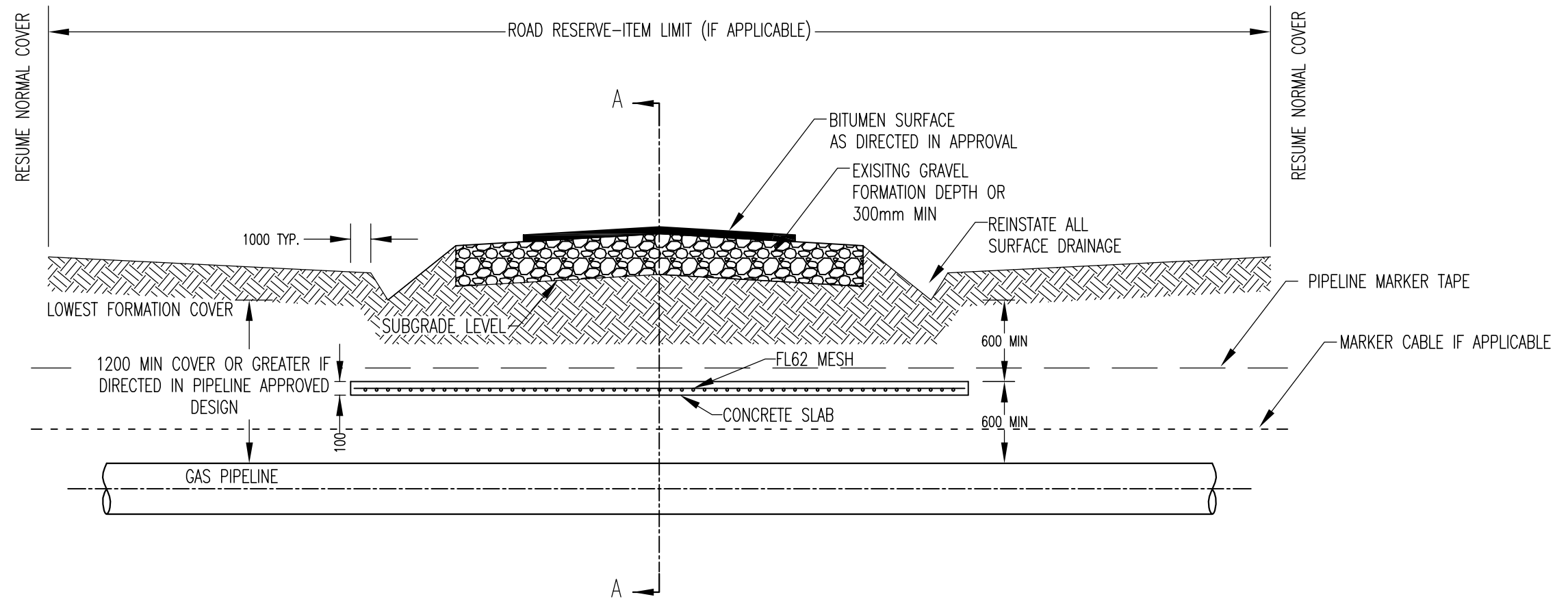


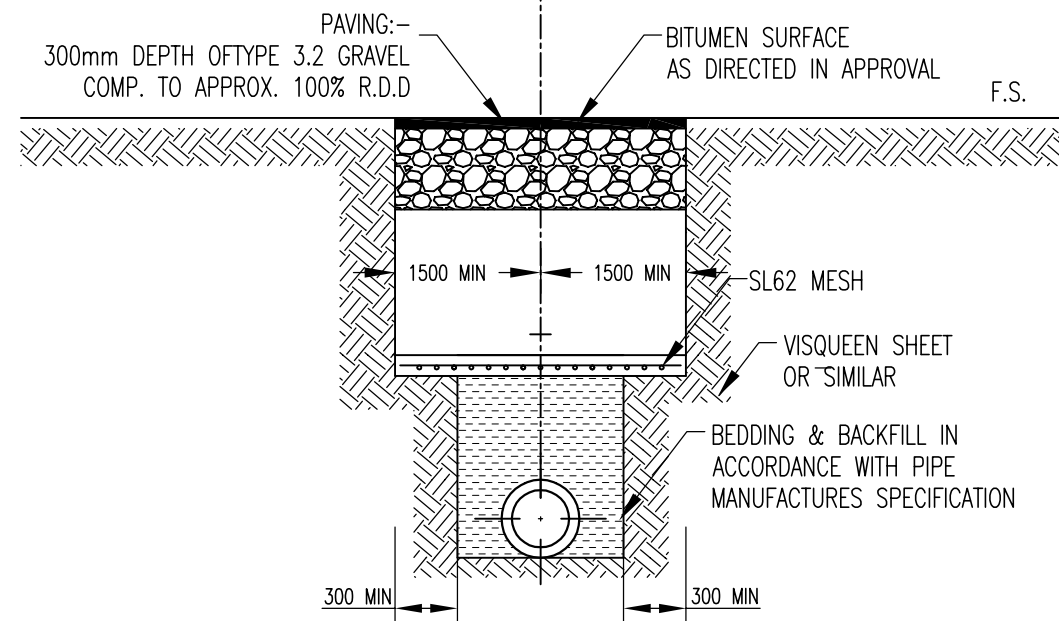
STD. DWG. NO.	DESCRIPTIONS
	GAS UNDER ROADS
G-002	GAS PIPELINE CROSSING UNDER RURAL ROAD
G-003	GAS GENERAL CONSTRUCTIONS PE GAS MAINS IN ROADWAYS
	SERVICE CONNECTIONS
G-004	SINGLE PROPERTY SERVICE MAIN TO METER
G-005	SPLIT PROPERTY SERVICE MAIN TO METER
G-006	GAS METER INSTALLATION REQUIREMENTS
G-007	GAS GENERAL CONSTRUCTION DOMESTIC GAS METER INSTALLATION REQUIREMENTS
G-008	GAS SUPPLY NETWORK PE BALL VALVE
G-009	GAS SUPPLY NETWORK SINGLE PE SERVICE
G-010	GAS SUPPLY NETWORK SPLIT SERVICE MAIN TO METER
G-011	GAS MAIN DOMESTIC SERVICE RISER
G-012	GAS MAIN MARKER POST, LABEL AND PLATE
G-013	PE GAS MAINS
G-014	PE GAS PIPE MINIMUM BEND RADIUS
G-015	DOMESTIC GAS SERVICE INSTALLATION DETAILS
G-016	GAS RETICULATION MAINS, FITTINGS & CONDUITS
G-017	GAS GENERAL CONSTRUCTIONS PE GAS MAIN

Revisions	Drn by	Date	Field Book No.	DRAWN S. Robertson		Horiz. Section  Scale: on A3	STANDARD DRAWINGS – GAS INDEX
			Level Book No.	DESIGNED L. Cook			
			Datum	CHECKED P. Mauch	Job No./s Works Order No. Auxiliary Plan No's.	Plan No. <i>G-001</i> No. 1 of 17 Plans Rev. A	
				EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234			
				TECHNICAL SERVICES MANAGER			
				DATE 15/07/2010			
A	Original Issue						

Computer Location S:\Engineering Services\Standard Drawings\G-Gas\WDRG Standard Drawings - Gas.dwg



TYPE CROSS SECTION



SECTION A-A

NOTES

SURFACE LEVEL TOLERANCE
THE DEVIATION FROM A STRAIGHT EDGE LAID AT RIGHT ANGLES TO THE TRENCH OF THE EXISTING ROAD AS SHOWN ON THE DRAWING SHALL NOT EXCEED 5mm.

EXTENT OF REINSTATEMENT
THE REINSTATEMENT OF THE PIPE CROSSING IS TO EXTEND OVER THE FULL WIDTH OF THE ROAD FORMATION AS SHOWN. REINSTATEMENT SHALL BE WITH NATURAL MATERIALS FOR THE REMAINING AREA OF ROAD RESERVE.
REFERENCES TO GRAVEL TYPES AND TEST METHODS IS IN ACCORDANCE WITH QUEENSLAND TRANSPORT SPECIFICATION MRS 11.05 (12/99).

CONCRETE
CONCRETE SLAB TO BE 100mm THICK N32\25AGG, OR AN APPROVED EQUIVALENT PRECAST SLAB AS APPROVED BY THE DIRECTOR OF ENGINEERING.
STEEL REINFORCEMENT FABRIC TO BE D500L IN ACCORDANCE WITH AS 4671. PLACED CENTRAL WITH 50mm EDGE COVER.
STEEL PLACEMENT TO BE INSPECTED BY WDRC REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE IF CAST-IN-SITU.

Revisions	Drn by	Date
A	Original Issue	

Field Book No.	
Level Book No.	
Datum	

DRAWN	S. Robertson
DESIGNED	L. Cook
CHECKED	P. Mauch
EXAMINED	L. Cook
RECOMMENDED	S. Hegedus RPEQ. 5234
TECHNICAL SERVICES MANAGER	
DATE	14/07/2010
Job No./s	Works Order No.

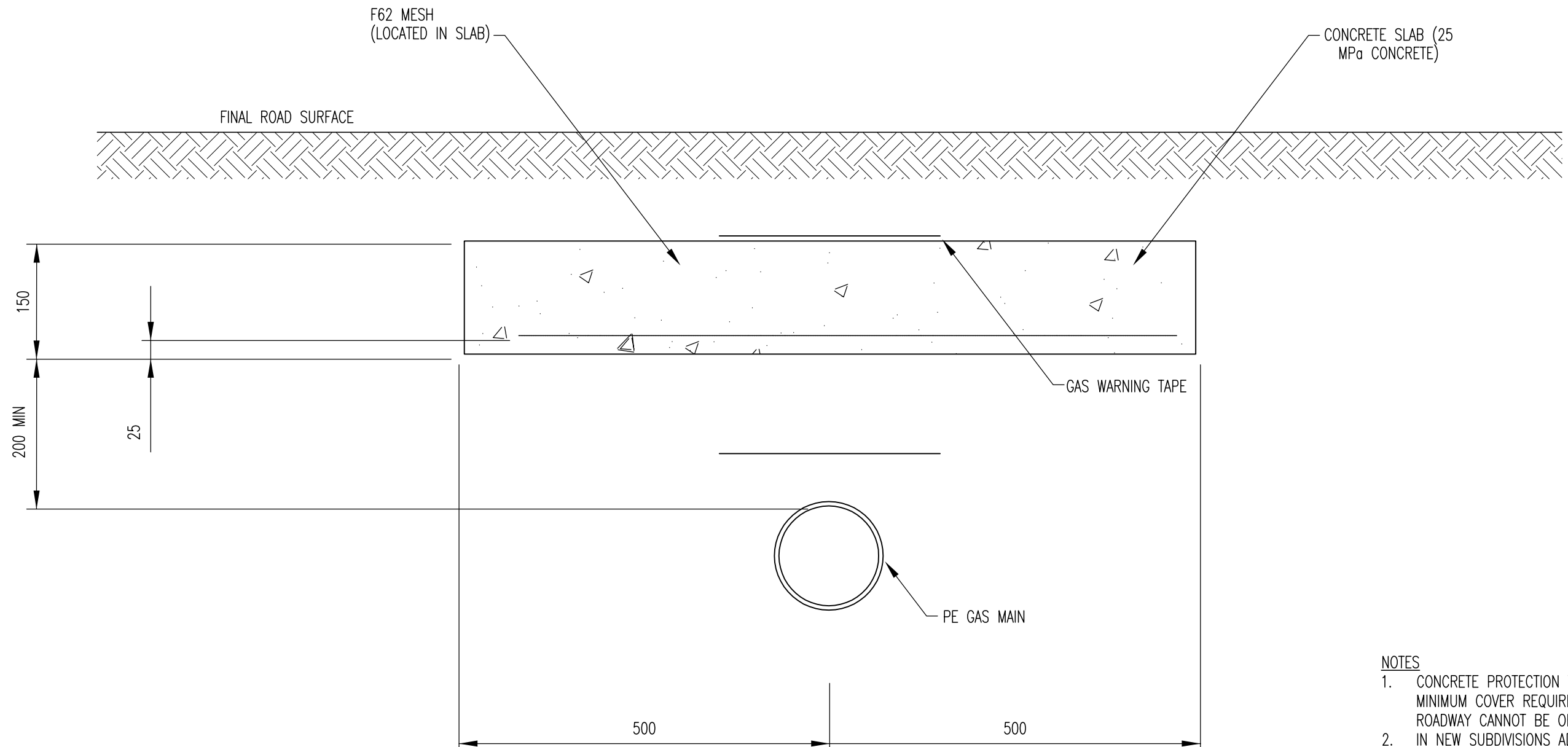
WESTERN DOWNS REGIONAL COUNCIL

Auxiliary Plan No's.

