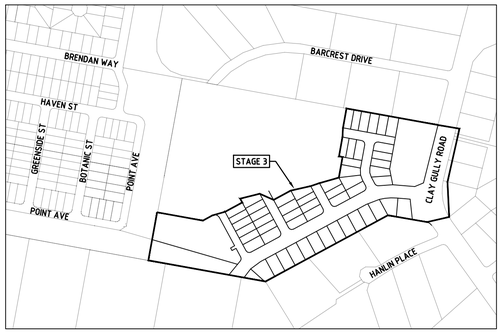


LOCALITY PLAN
SCALE 1:5000

!WARNING!
FIRE ANT TERRITORY
THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.

CONSTRUCTION ISSUE

ELECTRICAL / STREET LIGHT CERTIFICATION

THIS IS TO CERTIFY THAT THE DESIGN OF ENERGEX RETICULATION IS IN ACCORDANCE WITH ENERGEX DESIGN MANUALS AND WORK CATEGORY SPECIFICATION 47.1 & 47.3 WHERE APPLICABLE.

ROAD LIGHTING CERTIFIED TO COMPLY WITH AS/NZS 1158 FOR 'V' & 'P' CATEGORY LIGHTING FOR ROADS & PUBLIC SPACES SUPPLIED UNDER ENERGEX CONTRACT. THE LIGHTING DESIGN IS BASED UPON THE FOLLOWING MAINTENANCE SCHEDULE:

* LED LAMP REPLACEMENT AT 88000 HOUR INTERVALS INC. CLEANING & INSPECTION OF LUMINAIRE EVERY 48 MONTHS.
* LAMP REPLACEMENT AT 36 MONTH INTERVALS INC. CLEANING & INSPECTION OF LUMINAIRE.
* VEGETATION TO BE KEPT CLEAR OF LUMINARIES.
* INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN. 95%.
* LUMINARIES & LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS.

STREET NAME	LIGHTING CATEGORY
CLAY GULLY RD	V5
ARC BOULEVARD	PR3
ROBB ST, EARLY ST, LOVE ST, HAZELL CCT	PR4

KRIS BOVEINIS (RPEQ 22272)
DATE 16.01.23

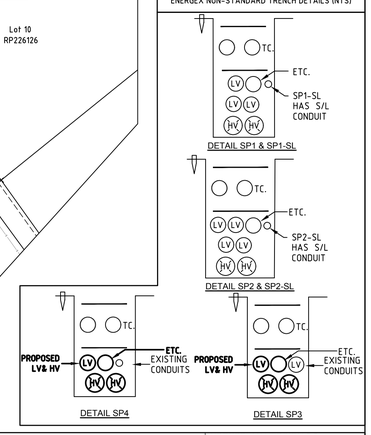
SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- 11kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WATER METER
- SURVEY PEG

STREET LIGHT SYMBOL LEGEND

- PROPOSED L50A (RATE 2)
- EXISTING L50A (RATE 2)
- PROPOSED L33A (RATE 2)
- PROPOSED L17A (RATE 2)
- EXISTING L33A (RATE 2)
- EXISTING L17A (RATE 2)

ENERGEX NON-STANDARD TRENCH DETAILS (NTS)



R	DESCRIPTION	DATE
A	ISSUED FOR ENERGEX & COUNCIL ACCEPTANCE	25.10.2022
B	ISSUED FOR CONSTRUCTION	10.11.2022
C	REISSUED FOR CONSTRUCTION	16.01.2023

CONSULTING ENGINEERS
STREET ADDRESS: U14, 39 Lawrence Dr, Nerang QLD 4211
POSTAL ADDRESS: PO Box 2835, Nerang DC QLD 4211
TELEPHONE: (07) 5596 1425
EMAIL: mail@peace.com.au
WEB: petereustace.com.au

NORTH

21-0359- 01

SITE CONTACT DETAILS		COUNCIL STANDARD ALIGNMENTS		WORKS COORDINATOR	PETER EUSTACE & ASSOCIATES
NAME		Energex OH	Energex OH	PARENT PROJECT NO.	
TBC		Energex UG	Energex UG	WORK REQUEST NO.	
COMPANY		NBN	REFER NBN		
-		GAS	REFER GAS	LOTS	149-154 , 176-185 , 202-208, 214-245
PHONE	-	HP GAS	REFER GAS		
MOBILE	-	WATER	REFER CIVIL	CANCELLING LOTS	PART Lot 953 on SP313636
FAX	-	STORMWATER	REFER CIVIL	LOCAL AUTHORITY	REDLAND CITY COUNCIL
		SEWERAGE	REFER CIVIL	UBD REF	
		OTHER	REFER CIVIL	PEGGED?	YES

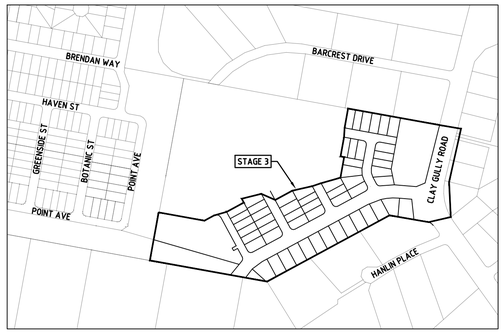
APPROVED	KRIS BOVEINIS	
CHECKED	DAVID PRUSS	
DESIGNER	ABRAHAM IKORO	
PHONE	(07) 5596 1425	
PLANNER	DAVID VAN GENT	
PHONE	(07) 5596 1425	
ISSUE DATE	16 JANUARY 2023	

Peter Eustace & Associates

INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING

55 LOT SUBDIVISION
CLAY GULLY STAGE 3, CLAY GULLY ROAD
VICTORIA POINT, 4165

WORKSPLAN VERSION 5.5
SCALE: 1:500@A1
PROJECT / SUB PROJECT NO.
S1301695
Sheet 1 of 6
ISSUE NO: C



LOCALITY PLAN
SCALE 1:5000

MAINTENANCE REGIME

Maintenance Factor Assumed: The maintenance factor assumed in the calculations is as follows:
* Luminaire Maintenance Factor (refer AS 1158 1.1:2005 APPENDIX E).
* Lamp Lumen Depreciation Factor (Refer Lamp Manufacturer's "Lamp Lumen Depreciation Curves").

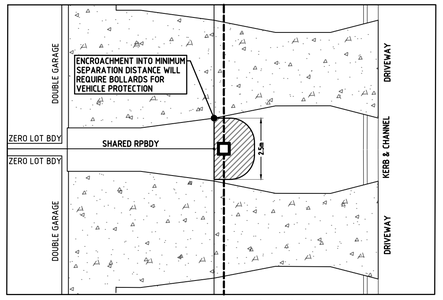
Maintenance Factor Calculated **0.75**

Schedule of Maintenance: This road lighting design is based on the following maintenance schedule:

*LED lamp replacement carried out at 88000 hrs intervals. Cleaning regime every 48 months.
*All other luminaires lamp replacement & cleaning carried out at 36 month intervals.

At this time the following shall also occur:

* All optical surfaces, both internal and external, of the luminarie shall be cleaned.
* All gaskets shall be checked for deterioration and replaced where necessary.
* Damaged/weathered visors shall be replaced.
* All accessible screws, nuts etc. shall be checked for tightness.
* A visual check shall be made of the electrical components and wiring for signs of overheating.
* If required, the luminaire shall be realigned/adjusted to the design specification.



