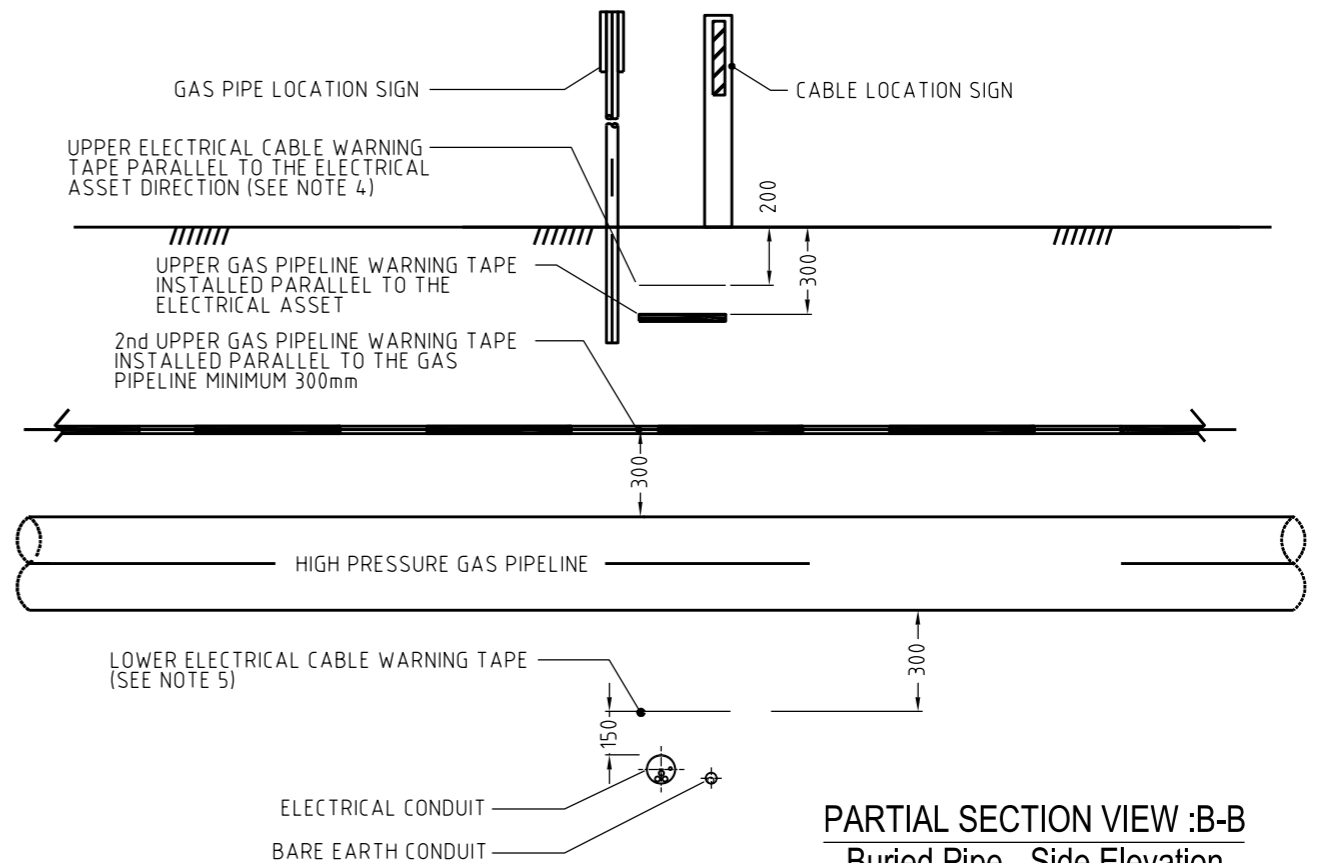


PARTIAL SECTION VIEW: A-A
Buried Pipe - End Elevation

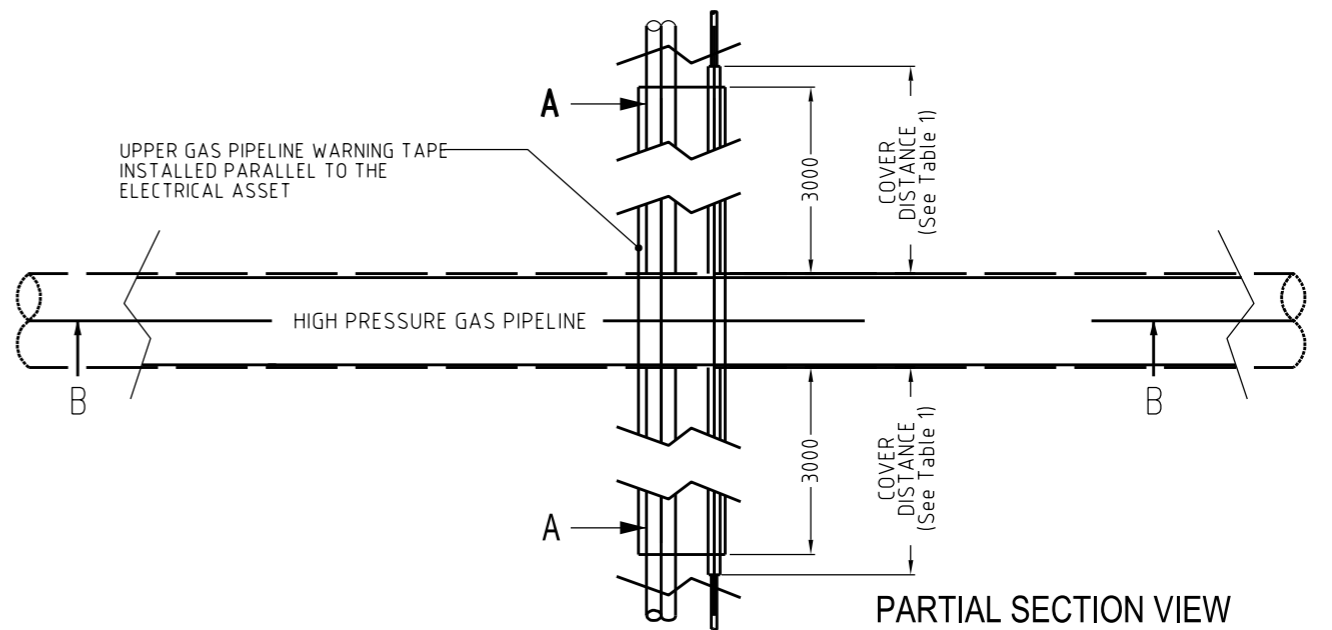


PARTIAL SECTION VIEW :B-B
Buried Pipe - Side Elevation

NOTES:

- THIS STANDARD DRAWING HAS BEEN DEVELOPED TO MEET THE REQUIREMENTS OF AUSTRALIAN STANDARD AS 4853 AND A.P.A. REQUIREMENTS
- EARTH CABLES CROSSING AN APA METALLIC HIGH PRESSURE GAS PIPE SHALL BE PLACED IN 50MM HDPE CONDUIT FOR A MINIMUM DISTANCE AS IN TABLE 1 BELOW.
- FOR EARTH CABLE CROSSINGS THAT DO NOT FIT THE CRITERIA OF TABLE 1 THEN A DETAIL RISK STUDY IS REQUIRED TO BE CONDUCTED BY A.P.A. IN ACCORDANCE WITH AS 2885.1 AND AS 4853 SECTION 4.1
- ELECTRICAL CABLE WARNING TAPE SHALL BE PLACED 200mm FROM THE SURFACE IN THE ELECTRICAL TRENCH. IT MUST EXTEND AT LEAST 3000mm TO EACH SIDE OF THE PIPELINE CROSSING.
- IF CABLE INSTALLATION DONE BY EXCAVATION, ELECTRICAL CABLE WARNING TAPE TO BE PLACED IN THE ELECTRICAL TRENCH 300mm BELOW THE PIPELINE AND ABOVE THE ELECTRICAL CABLE. IT MUST EXTEND AT LEAST 3000mm TO EACH SIDE OF THE CROSSING.
- THE EARTHING CABLE SHALL BE A MINIMUM SIZE OF 70 sqmm BARE COPPER EARTHING CABLE.
- THE COMBINED EARTHING RESISTANCE OF THE EARTHING SYSTEM SHALL NOT BE GREATER THAN 1 OHM AS TESTED BY STANDARD EARTH TESTING METHOD. THIS IS A P.A. REQUIREMENT.