Horiz. Section Scale: NTS on A3	
Vert. Section Scale: NTS on A3	

STANDARD DRAWING – GAS		
GAS PIPELINE CROSSING UNDER		
RURAL ROAD		
Plan No. G-002	No. 2 of 17 Plans	Rev. A

Computer Location S:\Engineering Services\Design\Standard Drawings\G-Gas\WDRC Standard Drawings - Gas.dwg

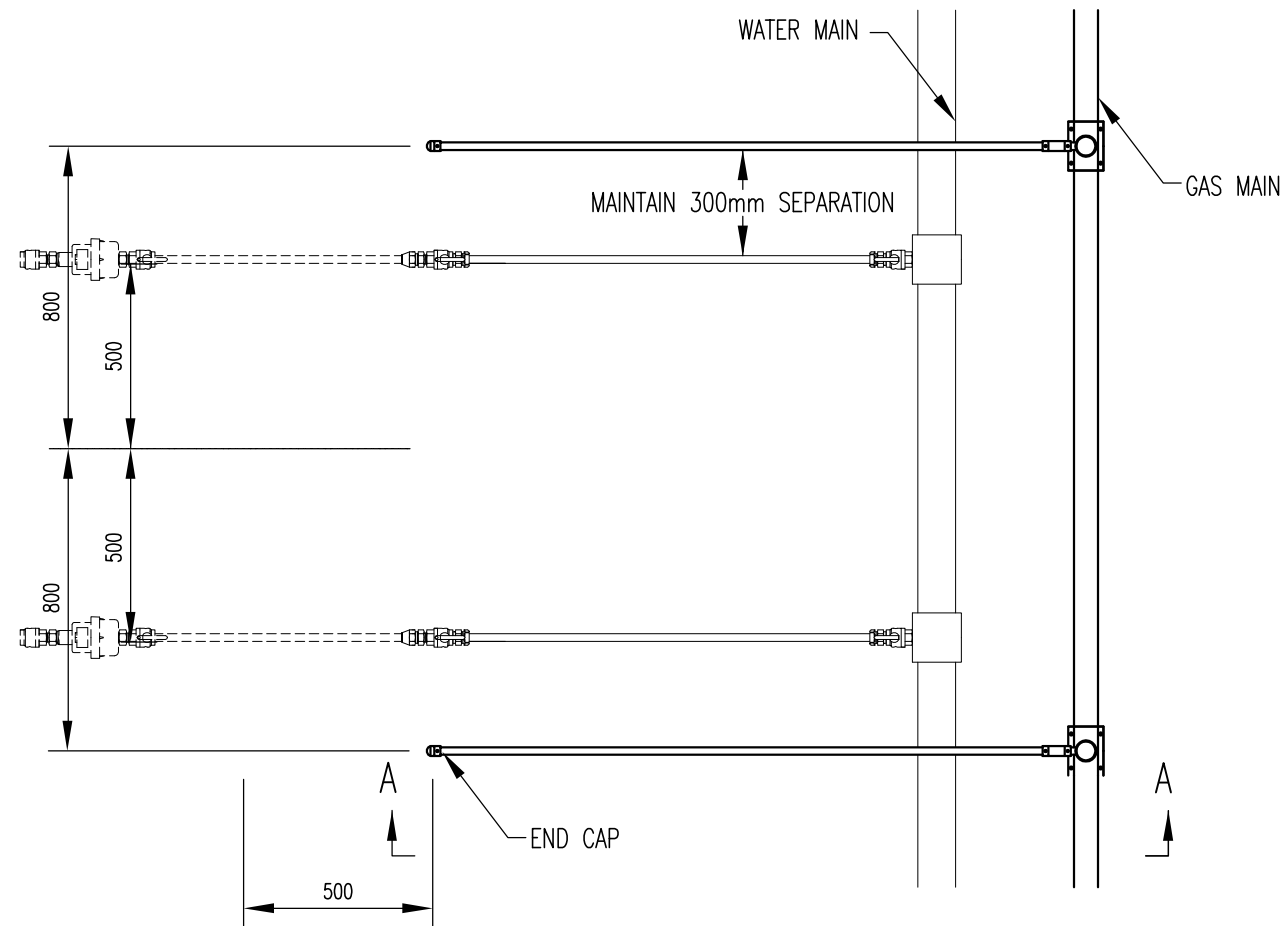


**PE GAS MAINS IN ROADWAYS
MAIN PROTECTION – REDUCED DEPTH**

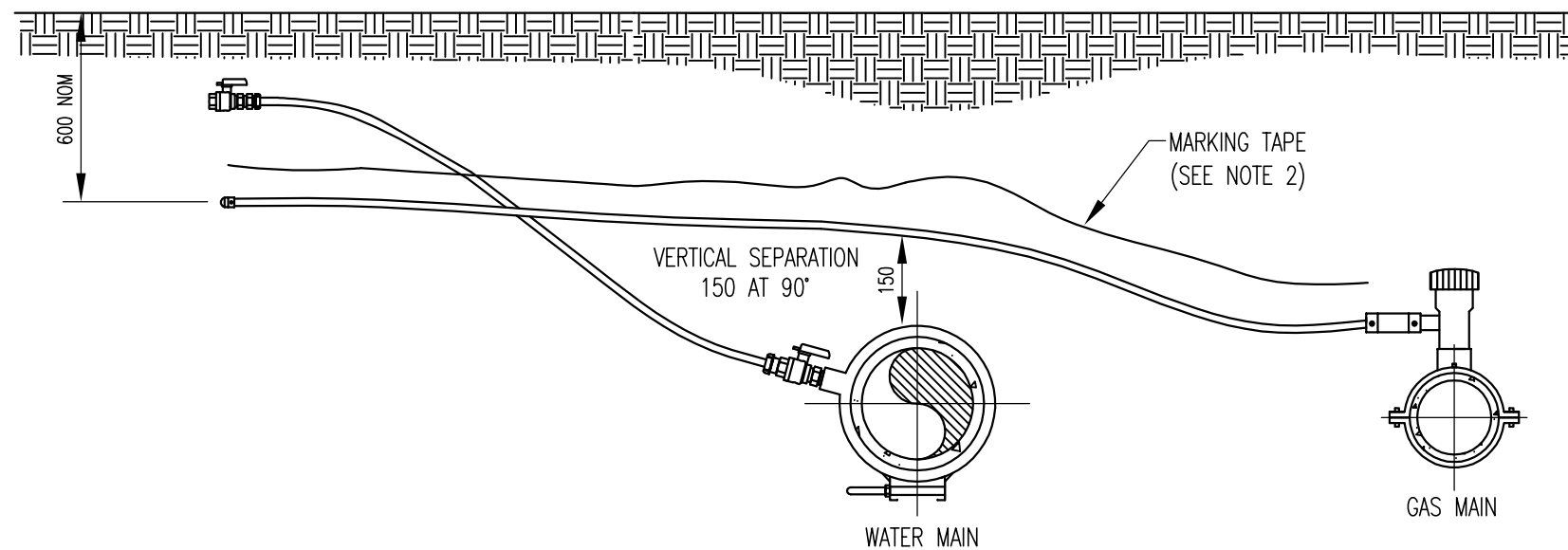
NOTES

1. CONCRETE PROTECTION TO BE USED IF MINIMUM COVER REQUIREMENT UNDER ROADWAY CANNOT BE OBTAINED.
2. IN NEW SUBDIVISIONS ADDITIONAL PROTECTION IS TYPICALLY NOT REQUIRED. DESIGN AND CONSTRUCTION OF THE GAS MAIN AND OTHER UTILITIES SHOULD BE COORDINATED TO AVOID INSUFFICIENT COVER. IF CONCRETE PROTECTION IS REQUIRED, PRIOR APPROVAL SHALL BE OBTAINED FROM THE ENERGEX OFFICER.

Revisions	Drn by	Date	Field Book No.	DRAWN L. Porter		Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING – GAS GAS GENERAL CONSTRUCTIONS PE GAS MAINS IN ROADWAYS MAIN PROTECTION – REDUCED DEPTH
			Level Book No.	DESIGNED L. Cook			
			Datum	CHECKED P. Mauch	DATE 30/05/2011		
				EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234 TECHNICAL SERVICES MANAGER			
A	Original Issue						



SERVICE PLAN

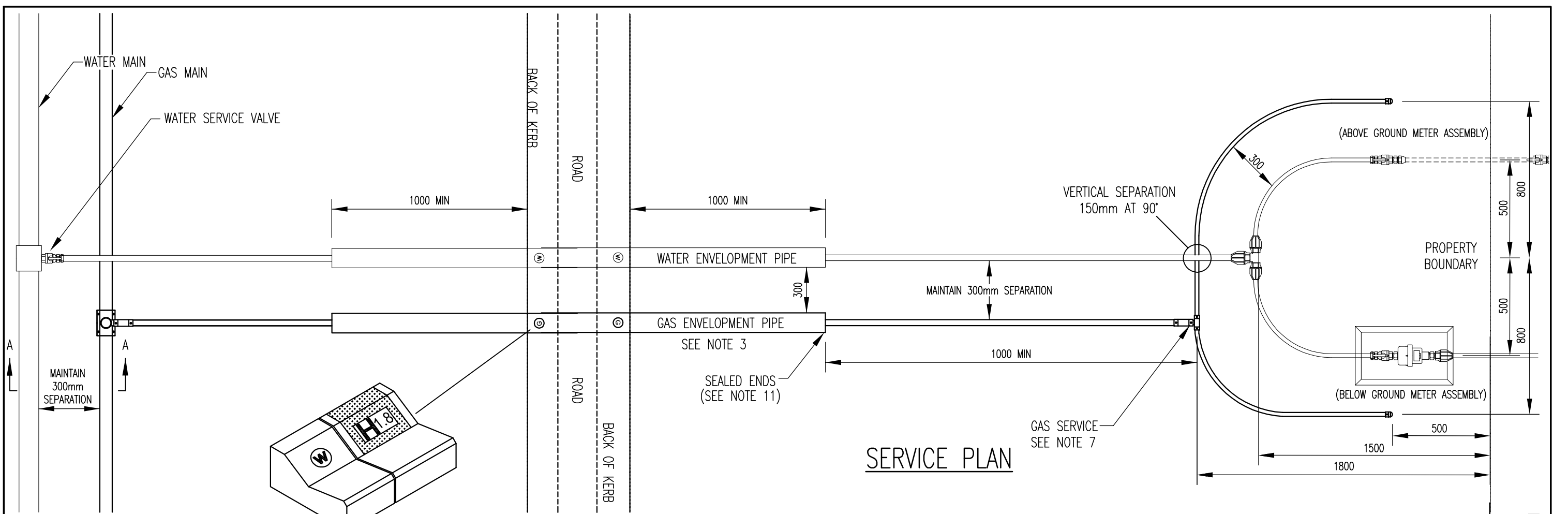


SECTION A-A TYPICAL SERVICE CONNECTION

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. MARKING TAPE IS REQUIRED FOR ALL SERVICE CONNECTIONS
3. GAS SERVICE ASSEMBLY AS PER STANDARD DRAWING.

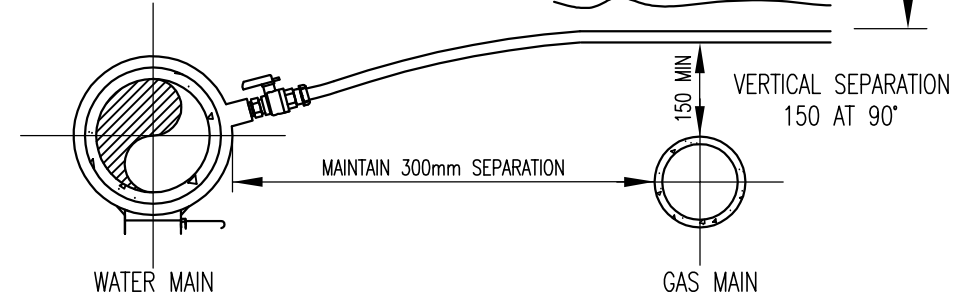
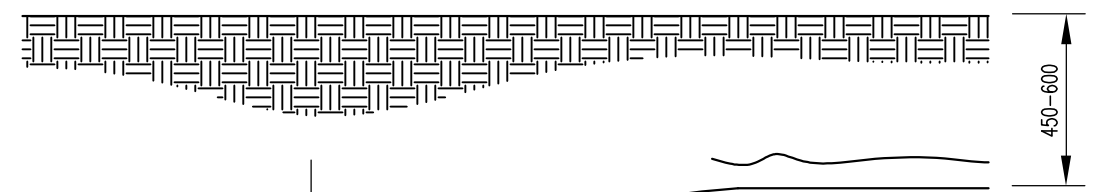
Revisions	Drn by	Date	Field Book No.	DRAWN S. Robertson		Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING – GAS GAS SUPPLY NETWORK SINGLE PROPERTY SERVICE MAIN TO METER
			Level Book No.	DESIGNED L. Cook			
			Datum	CHECKED P. Mauch			Plan No. G-004 No. 4 of 17 Plans Rev. A
				EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234			
				TECHNICAL SERVICES MANAGER			
				DATE 14/07/2010			
				Job No./s	Works Order No.	Auxiliary Plan No's.	
A	Original Issue						