DETAIL A : MINIMUM CLEARANCE FOR BACK-TO-BACK ZERO LOT PROPERTIES

CERTIFICATE OF COMPLIANCE

DESIGN DOCUMENTATION IN ACCORDANCE WITH THE REQUIREMENTS OF COMPLIANCE OF AS/NZS 1158

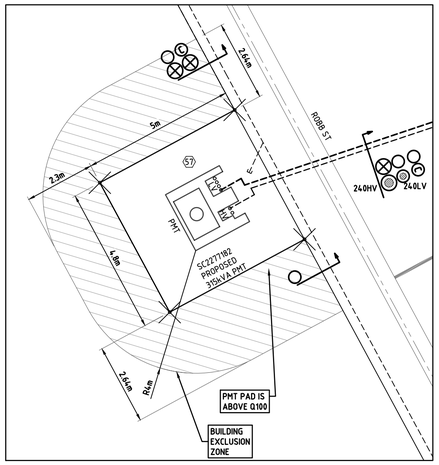
* Refer AS1158.1.1:2005 Appendix D for information regarding V category
* Refer AS1158.3.1:2005 Appendix E for information regarding P category
* PerfectLite 5.06 computer software used

ITEM	PROJECT SPECIFICATION			
LIGHTING CATEGORY				
Road Name	**CLAY GULLY ROAD**	**ARC BOULEVARD**	**EARLY ST, LOVE ST, HAZELL CCT**	**ROBB ST**
Nominated Lighting Category	**V5**	**PR3**	**PR4**	**PR4**
Road Surface Reflection Characteristic	**R3**	**R3**	**R3**	**R3**
INSTALLATION GEOMETRY				
Road Reserve Lighting Design Width/Road Width	**7m**	**21m**	**15m**	**15m**
Mounting Height	**9**	**7.5**	**5.1m**	**5.1m**
Overhang	**1.5m**	**1.5m**	**0**	**0**
Lighting Arrangement	**ARR1**	**ARR3**	**ARR1**	**ARR1**
Pole Setback	**0.9 BOK**	**0.9 BOK**	**0.9 BOK**	**0.9 BOK**
Upcast Angle	**5°**	**5°**	**0°**	**0°**
LUMINAIRE/LAMP 1 DETAILS				
Lamp Type / Wattage	**L50A**	**L33A**	**L17 (Nostalgia Type 2)**	**L17 (Nostalgia Type 2)**
Luminaire Identification	**Philips RoadFlair**	**Gerard Lighting StreetLED MKII 33W Aeroscreen**	**Gerard Lighting (Sylvania) MOD-LED 17W 4K**	**Gerard Lighting (Sylvania) MOD-LED 17W 4K**
Lamp Flux (Lumens)	**6000**	**3467**	**1899**	**1899**
I-Table Number (.cie)	**BRP391 LED60NW 50W DWV**	**StreetLED2 28W 4K AERO - 180262PH**	**MOD-LED 15W 4K 170326PHM**	**MOD-LED 15W 4K 170326PHM**
Lighting Tariff	**2**	**2**	**2**	**2**
Power Factor	**HPF (> 0.95)**	**HPF (≥ 0.9)**	**HPF (≥ 0.9)**	**HPF (≥ 0.9)**
Start/Run Currents (Amps)	**0.223**	**0.145**	**0.08**	**0.08**
IP Rating	**IP66**	**IP66**	**IP66**	**IP66**

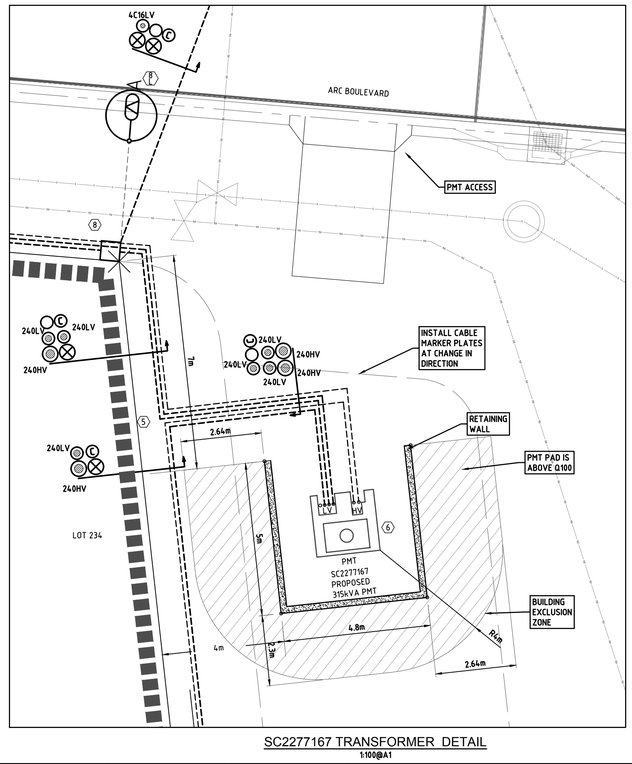
LUMINANCE BASED DESIGN - CATEGORY V LUMINAIRE/LAMP 1 TECHNICAL PARAMETER COMPLIANCE		
Spacing (m)	**50**	**50**
Traffic Direction	**Normal**	**Oncoming**
Average carraigeway luminance (L) cd/m^2	**0.42**	**0.45**
Overall uniformity (U_o)	**0.4**	**0.42**
Longitudinal Uniformity (U_l)	**0.53**	**0.61**
Upward wasted light ratio ($UWLR$) %	**0**	**0**
Threshold increment (TI) %	**13.53**	**9.2**
Surround verge illuminance (E_{ti}) %	**73.5**	**76.06**
Complies with standard	**YES**	**YES**

ILLUMINANCE BASED DESIGN - CATEGORY V TECHNICAL PARAMETER COMPLIANCE - "design area" ie. intersection of x and x roads	
Point Horizontal Illuminance (E_{ph})	**3.5**
Illuminance (Horizontal Uniformity) Cat V (U_{o1})	**8**

CATEGORY Px LUMINAIRE/LAMP 1 MAXIMUM SPACING CALCS			
Average Horizontal Illuminance (E_h)	**≥1.75 lx**	**≥0.85 lx**	**≥0.85 lx**
Minimum Point Horizontal Illuminance (E_{hn})	**≥0.30 lx**	**≥0.14 lx**	**≥0.14 lx**
Illuminance Uniformity (U_{o1})	**≤8**	**≤10**	**≤10**
Upward wasted light ratio (UWLR) %	**≤0.1%**	**≤2.8%**	**≤2.8%**
Road Reserve Lighting Design Width (m)	Maximum Spacing (m)		
21	**60.8**		
15		**56.8**	**63.5**



SC2277182 TRANSFORMER DETAIL
1:100@A1



SC2277167 TRANSFORMER DETAIL
1:100@A1

SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- 11kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WATER METER
- SURVEY PEG

STREET LIGHT SYMBOL LEGEND

- PROPOSED L50A (RATE 2)
- EXISTING L50A (RATE 2)
- PROPOSED L33A (RATE 2)
- PROPOSED L17 (RATE 2)
- PROPOSED L17A (RATE 2)
- EXISTING L17(RATE 2)

R	DESCRIPTION	DATE
A	ISSUED FOR ENERGEX & COUNCIL ACCEPTANCE	25.10.2022
B	ISSUED FOR CONSTRUCTION	10.11.2022
C	REISSUED FOR CONSTRUCTION	16.01.2023

CONSULTING ENGINEERS
STREET ADDRESS U14, 39 Lawrence Dr, Nerang QLD 4211
POSTAL ADDRESS PO Box 2835, Nerang DC QLD 4211
TELEPHONE (07) 5596 1425
EMAIL mail@peace.com.au
WEB petereustace.com.au

NORTH

21-0359- 02

SITE CONTACT DETAILS		COUNCIL STANDARD ALIGNMENTS		WORKS COORDINATOR	PETER EUSTACE & ASSOCIATES
NAME		Energex OH	**Energex OH**	PARENT PROJECT NO.	
TBC		Energex UG	**Energex UG**	WORK REQUEST NO.	
COMPANY		NBN	**REFER NBN**		
-		GAS	**REFER GAS**	LOTS	**149-154 , 176-185 , 202-208, 214-245**
PHONE	-	HP GAS	**REFER GAS**		
MOBILE	-	WATER	**REFER CIVIL**	CANCELLING LOTS	**PART Lot 953 on SP313636**
FAX	-	STORMWATER	**REFER CIVIL**	LOCAL AUTHORITY	**REDLAND CITY COUNCIL**
		SEWERAGE	**REFER CIVIL**	UBD REF	
		OTHER	**REFER CIVIL**	PEGGED?	**YES**

APPROVED	**KRIS BOVEINIS**	**Peter Eustace & Associates**
CHECKED	**DAVID PRUSS**	**INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING**
DESIGNER	**ABRAHAM IKORO**	**55 LOT SUBDIVISION**
PHONE	**(07) 5596 1425**	**CLAY GULLY STAGE 3, CLAY GULLY ROAD**
PLANNER	**DAVID VAN GENT**	**VICTORIA POINT, 4165**
PHONE	**(07) 5596 1425**	
ISSUE DATE	**16 JANUARY 2023**	

