

DUCT INSTALLATION ACCEPTANCE BY THE ASP

I have accepted the conduits as marked up on this drawing in compliance to SAD0004 and confirm that:

All the conduits installed by the ASP are:

- in accordance with MD10028 & MC10006
- are correct as per the WAE marked up design drawing provided

All conduit groups installed by the developer where accessed by the ASP during construction have been checked by me and I verify that:

- string lines are installed within all the conduits
- continuity of all conduits was confirmed
- all ends of conduits have been sealed as per standards
- exposed ducts at open ends appear to be installed in accordance with MD10028 & MC10006

THE INSTALLATION OF DUCT WAS VERIFIED BY ME ON:

NAME: CHRIS JOWETT
SIGNATURE: C. JOWETT
DATE: 01/11/2021
ASP COMPANY: C. DOYLE CONTRACTING
LEVEL 1 ASP COMPANY COMPETENT PERSON

HV. TRENCH LENGTH	840m
LV. TRENCH LENGTH	1660m
TOTAL TRENCH LENGTH	2500m

WARNING

LIVE ENDEAVOUR ENERGY CABLES AND OTHER SERVICES EXIST IN THIS AREA.

PLEASE CONTACT "DIAL BEFORE YOU DIG" ON TEL-1100 FOR SEARCH INFORMATION A MINIMUM TWO DAYS PRIOR TO EXCAVATION

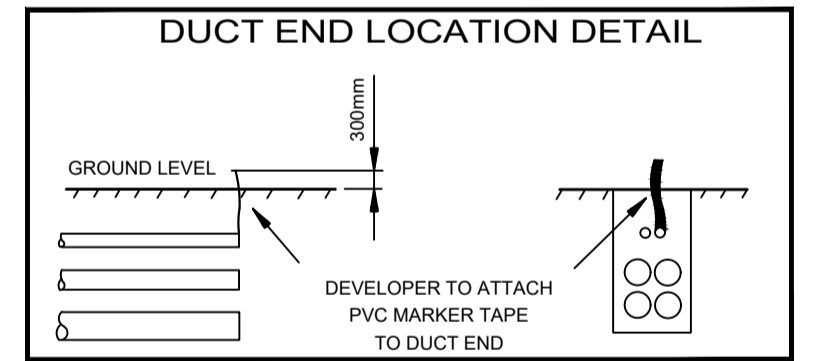
- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT ENDEAVOUR ENERGY NETWORK STANDARDS & CONNECTION POLICY.
 - AN EASEMENT FOR UNDERGROUND CABLE 1 METRE WIDE IS REQUIRED TO BE CREATED BY THE DEVELOPER OVER LOTS 1567, 1550 & 1549 FOLLOWING INSTALLATION. DUCT LOCATIONS ARE TO BE CONFIRMED BY A REGISTERED SURVEYOR PRIOR TO TRENCH BACKFILL.
 - CONCRETE PROTECTION TO BE PROVIDED TO EASEMENT DUCTS IN ACCORDANCE WITH MCI 0006 SECTION 4. REFER ENDEAVOUR ENERGY DRAWING 60862/F.
 - EASEMENTS FOR SUBSTATION SITES ('B') 8.5m (& VAR.) & 7.0m (& VAR.) x 2.75m (THIS IS MINIMUM SIZE ONLY) ARE REQUIRED TO BE CREATED BY THE DEVELOPER OVER RESERVE LOTS 548 & 1643. IN ADDITION TO THE EASEMENT A RESTRICTION ON THE USE OF LAND ('A') IS REQUIRED IN RELATION TO THE FIRE RATING OF BUILDINGS MEASURED 3M FROM THE PLINTH OVER RESERVE LOT 548, FUTURE LOT 2012, RESERVE LOT 1643 & FUTURE LOT 1601. A RESTRICTION ON THE USE OF LAND ('D') IS REQUIRED IN RELATION TO SWIMMING POOLS, MEASURED 5m RADIALLY FROM THE SUBSTATION EASEMENT OVER FUTURE LOTS 2012 & 1601.
 - AN EASEMENT FOR SUBSTATION SITE ('B') 5.5m x 2.75m (THIS IS MINIMUM SIZE ONLY) IS REQUIRED TO BE CREATED BY THE DEVELOPER OVER LOT 1641. IN ADDITION TO THE EASEMENT A RESTRICTION ON THE USE OF LAND ('A') IS REQUIRED IN RELATION TO THE FIRE RATING OF BUILDINGS MEASURED 3M FROM THE PLINTH OVER LOT 1641 & FUTURE LOT 1710. A RESTRICTION ON THE USE OF LAND ('D') IS REQUIRED IN RELATION TO SWIMMING POOLS, MEASURED 5m RADIALLY FROM THE SUBSTATION EASEMENTS OVER FUTURE LOT 1710.
 - REFER TEL STRAINBN DESIGN LAYOUT FOR DUCTING AND EXCAVATION REQUIREMENTS.
 - ATTENTION - PERMANENT SURVEY MARKS MAY EXIST IN THIS AREA. THESE ARE TO BE LOCATED BY A SURVEYOR PRIOR TO THE COMMENCEMENT OF WORK.
 - WARNING - LIVE ENDEAVOUR ENERGY CABLES AND OTHER SERVICES IN THIS AREA. PLEASE CONTACT "DIAL BEFORE YOU DIG" ON TEL-1100 FOR SEARCHES A MINIMUM TWO DAYS PRIOR TO EXCAVATION.
 - ALL THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AUTHORITY POLLUTION CONTROL LEGISLATION IS TO BE STRICTLY ADHERED TO.
 - THE DEVELOPER SHALL PROVIDE UNRESTRICTED 24/7 ACCESS TO ALL ENDEAVOUR ENERGY ASSETS FOR ENDEAVOUR ENERGY STAFF AND VEHICLES.

