

ELECTRICAL CONTRACTOR

The works detailed on this drawing shall be constructed in accordance with Robin Russell & Associates' General Specification for Installation of Electricity Reticulation and Street Lighting - Issue 'Y'.

CIVIL CONTRACTOR

The installation of all electrical conduits shall be supervised by the holder of an electrical work licence - Electrical Safety Act 2002.

Energex conduits and transformer site retaining walls shall be installed strictly in accordance with Energex's specifications (see below). They will be inspected for compliance upon completion.

The civil contractor shall install enveloping conduits under retaining walls behind pillars - two 100mm conduits into each lot (one for Electricity, one for Telstra), 600mm deep behind the pillar, near ground level inside the lot.

Relevant specifications in Energex's Underground Distribution Construction Manual are found at -

Section C1: Conduits
Section C2: Excavation
Section C3: Transformer Sites

These sections of the manual can be downloaded from the following Energex web site:
http://www.energex.com.au/about_energex/asp/technical_documents.asp

Civil engineers who have registered for access to the following RRA website may download extracts from Energex's manual at:
<http://www.robrus.com.au>

The civil contractor shall ensure that all conduits have been installed before constructing retaining walls, paths, driveways & water services. The civil contractor shall please inform the electrical contractor of any 'as constructed' departures from the civil design.

Careful Lighting of new or altered existing roads might not comply with specified standards until new road lighting has been commissioned. The civil contractor shall ensure that necessary warning signs are installed and speed restrictions are applied if necessary.

ON-SITE SERVICES CHECKS

Robin Russell & Associates gives no warranty regarding the presence or location of buried services, including newly-installed services. "As Constructed" locations may differ from what is drawn on this works plan. Contractors shall be responsible to identify and locate all buried services. Initial identification can be obtained from:

Dial Before You Dig Service

Telephone 1100
Fax 1300 652 077

On-line enquiries can be made at:
<http://www.1100.com.au>

Having determined which services may be present, on-site locations should then be arranged with relevant service authorities.

Sewerage and water plans for the subdivision may be obtained on request from the Superintendent.

LEGEND: ELECTRICAL

- EXISTING UNDERGROUND CABLE
- PROPOSED UNDERGROUND CABLE
- PROPOSED NBN CONDUIT ON COMMS ALIGNMENT
- BORED CONDUIT
- GAS IN SHARED TRENCH
- ⊙ STATION NUMBER
- ⊙ PADMOUNT TRANSFORMER
- ⊙ PROPOSED POLE TRANSFORMER
- ⊙ METER BOX / LV SWITCHBOARD
- PROPOSED SERVICE PILLAR
- EXISTING SERVICE PILLAR
- FUTURE SERVICE PILLAR
- ⊙ EXISTING LINK PILLAR
- ⊙ PROPOSED C&I PILLAR
- EXISTING OVERHEAD ELECTRICITY MAINS
- PROPOSED OVERHEAD ELECTRICITY MAINS
- HV POLE
- ⊙ HV + LV POLE
- ⊙ LV or STREET LIGHT POLE
- ⊙ PROPOSED STREET LIGHT
- ⊙ EXISTING STREET LIGHT
- ⊙ FUTURE UNDERGROUND STREET LIGHT
- ⊙ RECOVER STREET LIGHT
- ⊙ EARTH
- EXISTING RATE 3 STREETLIGHT CABLE
- PROPOSED RATE 3 STREETLIGHT CABLE
- ⊙ EXISTING RATE 3 STREET LIGHT
- ⊙ PROPOSED RATE 3 STREET LIGHT
- EXISTING CONSUMERS OVERHEAD CABLE
- PROPOSED CONSUMERS OVERHEAD CABLE
- EXISTING CONSUMERS UNDERGROUND CABLE
- PROPOSED CONSUMERS UNDERGROUND CABLE
- ⊙ PROPOSED CONSUMERS SWITCHBOARD
- ⊙ EXISTING CABLE
- ⊙ PROPOSED CABLE
- ⊙ 32/40mm HD CONDUIT
- ⊙ 80/100mm LD CONDUIT
- ⊙ 100mm WHITE ENERGEX COMMS. CONDUIT
- ⊙ 125mm LD CONDUIT
- ⊙ CABLE MARKER POST
- ⊙ "ENERGEX ELECTRIC CABLE" MARKER PLATE