WORKSPLAN VERSION 5.5
SCALE: **1:500@A1**
PROJECT / SUB PROJECT NO.
S1301695
Sheet **2 of 6**
ISSUE NO: **C**

RATE 2 STREETLIGHT SCHEDULE

	STN No	SITE ID (POLE No)	POLE or COMPONENTS						LANTERN								OUTREACH BRACKET				MOUNT HEIGHT (m)	REMARKS
			COMP ID	EXIST (m)	REC (m)	ERECT (m)	SLM or IIN	ALIGN (m)	COMP ID	EXIST	RECOVER		DATE DE-ENERG	ERECT		DATE ENERG	SLM or IIN	EXIST (m)	REC (m)	ERECT (m)	SLM or IIN	
											LUMIN	CUST		LUMIN	CUST							
CLAY GULLY RD	2L	P2256813	PO 1	WOODPOLE			EX	EX	SL 1	L50A	L50A	REDL					SLEDPH0509A	1.5	1.5		EX	7.5	
	7L	P2277145	PO 1			7BPM	SB90115UCI1	1.0 BOK	SL 1					L50A	REDL		SLEDPH0509A			1.5		9	
	14L	P2277146	PO 1			7BPM	SB90115UCI1	1.0 BOK	SL 1					L50A	REDL		SLEDPH0509A			1.5		9	
	16L	P2277147	PO 1			7BPM	SB90115UCI1	1.0 BOK	SL 1					L50A	REDL		SLEDPH0509A			1.5		9	
	18L	P2277148	PO 1			7BPM	SB90115UCI1	1.0 BOK	SL 1					L50A	REDL		SLEDPH0509A			1.5		9	
	65L	P2277149	PO 1			7BPM	SB90115UCI1	1.0 BOK	SL 1					L50A	REDL		SLEDPH0509A			1.5		9	
ARC BOULEVARD	8L	P2277150	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	11L	P2277151	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	21L	P2277152	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	33L	P2277153	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	37L	P2277154	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	41L	P2277155	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
	51L	P2277156	PO 1			5.5BPM	SB75115CI	0.9 BOK	SL 1					L33A	REDL		SLEDGL0325A			1.5		7.5	
HAZELL CCT	23L	P2277157	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
	26L	P2277158	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
	30L	P2277159	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
LOVE ST	35L	P2277160	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
	36L	P2277161	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
EARLY ST	44L	P2277162	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
	46L	P2277163	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
ROBB ST	56L	P2277164	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	
	60L	P2277165	PO 1			4.5BPM	SLNOS3CI	0.9 BOK	SL 1					L17	REDL		SLEDGL01715			-		5.1	

URD CIVIL WORKS SCHEDULE (ROAD CROSSINGS)

LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)								BENDS (<°/No)								X-SECTION (m)			DRAW WIRE	KERB MARK	REMARKS
		50	No	100C	No	100	No	125	No	40	No	100C	No	100	No	125	No	EXCAV/ TAPE	COVER STRIP	TRENCH DETAIL			
CLAY GULLY RD	1A - 3			35	1	35	1	35	2										35	L	140	2	
ARC BOULEVARD	8 - 9			25	1	25	2	25	2										25	N	125	2	
	19 - 20					35	2												35	E	70	2	
	34 - 35					25	1												25	D	25	2	
	41 - 42					25	1												25	D	25	2	
	51 - 52	25	1																25	O	25	2	
	53 - 54			25	1	25	1	25	2										25	L	100	2	
	63 - 66					25	1												25	D	25	2	
HAZELL CCT	21 - 22					20	1												20	D	20	2	
	21 - 23					20	1												20	D	20	2	
	24 - 25					20	1												20	D	20	2	
	26 - 27					25	2												25	E	50	2	
	29 - 30					20	1												20	D	20	2	
LOVE ST	36 - 37					20	1												20	D	20	2	
	36 - 38					20	1												20	D	20	2	
EARLY ST	44 - 45					20	1												20	D	20	2	
	46 - 47					20	1												20	D	20	2	
	48 - 49					20	1												20	D	20	2	
ROBB ST	56 - 57			15	1	15	3	15	2										15	SP1	90	2	
TOTALS		25		100		530		200										440			855	36	

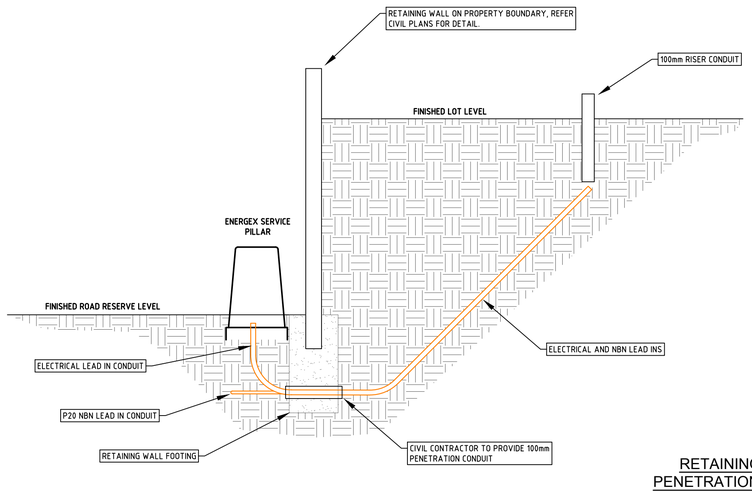
URD CIVIL WORKS SCHEDULE (ALONG FOOTPATHS)

LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)								BENDS (<°/No)								X-SECTION (m)			DRAW WIRE	KERB MARK	REMARKS
		50	No	100C	No	100	No	125	No	40	No	100C	No	100	No	125	No	EXCAV/ TAPE	COVER STRIP	TRENCH DETAIL			
CLAY GULLY RD	1A			5	1	5	1	5	2									5		SP3	20		INSTALL ALONG EXISTING TRENCH
	1 - 2			5	1	5	1	5	2										5	SP4	20		INSTALL ALONG EXISTING TRENCH
	3 - 4	40	1	40	1	40	1	40	2									40		X	200		
	4 - 5			35	1	35	1	35	2									25	10	L	140		
	3 - 64	15	1																15	O	15		
	7L - 65L	30	1																30	O	30		
	12 - 18L	95	1															90	5	O	95		
	13 - 14L	10	1																10	O	10		
	15 - 16L	10	1																10	O	10		
ARC BOULEVARD	5 - 6			10	1	10	4	10	2										10	SP2	70		
	5 - 8			10	1	10	3	10	2									10		SP1	60		
	9 - 10					15	1											15		D	15		
	10 - 12	10	1			10	1											5	5	P	20		
	10 - 11L	10	1																10	O	10		
	8 - 19			35	1	35	3	35	2									35		SP1	210		
	19 - 51			215	1	215	1	215	2									215		L	860		
	51 - 63			60	1	60	2	60	2									60		N	300		
	8 - 8L	5	1																5	O	5		
	20 - 21L	5	1																5	O	5		
	33 - 33L	5	1																5	O	5		
	41 - 41L	5	1																5	O	5		
	52 - 51L	20	1															15	5	O	20		
HAZELL CCT	20 - 21	25	1			25	2											25		Q	75		
	21 - 24					35	2											35		E	70		
	24 - 26	30	1			30	2											30		Q	90		
	27 - 28					30	1											30		D	30		
	27 - 31					45	2											45		E	90		
	23 - 23L	10	1																10	O	10		
	26 - 24L	5	1																5	O	5		
	30 - 30L	5	1																5	O	5		
LOVE ST	35 - 36					25	1											25		D	25		
	36 - 39	20	1			20	1											20		P	40		
	35 - 35L	5	1																5	O	5		
	37 - 37L	30	1															25	5	O	30		
	39 - 36L	5	1																5	O	5		
EARLY ST	42 - 43					5	1											5		D	5		
	43 - 44	10	1			10	1											10		P	20		
	44 - 46					30	1											30		D	30		
	46 - 48	20	1			20	2											20		Q	60		
	48 - 50					20	1											20		D	20		
	43 - 44L	5	1																5	O	5		
	48 - 46L	5	1																5	O	5		
ROBB ST	54 - 55			10	1	10	2	10	2									10		N	50		
	55 - 56	15	1	15	1	15	2	15	2									15		Z	90		
	56 - 60					55	2											55		E	110		
	57 - 67			65	1	65	1	65	2									65		L	260		
	57 - 66					35	1											35		D	35		
	60 - 61					20	1											20		D	20		
	55 - 56L	5	1															5		O	5		
	60 - 60L	5	1															5		O	5		
TOTALS		405		495		1340		990										1040	175		3285		

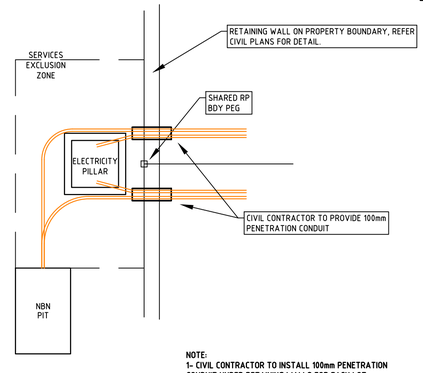
!WARNING!
FIRE ANT TERRITORY
THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.

