

# Duct, Trench & Easement Site Plan

Scale 1:1000

- ### LEGEND
- Install New Conduits (Ducts)
  - Existing Conduits (Ducts)
  - High Voltage Trenching
  - Low Voltage Trenching
  - Lay 40mm P.V.C. Service Conduits
  - New Pillar Excavation location
  - Existing Pillar
  - New Column Excavation location
  - Existing Column
  - Install New Street Light Lantern
  - Existing Street Light Lantern
  - Establish New Padmount Substation

### Trench Length (m)

High Voltage Trenching	0
Low Voltage Trenching	390
Street Light Trenching	39
Road Crossing Trenching	75
<b>TOTAL</b>	<b>504 m</b>

### TRENCH LENGTHS

All trench lengths are to be confirmed on site by the contractor prior to quoting or ordering materials.

**Establish NEW PMS No. 54964**

- Transformer: 500kVA (1100/433V)
- HV Switchgear: Switching Type "CRCC"
- HV Fuses: DIN 292mm Full Range Fuse 12kV 50A
- LV Switchgear: CAT 1, 200V, "FRFF"
- LV Fuses: LV 250A (DN, 10kV 2)
- Curbicle: Size 14
- Earthing: Common (refer Earth Design)

**PADMOUNT SUBSTATION EASEMENT**

Establish a 6.2m x 5.5m + variable easement for a Padmount Substation over Lot 41 in favour of Endeavour Energy.

Scale 1:1000

### DESIGN COMPLIANCE AND INDEMNITY

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

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

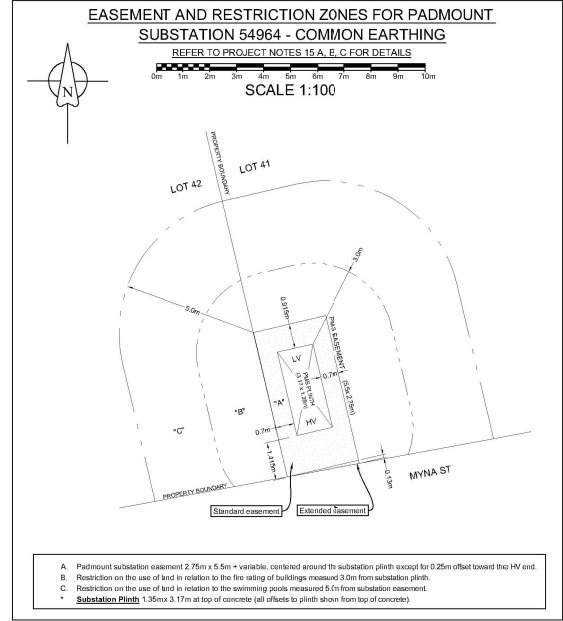
Additional, where relevant, a design complies with AS/NZS7000 'Overhead Line Design - Detailed Procedures' published by The Australian Standards.

Power Line Design Pty Ltd indemnifies Endeavour Energy for any loss or damage resulting from non-compliance in the design, with the above standards.

Signed: *L. McKinnon*  
 Name: L. McKinnon  
 Service Provider Number: 2486 Date: 29.04.2020

### WAE Survey Coordinate Table

ID	Quality Level	Asset	Property Line	Cover	Easting	Northing	AHD Height
1	A	WAE Duct	0.9	1.104	296398.1	6268883	21.564
2	A	WAE Duct	1	1	296409.2	6268860	21.99
3	A	WAE Duct	0.99	1.088	296445	6268900	21.797
4	A	WAE Duct	1.03	1.113	296453.2	6268888	21.782
5	A	WAE Duct	0.7	1.147	296487.2	6268902	22.054
6	A	WAE Duct	0.97	1.34	296480.5	6268915	21.832
7	A	WAE Duct	0.3	1.154	296527.2	6268912	22.399