DJK ELECTRICAL SERVICES P/L
59-71 Wuduru Rd
Cormsfield, Qld 4130
P - 07 3829 5501
F - 07 3829 9282
E - admin@djk-electrical.com.au

'AS CONSTRUCTED'
signature of certifier: *Alick Cottle*
name of author: *Alick Cottle*
date of certification: *12-10-2013*
name of company: *DJK Electrical*
certifier's position: *Project Manager*

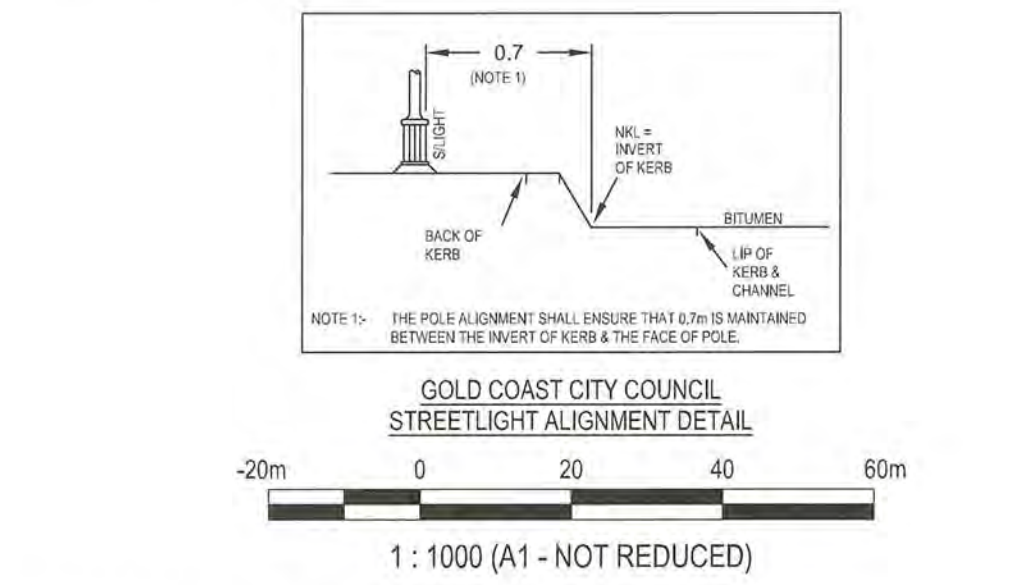
POWDER COATING OF COLUMNS & OUTREACHES

POWDER COAT COLUMNS & OUTREACHES AT STATIONS 3L1, 3L2, 7L2, 7L3, 44L, 9L2, 26L, 27L, 38L1, 38L2 & 38L3.

NOTE: LUMINAIRES MUST NOT BE PAINTED.

For Powder Coating:
Light abrasive blast, followed by powder coating ASxxxx in COLOUR XX.

Preferred Powder Coater:
Electro Seal
5-7 Platinum Street
Crestmead QLD 4132
Contact Eric Newton



CREATOR	DRAWING	DWG. NO.	REV. NO.	DATE
KN GROUP PTY LTD	CIVIL BASE	x11-125 BASE.dwg	-	1/5/2013

TELECOMMUNICATIONS INFRASTRUCTURE	
CONDUITS & PITS	to be designed by: Telstra's contractor to be installed by: Telstra's contractor to be owned by: Telstra to be provided by: Telstra
TELECOMMUNICATIONS INFRASTRUCTURE	Telstra AFFR: n/a (Telstra Velocity Estate)

CONSTRUCTION CONTACTS	
ELECTRICAL ENGINEER ROBIN RUSSELL & ASSOCIATES PTY LTD DESIGNER WILLIAM SCHARDT ph: 0419 778 552 CONSTRUCTION MANAGER BERNIE RUSSELL ph: 0413 598 560	
CIVIL ENGINEER KN GROUP PTY LTD GEOFF GREENHALGH ph: 3017 1900	
SURVEYOR LANDPARTNERS LTD JOHN DAVIDSON ph: 3842 1000	

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/08/2013	A	PRELIMINARY ISSUE	R.R.					REV B: council approval, joint use & separate gas trenching added to design, road names added to drawing.
19/5/2014	B	COUNCIL APPROVAL	R.R.					Rev C: cable details removed from future stage at Energex's request.
26/5/2014	C	REFER REVISION NOTES	R.R.					