UNDERGROUND CABLE SCHEDULE

LOCATION	STATIONS FROM-TO	VOLTS	EXIST	TRF	REC	INSTALL	CABLE SIZE/TYPE	MODEL ID	ROUTE LENGTH (m)	CABLE LENGTH (m) NEW	CABLE LENGTH (m) REC	LCC	REMARKS
CLAY GULLY RD	2 - 6	11kV				*	240mm² 3 x 1C Al XLPE TRIPLEX	11AT240XSH	97	100			
	1 - 4	LV				*	240mm² 4C Al XLPE	LVA4240XPV	62	65			
	4 - 6	LV				*	240mm² 4C Al XLPE	LVA4240XPV	32	35			
	1 - 2L	SL	*		*		4mm² 2C Cu PVC/PVC	LVC24PVPV	2		5		
	4 - 64	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	42	45			
	7 - 64	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	27	30			
	7 - 7L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	12 - 13	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	2	5			
	13 - 14L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	13 - 15	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	37	40			
	15 - 17	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	42	45			
	15 - 16L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	17 - 18L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	64 - 65L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	12	15			
ARC BOULEVARD	6 - 53A	11kV				*	240mm² 3 x 1C Al XLPE TRIPLEX	11AT240XSH	282	285			
	53A - 57	11kV				*	240mm² 3 x 1C Al XLPE TRIPLEX	11AT240XSH	57	60			
	6 - 8	LV				*	240mm² 4C Al XLPE	LVA4240XPV	12	15			
	6 - 21	LV				*	240mm² 4C Al XLPE	LVA4240XPV	92	95			
	8 - 12	LV				*	16mm² 4C Cu XLPE	LVC416XPV	37	40			
	8 - 32	LV				*	240mm² 4C Al XLPE	LVA4240XPV	52	55			
	32 - 33	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	33 - 34	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	34 - 35	LV				*	240mm² 4C Al XLPE	LVA4240XPV	22	25			
	34 - 40	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	40 - 41	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	41 - 44	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	41 - 51	LV				*	240mm² 4C Al XLPE	LVA4240XPV	37	40			
	51 - 56	LV				*	240mm² 4C Al XLPE	LVA4240XPV	72	75			
	51 - 62	LV				*	240mm² 4C Al XLPE	LVA4240XPV	47	50			
	8 - 8L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	12 - 11L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	17	20			
	33 - 33L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	41 - 41L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	51 - 51L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	42	45			
HAZELL CCT	21 - 22	LV				*	16mm² 4C Cu XLPE	LVC416XPV	22	25			
	21 - 23	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	21 - 24	LV				*	240mm² 4C Al XLPE	LVA4240XPV	32	35			
	24 - 25	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	24 - 26	LV				*	240mm² 4C Al XLPE	LVA4240XPV	22	25			
	26 - 27	LV				*	240mm² 4C Al XLPE	LVA4240XPV	22	25			
	27 - 28	LV				*	16mm² 4C Cu XLPE	LVC416XPV	27	30			
	27 - 29	LV				*	240mm² 4C Al XLPE	LVA4240XPV	27	30			
	29 - 30	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	21 - 21L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	27	30			
	23 - 23L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	26 - 26L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
	30 - 30L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
LOVE ST	35 - 36	LV				*	240mm² 4C Al XLPE	LVA4240XPV	27	30			
	36 - 37	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	36 - 38	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	35 - 35L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	7	10			
	37 - 37L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	32	35			
	36 - 36L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
EARLY ST	44 - 45	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	44 - 46	LV				*	240mm² 4C Al XLPE	LVA4240XPV	27	30			
	46 - 47	LV				*	16mm² 4C Cu XLPE	LVC416XPV	17	20			
	46 - 49	LV				*	16mm² 4C Cu XLPE	LVC416XPV	32	35			
	44 - 44L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	12	15			
	46 - 46L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	22	25			
ROBB ST	56 - 57	LV				*	240mm² 4C Al XLPE	LVA4240XPV	12	15			
	56 - 59	LV				*	240mm² 4C Al XLPE	LVA4240XPV	27	30			
	59 - 60	LV				*	240mm² 4C Al XLPE	LVA4240XPV	27	30			
	56 - 56L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	17	20			
	60 - 60L	SL				*	4mm² 2C Cu PVC/PVC	LVC24PVPV	2	5			
TOTALS		11kV					240mm² 3 x 1C Al XLPE TRIPLEX	11AT240XSH		445			
		LV					240mm² 4C Al XLPE	LVA4240XPV		905			
		LV					16mm² 4C Cu XLPE	LVC416XPV		270			
		SL					16mm² 2C Cu PVC/PVC	LVC216PVPV		185			
		SL					4mm² 2C Cu PVC/PVC	LVC24PVPV		295	5		



RETAINING WALL PENETRATION CONDUIT DETAIL



NOTE:
1- CIVIL CONTRACTOR TO INSTALL 100mm PENETRATION CONDUIT UNDER RETAINING WALLS FOR EACH LOT.
2- ELECTRICAL CONTRACTOR INSTALL LEAD-INS THROW PENETRATION CONDUIT.

CONSTRUCTION ISSUE

SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- 11kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WATER METER
- SURVEY PEG

R	DESCRIPTION	DATE
A	ISSUED FOR ENERGEX & COUNCIL ACCEPTANCE	25.10.2022
B	ISSUED FOR CONSTRUCTION	10.11.2022
C	REISSUED FOR CONSTRUCTION	16.01.2023

CONSULTING ENGINEERS
STREET ADDRESS: U14, 39 Lawrence Dr, Nerang QLD 4211
POSTAL ADDRESS: PO Box 2835, Nerang DC QLD 4211
TELEPHONE: (07) 5590 1425
EMAIL: mail@pece.com.au
WEB: petereustace.com.au

NORTH

21-0359- 03

SITE CONTACT DETAILS		COUNCIL STANDARD ALIGNMENTS		WORKS COORDINATOR	PETER EUSTACE & ASSOCIATES
NAME		Energex OH	Energex OH	PARENT PROJECT NO.	
TBC		Energex UG	Energex UG	WORK REQUEST NO.	
COMPANY		NBN	REFER NBN		
-		GAS	REFER GAS	LOTS	149-154 , 176-185 , 202-208, 214-245
PHONE	-	HP GAS	REFER GAS		
MOBILE	-	WATER	REFER CIVIL	CANCELLING LOTS	PART Lot 953 on SP313636
FAX	-	STORMWATER	REFER CIVIL	LOCAL AUTHORITY	REDLAND CITY COUNCIL
		SEWERAGE	REFER CIVIL	UBD REF	
		OTHER	REFER CIVIL	PEGGED?	YES

APPROVED	KRIS BOVEINIS
CHECKED	DAVID PRUSS
DESIGNER	ABRAHAM IKORO
PHONE	(07) 5596 1425
PLANNER	DAVID VAN GENT
PHONE	(07) 5596 1425
ISSUE DATE	16 JANUARY 2023