- LEGEND**
- PROPOSED PADMOUNT SUBSTATION
 - PROPOSED LV PILLAR LOCATION
 - EXISTING LV PILLAR LOCATION
 - PROPOSED SL COLUMN LOCATION
 - EXISTING SL COLUMN LOCATION
 - HV CABLE TRENCH
 - LV CABLE TRENCH
 - INSTALL 40mm PVC SERVICE CONDUIT
 - EXISTING UNDERGROUND CABLE
 - EXISTING OVERHEAD MAINS
 - PROPOSED DUCT LOCATIONS
 - EXISTING DUCT LOCATIONS
 - EXISTING POLE
 - DUCT CONFIGURATION - REFER MCI 0006 SECTION 4

DUCT DECLARATION

I, _____ OF _____ CONTACT NUMBER _____ HEREBY CERTIFY THAT THE DUCTS SHOWN ON THIS DRAWING HAVE BEEN INSTALLED IN ACCORDANCE WITH THIS DRAWING AND ENDEAVOUR ENERGY STANDARDS MD10028 & MC10006. THE DUCT DEPTHS AND LOCATIONS AT EACH END HAVE BEEN CORRECTLY MARKED ON THIS DRAWING AS PER ENDEAVOUR ENERGY STANDARD SAD 0004.

THE INSTALLATION OF THE DUCTS WAS COMMENCED ON _____ & COMPLETED ON _____ SIGNATURE _____ DATE _____ DEVELOPER COMPETENT PERSON _____



AHIP No. C0002175 APPLIES TO THIS PROJECT. LEVEL 1 ASP TO READ & FAMILIARISE HIMSELF WITH THE REQUIREMENTS OF THE DOCUMENT PRIOR TO THE COMMENCEMENT OF PROPOSED WORKS.

