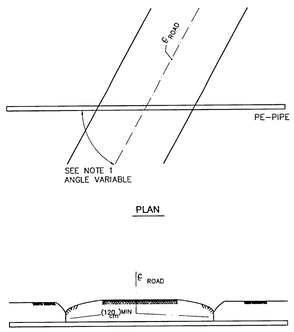
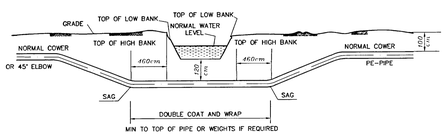
NO.1 TYPICAL PIPELINE UNDERCROSSING
GRAVEL OR DIRT ROAD



NOTE .

1 – PIPE LINE CROSSING AS REASONABLY TO RIGHT ANGLES (90°) TO ROAD AS POSSIBLE

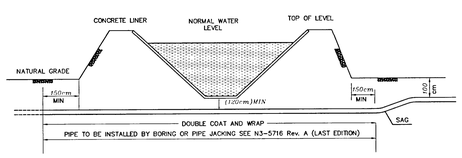
NO.2 TYPICAL STREAM OR DITCH PIPELINE UNDERCROSSING



NOTE.

1 – THIS DRAWING APPLICABLE TO ALL STREAM OR DITCH CROSSING NOT SHOWN INDIVDUALLY DESIGNED ON OTHER ACCOMPANYING DRAWINGS.
2 – WEIGHTS TO BE INSTALLED AS DIRECTED BY COMPANY
3 – ALL NEW CONSTRUCTION TO BE DONE BY CONTRACTOR

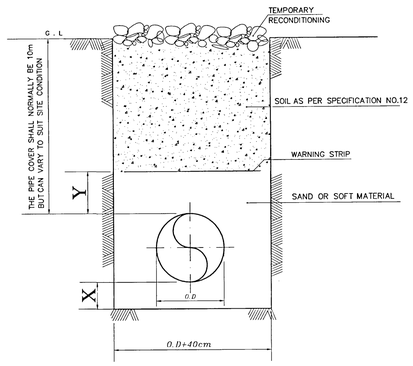
NO.3 TYPICAL CONCRETE LINED CANAL UNDERCROSSING



NOTE.

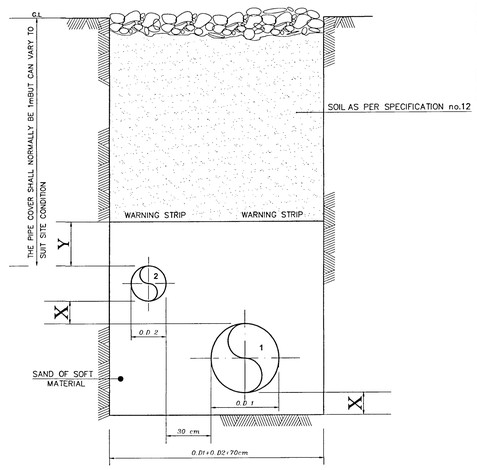
1 – LIMITS OF BORING TO EXTEND (1.5m) BEYOND TOE OF SLOPE ON EACH SIDE OF CANAL.
2 – CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO CONCRETE LINER & LEVEES AND SHALL REPAIR ANY DAMAGE TO THE SATISFACTION OF THE CANAL OWNER.
3 – CONSTRUCTION POINT BETWEEN PRESENT CONCRETE AND REPLACED CONCRETE SHALL CONSIST OF JOINT FILLER OF MIXED ASPHALT AND MINERAL FILLER COMPLYING WITH A.A S.S.H.O.M–89 PENETRATION GRADE 40 TO 50.

NO.4 TRENCH CROSS SECTION
BASIC GRID OR DISTRIBUTION NETWORK



1. X & Y SPECIFIED ACCORDING IGS–C–DN–01(1) AND IGS–C–PL–100 LAST EDITION.

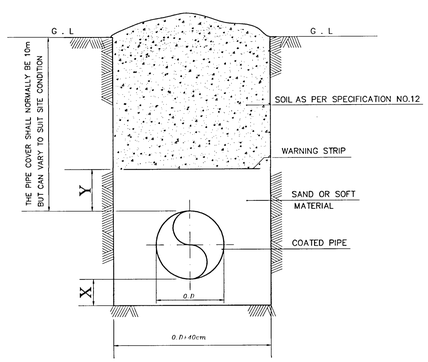
NO.5 TRENCH CROSS SECTION
BASIC GRID AND DISTRIBUTION PIPELINE IN THE SAME TRENCH FOR PIPELINE UP TO 250mm



NOTE.