Peter Eustace & Associates

INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING

55 LOT SUBDIVISION
CLAY GULLY STAGE 3, CLAY GULLY ROAD
VICTORIA POINT, 4165

WORKSPLAN VERSION 5.5
SCALE: N.T.S.
PROJECT / SUB PROJECT NO.
S1301695
Sheet 3 of 6
ISSUE NO: C

EQUIPMENT SCHEDULE

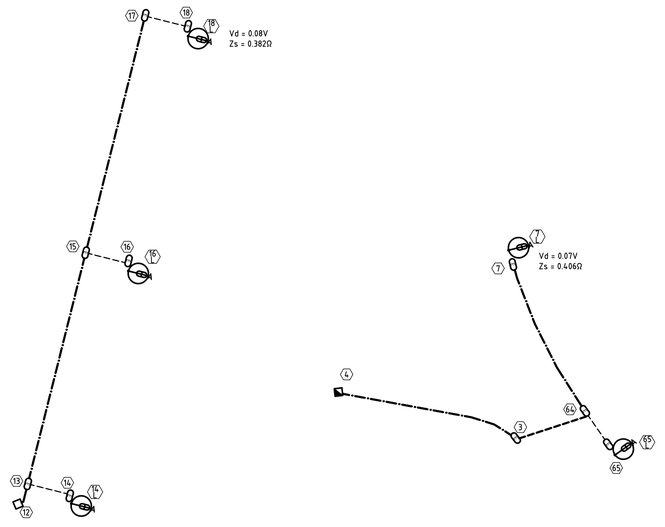
LOCATION	STN No	SITE I.D.	EXIST	REC	INSTALL	SIZE & DESCRIPTION	IIN	COMP ID	PLANT No.	MODEL ID	QTY	LCC	REMARKS
CLAY GULLY RD	1	U9168	*			SERV PILLAR		EX		EX	EX		MAKE 3-WAY
					*	PHASE BAR				06508	4		
					*	M12 x 50mm				00413	4		
					*	240 LUG SET				LVSPL240	1		
	3				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
	4	LP2277166			*	LINK PILLAR (240-240 6F)		LP1		LVSP14-6	1		
					*	S/L FUSE				ASSY801-1	1		
					*	S/L FUSE HOLDER				ASSY1043-3	1		
					*	EARTH				ASSY1037-1	1		
	7				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT				ASSY833-5	1		
	12	U2277168			*	SUPPLY PILLAR (16 7F)		PI1		LVSP12-6S	1		USE SPARE FUSE HOLDER FOR STREETLIGHTING
					*	S/L FUSE				ASSY801-1	1		
					*	S/L FUSE HOLDER				ASSY1043-3	1		
	13				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT				ASSY833-5	1		
	14				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
	15				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT				ASSY833-5	1		
	16				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
	17				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT				ASSY833-5	1		
	18				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
	64				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT				ASSY833-5	1		
	65				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
ARC BOULEVARD	6	SC2277167			*	315kVA PADMOUNT TRANSFORMER		TR1		S2475036	1		
					*	CULVERT & BASE				C & B	1		
					*	PMT INSTALLATION				PMTINSTALL	1		
					*	PMT COMMISSION				PMTCOM	1		
					*	HV FUSES				DSHVF3SLK	1		
					*	LV FUSES				DSLVF31	3		
					*	HV TERMINATIONS				1CFC9524XLG	2		
					*	LV TERMINATIONS				LTSA24D	3		
					*	COMMON EARTHING				DSSQPMCEG	1		
	8	U2277170			*	SUPPLY PILLAR (240-240-16 7F)		PI1		LVSP4-6S	1		
	11				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
	32	U2277171			*	SUPPLY PILLAR (240-240 6F)		PI1		LVSP4-6	1		
	33	U2277172			*	SUPPLY PILLAR (240-240 7F)		PI1		LVSP4-6S	1		
					*	EARTH				ASSY1011-2	1		
	34	U2277174			*	SUPPLY PILLAR (240-240-240 6F)		PI1		LVSP9-6	1		
	40	LP2277175			*	LINK PILLAR (240-240 6F)		LP1		LVSP14-6	1		
					*	EARTH				ASSY1037-1	1		
	41	U2277177			*	SUPPLY PILLAR (240-240-240 7F)		PI1		LVSP9-6S	1		
	51	U2277178			*	SUPPLY PILLAR (240-240-240 7F)		PI1		LVSP9-6S	1		
	53A	U12541160				11kV STRAIGHT JOINT		SJ1		11ST24/24X	1		
	62	U2277180			*	SUPPLY PILLAR (240 6F)		PI1		LVSP2-6	1		
					*	EARTH				ASSY1011-2	1		
HAZELL CCT	21	U2277193			*	SUPPLY PILLAR (240-240-16-16 7F)		PI1		LVSP4-6S	1		
					*	EARTH				ASSY1011-2	1		
	22	U2277194			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
	23	U2277173			*	SUPPLY PILLAR (16 7F)		PI1		LVSP12-6S	1		
	24	U2277195			*	SUPPLY PILLAR (240-240-16 6F)		PI1		LVSP4-6	1		
	25	U2277196			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
	26	U12541929			*	SUPPLY PILLAR (240-240 7F)		PI1		LVSP4-6S	1		
	27	U2277197			*	SUPPLY PILLAR (240-240-16 6F)		PI1		LVSP4-6	1		
	28	U2277169			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
	29	U2277198			*	SUPPLY PILLAR (240-16 6F)		PI1		LVSP2-6	1		
					*	EARTH				ASSY1011-2	1		
	30	U2277199			*	SUPPLY PILLAR (16 7F)		PI1		LVSP12-6S	1		
LOVE ST	35	U2277176			*	SUPPLY PILLAR (240-240 7F)		PI1		LVSP4-6S	1		
	36	U2277191			*	SUPPLY PILLAR (240-16-16 7F)		PI1		LVSP2-6S	1		
					*	EARTH				ASSY1011-2	1		
	37	U2277190			*	SUPPLY PILLAR (16 7F)		PI1		LVSP12-6S	1		
	38	U2277192			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
EARLY ST	44	U2277185			*	SUPPLY PILLAR (240-240-16 7F)		PI1		LVSP4-6S	1		
	45	U2277186			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
	46	U2277187			*	SUPPLY PILLAR (240-16-16 7F)		PI1		LVSP2-6S	1		
					*	EARTH				ASSY1011-2	1		
	47	U2277189			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
	49	U2277188			*	SUPPLY PILLAR (16 6F)		PI1		LVSP12-6	1		
ROBB ST	56	U2277181			*	SUPPLY PILLAR (240-240-240 7F)		PI1		LVSP9-6S	1		
	57	SC2277182			*	315kVA PADMOUNT TRANSFORMER		TR1		S2475036	1		
					*	CULVERT & BASE				C & B	1		
					*	PMT INSTALLATION				PMTINSTALL	1		
					*	PMT COMMISSION				PMTCOM	1		
					*	HV FUSES				DSHVF3SLK	1		
					*	LV FUSES				DSLVF31	1		
					*	HV TERMINATIONS				1CFC9524XLG	1		
					*	LV TERMINATIONS				LTSA24D	1		
					*	COMMON EARTHING				DSSQPMCEG	1		
	59	U2277183			*	SUPPLY PILLAR (240-240 6F)		PI1		LVSP4-6	1		
	60	U2277184			*	SUPPLY PILLAR (240 7F)		PI1		LVSP2-6S	1		
					*	EARTH				ASSY1011-2	1		

OVERHEAD WORKS SCHEDULE

LOCATION	STN No.	SITE I.D (POLE No)	POLES												CONSTRUCTIONS (Note: KBS is top KB to top KB)							REMARKS
			EDT ANG	EDT kN	SST Kn	LST Kn	EXISTING	RECOVER	ERECT	SINK	FOOT	COMP ID	ALIGN	LCC	EXISTING	RECOVER	ERECT	No	KBS	ANG	LCC	
CLAY GULLY RD	2	P2256813	EX	EX	EX	EX	P14/12-22			EX	EX	PO1	EX		11TC/S			1	150			
																	11PTTRIPXW	1	1400			
																	11BRAL/240XL	1				
																	PAGE7-53-3	3				
															SWPBMA1C	SWPBMA1C		EX	EX			
															SLUGTO4/2	SLUGTO4/2		EX				
															MEN			EX				
																	CGES	1				

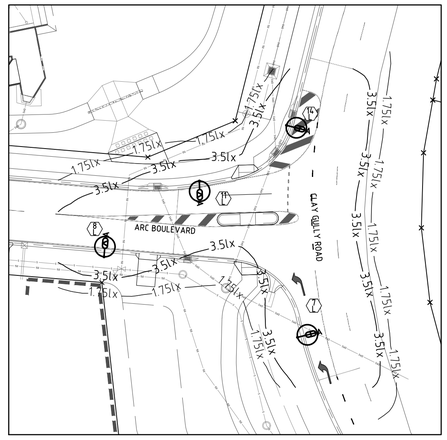
!WARNING!
FIRE ANT TERRITORY

THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.