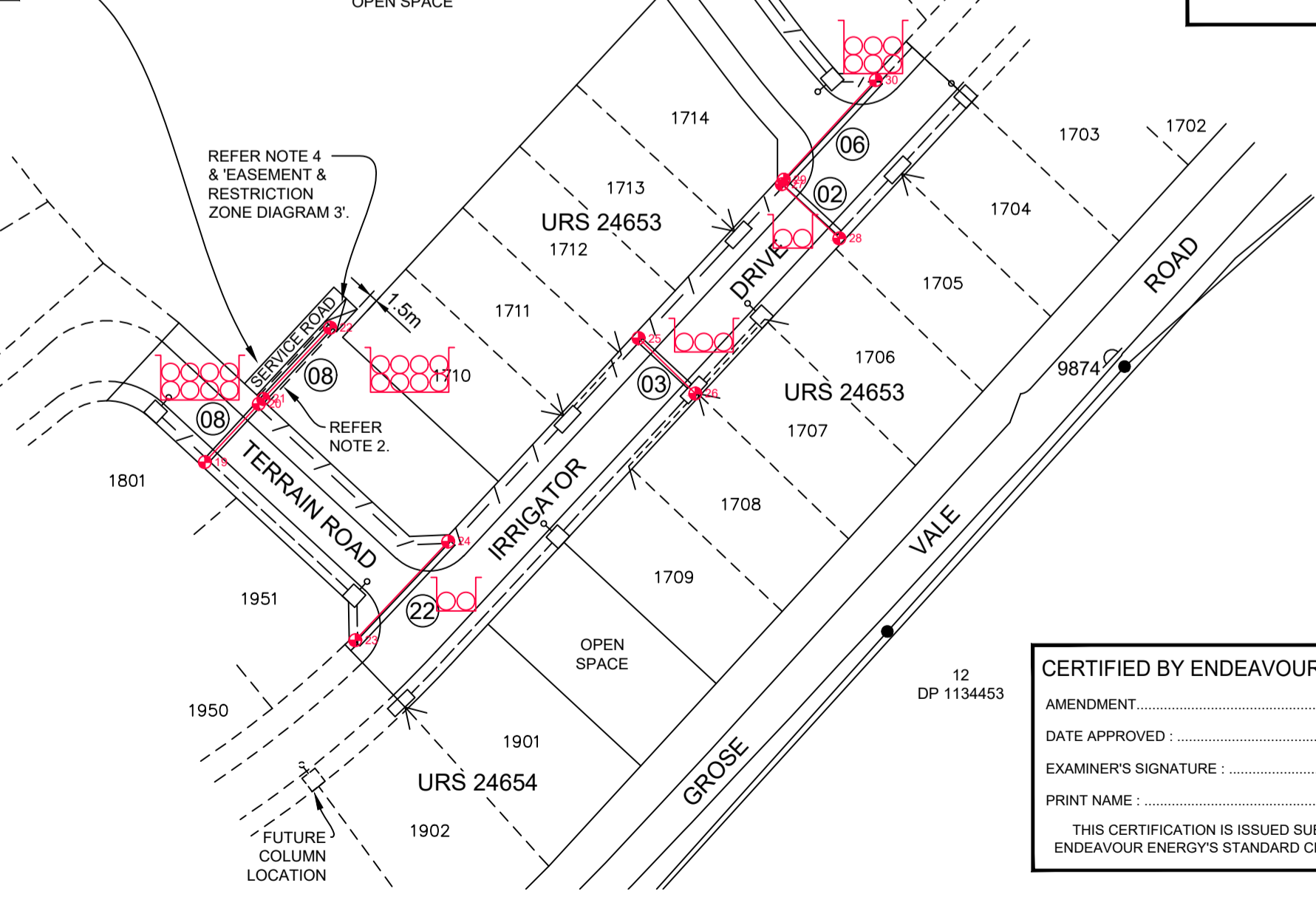
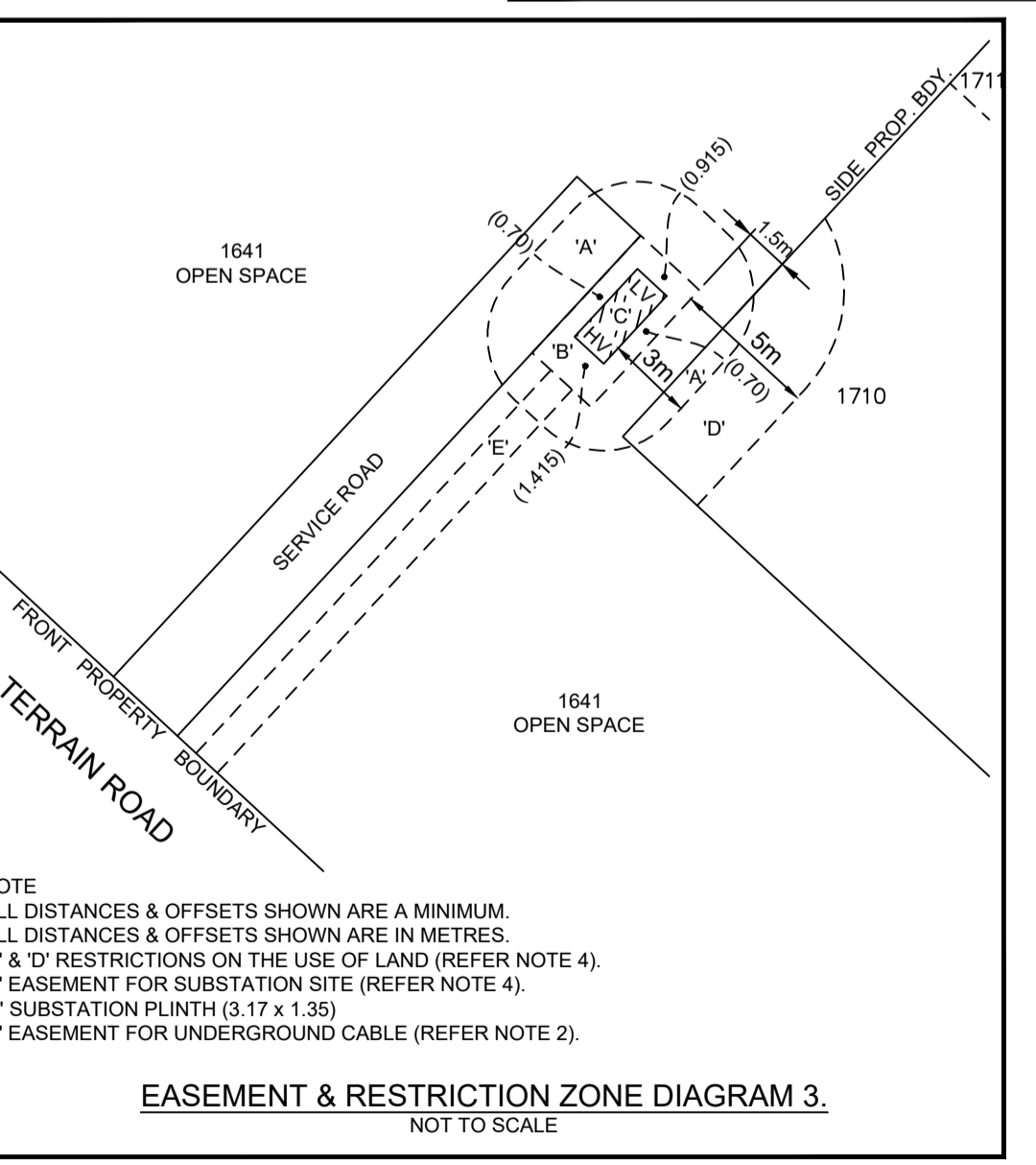