Robin Russell
& ASSOCIATES PTY. LTD.

SUBDIVISION ELECTRICAL SERVICES

20-46 Babara Street,
Stafford, QLD 4053
Tel: (07) 3872 5555
Fax: (07) 3872 5566
Email: rr@robrus.com.au
www.robrus.com.au

QUALITY
MANAGEMENT
SYSTEM

ENERGEX SPECIFICATION	SWP47.1	DESIGNED	W.Schardt
COUNCIL	GOLD COAST	DRAWN	The Drafting Room
COUNCIL REF	PN326770/12/DA1	APPROVED BY	ROBIN RUSSELL RPEQ 1546
UBD REF	Map 326 Grid M7	SIGNED	<i>Robin Russell</i>
DWT REV	V17 - 2012/018	DATE	02/08/2013

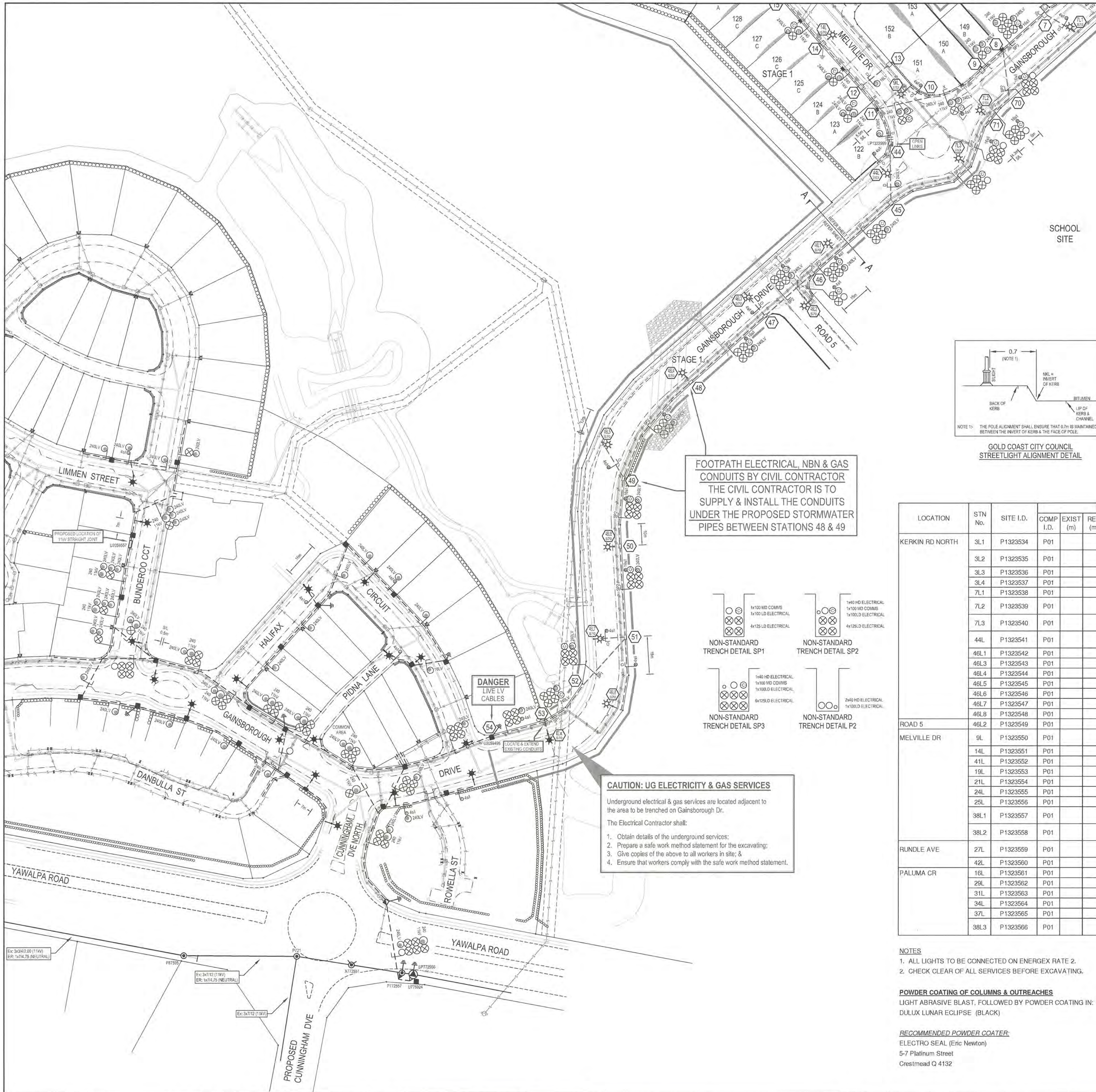
DESCRIPTION	CLIENT
ELECTRICITY RETICULATION	MIRVAC PACIFIC PTY LTD

LOCATION

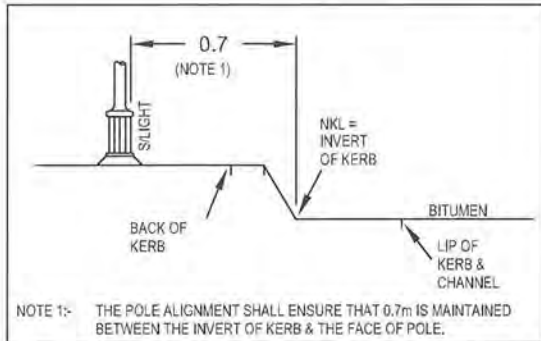
**GAINSBOROUGH GREEN ESTATE
PRECINCT 1.2 STAGES 1 & 2A
GAINSBOROUGH DRIVE, PIMPAMA**

THIS DOCUMENT IS COPYRIGHT AND THE PROPERTY OF ROBIN RUSSELL & ASSOCIATES PTY LTD AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

DRAWING No.	A730-01C
ENERGEX PROJECT No.	S0104314
SHEET No.	1 of 6

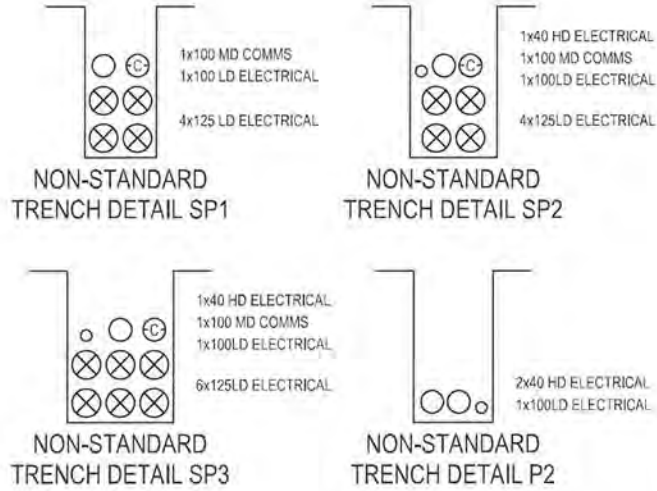


JOINT USE GAS INSTALLATION