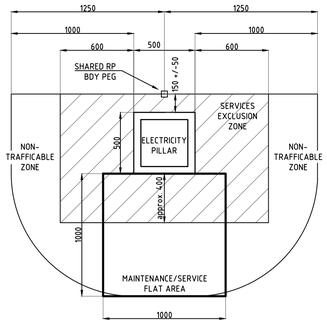
PROPOSED STREETLIGHT GEOGRAPHICS
(NOT TO SCALE)

16mm 2C STREET LIGHT CABLE
4mm 2C STREET LIGHT CABLE

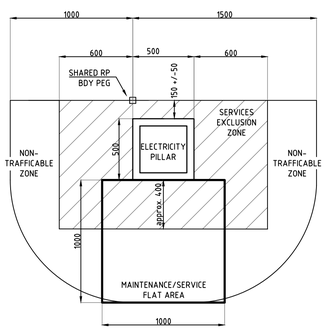


LUX PLOT
1:500@A1

CONSTRUCTION ISSUE



PILLAR CENTRED ON SHARED RP BDY



PILLAR OFFSET TO ONE SIDE OF SHARED RP BDY

NOTES
1. PILLARS MAY BE SET CENTRED ON BDY PEG OR OFFSET TO ONE SIDE AS SHOWN.
2. PILLARS TO BE OFFSET 150 (+/-50) FROM RP BDY.
3. SERVICES EXCLUSION ZONE IS FOR ABOVE GROUND SERVICES ONLY. (PITS, MANHOLES ETC). UNDERGROUND PIPES MAY PASS THROUGH THIS AREA AS LONG AS THEY DO NOT CONFLICT WITH ELECTRICITY ASSETS.
4. IF ROADS/DRIVEWAYS ARE WITHIN 1000 OF PILLAR 2 X PROTECTION BOLLARDS WILL BE REQUIRED.
5. FLAT AREA IN FRONT OF PILLAR TO BE MAINTAINED FOR ACCESS AND MAINTENANCE.

SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- 11kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WATER METER
- SURVEY PEG

R	DESCRIPTION	DATE
A	ISSUED FOR ENERGEX & COUNCIL ACCEPTANCE	25.10.2022
B	ISSUED FOR CONSTRUCTION	10.11.2022
C	REISSUED FOR CONSTRUCTION	16.01.2023

CONSULTING ENGINEERS
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POSTAL ADDRESS PO Box 2835, Nerang DC QLD 4211
TELEPHONE (07) 5596 1425
EMAIL mail@pece.com.au
WEB petereustace.com.au

NORTH

21-0359- 04

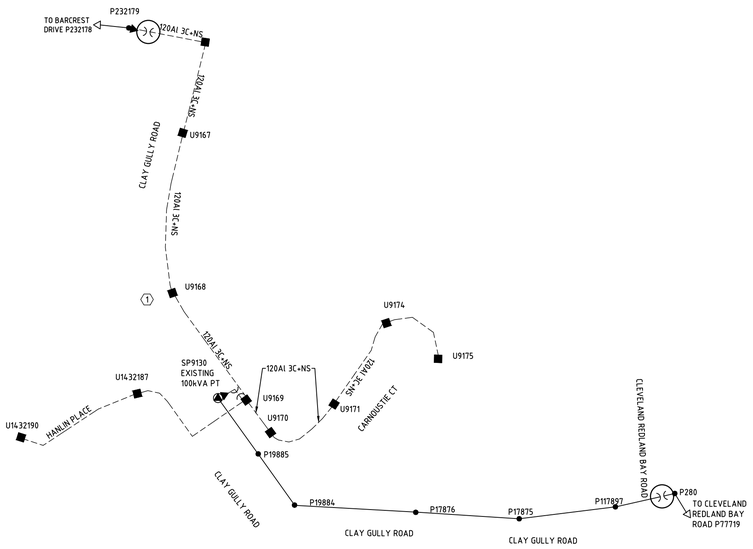
SITE CONTACT DETAILS		**COUNCIL STANDARD ALIGNMENTS**		WORKS COORDINATOR	**PETER EUSTACE & ASSOCIATES**	APPROVED	**KRIS BOVEINIS**
NAME		Energex OH	**Energex OH**	PARENT PROJECT NO.			
TBC		Energex UG	**Energex UG**	WORK REQUEST NO.		CHECKED	**DAVID PRUSS**
COMPANY		NBN	**REFER NBN**				
-		GAS	**REFER GAS**	LOTS	**149-154 , 176-185 , 202-208, 214-245**	DESIGNER	**ABRAHAM IKORO**
PHONE	-	HP GAS	**REFER GAS**			PHONE	**(07) 5596 1425**
MOBILE	-	WATER	**REFER CIVIL**	CANCELLING LOTS	**PART Lot 953 on SP313636**	PLANNER	**DAVID VAN GENT**
FAX	-	STORMWATER	**REFER CIVIL**	LOCAL AUTHORITY	**REDLAND CITY COUNCIL**	PHONE	**(07) 5596 1425**
		SEWERAGE	**REFER CIVIL**	UBD REF		ISSUE DATE	**16 JANUARY 2023**
		OTHER	**REFER CIVIL**	PEGGED?	**YES**		

Peter Eustace & Associates

INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING

55 LOT SUBDIVISION
CLAY GULLY STAGE 3, CLAY GULLY ROAD
VICTORIA POINT, 4165

WORKSPLAN VERSION 5.5
SCALE: **N.T.S.**
PROJECT / SUB PROJECT NO.
S1301695
Sheet **4 of 6**
ISSUE NO: **C**

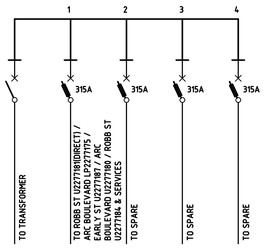


EXISTING LV GEOGRAPHIC

ALL UNDERGROUND CABLE 240LV UNLESS OTHERWISE MARKED

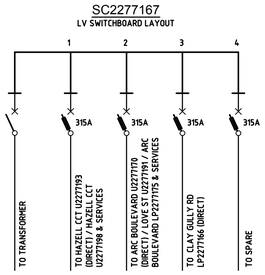
SC2277182

LV SWITCHBOARD LAYOUT



SC2277167

LV SWITCHBOARD LAYOUT



LV POLE TERMINATION LABEL		
LABEL SIZE	**SITE LOCATION FOR ATTACHING OF LABEL**	**LABEL INFORMATION**
300x100	**POLE No:** SP9130	TO CLAY GULLY RD LP2277166 / HANLIN PL U1432190 /CLAY GULLY RD P232179 / CARNOUSTIE CT U9175 & SERVICES
	LOCATION: CALLAGHAN RD	
MATERIAL: GRAVOPLY II (1.5mm) or similar		

LV POLE TERMINATION LABEL		
LABEL SIZE	**SITE LOCATION FOR ATTACHING OF LABEL**	**LABEL INFORMATION**
300x100	**POLE No:** P232179	TO CLAY GULLY RD LP2277166 / HANLIN PL U1432190 /CLAY GULLY RD SP9130 / CARNOUSTIE CT U9175 & SERVICES
	LOCATION: CALLAGHAN RD	
MATERIAL: GRAVOPLY II (1.5mm) or similar		