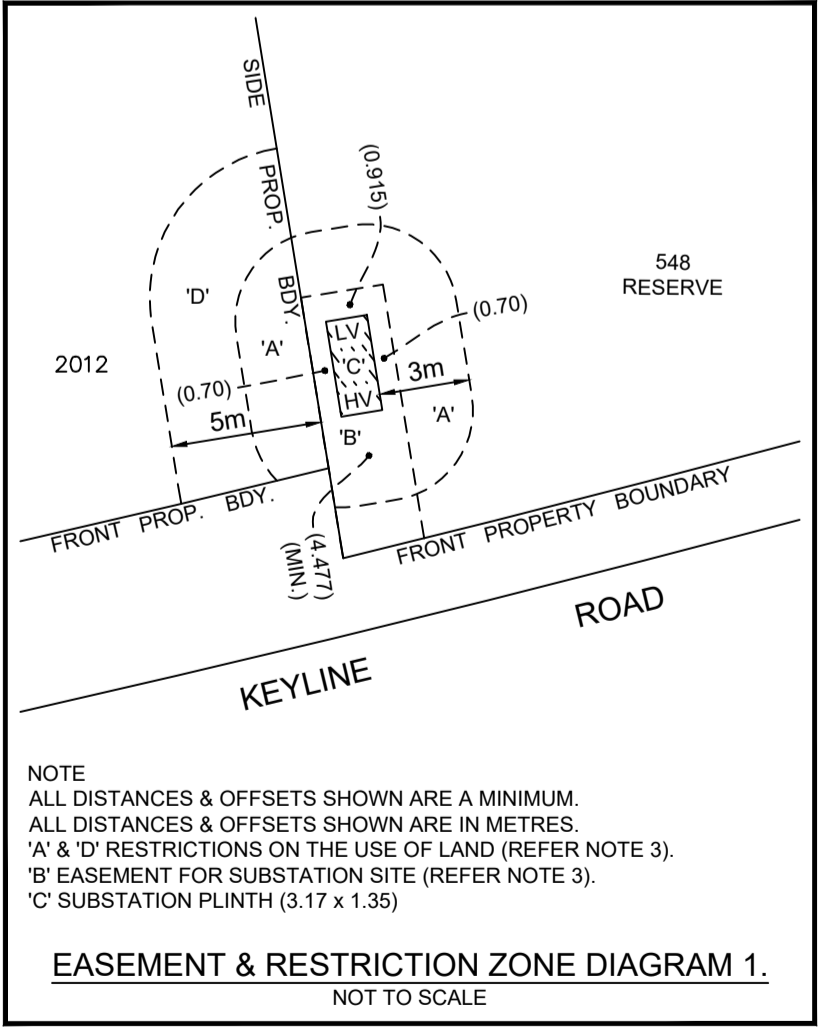
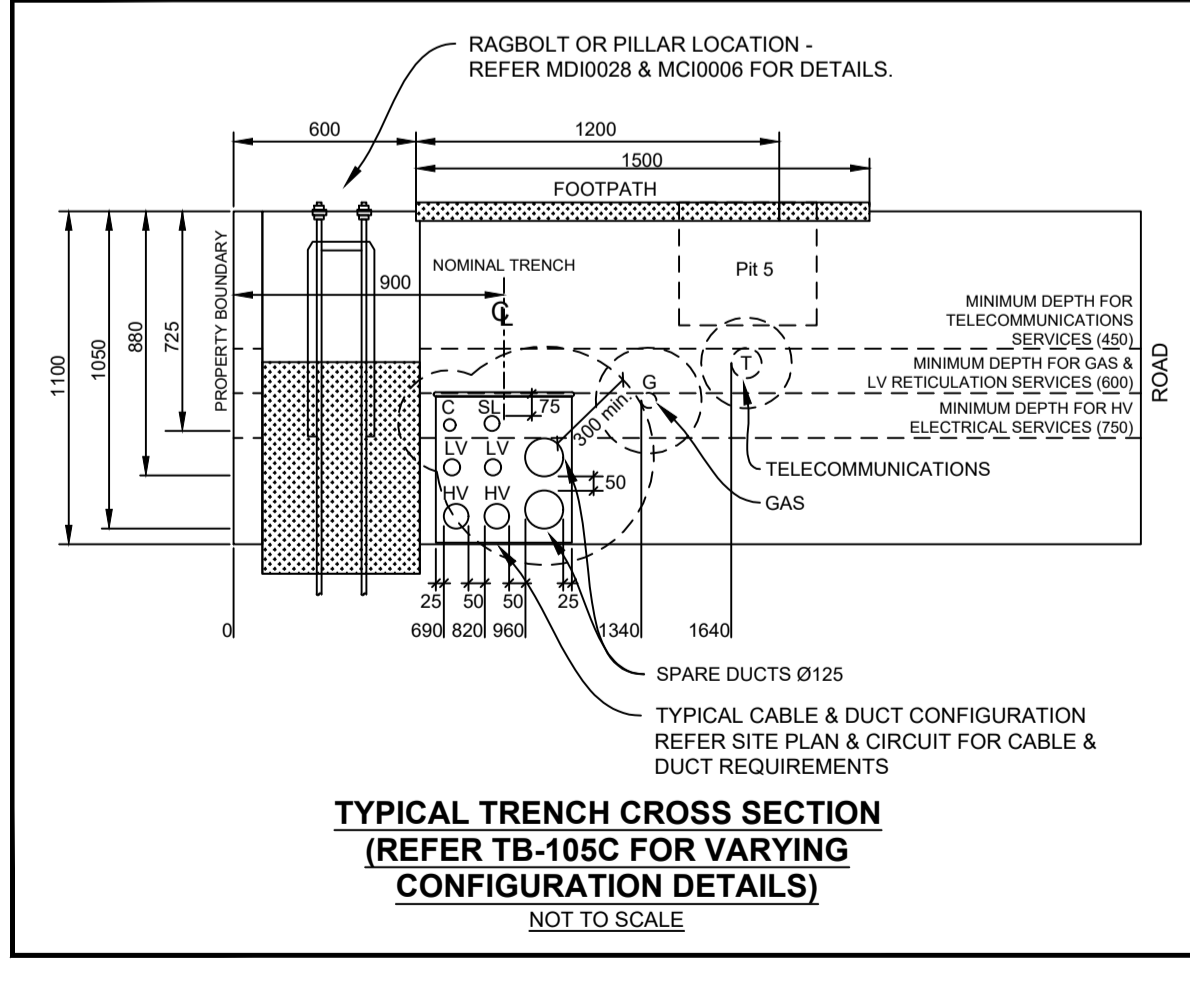