GAS IS TO BE RETICULATED THROUGHOUT THIS PROJECT IN BOTH A JOINT USE TRENCH ARRANGEMENT & ON A SEPARATE ALIGNMENT. THE JOINT USE TRENCH LOCATIONS ARE DETAILED ON THE DRAWING & SEPARATE TRENCHES FOR GAS ARE TO BE TAKEN FROM THE GAS DESIGN (REFER APA PLAN E04510-001)
THE SPERATE GAS ALIGNMENT WILL BE 900-1200.
THE SEPARATE GAS TRENCH IS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR



GOLD COAST CITY COUNCIL
STREETLIGHT ALIGNMENT DETAIL

FOOTPATH ELECTRICAL, NBN & GAS
CONDUITS BY CIVIL CONTRACTOR
THE CIVIL CONTRACTOR IS TO
SUPPLY & INSTALL THE CONDUITS
UNDER THE PROPOSED STORMWATER
PIPES BETWEEN STATIONS 48 & 49



CAUTION: UG ELECTRICITY & GAS SERVICES
Underground electrical & gas services are located adjacent to the area to be trenched on Gainsborough Dr.
The Electrical Contractor shall:
1. Obtain details of the underground services;
2. Prepare a safe work method statement for the excavating;
3. Give copies of the above to all workers in site; &
4. Ensure that workers comply with the safe work method statement.