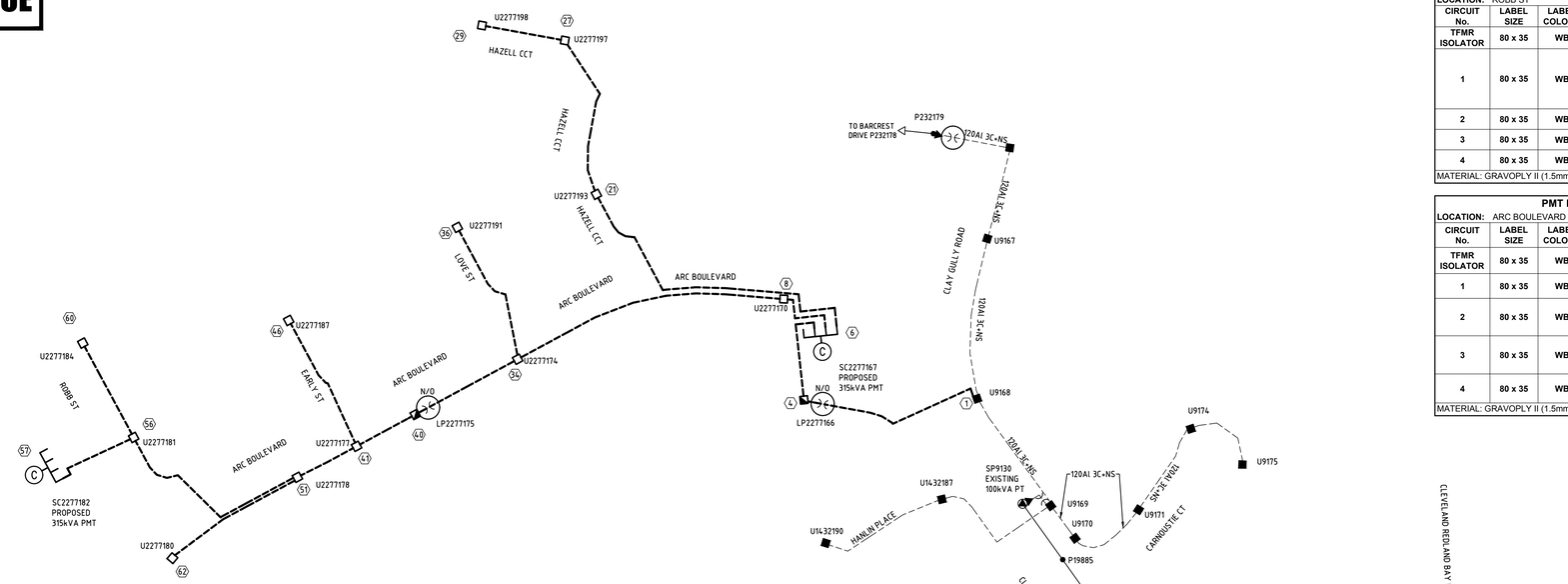
NEW STYLE LINK PILLAR				
LOCATION: CLAY GULLY RD				**STATION:** LP2277166
CIRCUIT No.	**LABEL SIZE**	**LABEL COLOUR**	**LETTER SIZE**	**LABEL INFORMATION**
1 (LHS)	**150x50**	**WB**	**5**	TO CLAY GULLY RD P232179 / HANLIN PL U1432190 /CLAY GULLY RD SP9130 / CARNOUSTIE CT U9175 & SERVICES
2 (RHS)	**150x50**	**WB**	**5**	TO ARC BOULEVARD SC2277167 (DIRECT)
MATERIAL: GRAVOPLY II (1.5mm) or similar				

NEW STYLE LINK PILLAR				
LOCATION: ARC BOULEVARD				**STATION:** LP2277175
CIRCUIT No.	**LABEL SIZE**	**LABEL COLOUR**	**LETTER SIZE**	**LABEL INFORMATION**
1 (LHS)	**150x50**	**WB**	**5**	TO ARC BOULEVARD SC227167 / LOVE ST U2277191 & SERVICES
2 (RHS)	**150x50**	**WB**	**5**	TO ROBB ST SC2277182 / EARLY ST U2277187 / ARC BOULEVARD U2277180 / ROBB ST U2277184 & SERVICES
MATERIAL: GRAVOPLY II (1.5mm) or similar				

PMT LV SWBD - SWITCH FUSE CIRCUITS				
LOCATION: ROBB ST				**STATION:** SC2277182
CIRCUIT No.	**LABEL SIZE**	**LABEL COLOUR**	**LETTER SIZE**	**LABEL INFORMATION**
TFMR ISOLATOR	**80 x 35**	**WB**	**6**	TO TRANSFORMER
1	**80 x 35**	**WB**	**5**	TO ROBB ST U2277181(DIRECT) / ARC BOULEVARD LP2277175 / EARLY ST U2277187 / ARC BOULEVARD U2277180 / ROBB ST U2277184 & SERVICES
2	**80 x 35**	**WB**	**5**	SPARE
3	**80 x 35**	**WB**	**5**	SPARE
4	**80 x 35**	**WB**	**5**	SPARE
MATERIAL: GRAVOPLY II (1.5mm) or similar				

PMT LV SWBD - SWITCH FUSE CIRCUITS				
LOCATION: ARC BOULEVARD				**STATION:** SC2277167
CIRCUIT No.	**LABEL SIZE**	**LABEL COLOUR**	**LETTER SIZE**	**LABEL INFORMATION**
TFMR ISOLATOR	**80 x 35**	**WB**	**6**	TO TRANSFORMER
1	**80 x 35**	**WB**	**5**	TO HAZELL CCT U2277193 (DIRECT) / HAZELL CCT U2277198 & SERVICES
2	**80 x 35**	**WB**	**5**	TO ARC BOULEVARD U2277170 (DIRECT) / LOVE ST U2277191 / ARC BOULEVARD LP2277175 & SERVICES
3	**80 x 35**	**WB**	**5**	TO CLAY GULLY RD LP2277166 (DIRECT)
4	**80 x 35**	**WB**	**5**	SPARE
MATERIAL: GRAVOPLY II (1.5mm) or similar				

CONSTRUCTION ISSUE



PROPOSED LV GEOGRAPHIC

ALL UNDERGROUND CABLE 240LV UNLESS OTHERWISE MARKED

SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- STJ 11kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WM WATER METER
- × SURVEY PEG

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NORTH

21-0359- 05

SITE CONTACT DETAILS		**COUNCIL STANDARD ALIGNMENTS**		WORKS COORDINATOR	**PETER EUSTACE & ASSOCIATES**	APPROVED	**KRIS BOVEINIS**
NAME		Energex OH	**Energex OH**	PARENT PROJECT NO.			
TBC		Energex UG	**Energex UG**	WORK REQUEST NO.		CHECKED	**DAVID PRUSS**
COMPANY		NBN	**REFER NBN**				
-		GAS	**REFER GAS**	LOTS	**149-154 , 176-185 , 202-208, 214-245**	DESIGNER	**ABRAHAM IKORO**
PHONE	-	HP GAS	**REFER GAS**			PHONE	**(07) 5596 1425**
MOBILE	-	WATER	**REFER CIVIL**	CANCELLING LOTS	**PART Lot 953 on SP313636**	PLANNER	**DAVID VAN GENT**
FAX	-	STORMWATER	**REFER CIVIL**	LOCAL AUTHORITY	**REDLAND CITY COUNCIL**	PHONE	**(07) 5596 1425**
		SEWERAGE	**REFER CIVIL**	UBD REF		ISSUE DATE	**16 JANUARY 2023**
		OTHER	**REFER CIVIL**	PEGGED?	**YES**		

Peter Eustace & Associates

INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING

55 LOT SUBDIVISION
CLAY GULLY STAGE 3, CLAY GULLY ROAD
VICTORIA POINT, 4165

WORKSPLAN VERSION 5.5

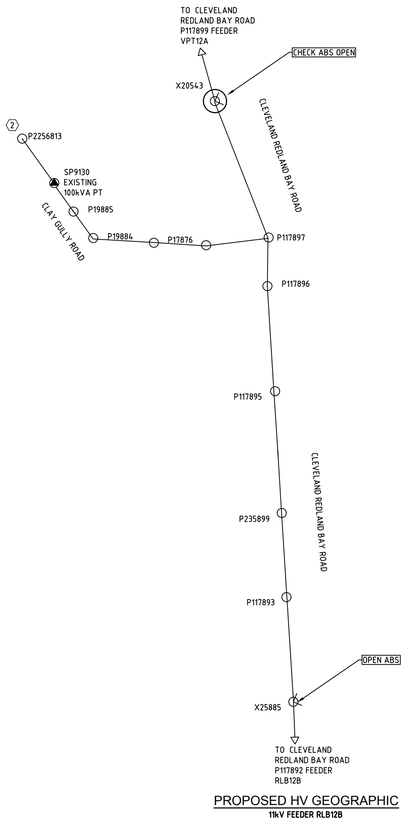
SCALE: **N.T.S.**

PROJECT / SUB PROJECT NO.