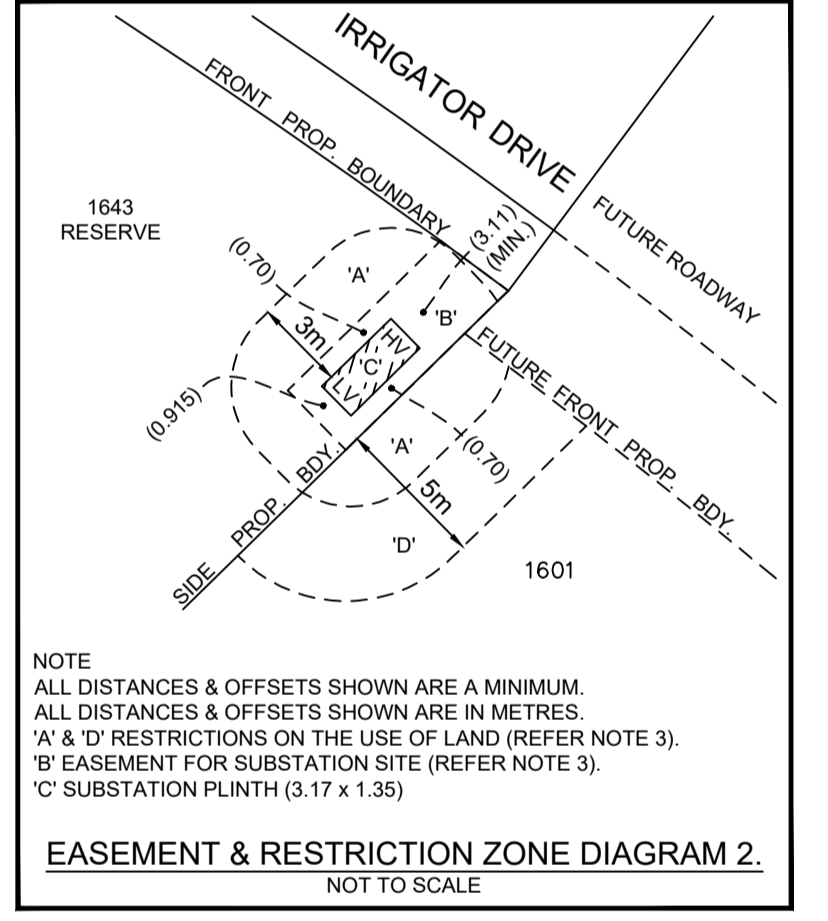
THE SL COLUMN INDICATED THUS IS TO BE INSTALLED 0.5 METRES FROM THE SIDE BOUNDARY AS SHOWN TO PROVIDE CLEARANCE FOR THE PILLAR.