- ### DIAL BEFORE YOU DIG
- Ref: 1570468 Date: 14 Nov 2020
- DVD searches indicate the presence of services within the proposed works. The Level 1 ASP Contractor is to confirm the location of all services prior to the commencement of works.
- ### WARNING
- Existing live electrical assets located in the vicinity, appropriate safety precautions must be utilised.
- ### WARNING
- High Pressure Gas Assets in this area. Contractor to contact Endeavour Energy on ph 1300 665 380 prior to the commencement of works.
- ### WARNING
- Sydney Water assets in this area. Contractor to contact Sydney Water on ph 1320 92 prior to the commencement of works.
- ### STREETLIGHT LV SUPPLY
- All active conductors extending from LV pillars to service streetlight columns are to be fitted with a 6A in-line fuse.
- ### STREETLIGHT COLUMNS
- All streetlight columns are to be installed 350mm from the property boundaries unless otherwise indicated.
- ### SURVEY MARKS
- Permanent survey marks may exist in this area. These are to be located by survey prior to the commencement of works.
- ### FINAL GROUND LEVEL
- The contractor is to confirm finished ground level with the developer prior to the commencement of construction.
- ### SERVICE DUCTS
- The end of service ducts installed not to be placed under proposed driveway (Refer to Developers Representative for details for details).
- ### WARNING
- Existing live electrical assets located in the vicinity, appropriate safety precautions must be utilised.
- ### WARNING
- A current services search of all utilities must be carried out prior to the commencement of works.

- ### NOTES
- This drawing is to be read in conjunction with the relevant Endeavour Energy Network Standards and Connection Policy.
  - Endeavour Energy Contact Phone: 131881.
  - Design certification shall lapse where:
    - (i) notice of intent has not been received within six (6) months of this certification, or
    - (ii) construction has been interrupted for more than six (6) months.
 Where design certification has lapsed to design must be certified by certification by the accredited designer.
  - Accredited Service Provider to notify Endeavour Energy asset data customer department daily when cable works is in progress. (p. 131 081)
  - ATTENTION:** Permanent survey marks may exist in this area, these are to be located by a surveyor prior to commencement of work.
  - ATTENTION:** All services searches must be checked before construction.
  - ATTENTION:** The preparation of this design has been undertaken giving due consideration to the location of existing services. The Contractor is however responsible for the verification of services and permanent survey marks prior to the commencement of construction. No responsibility nor liability will be accepted by the designer for damage to existing services as a result of this design.
  - WARNING:** Live Endeavour Energy cables & other services in this area. Please contact 'Dial Before You Dig' or telephone: 1100 for searches two days prior to excavation.
  - Reimbursements:** Reimbursements will be paid to the nominated party on the letter of intent after the works have been completed and the letter of acceptance has been issued. The reimbursed amount is shown in the 'Funding Arrangements for Scope of Work table'. Any disagreement with the amount should be resolved with Endeavour Energy prior to the commencement of works.
  - Operational Limitations:** Unless approved otherwise, interference to any customer's supply must be avoided. The following alternatives should be considered:
    - design alternatives,
    - low voltage parallel,
    - work practicality/standards.
 The cost is to be funded by the customer/developer.
  - Environmental Management plan:** EMP EMB001 is part of this design (refer to EIA for details).
  - Pollution Controls:** All the requirements of the Environmental Protection Authority pollution control legislation is to be strictly adhered to.
  - Telecommunications:** Telecommunications assets are **NOT** affected by the proposed works.
  - Existing Assets:** Have all the existing assets been field checked and are accurate at the time of design? **YES**
  - Padmount Substation Easement - (Common Earthing):** A minimum 5.5m x 2.75m + variable easement for padmount substations is to be created over Lot 41 in favour of Endeavour Energy. This easement is a minimum size and in addition to the substation easement the following restriction zone requirements should be documented on the lines plan & 800 instrument (Refer to Endeavour Energy Standard MD0044 Annexure 1 for Standard Easement Terms).
  - Restriction Zone - Fire Ratings of Buildings:** A restriction zone on the use of level elevation to the design of buildings measured 3.0m from the padmount substation plinth is to be created in favour of Endeavour Energy within proposed lots 41 & 42.
  - Restriction Zone - Swimming Pools:** A restriction zone on the use of level elevation to pools measured 5.0m from the padmount substation easement is to be created in favour of endeavour energy within proposed lots 41 & 42.

