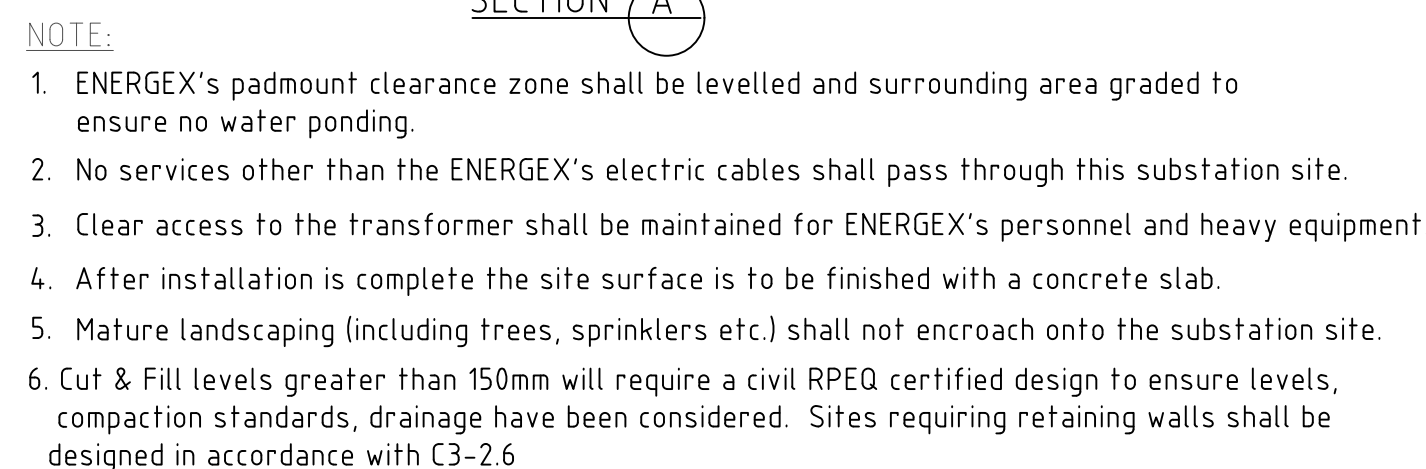




External works to be done by builder / developer
> PMT Site Preparation
> PMT Foundation
> PMT Site Reinstatement & concrete surround.
> Conduits between Existing Boundary Conduits and PMT Site

Notes:

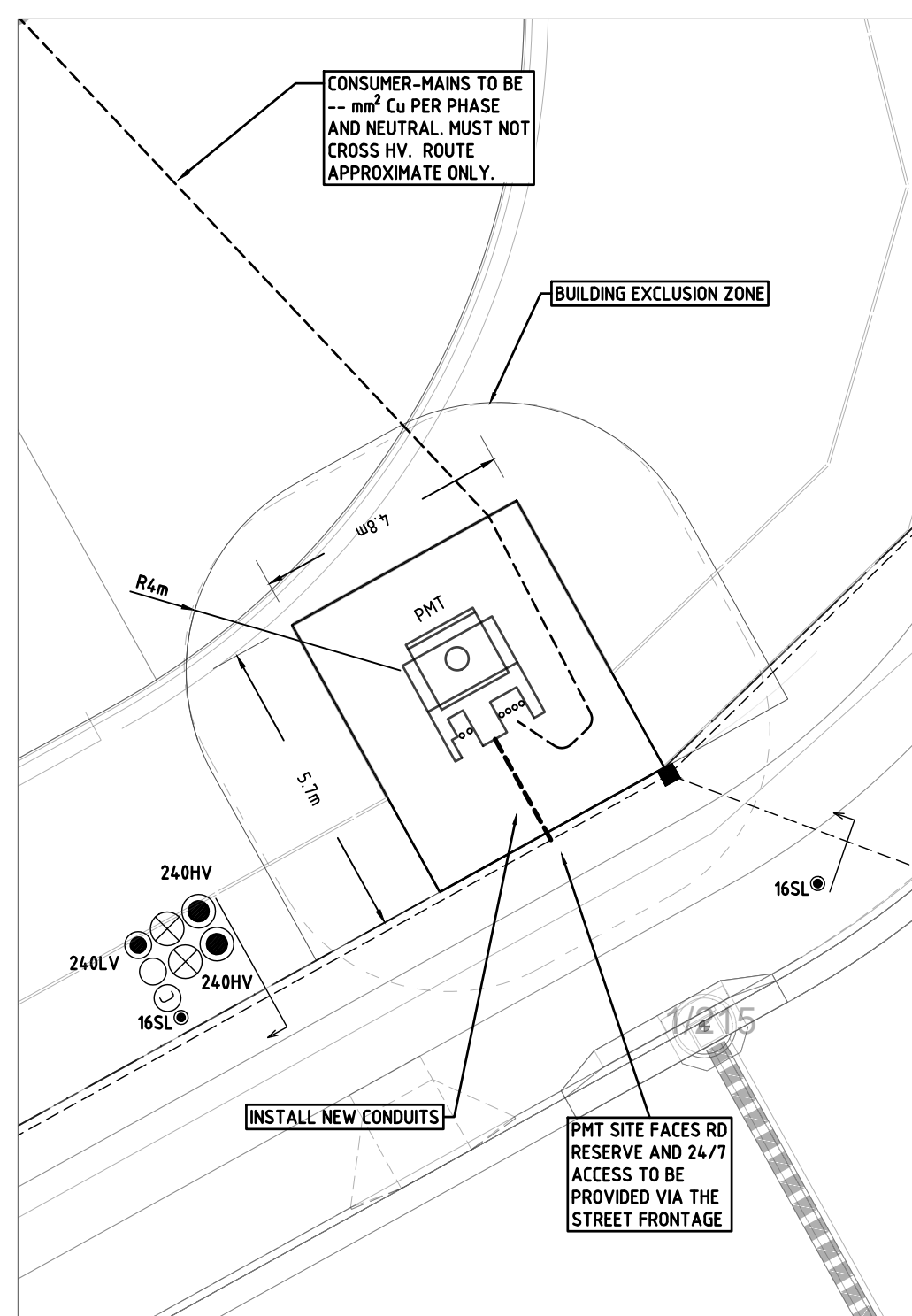
- (1) Energex Communication conduit to be 100mm white Located top kerbside.
- (2) Power cable conduits to be 125mm orange, light duty.
- (3) Separation for conduits - 50mm minimum, up to 160mm desirable.
- (3) Increased cover required for road crossings.
- (4) Select Backfill and Pit sand bedding complying with ENERGEX UDCM Section C2
- (5) For de-rating factors for cables in duct bank, refer to the Plant Rating Manual.

NOTES:

1. CABLE CONDUIT SHALL BE OF THE FOLLOWING TYPE: LIGHT DUTY ELECTRICAL CONDUIT TO AS/NZS 2053. CONDUIT BENDS SHALL HAVE A MINIMUM RADIUS OF 1830mm.
2. CONDUITS SHALL BE 125mm ORANGE FOR ELECTRICAL AND 100mm WHITE (LOCATED TOP KERBSIDE) AS SPECIFIED BY ENERGEX AND SHALL BE SUPPLIED AND INSTALLED BY THE DEVELOPER OR ENERGEX. CONDUITS SHALL BE SECURELY SEALED TO PREVENT INGRESS OF DIRT UNTIL CABLE INSTALLATION AND THEN RESEALED.
3. EACH CONDUIT TO BE FITTED WITH A 6mm BRAID POLYPROPYLENE DRAW ROPE TO PULL IN HAULAGE ROPE. (MINIMUM BREAKING STRENGTH OF 1.0kN.)
4. ENERGEX MAY NEED TO INSTALL AN EARTH WIRE AND EARTH RODS IN CONDUIT TRENCHES FROM THE SUBSTATION SITE.
5. ELECTRICITY SUPPLY CONDUITS AND CABLES SHALL HAVE POLYMERIC CABLE PROTECTION COVER STRIPS PLACED 100mm ABOVE THE TOP CONDUIT FACE OF THE ELECTRICITY SUPPLY CONDUITS AND CABLES. CABLE PROTECTION COVER STRIP SHALL BE LAPPED WHEN PLACED TOGETHER; 100mm MINIMUM ALONG THE LONGITUDINAL AXIS, 40mm MINIMUM ALONG THE TRAVERSE AXIS AND SHALL EXTEND 40mm MINIMUM PAST THE EXTERNAL EDGES OF THE CONDUIT/CABLE BANK.
6. POLYMERIC CABLE PROTECTION COVER SHALL BE A MINIMUM OF 5mm THICK AS DESCRIBED IN THE AUSTRALIAN STANDARD; AS4702 FPR POLYMERIC CABLE PROTECTION COVERS.
7. REDUCED CONDUIT SEPARATION MAY BE ACCEPTED TO AVOID SPECIFIC OBSTACLES
8. MIN. DEPTHS SHOWN ARE THOSE DEPTHS REQUIRED BY CODE OF PRACTICE, WORKS (MINOR ROADS), AND DMR (ARTERIAL, ROADS).

REQUIRED TASKS	DATE COMPLETED		CHECKED BY
	YES	NO	
CUSTOMER RESPONSIBILITIES			
24 HOUR ACCESS PROVIDED.			
PADMOUNTED SUBSTATION SITE IS LEVEL.			
PADMOUNTED SUBSTATION SITE SIZE - 5.7M x 4.8M			
RETAINING WALLS (INCL. RPEO APPROVAL IF REQUIRED).			
PADMOUNTED SUBSTATION SITE IS CLEAR OF ALL SERVICES.			
CORRECT FOUNDATION INSTALLED.			
CONDUITS ARE INSTALLED (INCLUDING BUNGS & DRAW WIRES)			
CONDUITS TRENCHES BACKFILLED & COMPACTED.			
FENCES INSTALLED.			
HAVE 2000mm DEDICATED CLEAR ZONE IN FRONT OF PLINTH.			
CUSTOMER RESPONSIBILITIES PRIOR TO COMMISSIONING			
SITE BACKFILLED & COMPACTED (INCLUDING UNDER PLINTH)			
BOUNDARY SURROUND & SITE SURFACE CONCRETED.			
AREA SUITABLY DRAINED (NO PONDING)			
SITE CLEANED-UP NEATLY.			

NOTE. x if applicable.