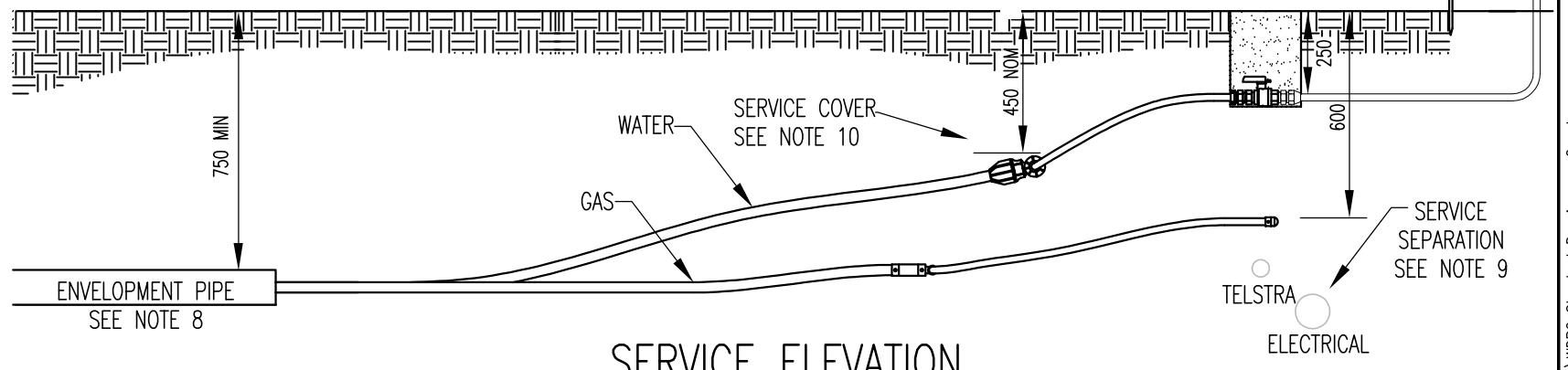
SERVICE PLAN

KERB MARKING

SEE NOTE 4



**SECTION A-A
TYPICAL SERVICE CONNECTION**



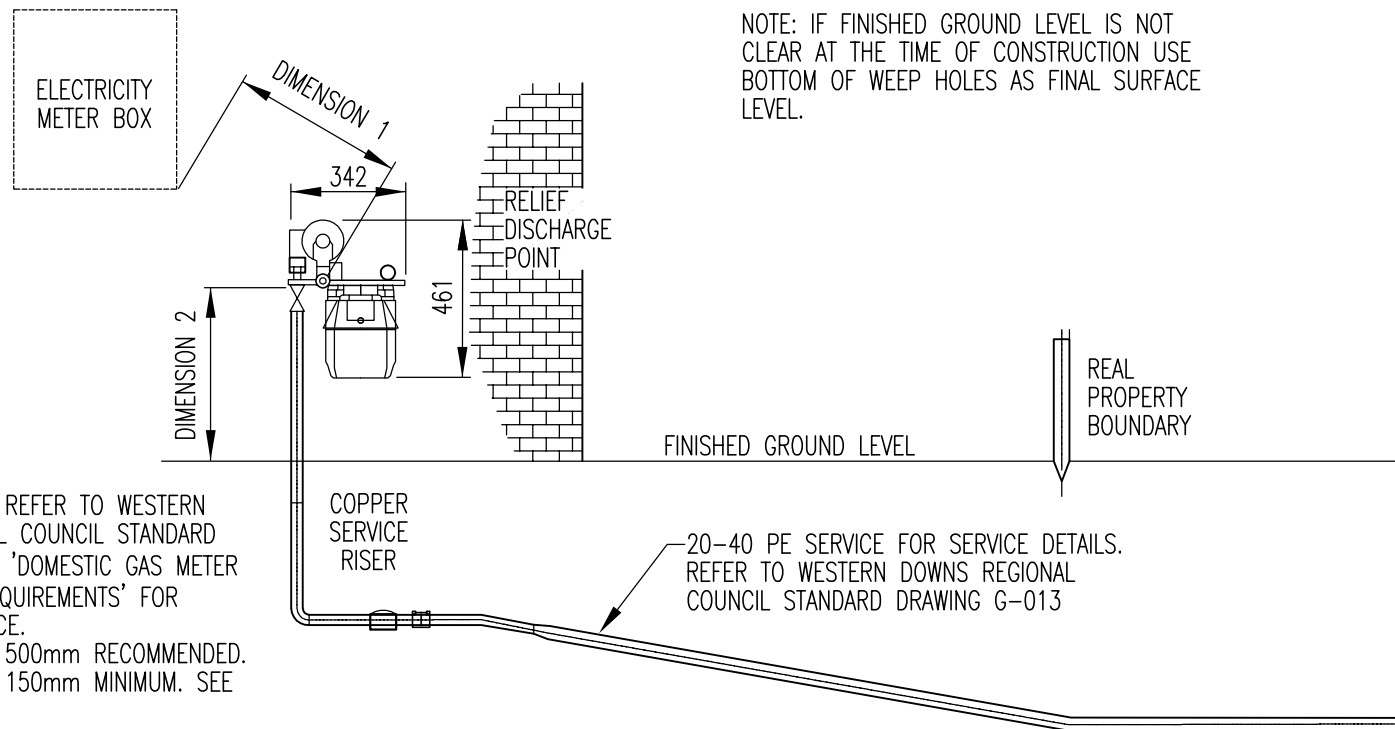
SERVICE ELEVATION

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. WATER ENVELOPMENT PIPE PN16 100mm MINIMUM.
3. GAS ENVELOPMENT PIPE PN16 100mm MINIMUM.
4. PERMANENTLY MARK CONCRETE KERBING IN LINE WITH THE SERVICE ENVELOPMENT PIPE.
5. MARKING TAPE IS REQUIRED FOR ALL SERVICE CONNECTIONS.
6. INSTALL SERVICE BRASS ISOLATION INLINE BALL VALVE FI/POLY.
7. GAS MAIN AND SERVICES TO INCLUDE A 1mm TRACE WIRE TO COUNCIL SPECIFICATION.
8. WATER & GAS ENVELOPMENT PIPES 750 MINIMUM COVER.
9. TELSTRA TO MAINTAIN 100mm MIN AND ELECTRICITY CONDUITS 300mm MIN VERTICAL SEPARATION BETWEEN SERVICES.
10. WATER SERVICES TO MAINTAIN A MINIMUM 450mm COVER 1m PRIOR TO SERVICE VALVE. GAS SERVICE TO MAINTAIN 600mm COVER.
11. ENDS OF ENVELOPMENT PIPES TO BE SEALED WITH FULLAFOAM.

Revisions	Drn by	Date	Field Book No.	Level Book No.	Datum	DATE 14/07/2010	WESTERN DOWNS REGIONAL COUNCIL	Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING – GAS GAS SUPPLY NETWORK SPLIT PROPERTY SERVICE MAIN TO METER	
B	L.T.P.	28.5.12								
A										
			Job No./s		Works Order No.		Auxiliary Plan No.'s.		Plan No. G-005 No. 5 of 17 Plans Rev. B	

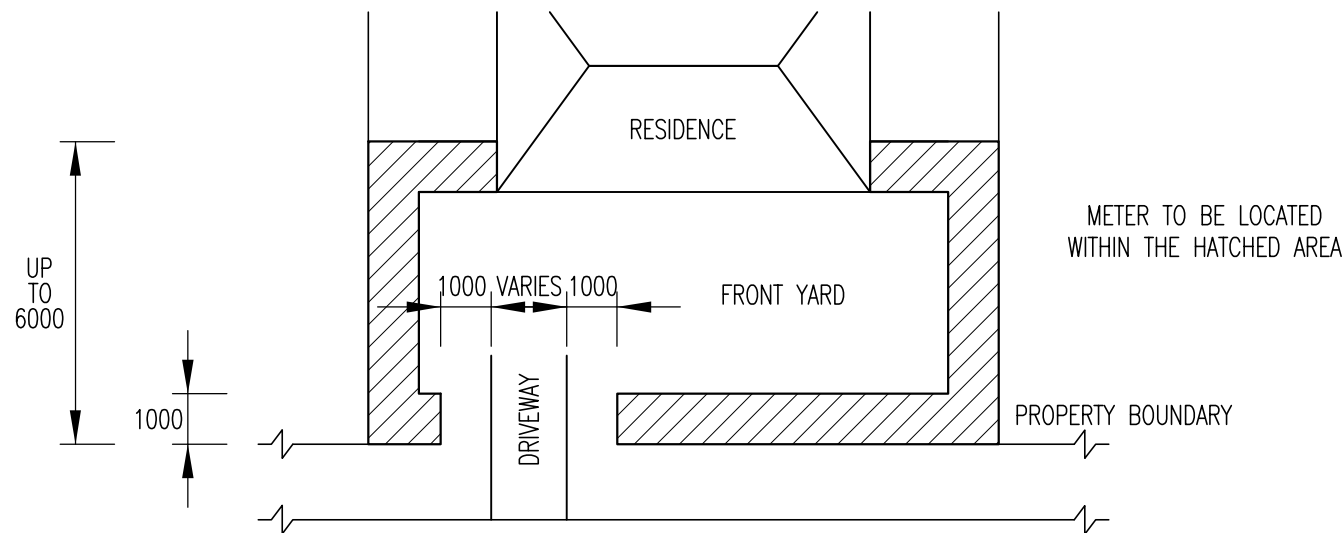
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DIMENSION 1 = REFER TO WESTERN DOWNS REGIONAL COUNCIL STANDARD DRAWING G-007 'DOMESTIC GAS METER INSTALLATION REQUIREMENTS' FOR MINIMUM DISTANCE.
 DIMENSION 2 = 500mm RECOMMENDED.
 DIMENSION 3 = 150mm MINIMUM. SEE BELOW.

NOTE: IF FINISHED GROUND LEVEL IS NOT CLEAR AT THE TIME OF CONSTRUCTION USE BOTTOM OF WEEP HOLES AS FINAL SURFACE LEVEL.

GENERAL ARRANGEMENT

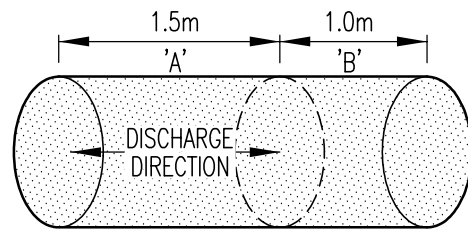


METER LOCALITY PLAN

NOTES

1. **METER SET LOCATION:** THE LOCATION OF A GAS METER IS DETERMINED BY THE NETWORK OPERATOR AFTER CONSULTATION WITH THE CONSUMER OR THE CONSUMER'S REPRESENTATIVE. THE METER LOCATION MUST ENSURE COMPLIANCE WITH THE FOLLOWING:
 - a. THE METER IS TO BE EXTERNAL TO ANY BUILDING OR STRUCTURE.
 - b. THE SERVICE LINE ROUTE IS TO BE A STRAIGHT LINE BETWEEN THE TAPPING POINT AND THE METER, AND THE SERVICE IS NOT TO PASS UNDER THE BUILDING.
 - c. WHERE THE DISTANCE BETWEEN THE BUILDING AND THE FRONT PROPERTY LINE IS 50 METRES (d) FOR DOMESTIC ESTATES WITH ROAD CROSSING CONDUITS THE PREFERRED METER LOCATION IS ADJACENT TO THE CROSSING.
 - d. METERS MUST NOT BE LOCATED ON WALLS WHERE THE BUILDING IS ON THE BOUNDARY LINE.
2. **READING THE METER INDEX:** WHERE A METER IS TO BE LOCATED BEHIND A BARRIER WHICH WILL PREVENT ACCESS FOR INDEX READING, THE FOLLOWING IS TO APPLY:
 - a. THE METER IS TO BE LOCATED ADJACENT TO THE BARRIER.
 - b. THE BARRIER, IF OF CLOSED CONSTRUCTION, IS TO INCLUDE PROVISION FOR METER READING. SUCH PROVISION SHALL BE AN OPENING DIRECTLY IN LINE WITH THE METER INDEX. THE MINIMUM DIMENSIONS OF THE OPENING ARE 100mm x 100mm.
 - c. WHERE THE BARRIER IS OF OPEN CONSTRUCTION THE METER INDEX NEEDS TO BE VISIBLE FROM THE ACCESSIBLE SIDE OF THE BARRIER.
3. **METER SET CLEARANCES:** THE RELIEF DISCHARGE POINT SHALL HAVE MINIMUM CLEARANCES AS SHOWN ON WESTERN DOWNS REGIONAL COUNCIL STANDARD DRAWING "G-007: DOMESTIC GAS METER INSTALLATION REQUIREMENTS"
4. **METER SET PROTECTION:**
 - a. A LOCATION SHALL BE CHOSEN THAT PREVENTS THE METER SET BEING STRUCK BY VEHICLES OR BEING EXPOSED TO OTHER PHYSICAL DAMAGE.
 - b. THE METER SET SHALL BE IN A LOCATION THAT IS NOT SUBJECT TO FLOODING.
5. **METER SET TESTING & COMMISSIONING:** TESTING & COMMISSIONING OF DOMESTIC METER SETS MUST COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
6. ALL DIMENSIONS IN MILLIMETRES
7. REFER TO WESTERN DOWNS REGIONAL COUNCIL STANDARD DRAWING G-004 FOR MORE INFORMATION.

Revisions		Drn by	Date	Field Book No.	Level Book No.	WESTERN DOWNS REGIONAL COUNCIL 	Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING – GAS GAS METER INSTALLATION REQUIREMENTS		
Datum				DRAWN L. Porter DESIGNED L. Cook CHECKED P. Mauch EXAMINED L. Cook RECOMMENDED S. Hegedus RPEQ. 5234 TECHNICAL SERVICES MANAGER						
B		Meter box/enclosure detail removed. Locality plan edited	L.T.P.	10.2.11	DATE 22/02/2011					
A		Original Issue								
		Job No./s	Works Order No.	Auxiliary Plan No.'s				Plan No. G-006	No. 6 of 17 Plans	Rev. B



RELIEF TERMINAL
DISCHARGE POINT

NOTE:

THE EXCLUSION ZONE SHOWN ABOVE DEPICTS A CYLINDER IN THE DIRECTION OF DISCHARGE AND BEHIND THE DISCHARGE POINT.

'A' = NO PHYSICAL OBSTRUCTIONS OR SOURCES OF IGNITION PERMITTED. IF AN OBSTRUCTION EXISTS SEE DIAGRAM 2 OR 3 FOR MODIFIED HAZARDOUS AREA.

'B' = NO SOURCES OF IGNITION PERMITTED.