STREET LIGHT SCHEDULE - RATE 2

LOCATION	STN No.	SITE I.D.	POLE OR COMPONENTS								COMP I.D.	EXIST	RECOVER		ERECT		CU/SC	ALIGN	OUTREACH BRACKET				MOUNT HT (m)	REMARKS	SL CABLE (m)	
			COMP I.D.	EXIST (m)	REC (m)	ERECT (m)	POLE TYPE	CU/SC	LANTERN	CUST.			LANTERN	CUST.	EXIST (m)	REC (m)			ERECT (m)	CU/SC						
KERKIN RD NORTH	3L1	P1323534	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					1.5	SLM5734	9	POWDER COAT POLE & OUTREACH BLACK	6
	3L2	P1323535	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					1.5	SLM5734	9	POWDER COAT POLE & OUTREACH BLACK	6
	3L3	P1323536	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	3L4	P1323537	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	7L1	P1323538	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	7L2	P1323539	P01			8.5	BPM	SLM5639	700 NKL	SL1					S150AL2	GCCC	S21581					0.5	SLM5750	10.5	POWDER COAT POLE & OUTREACH BLACK	6
	7L3	P1323540	P01			8.5	BPM	SLM5639	700 NKL	SL1					S150AL2	GCCC	S21581					0.5	SLM5750	10.5	POWDER COAT POLE & OUTREACH BLACK	6
	44L	P1323541	P01			8.5	BPM	SLM5639	700 NKL	SL1					S150AL2	GCCC	S21581					0.5	SLM5750	10.5	POWDER COAT POLE & OUTREACH BLACK	6
	46L1	P1323542	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L3	P1323543	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
ROAD 5	46L4	P1323544	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L5	P1323545	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L6	P1323546	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L7	P1323547	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L8	P1323548	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	46L2	P1323549	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	9L	P1323550	P01			8.5	BPM	SLM5639	700 NKL	SL1					S150AL2	GCCC	S21581					3	SLM5750	10.5	POWDER COAT POLE & OUTREACH BLACK	6
	14L	P1323551	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	41L	P1323552	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	19L	P1323553	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
MELVILLE DR	21L	P1323554	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	24L	P1323555	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	25L	P1323556	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	38L1	P1323557	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					3	SLM5750	9	POWDER COAT POLE & OUTREACH BLACK	6
	38L2	P1323558	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					3	SLM5750	9	POWDER COAT POLE & OUTREACH BLACK	6
	27L	P1323559	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					3	SLM5750	9	POWDER COAT POLE & OUTREACH BLACK	6
	42L	P1323560	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	16L	P1323561	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	29L	P1323562	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	31L	P1323563	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
PALUMA CR	34L	P1323564	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	37L	P1323565	P01			4.5	ESTATE	SLM14770	700 NKL	SL1					S70D3L2	GCCC	S21560					0.5	5.1	BLACK AVENUE	6	
	38L3	P1323566	P01			7	BPM	SLM5637	700 NKL	SL1					S100AL2	GCCC	S21580					3	SLM5750	9	POWDER COAT POLE & OUTREACH BLACK	6

NOTES
1. ALL LIGHTS TO BE CONNECTED ON ENERGEX RATE 2.
2. CHECK CLEAR OF ALL SERVICES BEFORE EXCAVATING.

