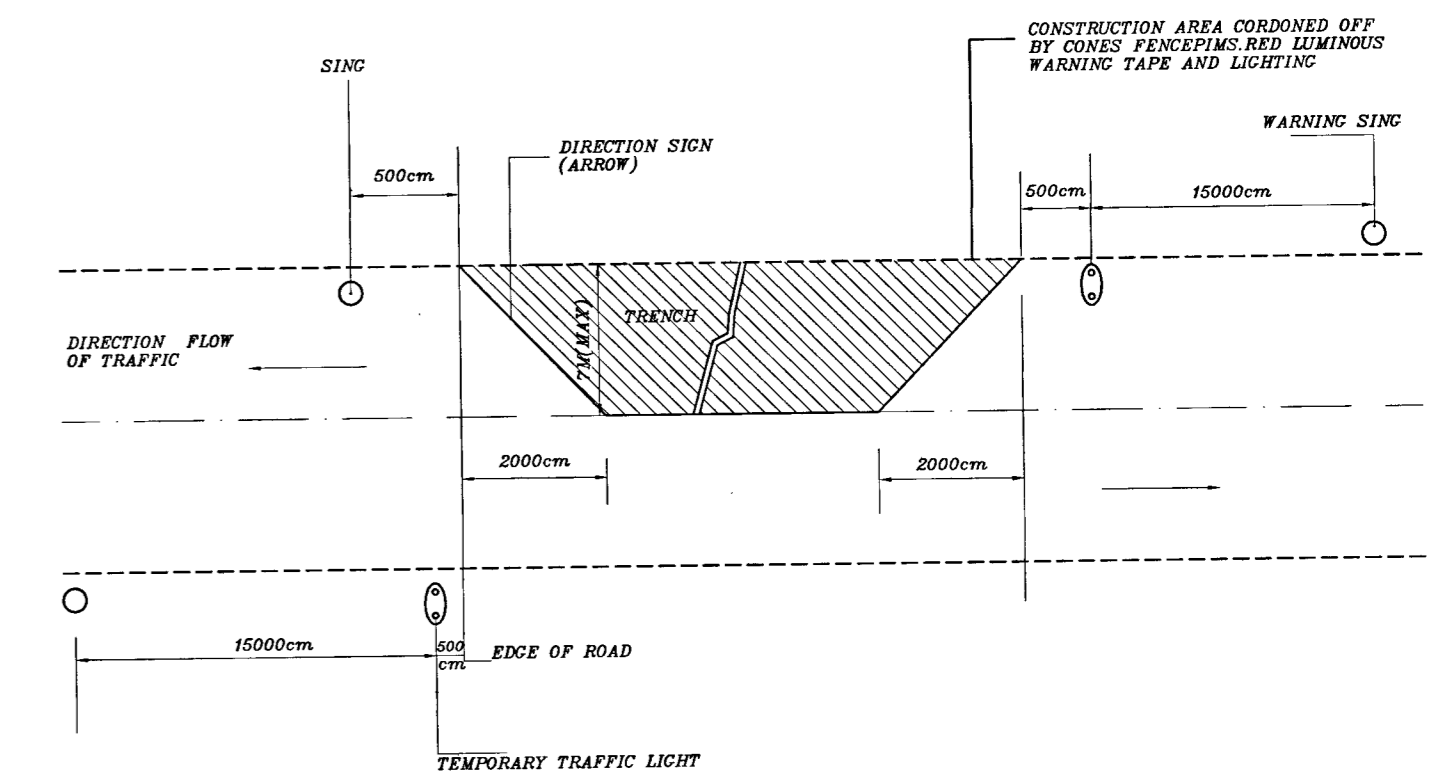
**NO.8 VICINITY OF PARALLEL UNDER GROUND UTILITIES**