1. PIPELINE WITH DESIGN PRESSURE 60–250 PSIG AND O.D 6"–12"
2. PIPELINE WITH DESIGN PRESSURE 60 PSIG AND O.D 2"–6"
3. X & Y SPECIFIED ACCORDING IGS–C–DN–01(1) AND IGS–C–PL–100 LAST EDITION.

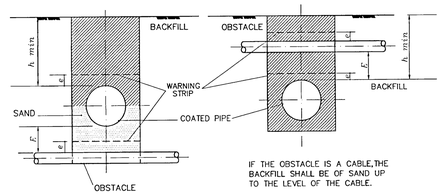
NO.6 TRENCH CROSS SECTION
BASIC GRID (RING) OR DISTRIBUTION NETWORK



NOTE.

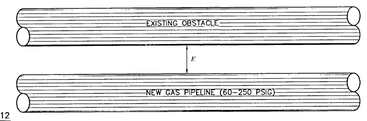
1 – THIS DRAWING IS APPLICABLE TO N.I.G.C PRIVATE RIGHT OF WAY.
2 – HIGH WAY RIGHT OF WAY.
3. X & Y SPECIFIED ACCORDING IGS–C–DN–01(1) AND IGS–C–PL–100 LAST EDITION.

NO.7 VICINITY OF UNDER GROUND UTILITIES



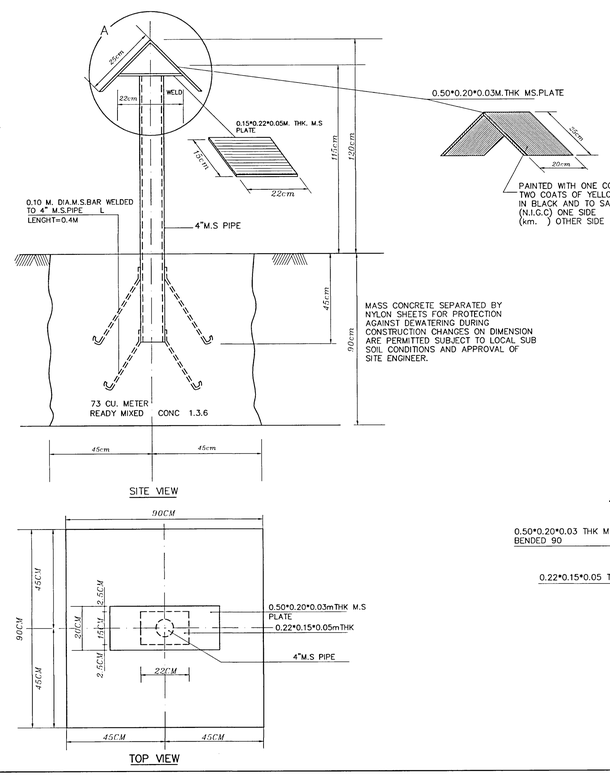
h = MINIMUM HEIGHT BACKFILL IN SPECIFICATIONS
e = MINIMUM PERMISSIBLE DISTANCE TANGENTS OF OBSTACLE OR OF THE PIPELINE AND WARNING DEVICE e=0.20M
E = MINIMUM PERMISSIBLE DISTANCE BETWEEN TANGENTS OF THE OBSTACLE AND THE PIPELINE.
1 – IF THE OBSTACLE IS A TELECOMMUNICATION CABLE OR A METAL PIPELINE OR OTHER WISE FOR NON–INFLAMMABLES , E = 0.40M
2 – IF THE OBSTACLE IS AN ELECTRIC ENERGY TRANSMISSION CABLE REFER TO N.I.G.C SAFETY REGULATION STANDARD
3– IF THE OBSTACLE IS METAL PIPELINE FOR INFLAMMABLES
a. WITH DESIGN PRESSURE (250–1050 PSIG) E=0.90M OR THE DIAMETER OF LARGER PIPE
b. WITH DESIGN PRESSURE (60 PSIG) E=0.40M OR THE DIAMETER OF LARGER PIPE

NO.8 VICINITY OF PARALLEL UNDER GROUND UTILITIES
ALMOST AT SAME DEPTH

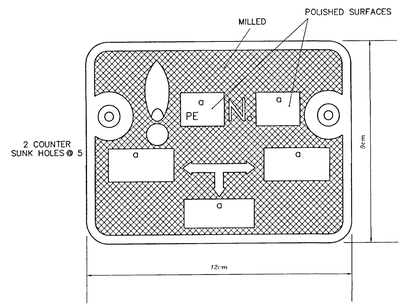


E = MINIMUM PERMISSIBLE DISTANCE BETWEEN OBSTACLE AND NEW GAS PIPELINE
1 – IF THE OBSTACLE IS A TELECOMMUNICATION CABLE OR METAL PIPELINE OR OTHER WISE, FOR NON INFLAMMABLES, E=0.50M
2 – IF THE OBSTACLE IS AN ECLECTIC ENERGY TRANSMISSION CABLE REFER TO N.I.G.C SAFETY REGULATION STANDARD
3 – IF THE OBSTACLE IS METAL GAS PIPELINE FOR INFLAMMABLES A WITH DESIGN PRESSURE 60–250 PSIG, E=0.60M OR THE DIAMETER OF LARGER PIPE