DIAGRAM 1

HAZARDOUS ZONE WITHOUT OBSTRUCTION OF RELIEF

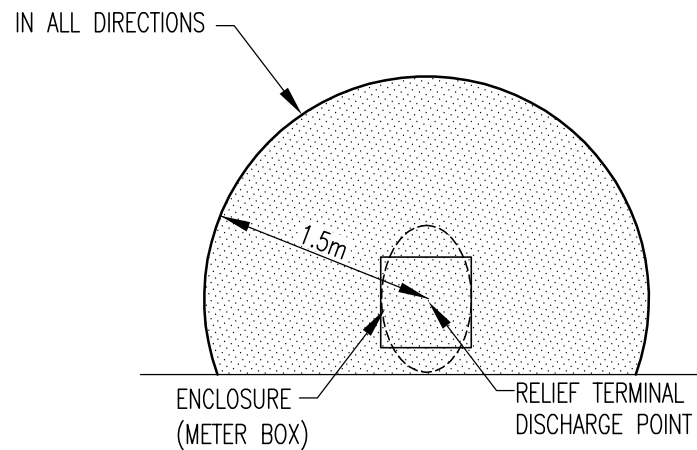


DIAGRAM 2

HAZARDOUS ZONE WITH RELIEF OBSTRUCTION

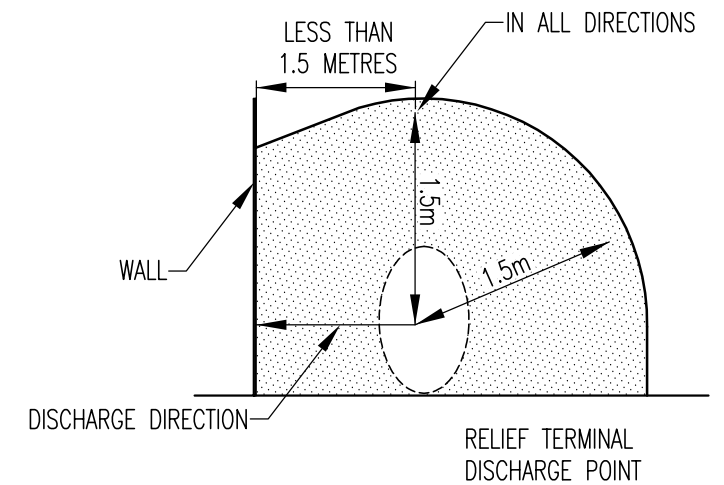


DIAGRAM 3

HAZARDOUS ZONE WITH RELIEF OBSTRUCTION

METER SET CLEARANCES

DISTANCES FOR POINTS (A) AND (B) APPLY IN ALL DIRECTIONS AND ARE MINIMUM DISTANCES. NO ELECTRICAL EQUIPMENT OR SOURCES OF IGNITION ARE TO BE LOCATED WITHIN THE GAS HAZARDOUS ZONE AS PER DIAGRAM 1, 2 OR 3, OR THE FOLLOWING - WHICHEVER IS GREATER.

- (a) 1000mm FROM ANY DOOR, WINDOW OR ANY OTHER OPENING INTO THE BUILDING OR ENCLOSED SPACE (EXCLUDING SUB-FLOOR VENTILATION OPENINGS).
- (b) 3000mm FROM ANY MECHANICAL AIR INLET.
- (c) 1000mm FROM A FLUE TERMINAL.
- (d) 1000mm FROM ELECTRICAL EQUIPMENT OTHER THAN PERMITTED IN (e).
- (e) 500mm FROM AN ELECTRICITY METER BOX.

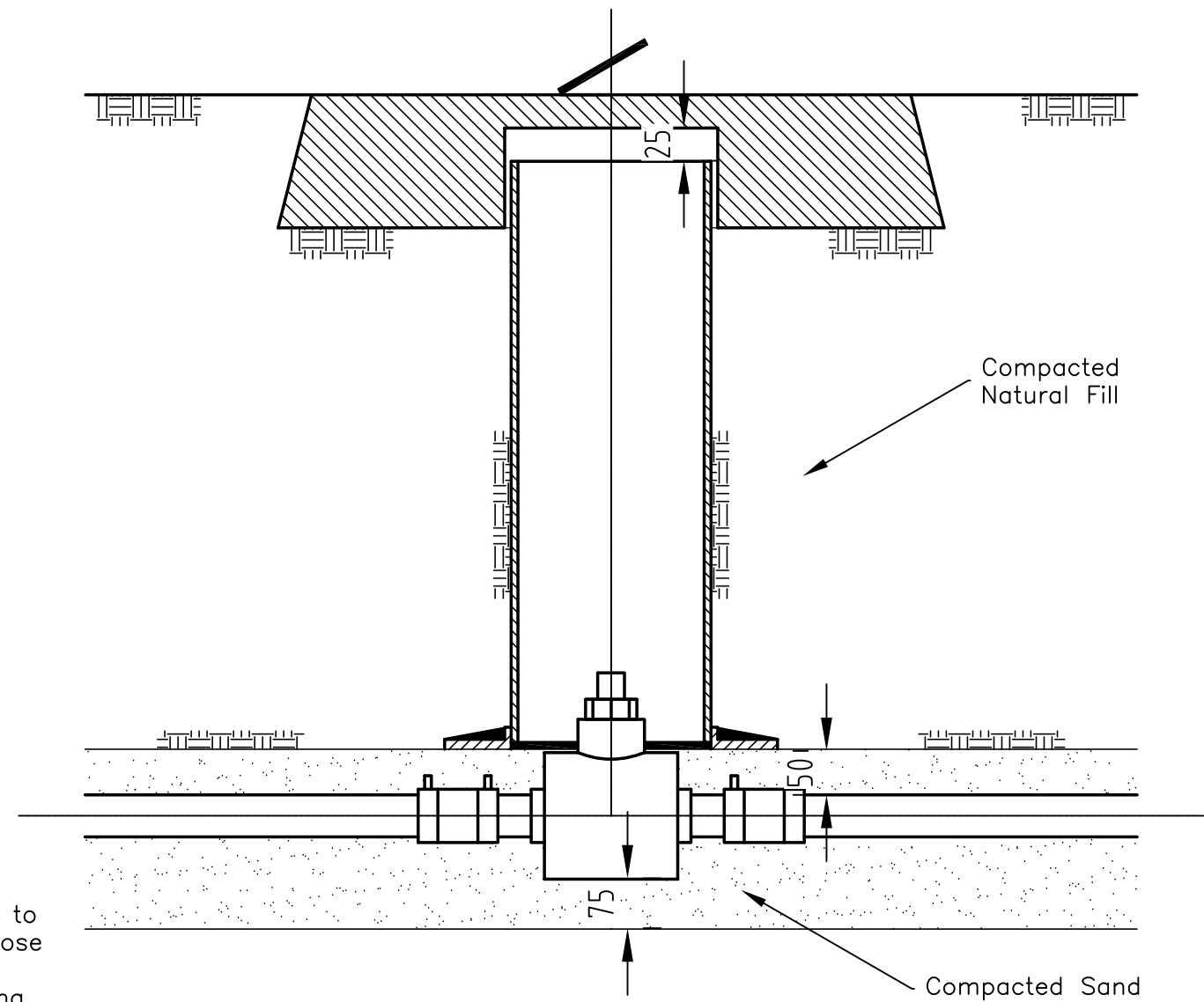
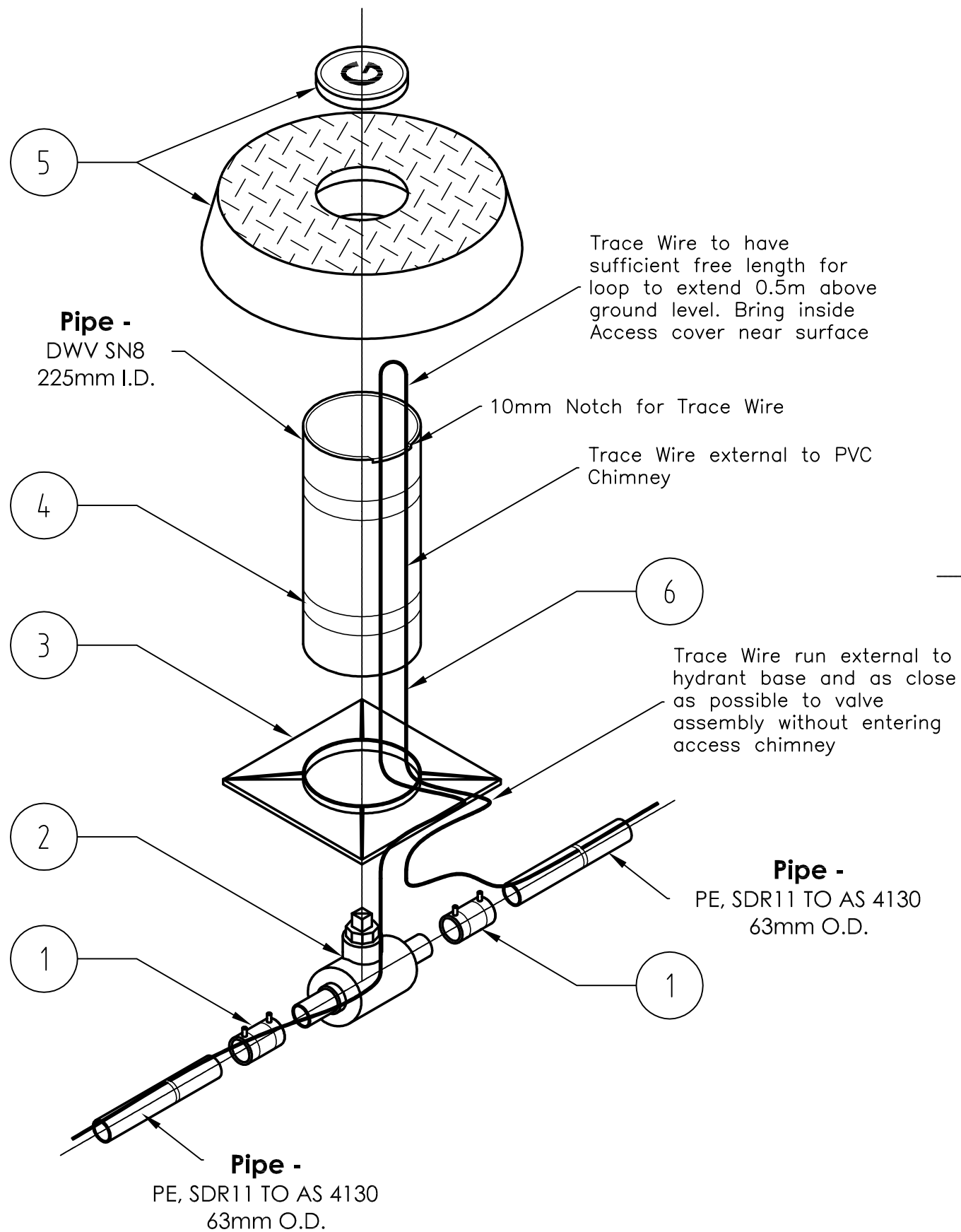
THE POSITION OF THE RELIEF DISCHARGE POINT CAN BE ALTERED BY RUNNING PIPEWORK FROM THE RELIEF VENT IF REQUIRED. THE DIRECTION OF DISCHARGE MAY BE ALTERED BY ROTATING THE ELBOW ON THE REGULATOR RELIEF VENT.

NOTES

- 1. SEE WESTERN DOWNS REGIONAL COUNCIL STANDARD DRAWING G-006 - 'DOMESTIC GAS METER INSTALLATION REQUIREMENTS' FOR TYPICAL LOCATION OF RELIEF DISCHARGE POINT ON METER SET.
- 2. METER BOX ENCLOSURES ARE CLASSIFIED AS A RELIEF IMPEDEMENT. EXAMPLE: DIAGRAM 2 TO ENABLE USE OF DIAGRAM 1A 50mm DIAMETER HOLE IS TO BE CUT IN THE METER BOX DOOR IN LINE WITH THE RELIEF DISCHARGE POINT.
- 3. EXAMPLES OF SOURCES OF IGNITION ARE, ELECTRICAL METERS & EQUIPMENT, FLUE TERMINALS, HOT WATER SYSTEMS, AIR CONDITIONING UNITS, ETC.