AN ALL WEATHER UNRESTRICTED 24/7 ACCESS 20 TONNE CAPACITY SERVICE ROAD (MIN 3m WIDE) IS REQUIRED TO BE CONSTRUCTED AS SHOWN. REFER NOTE 9

ALL WORKS TO BE CONSTRUCTED ARE TO BE COMPLETED IN ACCORDANCE WITH ENDEAVOUR ENERGY'S GENERIC ENVIRONMENTAL PLAN - EMS 0001.

ALL SL COLUMNS ARE TO BE INSTALLED 350mm FROM THE FRONT PROPERTY BOUNDARIES UNLESS NOTED OTHERWISE.

ALL SL COLUMNS INDICATED THUS ARE TO BE INSTALLED 3.0 METRES BEHIND REAR OF KERB.



DESIGN COMPLIANCE AND INDEMNITY

This design complies with the Endeavour Energy's relevant standards as current at this time and as listed on the Endeavour Energy Accredited Service Provider's Internet site. These standards include, but are not limited to:

- CP : Connection Policy
- EMS : Environmental Management Standard
- MCI : Mains Construction Instruction
- MDI : Mains Design Instruction
- PDI : Protection Design Instruction
- SDI : Substation Design Instruction
- SAD 0001 : Design Drawing Standard
- MMI : Mains Maintenance Instruction
- SMI : Substation Maintenance Instruction
- LDI 0001 : Public Lighting Electrical Design Element

Additionally, where relevant, the design complies with AS/NZS 7000 "Overhead Line Design - Detailed Procedures" published by the Australian Standards.

ESTATE POWER DESIGN (Company name) indemnifies Endeavour Energy for any loss or damage resulting from non-compliance of the design with the above standards.

Signed: _____ Name: BRIAN JUDE
Service Provider Number: 1033 Date: 19/05/2021

CERTIFIED BY ENDEAVOUR ENERGY

AMENDMENT: _____
DATE APPROVED: _____
EXAMINER'S SIGNATURE: _____
PRINT NAME: _____

THIS CERTIFICATION IS ISSUED SUBJECT TO ENDEAVOUR ENERGY'S STANDARD CERT. TERMS.



EPD REFERENCE No. 10/233/EDP1

AMENDMENTS	ORIGINAL	ISSUE
A		

ESTATE POWER DESIGN PTY LIMITED

ABN 69 002 331 142
ELECTRICAL RETICULATION CONSULTANTS
P.O. BOX 1872, PENRITH BC, 2751
TEL: (02) 4731-8333 FAX (02) 4731-1594
EMAIL: brian@estatepower.com.au

THIS DRAWING AND THE COPYRIGHT THEREIN IS THE PROPERTY OF ENDEAVOUR ENERGY AND MAY NOT BE COPIED, REPRODUCED, DISTRIBUTED, LOANED OR USED WITHOUT THE WRITTEN CONSENT OF ENDEAVOUR ENERGY

TEMPLATE VERSION No. 5.0
EPD 4.3

REFERENCE DRAWINGS	WORK ORDERS	CAP / SAMP No.	URS 24650	ORIGINAL SCALE	DO NOT SCALE
521813	ELECTRICAL RETICULATION	AM PROJ. No.	2014/02306/001	1:1000	DIMENSIONS IN METRES
	OVERHEAD	HV SWITCHING			
	UNDERGROUND	UBD/PENGUIN REF	MAP 63 REF J18	DRAWN	L.R.
	SUBSTATIONS	GIS MAP No	6475.32	DATE	09.06.21
		HV OP DIAGRAM	NORTH RICHMOND	CHD	B.J.
		LOCAL GOV AREA	HAWKESBURY	DESIGN	B.J.