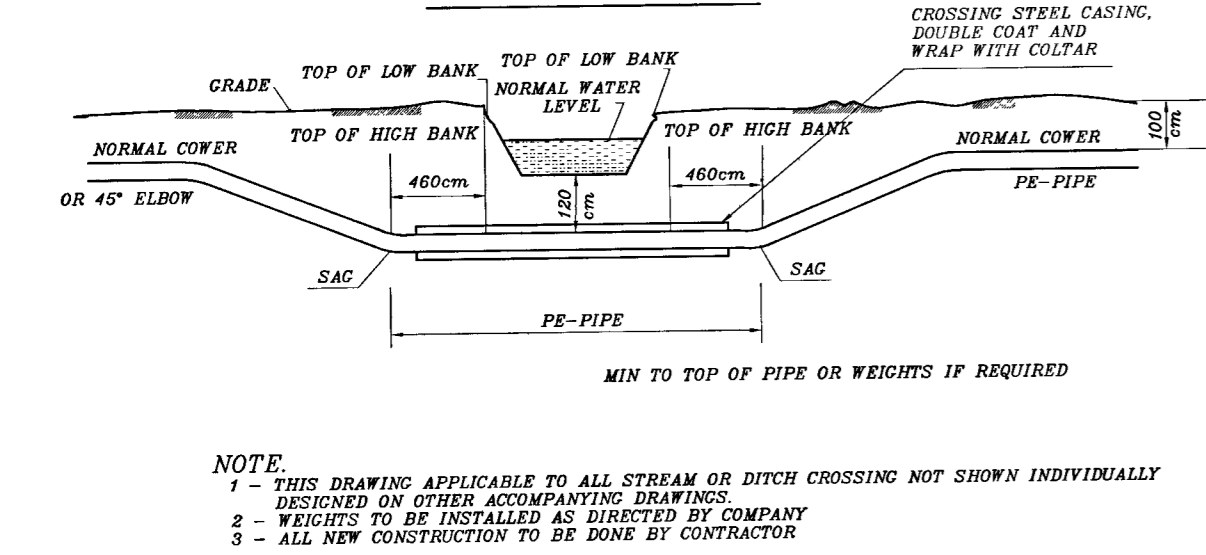
**NO.11 TYPICAL MARKERS**



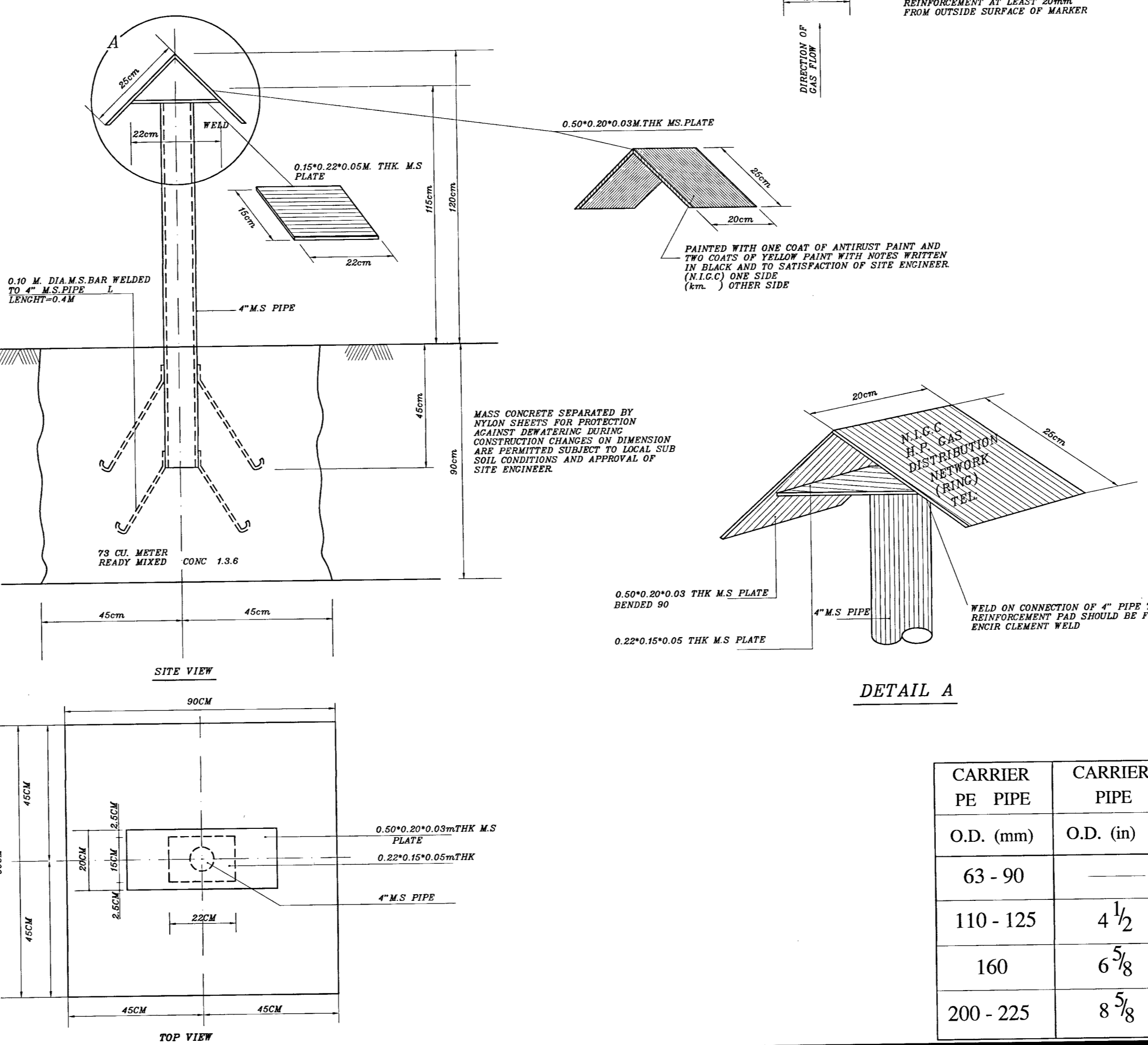
**NO.13 SPACING AND ARRANGEMENT OF ROAD SIGNS