DOMESTIC GAS METER INSTALLATION REQUIREMENTS

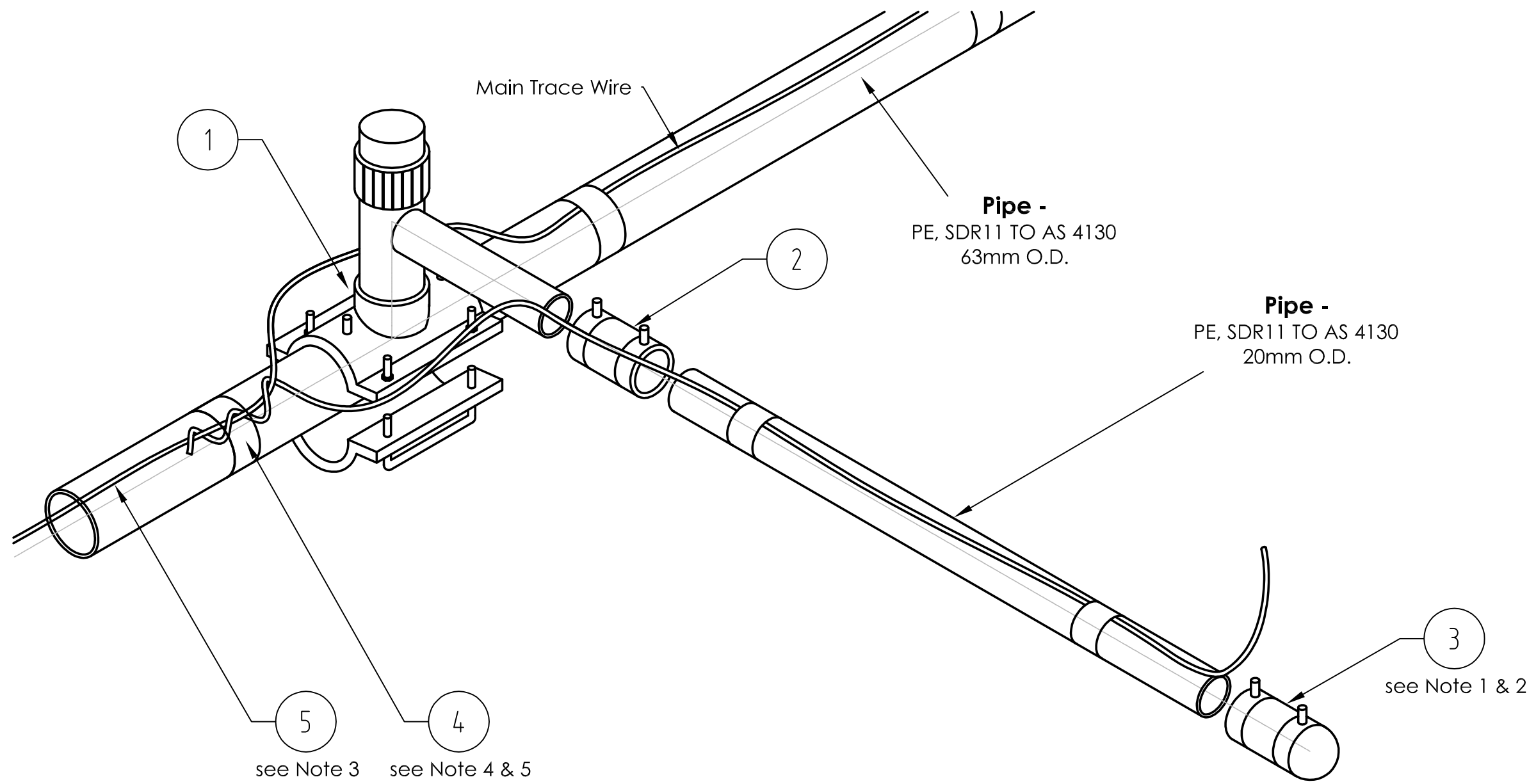
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	Level Book No.	Datum	CHECKED P. Mauch	EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234			
				TECHNICAL SERVICES MANAGER			
				DATE 17/05/2011			
B	Notes edited	L.T.P.	10.2.11	Job No./s	Works Order No.	Auxiliary Plan No.'s. G-006	
A	Original Issue						



BILL OF MATERIALS			
ITEM No.	PART No.	DESCRIPTION	QTY
1		Coupling E/F SDR11 63mm OD PE	2
2		Valve, Ball, Full Bore, Class 500 E/F 63mm OD PE	1
3		Hydrant Base Plate	1
4		Adhesive Tape as available	n/a
5		Access Surround & Access Cover	1
6		Trace Wire Single Core, 0.7mm ² SS or PVC insulated copper 1mm ²	n/a

- Notes:
- All dimensions are in millimetres
 - Must not be subjected to vehicular traffic
 - UPVC pipe chimney to be of sufficient length to allow insertion into hydrant base and access surround as per dimensions

Revisions	Drn by	Date	Field Book No.	DRAWN L. Cook		Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWINGS – GAS GAS SUPPLY NETWORK GAS MAIN ASSEMBLIES PE BALL VALVE
	Level Book No.	Datum	CHECKED P. Mauch	EXAMINED L. Cook			
B	Multileaders edited	L.T.P. 10.2.11			DATE 21/04/2011		Plan No. G-008
A	Original Issue				Job No./s	Works Order No.	No. 8 of 17 Plans Rev. B

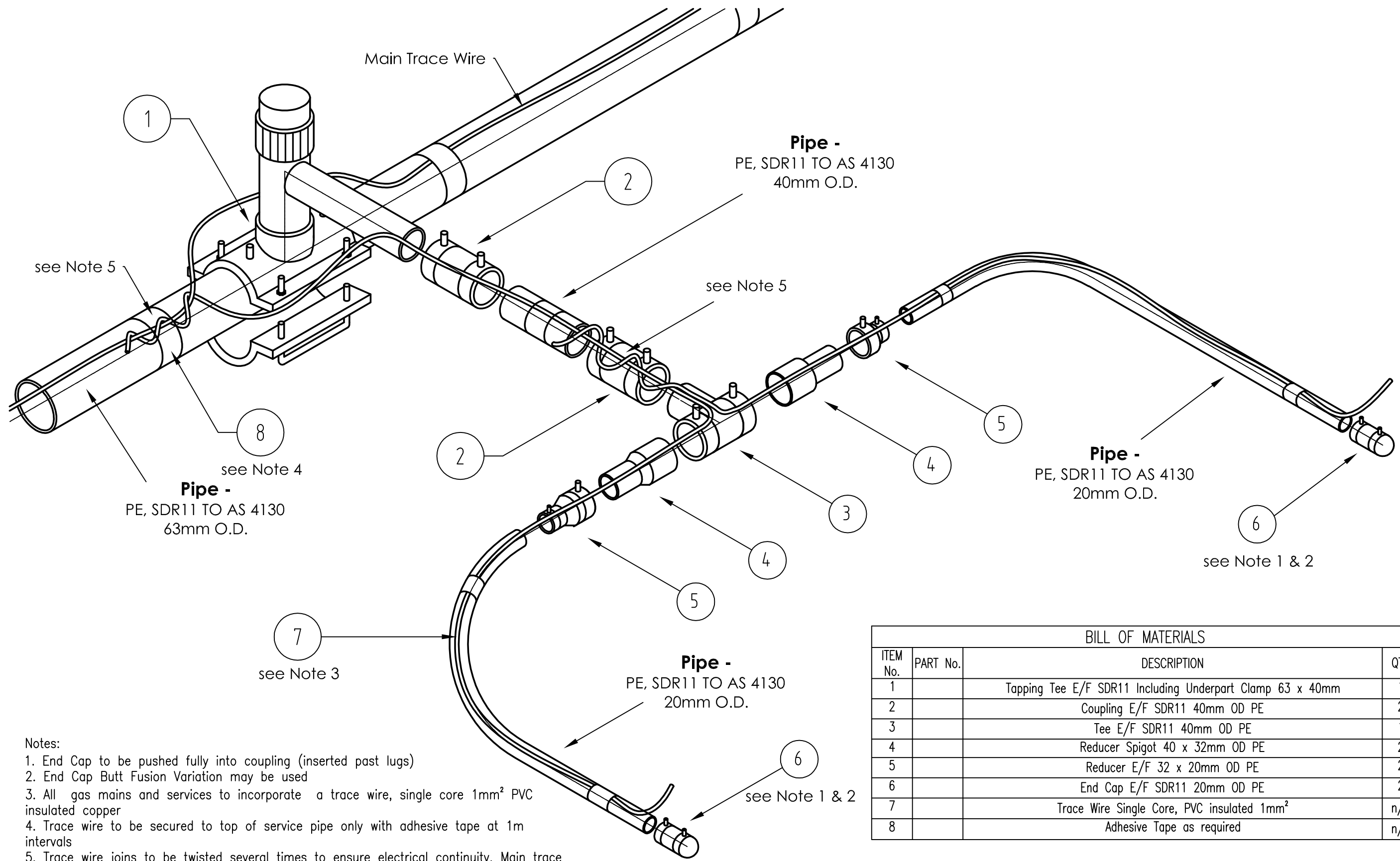


Notes:

1. End Cap to be pushed fully into coupling (inserted past lugs)
2. End Cap Butt Fusion Variation may be used
3. All gas mains and services to incorporate 1mm single core pvc insulated trace wire at 1m intervals
4. Trace wire to be secured to top of pipe only with adhesive tape
5. Trace wire to be bared and twisted. Main trace wire not to be cut.
6. All gas mains and services are required to have gas warning tape placed typically 300mm above pipe

BILL OF MATERIALS			
ITEM No.	PART No.	DESCRIPTION	QTY
1		Tapping Tee E/F SDR11 Including Underpart Clamp 63 x 20mm	1
2		Coupling E/F SDR11 20mm OD PE	1
3		End Cap E/F SDR11 20mm OD PE	1
4		Adhesive Tape as required	n/a
5		Trace Wire Single Core, PVC insulated 1mm ²	n/a

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Revisions</th> <th>Drn by</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Multileaders edited</td> <td>L.T.P. 10.2.11</td> </tr> <tr> <td>A</td> <td>Original Issue</td> <td></td> </tr> </tbody> </table>	Revisions	Drn by	Date	B	Multileaders edited	L.T.P. 10.2.11	A	Original Issue		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Field Book No.</td> <td></td> </tr> <tr> <td>Level Book No.</td> <td></td> </tr> <tr> <td>Datum</td> <td></td> </tr> </table>	Field Book No.		Level Book No.		Datum		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DRAWN</td> <td>L. Cook</td> </tr> <tr> <td>DESIGNED</td> <td>L. Cook</td> </tr> <tr> <td>CHECKED</td> <td>P. Mauch</td> </tr> <tr> <td>EXAMINED</td> <td>L. Cook</td> </tr> <tr> <td>RECOMMENDED</td> <td>S. Hegedus RPEQ. 5234</td> </tr> <tr> <td colspan="2">TECHNICAL SERVICES MANAGER</td> </tr> <tr> <td colspan="2" style="text-align: right;">DATE 21/04/2011</td> </tr> <tr> <td>Job No./s</td> <td>Works Order No.</td> </tr> </table>	DRAWN	L. Cook	DESIGNED	L. Cook	CHECKED	P. Mauch	EXAMINED	L. Cook	RECOMMENDED	S. Hegedus RPEQ. 5234	TECHNICAL SERVICES MANAGER		DATE 21/04/2011		Job No./s	Works Order No.	<p>WESTERN DOWNS REGIONAL COUNCIL</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Horiz. Section Scale: NTS on A3</td> <td></td> </tr> <tr> <td>Vert. Section Scale: NTS on A3</td> <td></td> </tr> </table>	Horiz. Section Scale: NTS on A3		Vert. Section Scale: NTS on A3		<p>STANDARD DRAWINGS – GAS GAS SUPPLY NETWORK GAS MAIN ASSEMBLIES SINGLE PE SERVICE</p>
Revisions	Drn by	Date																																						
B	Multileaders edited	L.T.P. 10.2.11																																						
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Vert. Section Scale: NTS on A3																																								
					Plan No. G-009 No. 9 of 17 Plans Rev. B																																			



Pipe -
PE, SDR11 TO AS 4130
40mm O.D.

Pipe -
PE, SDR11 TO AS 4130
63mm O.D.

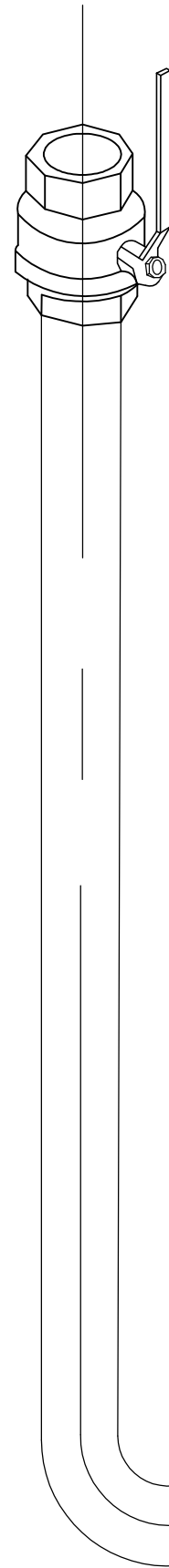
Pipe -
PE, SDR11 TO AS 4130
20mm O.D.

Pipe -
PE, SDR11 TO AS 4130
20mm O.D.

- Notes:
1. End Cap to be pushed fully into coupling (inserted past lugs)
 2. End Cap Butt Fusion Variation may be used
 3. All gas mains and services to incorporate a trace wire, single core 1mm² PVC insulated copper
 4. Trace wire to be secured to top of service pipe only with adhesive tape at 1m intervals
 5. Trace wire joins to be twisted several times to ensure electrical continuity. Main trace wire not is to be cut.
 6. All gas mains and services are required to have gas warning tape placed typically 300mm above pipe

BILL OF MATERIALS			
ITEM No.	PART No.	DESCRIPTION	QTY
1		Tapping Tee E/F SDR11 Including Underpart Clamp 63 x 40mm	1
2		Coupling E/F SDR11 40mm OD PE	2
3		Tee E/F SDR11 40mm OD PE	1
4		Reducer Spigot 40 x 32mm OD PE	2
5		Reducer E/F 32 x 20mm OD PE	2
6		End Cap E/F SDR11 20mm OD PE	2
7		Trace Wire Single Core, PVC insulated 1mm ²	n/a
8		Adhesive Tape as required	n/a

Revisions Drn by Date C Note 3 edited L.T.P. 28.5.12 B Multileaders edited L.T.P. 10.2.11 A Original Issue	Field Book No. Level Book No. Datum	DRAWN L. Cook DESIGNED L. Cook CHECKED P. Mauch EXAMINED L. Cook RECOMMENDED S. Hegedus RPEQ. 5234 TECHNICAL SERVICES MANAGER		Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWINGS – GAS GAS SUPPLY NETWORK GAS MAIN ASSEMBLIES SPLIT SERVICE MAIN TO METER
		DATE 21/04/2011 Job No./s Works Order No. Auxiliary Plan No's.			



20mm PIPE BENDERS TO BE USED TO FORM 90 DEGREE BEND IN COPPER PIPE RISER
 INSULATION TO BE REMOVED AT BEND LOCATION TO ENABLE INSPECTION FOR ANY
 EXCESSIVE MATERIAL DEFORMATION. AREA TO BE RE-WRAPED AFTER INSPECTION.