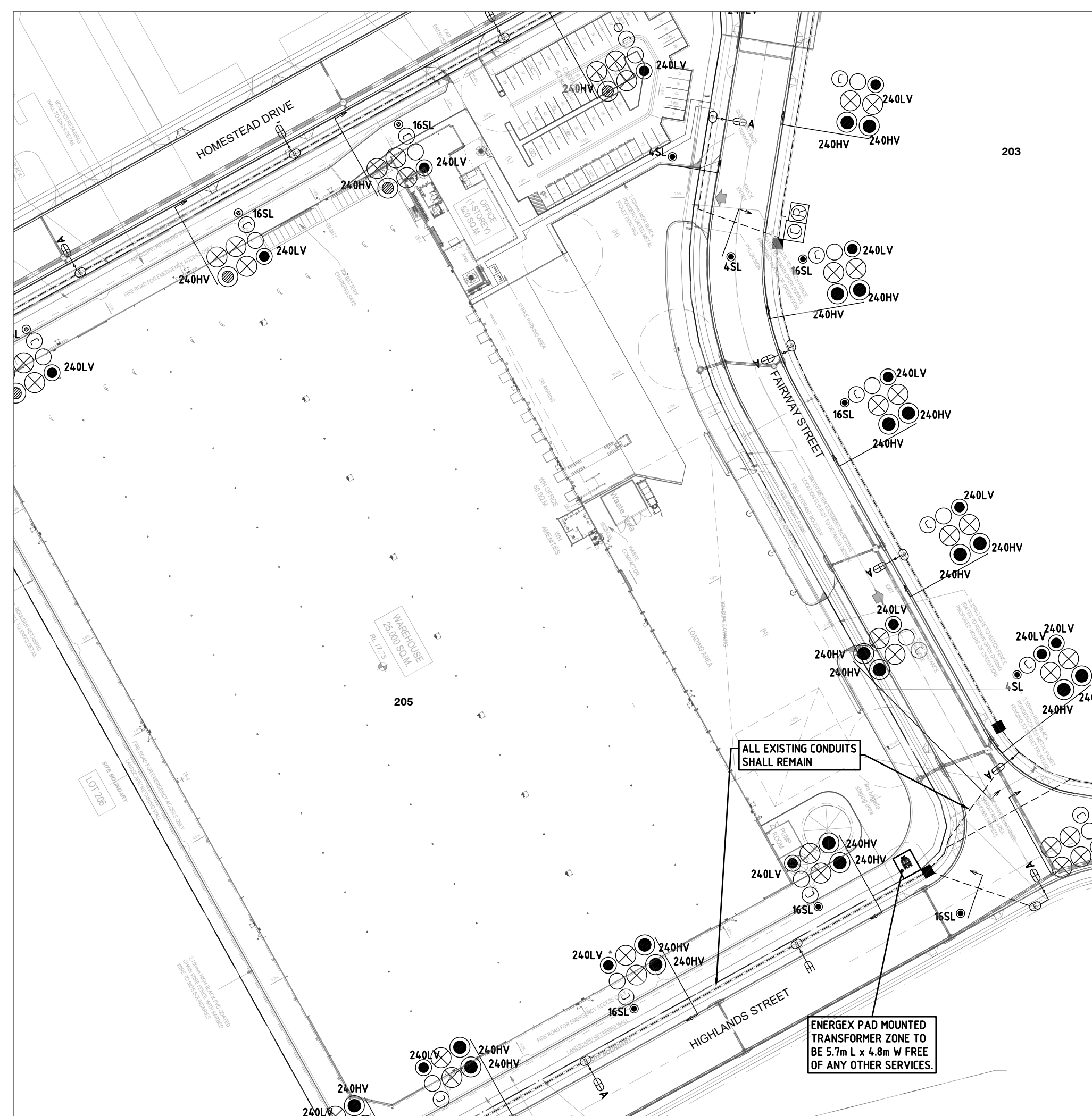


SITE DETAIL PLAN

1:125 @ A1

Notes:

- (1) Substation site complies with clearances from Hazardous Area. No hazardous substances on site.
- (2) Substation site not located within 10m from a Hydrant as per AS2419.1
- (3) External works to be completed by builder/developer. (Footpath conduits, bollards etc.)
- (4) PMT site to be inspected and handed to Energex at least 6 weeks prior to supply date.
- (5) Proposed substation floor 75mm above interim Residential Flood level (IRFL)

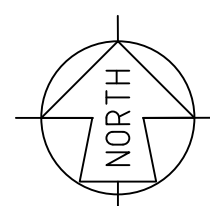


SITE PLAN

1:1000 @ A1

A	DESCRIPTION	DATE
	ISSUE FOR ENERGEX ACCEPTANCE	XX.11.22

205 HOMESTEAD DRIVE, STAPYLTON QLD 4207



21-0490-01

FOR FURTHER INFORMATION PLEASE CONTACT : SHIHABUL ISLAM PETER EUSTACE & ASSOCIATES (07-55961425)

CULVERT INSPECTION REQUIRED BEFORE TRANSFORMER IS DELIVERED
- 5 BUSINESS DAYS PRIOR NOTICE NEEDED.
CONDUITS INSPECTION REQUIRED PRIOR TO BACKFILLING
CONTACT: Russell Collins PH. 07 36649172 EMAIL: russellcollins@energex.com.au
TRANSFORMER WILL NOT BE ENERGISED UNTIL ALL REQUIREMENTS ARE MET.