FOR GAS PIPELINE CONSTRUCTION (SINGLE CARRIAGEWAY ROAD)**



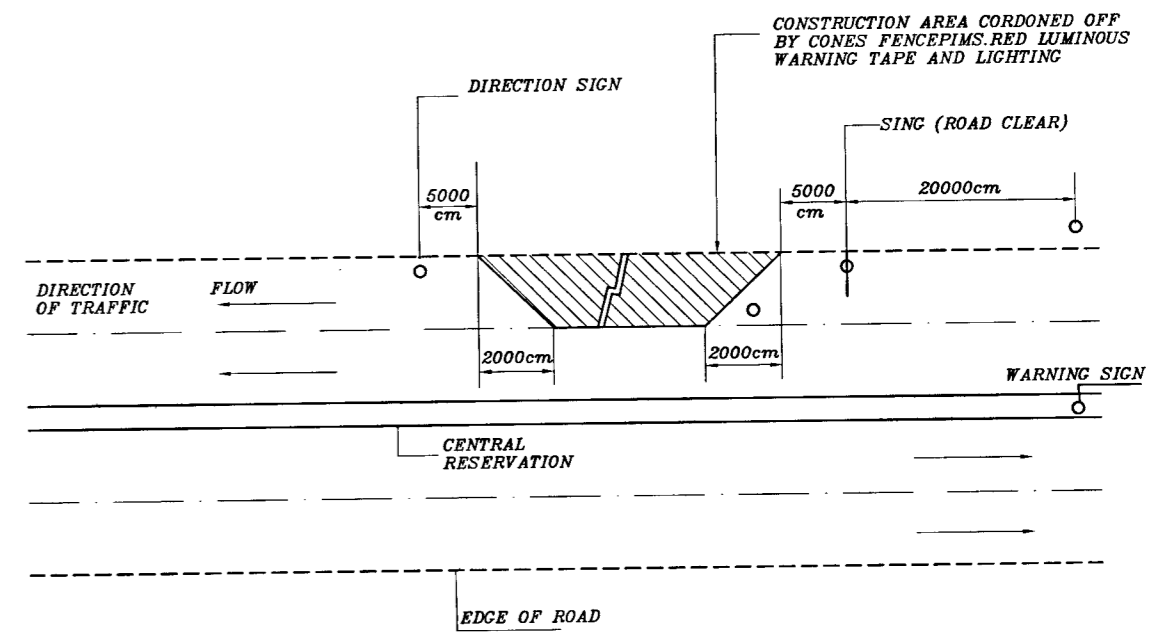
**NO.2 TYPICAL STREAM OR DITCH PIPELINE UNDERCROSSING**