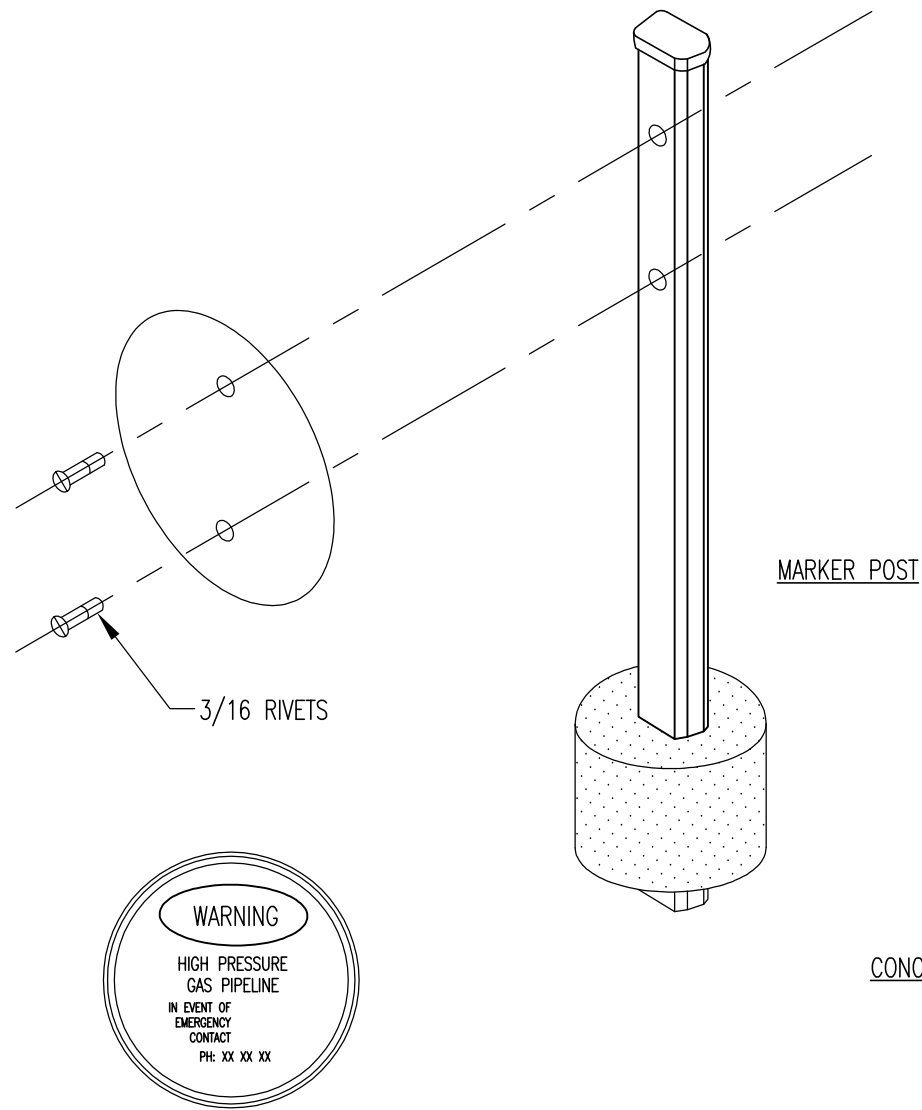
PIPE -
 SDR11 TO AS 4130
 20mm O.D.

COUPLING -
 CLASS 500 E/F, 39.5 V
 20mm O.D.

PIPE RISER -
 INSULATED COPPER, ANNEALED
 TYPE B, 1500mm 19.05mm O.D
 WITH 20NS BALL VALVE.

ASSEMBLY 2011-1 DOMESTIC RISER -20mm

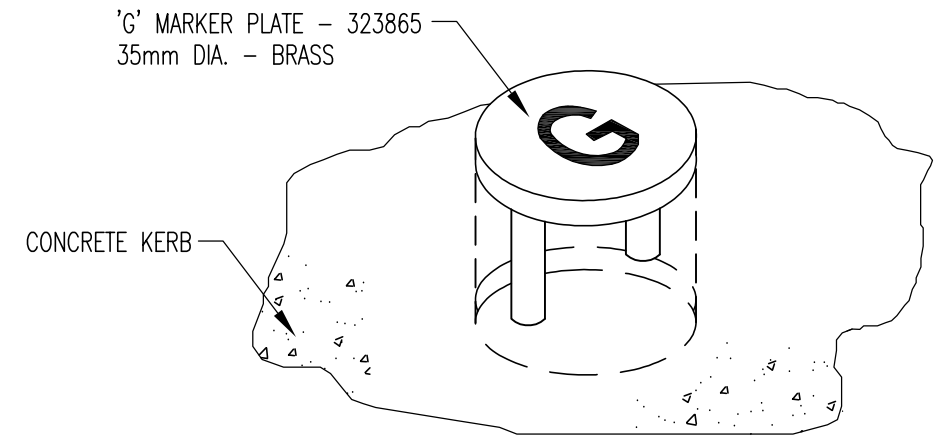
Revisions	Drn by	Date	Field Book No.	DRAWN J. Muhldorff	DESIGNED L. Cook	CHECKED P. Mauch	EXAMINED L. Cook	RECOMMENDED S. Hegedus RPEQ. 5234	TECHNICAL SERVICES MANAGER	DATE 28/4/2011	Job No./s	Works Order No.	Auxiliary Plan No's.	Horiz. Section Scale 1:NTS on A3 Vert. Section Scale 1:NTS on A3		STANDARD DRAWING - GAS GAS MAIN DOMESTIC SERVICE RISER
			Level Book No.													
B	Multileaders edited	L.T.P.	10.2.11													
A	Original Issue															



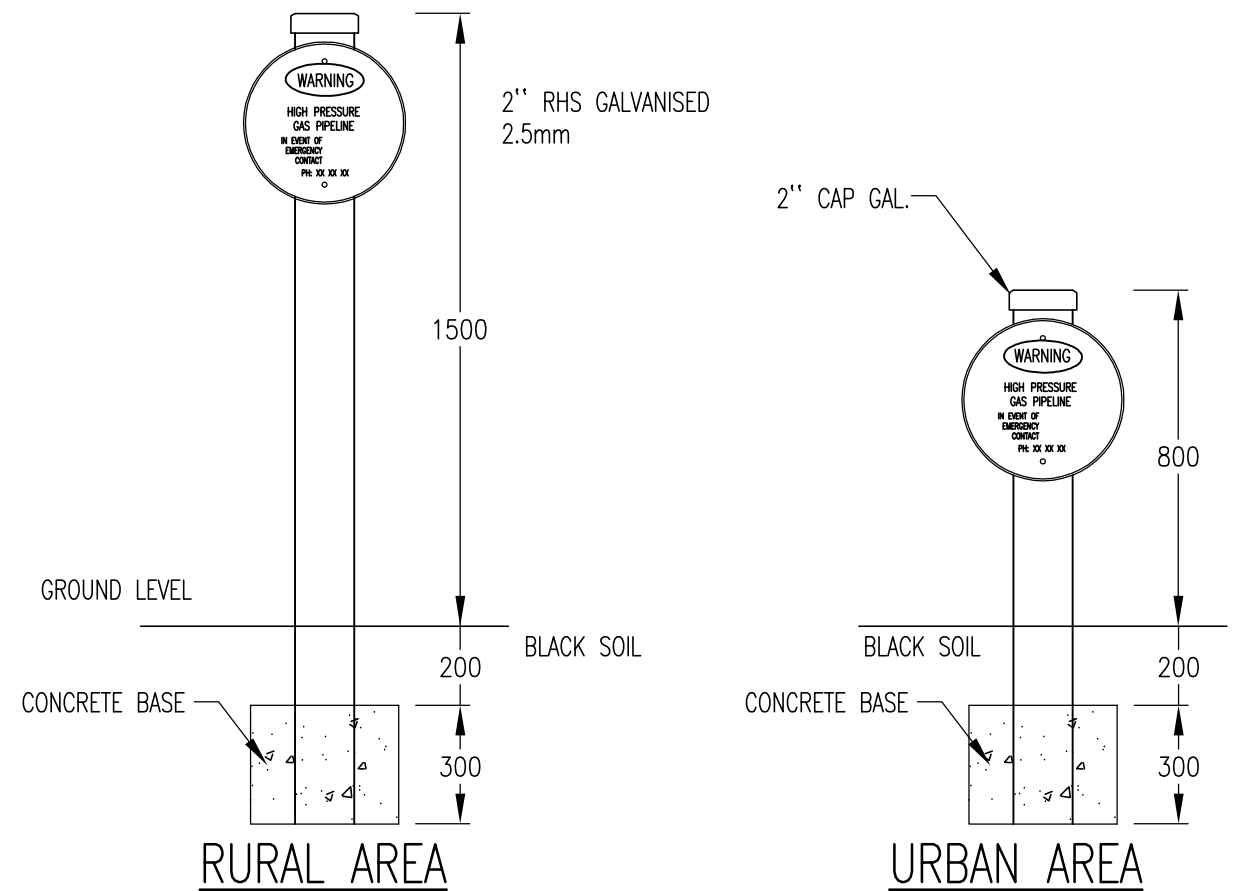
GAS WARNING SIGN - 397539
 HIGH PRESSURE GAS PIPELINE
 200mm DIA. x 4mm THICK -
 STEEL OR ALLOY

GAS MARKER POST

MARKER POST ASSEMBLY TO BE INSTALLED ON THE PROPERTY
 BOUNDARY IN A VISIBLE AND SAFE LOCATION



ASSEMBLY 2012-3 - 'G' MARKER PLATE



ASSEMBLY 2012-2 - GAS MARKER POST - 2000mm LONG

ASSEMBLY 2012-2 - GAS MARKER POST - 2000mm LONG

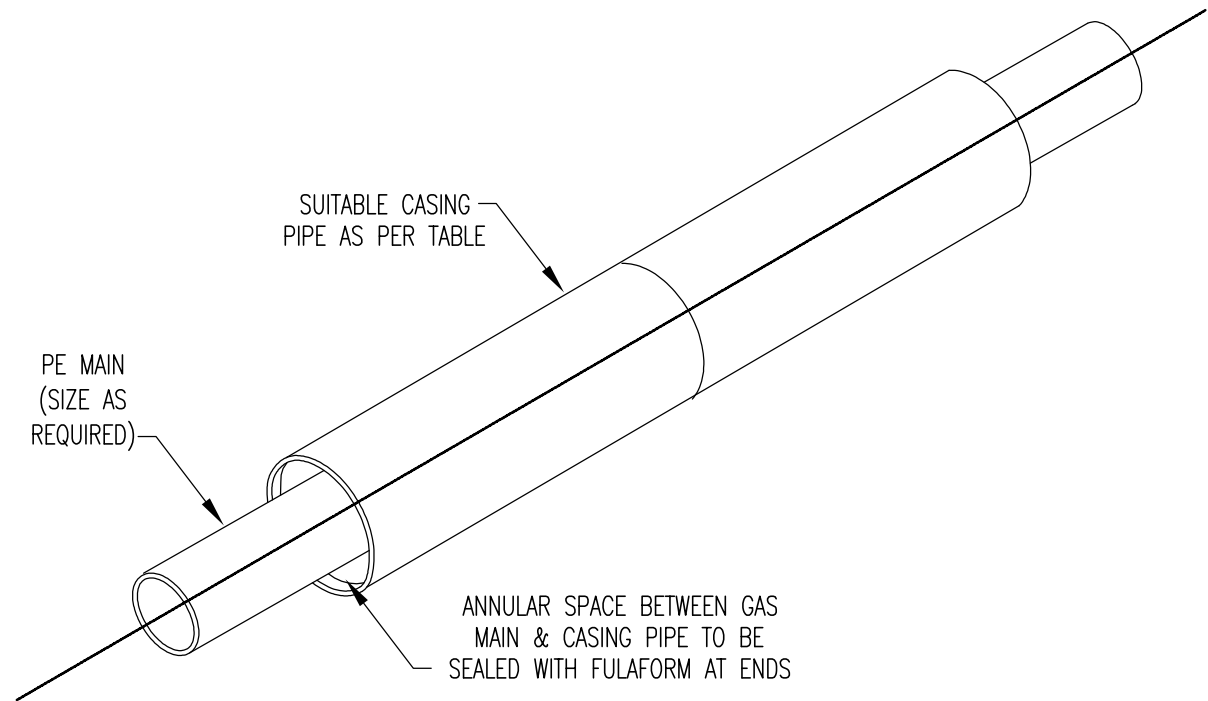
Revisions		Drn by	Date	Field Book No.	Level Book No.	Datum	DRAWN L. Porter DESIGNED P. Mauch CHECKED P. Mauch EXAMINED L. Cook RECOMMENDED S. Hegedus RPEQ. 5234 TECHNICAL SERVICES MANAGER	WESTERN DOWNS REGIONAL COUNCIL 	Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING - GAS GAS MAIN MARKER POST, LABEL AND PLATE
C	Marker post lengths changed & nuts removed from post	L.T.P.	10.02.12				DATE 17/05/2011			
B	Rural/urban drawings added & marker label drawing removed	L.T.P.	08-11							
A	Original Issue									Plan No. G-012 No. 12 of 17 Plans Rev. C

PE MAINS

MAIN (PE)	40mm O.D PE	63mm O.D PE	90mm O.D PE	110mm O.D PE
CONDUIT (PE)	63mm O.D PE	110mm O.D PE	160mm O.D PE	N/A