REDBANK COMMUNITIES 'PROMENADE' - STAGE 1

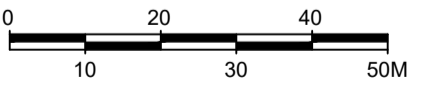
OFF KEYLINE ROAD
NORTH RICHMOND
URS 24650
DUCT, EASEMENT & TRENCH REQUIREMENTS

Endeavour Energy

A1 521812 A

SHEET No. 1 OF 2 SHEETS

WAE SURVEY COORDINATE TABLE - MGA 94							
NODE ID #	ASSET TYPE	PROPERTY LINE	COVER	NOTES	EASTING	NORTHING	REDUCED/SURFACE LEVEL
1	DUCT END	0.90	-1.09		286359.77	6281426.09	43.57
2	DUCT END	0.90	-0.89		286381.45	6281425.97	44.05
3	DUCT END	0.90	-0.78		286409.15	6281447.73	44.38
4	DUCT END	0.90	-0.93		286410.89	6281428.62	44.2
5	DUCT END	0.87	-0.75		286462.7	6281453.14	44.41
6	DUCT END	0.88	-0.76		286465.04	6281434.04	44.49
7	DUCT END	0.88	-0.80		286560.75	6281467.82	42.38
8	DUCT END	0.89	-0.96		286562.54	6281448.53	42.15
9	DUCT END	0.90	-0.81		286579.4	6281451.95	41.96
10	DUCT END	0.90	-0.95		286602.9	6281457.98	41.17
11	DUCT END	0.87	-0.80		286592.03	6281405.48	43.34
12	DUCT END	0.88	-0.75		286605.18	6281413.23	43.06
13	DUCT END	0.88	-0.93		286596.53	6281376.34	44.75
14	DUCT END	0.87	-0.76		286600.43	6281352.14	46.24
15	DUCT END	0.89	-0.75		286435.21	6281359.88	47.24
16	DUCT END	0.88	-0.87		286436.93	6281345.83	47.51
17	DUCT END	0.89	-0.92		286404.17	6281278.15	50.97
18	DUCT END	0.90	-1.01		286392.6	6281264.45	50.9
19	DUCT END	0.90	-0.75		286679.15	6281122.26	56.75
20	DUCT END	0.90	-0.86		286688.81	6281132.66	56.57
21	DUCT END	INSIDE EASEMENT	-0.77		286689.59	6281133.58	56.65
22	DUCT END	INSIDE EASEMENT	-0.83		286701.58	6281146.32	56.03
23	DUCT END	0.88	-0.75		286706.09	6281090.38	58.71
24	DUCT END	0.90	-0.75		286722.72	6281108.04	57.91
25	DUCT END	0.89	-0.78		286756.8	6281144.42	58.28
26	DUCT END	0.90	-0.80		286766.95	6281134.53	58.21
27	DUCT END	0.90	-0.76		286782.42	6281171.99	59.13
28	DUCT END	0.89	-0.90		286792.74	6281162.3	58.83
29	DUCT END	0.90	-0.92		286782.78	6281172.82	59.11
30	DUCT END	0.90	-0.75		286799.22	6281190.64	60.01
31	DUCT END	0.90	-0.93		286703.51	6281386.91	44.82
32	DUCT END	0.88	-0.75		286676.9	6281382.44	44.75
33	DUCT END	0.90	-0.75		286698.22	6281391.41	44.61
34	DUCT END	0.89	-0.84		286701.81	6281369.37	45.67
35	DUCT END	0.90	-0.90		286743.86	6281356.18	47.53
36	DUCT END	0.90	-0.84		286751.7	6281366.92	47.53
37	DUCT END	INSIDE EASEMENT	-0.78		286616.89	6281347.31	46.82
38	DUCT END	INSIDE EASEMENT	-0.86		286679.93	6281357.48	46.07



EPD REFERENCE No.
10/233/EDP1

AMENDMENTS
ORIGINAL
ISSUE
A

ESTATE POWER DESIGN PTY LIMITED
 ABN 69 002 331 142
 ELECTRICAL RETICULATION CONSULTANTS
 P.O. BOX 1872, PENRITH BC, 2751
 TEL: (02) 4731-8333 FAX (02) 4731-1594
 EMAIL: brian@estatepower.com.au

EPD 4.3

THIS DRAWING AND THE COPYRIGHT THEREIN IS THE PROPERTY OF ENDEAVOUR ENERGY AND MAY NOT BE COPIED, REPRODUCED, DISTRIBUTED, LOANED OR USED WITHOUT THE WRITTEN CONSENT OF ENDEAVOUR ENERGY

REFERENCE DRAWING'S	WORK ORDERS	CAP / SAMP No.	URS 24650	ORIGINAL SCALE
521813	GENERAL	AM PROJ No.	2014/02306/001	1:1000
	OVERHEAD	HV SWITCHING		
	UNDERGROUND	UBD/PENGUIN REF	MAP 63 REF J16	
	SUBSTATIONS	GIS MAP No	6475.32	
		HV OP DIAGRAM	NORTH RICHMOND	
		LOCAL GOV AREA	HAWKESBURY	

DO NOT SCALE
DIMENSIONS IN METRES

REDBANK COMMUNITIES
'PROMENADE' - STAGE 1
OFF KEYLINE ROAD
NORTH RICHMOND
URS 24650
DUCT, EASEMENT & TRENCH REQUIREMENTS

Endeavour Energy

A1 521812 A

SHEET No. 2 OF 2 SHEETS