NO.9 TYPICAL GAS LINE MARKER

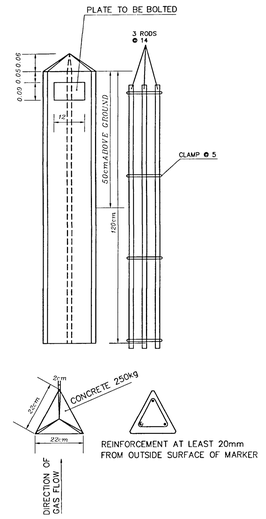


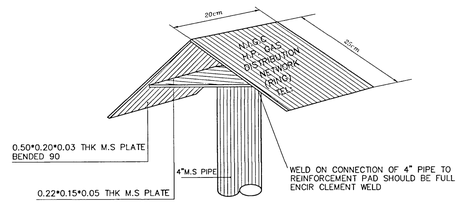
NO.10 VALVE INDICATOR PLATE



a – SURFACES TO BE STAMPED
MATERIAL : ALUMINUM OR CAST ALPAX
THICKNESS : 4mm

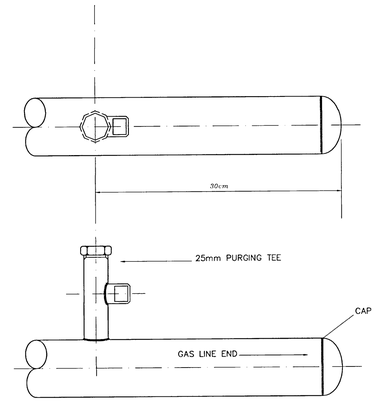
NO.11 TYPICAL MARKERS





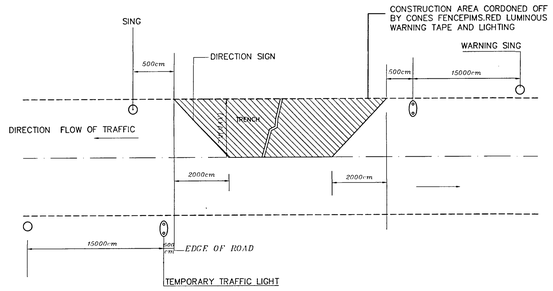
DETAIL A

NO.12 TYPICAL INSTALLATION OF A PURGING POINT



1 – A WELD ON 25mm PURGING TEE IS TO BE FITTED ADJACENT TO ALL CAPS.

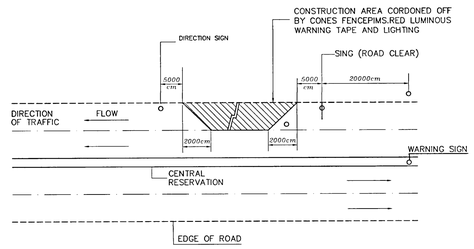
NO.13 SPACING AND ARRANGEMENT OF ROAD SIGNS FOR GAS PIPELINE CONSTRUCTION (SINGLE CARRIAGEWAY ROAD)



NOTE.

FOR TRENCH WORK CONSTRUCTED ACROSS THE CARRIAGE WAY THE EXTENT OF THE WORKS SHOULD BE LIMITED TO HALF OF THE ROADS WIDTH

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



REV	DESCRIPTION	DRAWN	DESIGN	CHECK	APP	DATE
B	–DRAWINGS NO.1,NO.2,NO.3 EDITED	S.RAYAT	M.Tavakoli	H.Mazaraei	M.Zarleah	96/11
A	–X & Y SPECIFIED IN NO.4,NO.5,NO.6	S.RAYAT	M.Tavakoli	H.Mazaraei	M.Zarleah	96/09

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(GRAVAL OR DIRT ROAD ,STREAM,CANAL)
TRENCH CROSS SECTION VICINITY OF UNDER GROUND UTILITIES PIPELINE MARKER
INDICTOR PLATE INSTALLATION OF A PURGING POINT AND SPACING FOR ROAD SIGN

DRAWN	CHECKED	BUD. REF.	SCALE	DRAWING NO	REV
A.ALIMOHAMMADI	M. BOLOORI	—	—	SM-6021	B
DESIGNED	DES. CHECK	APPROVED	DATE		
N.I.G.C.	N.I.G.C TECHNICAL SUBCOMMITTEE	F. SANANDAJI	BAH. 63		