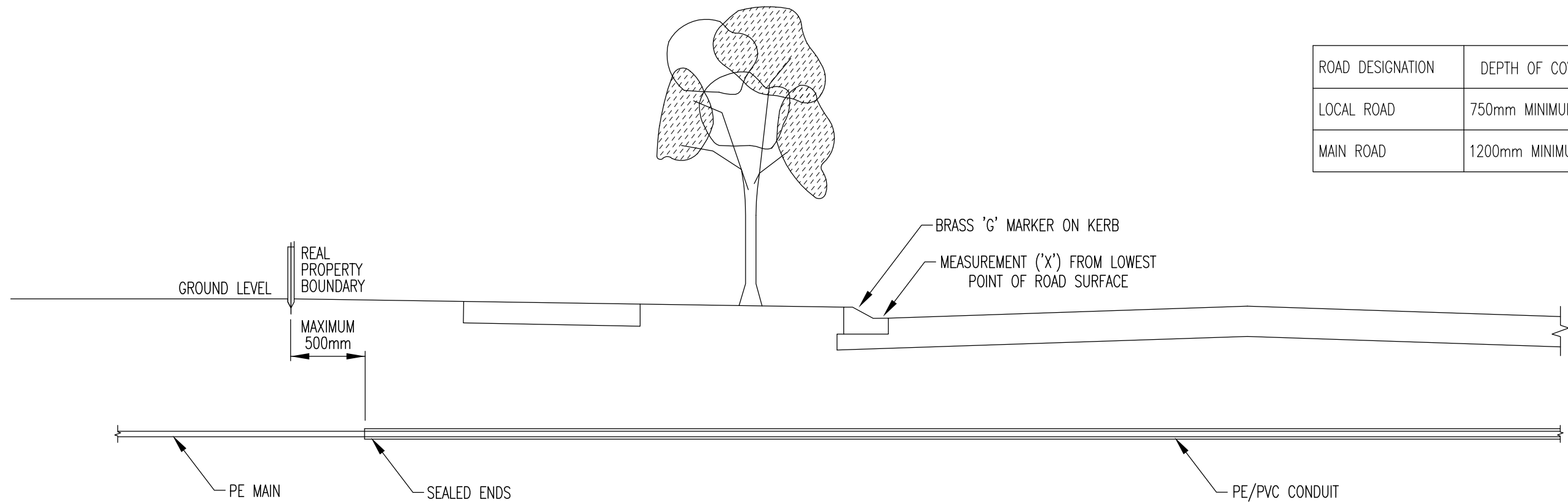
PVC FOR CASINGS SHALL BE PN16 UPVC PIPE
 PE FOR CASINGS SHALL BE SDR11 TO AS 4130

NOTE:
 - PVC IS THE PREFERRED CONDUIT MATERIAL
 - JOINTS & FITTINGS IN ROAD CROSSING CASINGS ARE NOT PERMITTED

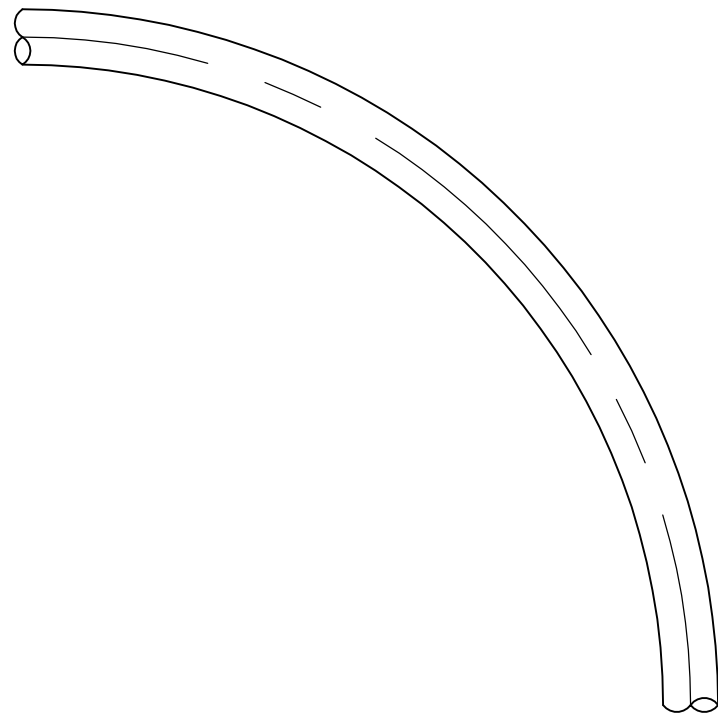


100Ø UPVC WITH XXX TAPE

ROAD DESIGNATION	DEPTH OF COVER - 'X'
LOCAL ROAD	750mm MINIMUM
MAIN ROAD	1200mm MINIMUM

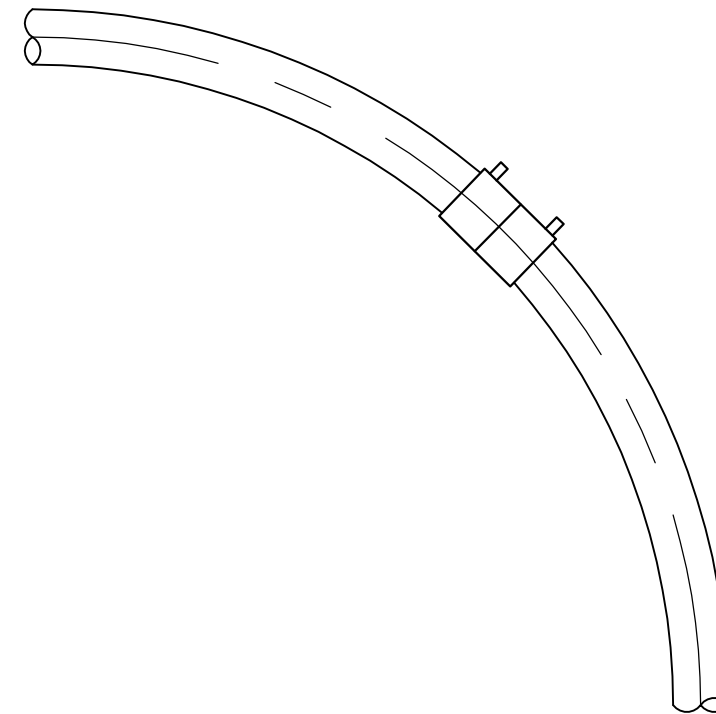


Revisions	Drn by	Date	Field Book No.	DRAWN L. Porter		Horiz. Section Scale: NTS on A3	STANDARD DRAWING - GAS PE GAS MAINS
			Level Book No.	DESIGNED L. Cook		Vert. Section Scale: NTS on A3	
			Datum	CHECKED P. Mauch			
				EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234			
				TECHNICAL SERVICES MANAGER			
				DATE 24/05/2011			
B	PVC Casings Note edited	L.T.P.	10.2.11	Job No./s	Works Order No.	Auxiliary Plan No's.	Plan No. G-013
A	Original Issue						No. 13 of 17 Plans Rev. B



VARIANT 1
CONTINUOUS LENGTH OF PIPE

'D'	'R' MIN (mm)
20 PE CLASS 500	300
32 PE CLASS 500	480
40 PE CLASS 500	600
63 PE CLASS 500	945
90 PE CLASS 500	1350
110 PE CLASS 500	1650
160 PE CLASS 500	2400



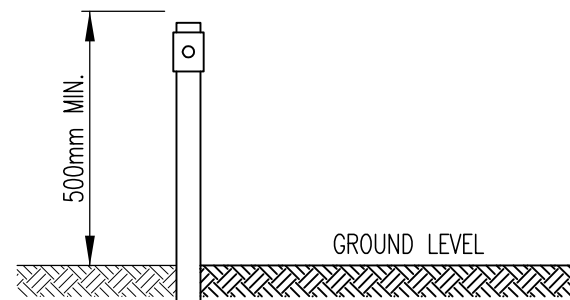
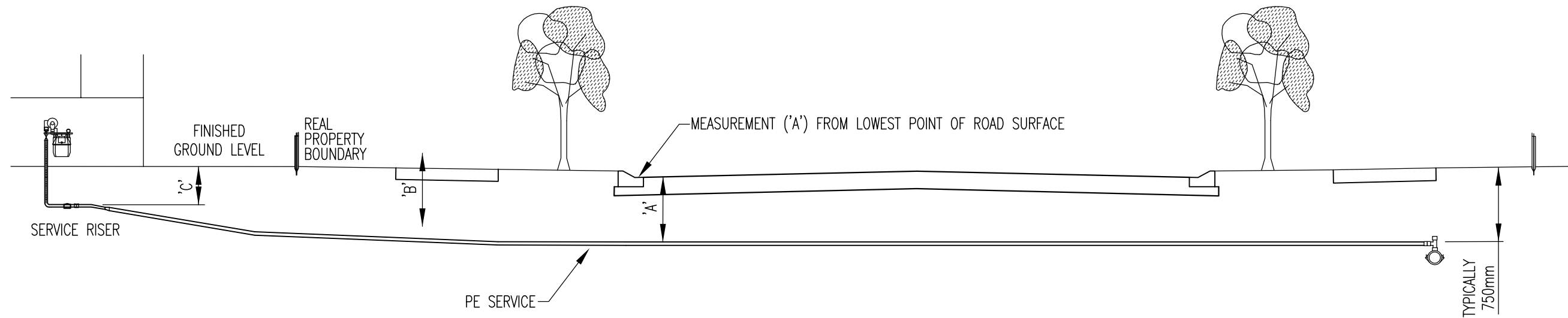
VARIANT 2
PIPE JOINED WITH FITTING

'D'	'R' MIN (mm)
20 PE CLASS 500	500
32 PE CLASS 500	800
40 PE CLASS 500	1000
63 PE CLASS 500	1575
90 PE CLASS 500	2250
110 PE CLASS 500	2750
160 PE CLASS 500	4000

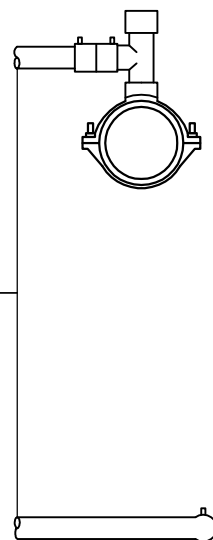
NOTE: IF THE MINIMUM RADIUS ('R' MIN) OR LARGER CANNOT BE ACHIEVED USE ELECTROFUSION ELBOWS

Revisions	Drn by	Date	Field Book No.	Level Book No.	Datum	DRAWN L. Porter		Horiz. Section Scale: NTS on A3	STANDARD DRAWING – GAS PE GAS PIPE MINIMUM BEND RADIUS
						DESIGNED L. Cook		Vert. Section Scale: NTS on A3	
						CHECKED P. Mauch			
						EXAMINED L. Cook			
						RECOMMENDED S. Hegedus RPEQ. 5234			
						TECHNICAL SERVICES MANAGER			
						DATE 17/05/2011			
Job No./s		Works Order No.		Auxiliary Plan No.'s.					
A Original Issue								Plan No. G-014 No. 14 of 17 Plans Rev. A	

IF FINISHED GROUND LEVEL IS NOT CLEAR AT THE TIME OF CONSTRUCTION USE BOTTOM OF WEEP HOLES AS FINAL SURFACE LEVEL.



DOMESTIC SERVICE RISER
(ASSEMBLY 2011-1)



(1)
CONNECTION TO PE MAIN
(ASSEMBLY 2009-1, 2, 4, 7 & 10)

(3)
SERVICE CONNECTION TO TEE

PIPE LOCATION	PIPE DEPTH
MAIN ROADWAY	1200mm - 'A'
LOCAL ROADWAY	750mm - 'A'
FOOTPATH	750mm - 'B'
PRIVATE PROPERTY (SUBJECTED TO TRAFFIC)	600mm - 'C'
PRIVATE PROPERTY (NOT SUBJECTED TO TRAFFIC)	450mm - 'C'