- NO EARTHING INSTALLATION IE. BARE EARTHING CABLE OR EARTH STAKES ARE TO BE INSTALLED WITHIN 7 METERS OF EITHER SIDE OF THE PIPELINE. INSTALLATIONS WHERE THIS 7 METER CLEARANCE CANNOT BE ACHIEVED SHALL BE REFERRED TO A.P.A. FOR REVIEW AND APPROVAL.
- BARE EARTHING CABLE RUNNING IN PARALLEL TO AND WITHIN A 16M RADIAL DISTANCE OF GAS PIPELINE SHALL HAVE A PARALLEL LENGTH OF MINIMUM 32 METRES AND 70 SQMM EARTHING CABLE. THIS IS AN A.P.A. REQUIREMENT.

TABLE 1- EARTH CABLE CONDUIT COVER DISTANCE (TO EACH SIDE OF GAS PIPELINE)	
SOIL RESISTIVITY VALUE IN OHM.M	MINIMUM CONDUIT COVER DISTANCE EITHER SIDE OF THE FOR BARE EARTHIN CABLE
UPTO 750 OHM.METRE	7 METRES
ABOVE 750 OHM.METRE TO 2000 OHM.METRE	12 METRES



PARTIAL SECTION VIEW
Buried Pipe - Plan View

NO	DESCRIPTION	DRN	DATE	CKD	APPD
3	REFORMATTED TEXT. EDITED TABLE 1 & NOTES 7 & 9.	CC	JUL'21	AN	B.V.
2	TITLEBLOCK & DRAWING NUMBER FORMATTED	K.T.	FEB'19	CC	C.C.
1	ISSUED FOR IMPLEMENTATION	CWM	JAN'13	B.C.	S.C.
AMENDMENTS					



DES		POWER STANDARD DRAWING	
B.NARAYANA		EXPOSED EARTH SYSTEM ARRANGEMENT FOR CROSSING HIGH PRESSURE GAS PIPELINES NORTHERN TERRITORY - LAYOUT	
C.MCLAREN		A3	DRAWING NUMBER S02-02-05-11
B.NARAYANA			
B.CHEUNG		CAD PRODUCT - DO NOT AMEND MANUALLY	
ISSUED DEC'12		AMDT	
ALL DIM. IN mm			
DRAFTING STANDARD TO A.S.1100			