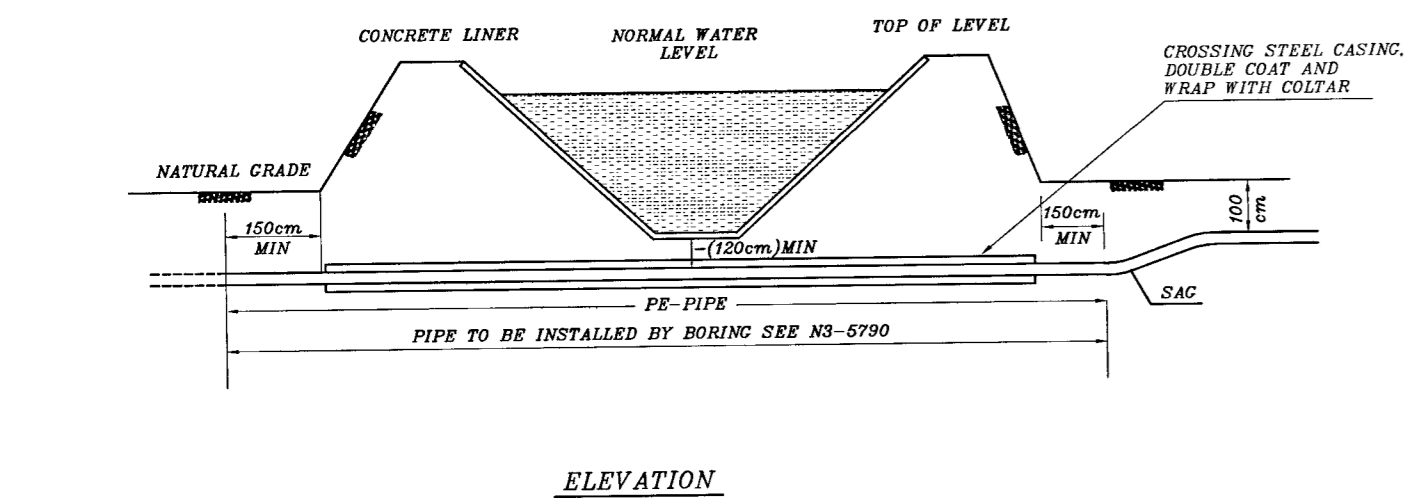
**NO.9 TYPICAL GAS LINE MARKER**



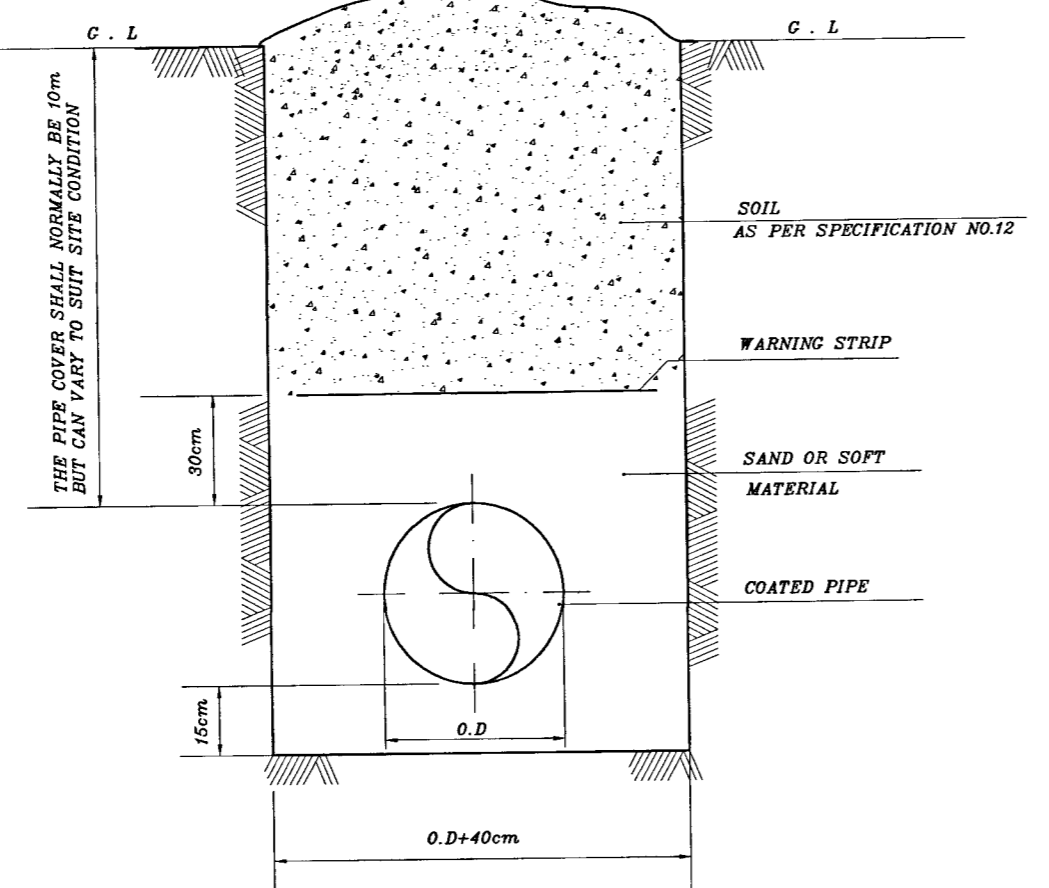
**NO.14 SPACING AND ARRANGEMENT OF ROAD SIGNS FOR GAS PIPELINE CONSTRUCTION (DUAL OR MULTIPLE LINE CARRIAGEWAY ROAD)**



**NO.3 TYPICAL CONCRETE LINED CANAL UNDERCROSSING**



**NO.6 TRENCH CROSS SECTION  
BASIC GRID (RING) OR DISTRIBUTION NETWORK**



CARRIER PE PIPE	CARRIER PIPE	CASING PIPE	INSULATOR SPACE FOR CASING PIPE
O.D. (mm)	O.D. (in)	O.D. (in)	METER
63 - 90	---	6 5/8	0.172
110 - 125	4 1/2	8 5/8	0.188
160	6 5/8	10 3/4	0.219
200 - 225	8 5/8	12 3/4	0.219

ADD CASING TABLE

PIPELINE UNDER CROSSING WITH CASING

NO CONSTRUCTION PERMITTED UNLESS THE DRAWING IS APPROVED

**NATIONAL IRANIAN GAS COMPANY**

ENGINEERING AND TECHNICAL SERVICES AFFAIRS

GAS DISTRIBUTION NETWORK

STANDARD DRAWING FOR PIPELINE UNDER CROSSING (GRAVEL OR DIRT ROAD STREAM CANAL) TRENCH CROSS SECTION VICINITY OF UNDER GROUND UTILITIES PIPELINE MARKER INDICATOR PLATE INSTALLATION OF A PURGING POINT AND SPACING FOR ROAD SIGN

DRAWN	DES. CHECK	APPROVED	SCALE	DRAWING NO	REV
P. FARIDI	M.E. ATRENECHI	F. SANANAJI	---	PE-SM-6021	B
DESIGNED	A. FAGHNI	---	DATE	---	---
N.I.G.C.	F. GHANI	A. NOBAKHTI	KHOR. 65	---	---