ENERGEX
PADMOUNT CONSTRUCTION GENERAL LAYOUT DRAWINGS LANDLOCKED COMMON EARTHING

SCALE DO NOT SCALE (PLOT SCALE=1:1000) A

APPROVED:	DATE:
DESIGN:	FILE:

WR7720126

SHEET 1 of 2

A

1.0 INTRODUCTION

Padmounted transformer foundations to be built according to site sketch and design standards contained in this document.

2.0 NEGOTIATIONS BETWEEN ENERGEX AND CUSTOMER

- ### 3.0 BUILDING GENERAL

No services other than ENERGEX's electric lines and approved parts of the customer's electrical mains shall pass through or under the substation area.

Building work shall be completed in a neat tradesman like manner and shall be as detailed on the drawings.

All civil construction works must be undertaken in accordance with the requirements specified in ENERGEN Work Category Specification WCS61 "Underground Civil Construction".

The transformer site shall be above the local flood level (Q100/DFL which ever is higher) with the top of the concrete plinth 25mm above the finished yard level.
Cable apertures through the precast concrete plinth shall be backfilled to 50mm from the top of plinth.

The transformer site shall be level $\pm 25\text{mm}$ with a maximum cut and fill of $\pm 150\text{ mm}$ and shall be concreted in accordance with ENERGEX Underground Distribution Construction Manual Sect C3.

For a steep sloping site a retaining wall and guard rail will be required to be constructed by the customer. Refer to ENERGEX Underground Distribution Construction Manual.

ENERGEX's staff shall have access to the substation at all times without having to enter security areas. The onus will be on the customer to maintain said access 24 hours a day, 7 days a week.

Padmounted transformers are hauled by flat bed trucks and "Franna" style mobile cranes. Any access or manoeuvring area which will be used for the purpose of off loading or loading transformers should be constructed to take a minimum loading of 31 tonnes in all weather conditions.

5.00 CABLE CONDUITS

6.00 EARTHING

7.00 CUSTOMER'S CABLES

8.00 UNDERGROUND CABLE PITS

9.0 EASEMENTS

All private services easements must be registered prior to supply being made available to the future development sites.

11.00 ENERGEX COMMUNICATION CONDUIT

ENERGEX communication conduit installation:
100mm conduit shall be located adjacent to the top Low Voltage conduits on the kerb side of the trench, between the LV conduits and any Public Lighting conduit.

DESCRIPTION DATE ENERGEX XX.YY.ZZ ACCEPTANCE	205 HOMESTEAD DRIVE, STAPYLTON QLD 4207	 STREET ADDRESS PE CONSULTING ENGINEERS PO BOX 2835, NERANG QLD 4211 (07) 5596 1425 mail@energex.com.au peter@eustace.com.au	FOR FURTHER INFORMATION PLEASE CONTACT : SHIHABUL ISLAM PETER EUSTACE & ASSOCIATES (07-55961425)	ENERGEX	SCALE/DRAWING NOT SCALE (PLOT SCALE=1:1000) A1
			CULVERT INSPECTION REQUIRED BEFORE TRANSFORMER IS DELIVERED - 5 BUSINESS DAYS PRIOR NOTICE NEEDED. CONDUITS INSPECTION REQUIRED PRIOR TO BACKFILLING CONTACT: Russell Collins PH. 07 36649172 EMAIL: russellcollins@energex.com.au TRANSFORMER WILL NOT BE ENERGISED UNTIL ALL REQUIREMENTS ARE MET.	PADMOUNT CONSTRUCTION GENERAL LAYOUT DRAWINGS FRONTING ROAD RESERVE COMMON EARTHING	APPROVED: DATE: DESIGN: FILE: WR7720126 SHEET 2 of 2
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