### CERTIFIED BY ENDEAVOUR ENERGY

Amendment: \_\_\_\_\_  
 Date Approved: \_\_\_\_\_  
 Examiner's Signature: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 This Certification is issued subject to Endeavour Energy's Standard Certification Terms.

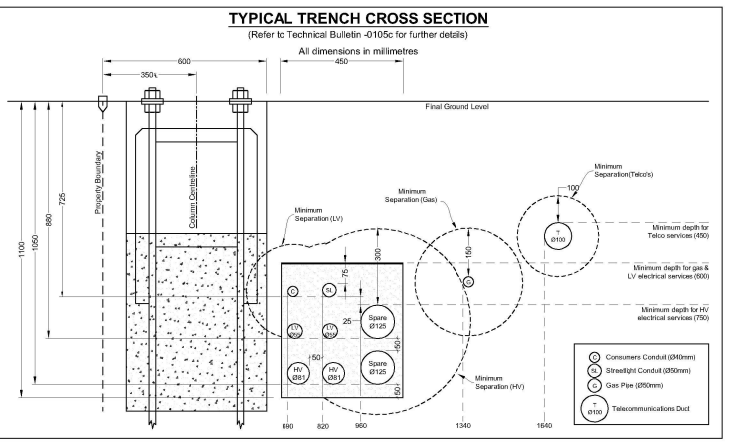
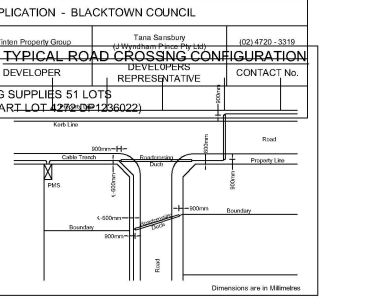
### WORKS COMPLETED / FIELD BOOK

Constructed By: \_\_\_\_\_  
 Works Completed: \_\_\_\_\_  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Inspected By: \_\_\_\_\_  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**ASSET RECORDING**  
**MALCOLM HARVEY**  
 of: **DARACON**  
 Contact No: **02 4974 9200**

Hence, certify that assets marked as built on this drawing have been recorded in accordance with Endeavour Energy Standard 100/004.

Signature: \_\_\_\_\_ Date: 12/01/2021



AMENDMENTS

Original Issue	
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The preparation of this design has been undertaken giving due consideration to the existing services. The project contractor is wholly responsible for verifying the exact location of existing services and permanent survey marks prior to commencing construction. No responsibility or liability will be accepted by the designer if the project for damage to existing services as a result of this design.

Power Line Design Ref: 3454  
 Power Line Design Pty Ltd  
 PO BOX 538 MtAlbion NSW 2575  
 Ph (02) 4872 1920 Fax (02) 4872 1440  
 Accredited Designer Number: 2486 3510 91 91 91

Reference Drawings

A518829	URS24021 - RETIC
A510177	URS20472 - RETIC

Work Orders

General
Overhead
Underground
Substations

CAP / SAMP No. URS24021  
 AM Project No. HV Switching  
 UBDD/Pending Ref No. 126 C.16  
 GIS Map No. URS15  
 HV OP Diagram MARSDEN PARK 1  
 Local Government Area BLACKTOWN CITY

ORIGINAL SCALE 1:1000  
 Drawn R. Walsh  
 Date 29.04.2020  
 Checked Michael J.B

DO NOT SCALE DIMENSIONS IN METRES  
 Design R. Walsh

**ABELL ROAD NEWPARK PRECINCT 6 MARS DEN PARK PART LOT 4272 DP 1236022 URS24021 DUCT TRENCH & EASEMENT**

**Endeavour Energy**

**A1 518828 A**

Sheet No 1 of 1 Sheets