S1301695

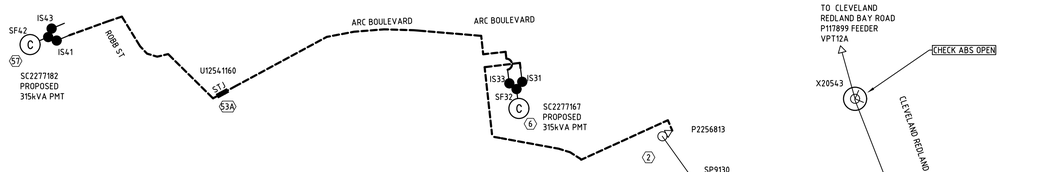
Sheet **5 of 6**

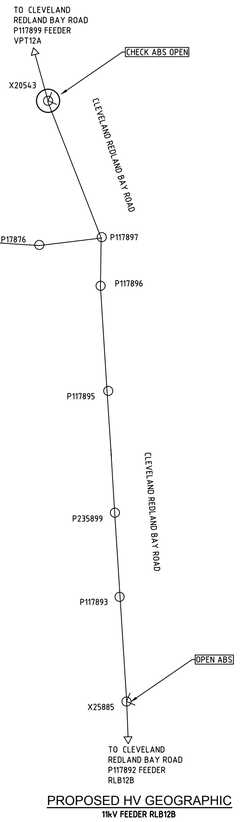
ISSUE NO: **C**



PROPOSED HV GEOGRAPHIC

11kV FEEDER RLB12B





PROPOSED HV GEOGRAPHIC

11kV FEEDER RLB12B

SYMBOL LEGEND	
	PROPOSED 50mm S/L
C	PROPOSED ENERGEX 100mm COMMS
	PROPOSED 100mm
	PROPOSED 125mm
	EXISTING 40mm S/L
C	EXISTING ENERGEX 100mm COMMS
	EXISTING 100mm
	EXISTING 125mm
	PROPOSED CABLE (AS MARKED)
	EXISTING CABLE (AS MARKED)
	PROPOSED UNDERGROUND HV/LV ROUTE
	EXISTING UNDERGROUND HV/LV ROUTE
	PROPOSED OVERHEAD HV/LV ROUTE
	EXISTING OVERHEAD HV/LV ROUTE
	PROPOSED S/L CABLE
	EXISTING S/L CABLE
	PADMOUNT TRANSFORMER
C	PMT LV GEOGRAPHIC
C	PMT HV GEOGRAPHIC
	RING MAIN UNIT
R	RMU HV SCHEMATIC
	PROPOSED SUPPLY PILLAR
	EXISTING SUPPLY PILLAR
	PROPOSED LINK PILLAR
	EXISTING LINK PILLAR
	COMMERCIAL PILLAR
	EARTH
	PROPOSED TYPE 4 PIT
	EXISTING TYPE 4 PIT
	RECOVER EQUIPMENT
STJ	11kV STRAIGHT JOINT
	OVERHEAD POLE TRANSFORMER
	OVERHEAD POLE (HV ONLY)
	OVERHEAD POLE (LV ONLY)
	OVERHEAD POLE (HV & LV)
	OVERHEAD HV TERMINATION
	OVERHEAD LV TERMINATION
	AIR BREAK SWITCH (OPEN)
	AIR BREAK SWITCH (CLOSED)
	DISCONNECT LINKS (OPEN)
	DISCONNECT LINKS (CLOSED)
WM	WATER METER
×	SURVEY PEG

11kV FEEDER DESTINATION LABELS

LOCATION: CLAY GULLY RD

LABEL SIZE	STATION I.D	LABEL INFORMATION
300 x 100	**POLE No:** P2256813	11kV CABLE TO ARC BOULEVARD SC2277167 IS31

MATERIAL: GRAVOPLY II (1.5mm) or similar

CONSTRUCTION ISSUE

ABB SAFELINK CFC RMU

LOCATION: ARC BOULEVARD **STATION:** SC2277167

LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION
100x40	**WB**	**15**	**IS31**	**SF32**	**IS33**	**NEAR ISOLATOR**	**ISOLATOR IDENTIFICATION**
150x40	**BW**	**20**	**EXISTING**			**FRONT**	**FEEDER IDENTIFICATION**
150x50	**BW**	**10**	TO CLAY GULLY RD P2256813	TO TRANSFORMER	TO ROBB ST SC2277182 IS41	**CABLE BOX**	**CABLE DESTINATION**
150x50	**BW**	**10**	TO CLAY GULLY RD P2256813	TO TRANSFORMER	TO ROBB ST SC2277182 IS41	**INSIDE SIDE WALL**	**CABLE DESTINATION**

NOTES: 1) Label to be made in GRAVOPLY II (1.5mm) or similar
2) The Feeder I.D Label is only required if the RMU is the first termination outside a Zone Substation
3) Design I.D and Component I.D labels are only required if the RMU is installed in a Zone Substation

ABB SAFELINK CFC RMU

LOCATION: ROBB ST **STATION:** SC2277182

LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION
100x40	**WB**	**15**	**IS41**	**SF42**	**IS43**	**NEAR ISOLATOR**	**ISOLATOR IDENTIFICATION**
150x40	**BW**	**20**	**EXISTING**			**FRONT**	**FEEDER IDENTIFICATION**
150x50	**BW**	**10**	TO ARC BOULEVARD SC2277167 IS33	TO TRANSFORMER	SPARE	**CABLE BOX**	**CABLE DESTINATION**
150x50	**BW**	**10**	TO ARC BOULEVARD SC2277167 IS33	TO TRANSFORMER	SPARE	**INSIDE SIDE WALL**	**CABLE DESTINATION**

NOTES: 1) Label to be made in GRAVOPLY II (1.5mm) or similar
2) The Feeder I.D Label is only required if the RMU is the first termination outside a Zone Substation
3) Design I.D and Component I.D labels are only required if the RMU is installed in a Zone Substation

PROPOSED COMMISSIONING SCHEDULE

TENTATIVE ONLY SUBJECT TO AMENDMENT BY SWITCHING CO-ORDINATOR

ITEM No	LOCATION	APPARATUS	ACTION
	COMMISSION NEW PMT - LV AND HV SWITCHING		
1	ADVISE CONTRACT SUPERVISOR SWITCHING TO COMMENCE		
2	RECEIVE CLEARANCE FROM WORK CREWS ALL WORK COMPLETED		
3	NOTIFY ALL WORK CREWS TREAT PILLARS AS LIVE		
4	CLAY GULLY ROAD SP9130	GENSET	CONNECT
5	CLEVELAND REDLAND BAY ROAD X20543	ABS	CHECK OPEN
6	CLEVELAND REDLAND BAY ROAD X25885	ABS	OPEN
7	NEW ROADS	NEW EQUIPMENT	CONNECT & MAKE READY
8	REVERSE		REVERSE
9	NEW ROADS	NEW EQUIPMENT	COMMISSION & TEST
10	ADVISE CONTRACT SUPERVISOR SWITCHING COMPLETE		

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NORTH

21-0359- 06

SITE CONTACT DETAILS		**COUNCIL STANDARD ALIGNMENTS**		WORKS COORDINATOR	**PETER EUSTACE & ASSOCIATES**
NAME		Energex OH	**Energex OH**	PARENT PROJECT NO.	
TBC		Energex UG	**Energex UG**	WORK REQUEST NO.	
COMPANY		NBN	**REFER NBN**		
-		GAS	**REFER GAS**	LOTS	**149-154 , 176-185 , 202-208, 214-245**
PHONE	-	HP GAS	**REFER GAS**		
MOBILE	-	WATER	**REFER CIVIL**	CANCELLING LOTS	**PART Lot 953 on SP313636**
FAX	-	STORMWATER	**REFER CIVIL**	LOCAL AUTHORITY	**REDLAND CITY COUNCIL**
		SEWERAGE	**REFER CIVIL**	UBD REF	
		OTHER	**REFER CIVIL**	PEGGED?	**YES**

APPROVED	**KRIS BOVEINIS**	**Peter Eustace & Associates**
CHECKED	**DAVID PRUSS**	**INSTALL HV & LV CABLE, CONDUITS & PMT, STREET LIGHTING**
DESIGNER	**ABRAHAM IKORO**	
PHONE	**(07) 5596 1425**	**55 LOT SUBDIVISION**
PLANNER	**DAVID VAN GENT**	**CLAY GULLY STAGE 3, CLAY GULLY ROAD**
PHONE	**(07) 5596 1425**	**VICTORIA POINT, 4165**
ISSUE DATE	**16 JANUARY 2023**	

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Sheet **6 of 6**
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