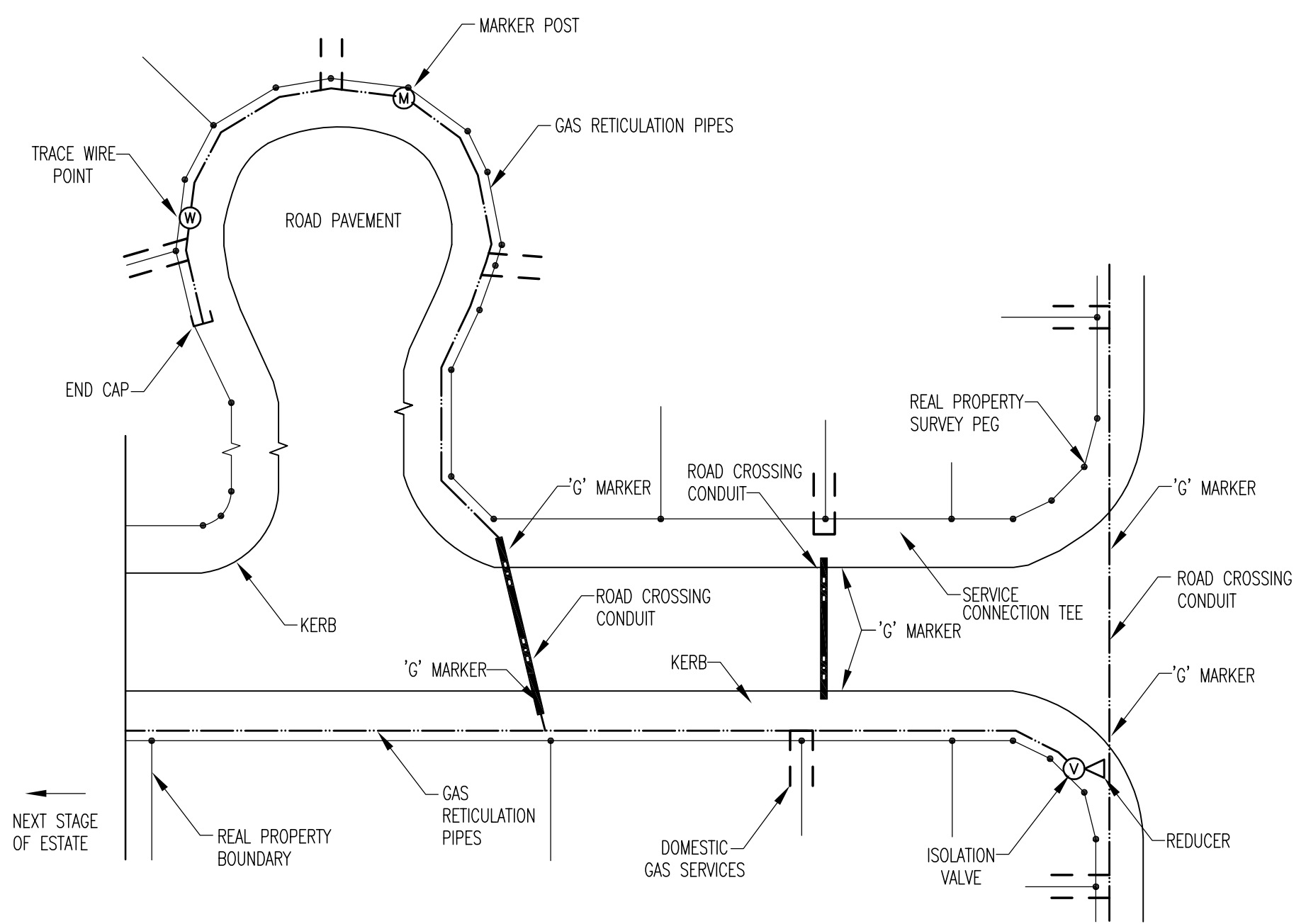
NOTES

- ALL PE AND COPPER COMPONENTS TO BE PRESSURE TESTED TO 700kPa.
- ALL MECHANICAL JOINTS TO BE SOAPY WATER TESTED AT OPERATING PRESSURE.
- TRACE WIRE WILL BE LAID WITH THE SERVICE AND BOUGHT TO THE SURFACE AT THE RISER. SERVICE TRACE WIRE IS TO BE ATTACHED TO THE TRACE WIRE AT THE MAIN.

DOMESTIC GAS SERVICE INSTALLATION DETAILS

Revisions	Drn by	Date	Field Book No.	DRAWN L. Porter	DESIGNED L. Cook	CHECKED P. Mauch	EXAMINED L. Cook	RECOMMENDED S. Hegedus RPEQ. 5234	TECHNICAL SERVICES MANAGER	DATE 24/05/2011	Job No./s	Works Order No.	Auxiliary Plan No's.	WESTERN DOWNS REGIONAL COUNCIL 	Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING - GAS DOMESTIC GAS SERVICE INSTALLATION DETAILS	
			Level Book No.														Datum
B	Notes edited	L.T.P.	10.2.11														Plan No. G-015 No. 15 of 17 Plans Rev. B
A	Original Issue																

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LEGEND

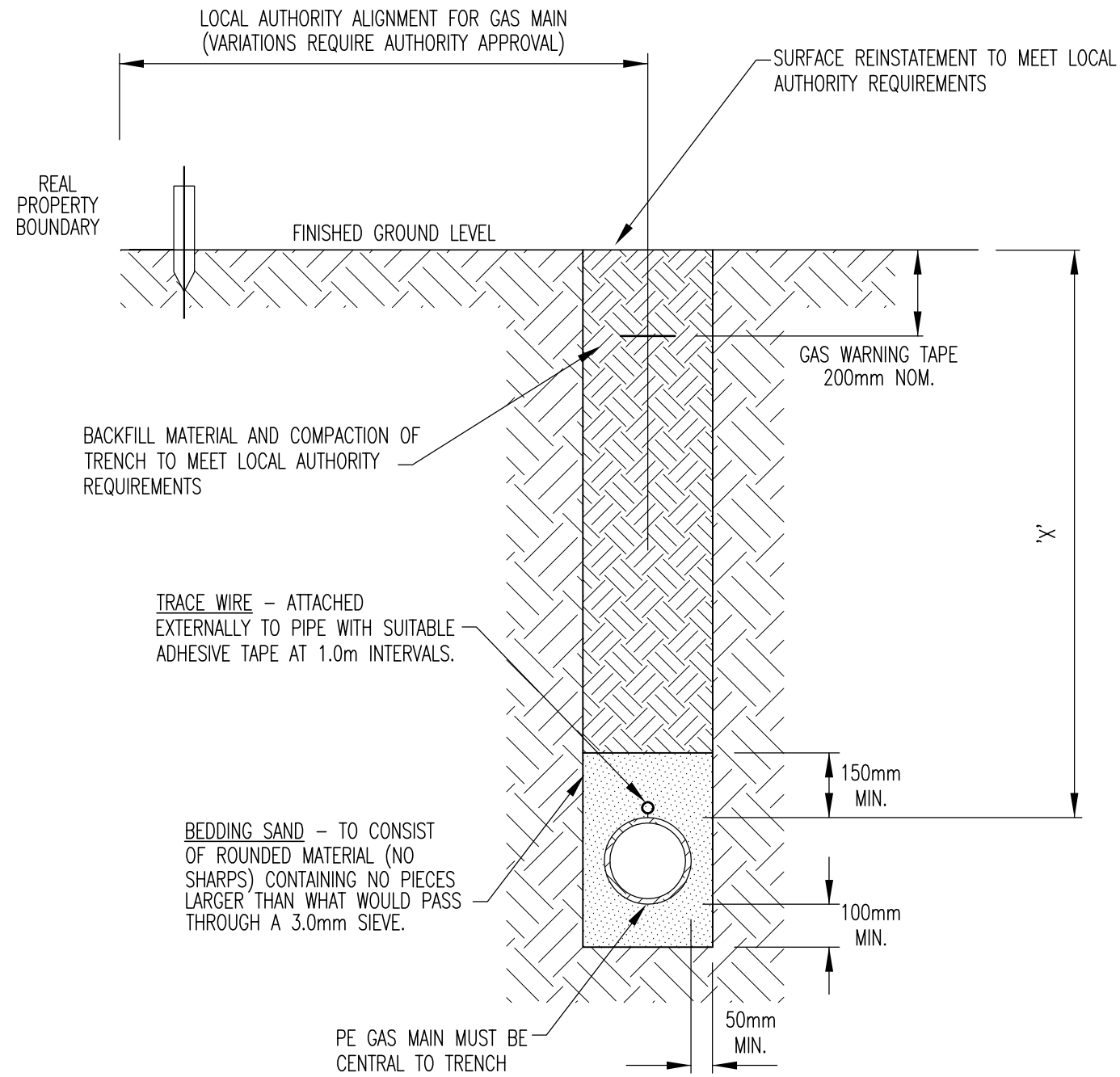
- PROPOSED GAS MAIN
- PROPOSED DOMESTIC SERVICE
- PROPOSED VALVE (WITH CHIMNEY ACCESS)
- PROPOSED MARKER POST
- PROPOSED TRACE WIRE POINT
- PROPOSED END CAP
- PROPOSED REDUCER

NOTES

1. ROAD CROSSING CONDUITS SHALL BE OF SIZE & MATERIAL AS PER DRAWING.
2. ROAD CROSSING CONDUITS SHALL BE PLACED ON A LINE BETWEEN THE REAL PROPERTY BOUNDARY SURVEY PEGS.
3. ROAD CROSSING CONDUITS SHALL TERMINATE 500mm FROM THE REAL PROPERTY SURVEY PEG.
4. ROAD CROSSING CONDUIT ENDS SHALL BE SEALED TO PREVENT ENTRY OF DIRT OR FOREIGN MATERIAL.

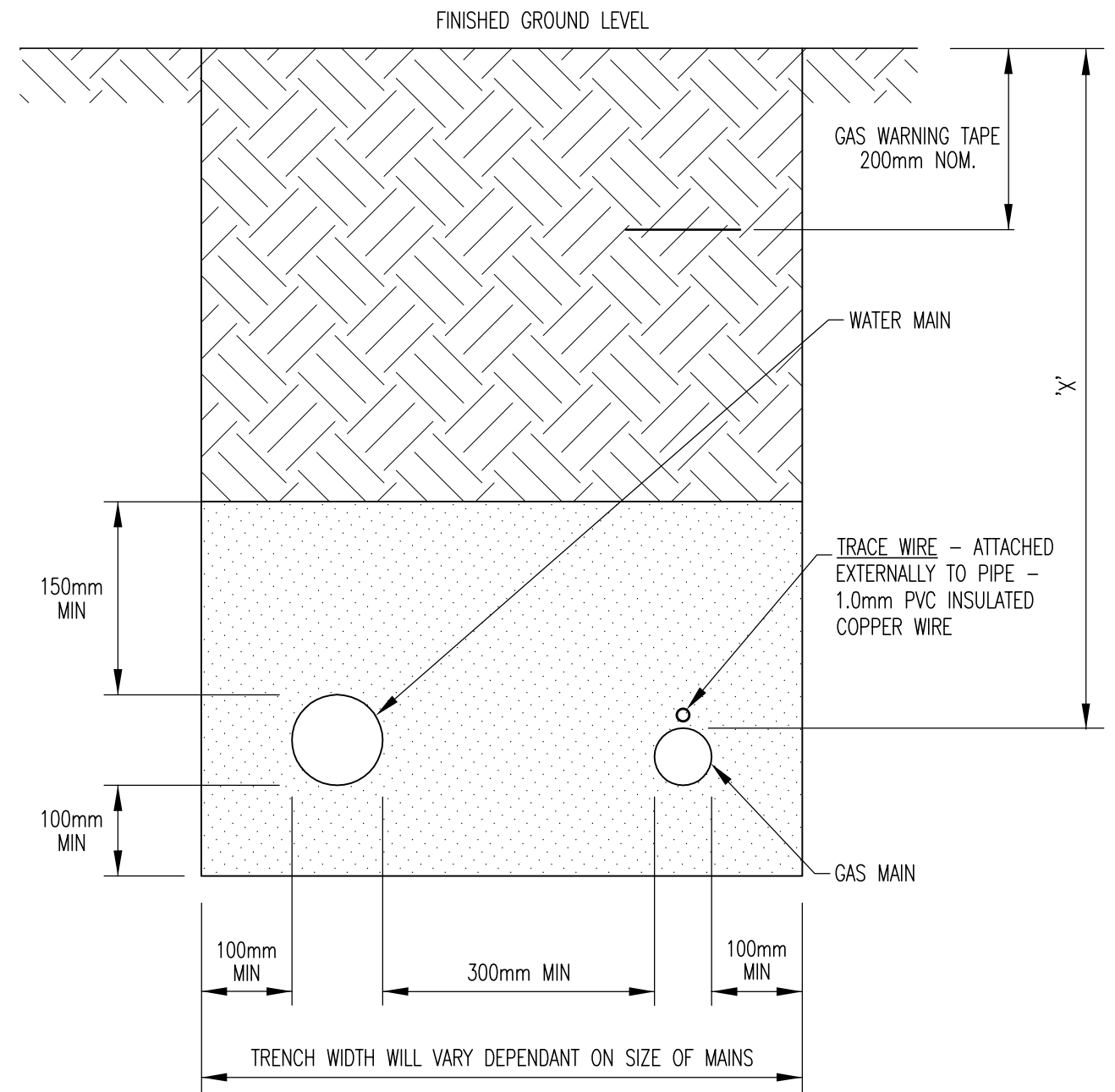
**GAS RETICULATION
MAINS, FITTINGS & CONDUITS**

Revisions	Drn by	Date	Field Book No.	DRAWN L. Porter		Horiz. Section Scale: NTS on A3 Vert. Section Scale: NTS on A3	STANDARD DRAWING – GAS GAS RETICULATION MAINS, FITTINGS & CONDUITS
			Level Book No.	DESIGNED L. Cook			
			Datum	CHECKED P. Mauch			
				EXAMINED L. Cook			
				RECOMMENDED S. Hegedus RPEQ. 5234			
				TECHNICAL SERVICES MANAGER			
				DATE 26/05/2011			
				Job No./s	Works Order No.	Auxiliary Plan No.'s.	
A Original Issue							Plan No. G-016 No. 16 of 17 Plans Rev. A



PIPE LOCATION	DEPTH OF COVER - 'X'
FOOTPATH	750mm MINIMUM
LOCAL ROADWAY	750mm MINIMUM
MAIN ROADWAY	1200mm MINIMUM

GAS GENERAL CONSTRUCTIONS - PE GAS MAIN



GAS GENERAL CONSTRUCTIONS - SHARED TRENCH DETAIL

Revisions	Drn by	Date	Field Book No.	Level Book No.	Datum	DATE	Job No./s	Works Order No.	Auxiliary Plan No.'s.	Horiz. Section Scale: NTS on A3	Vert. Section Scale: NTS on A3	STANDARD DRAWING - GAS GAS GENERAL CONSTRUCTIONS PE GAS MAIN & SHARED TRENCH DETAIL
D	Bedding detail, procedure compliance	L.T.P.	15.6.12			30/05/2011						Plan No. G-017 No. 17 of 17 Plans Rev. D
C	Shared Trench detail added	L.T.P.	30.5.12									
B	Multileaders edited	L.T.P.	10.2.11									
A	Original Issue											

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