POWDER COATING OF COLUMNS & OUTREACHES
LIGHT ABRASIVE BLAST, FOLLOWED BY POWDER COATING IN: DULUX LUNAR ECLIPSE (BLACK)

RECOMMENDED POWDER COATING:
ELECTRO SEAL (Eric Newton)
5-7 Platinum Street
Crestmead Q 4132

DJK ELECTRICAL SERVICES P/L
69-71 Wuduru Rd
Carnubula, Qld 4130
P - 07 3829 5801
F - 07 3829 9292
E - admin@djk-electrical.com.au

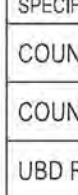
'AS CONSTRUCTED' CERTIFICATION
signature of certifier: *Alick Cattle*
name of authorised certifier: *Alick Cattle*
date of certification: *12-10-2015*
name of company: *DJK Electrical*
certifier's position: *Project Manager*

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/08/2013	A	PRELIMINARY ISSUE	R.R.					REV B: council approval, joint use & separate gas trenching added to design, road names added to drawing.
19/5/2014	B	COUNCIL APPROVAL	R.R.					Rev C: cable details removed from future stage at Energex's request.
26/5/2014	C	REFER REVISION NOTES	R.R.					



Robin Russell
& ASSOCIATES PTY. LTD.

SUBDIVISION ELECTRICAL SERVICES
204/6 Barbara Street,
Stadium, QLD 4053
Tel: (07) 3872 5555
Fax: (07) 3872 5566
Email: rr@robruss.com.au
www.robruss.com.au

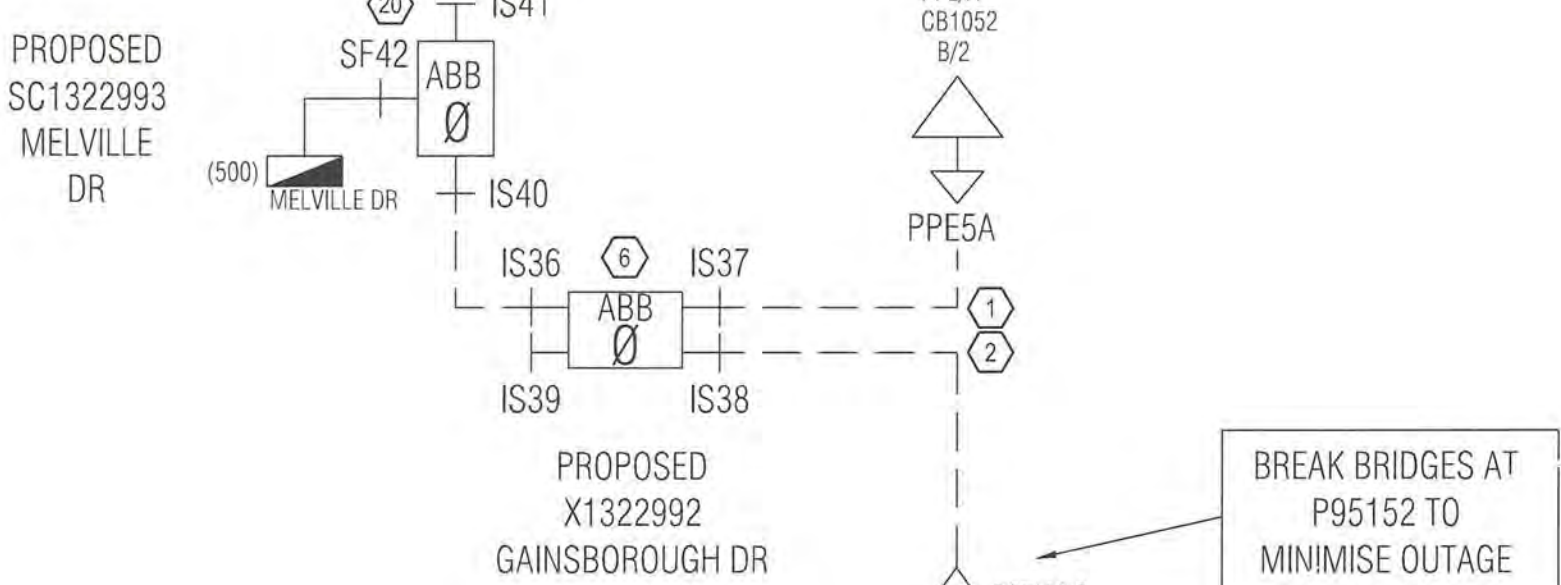
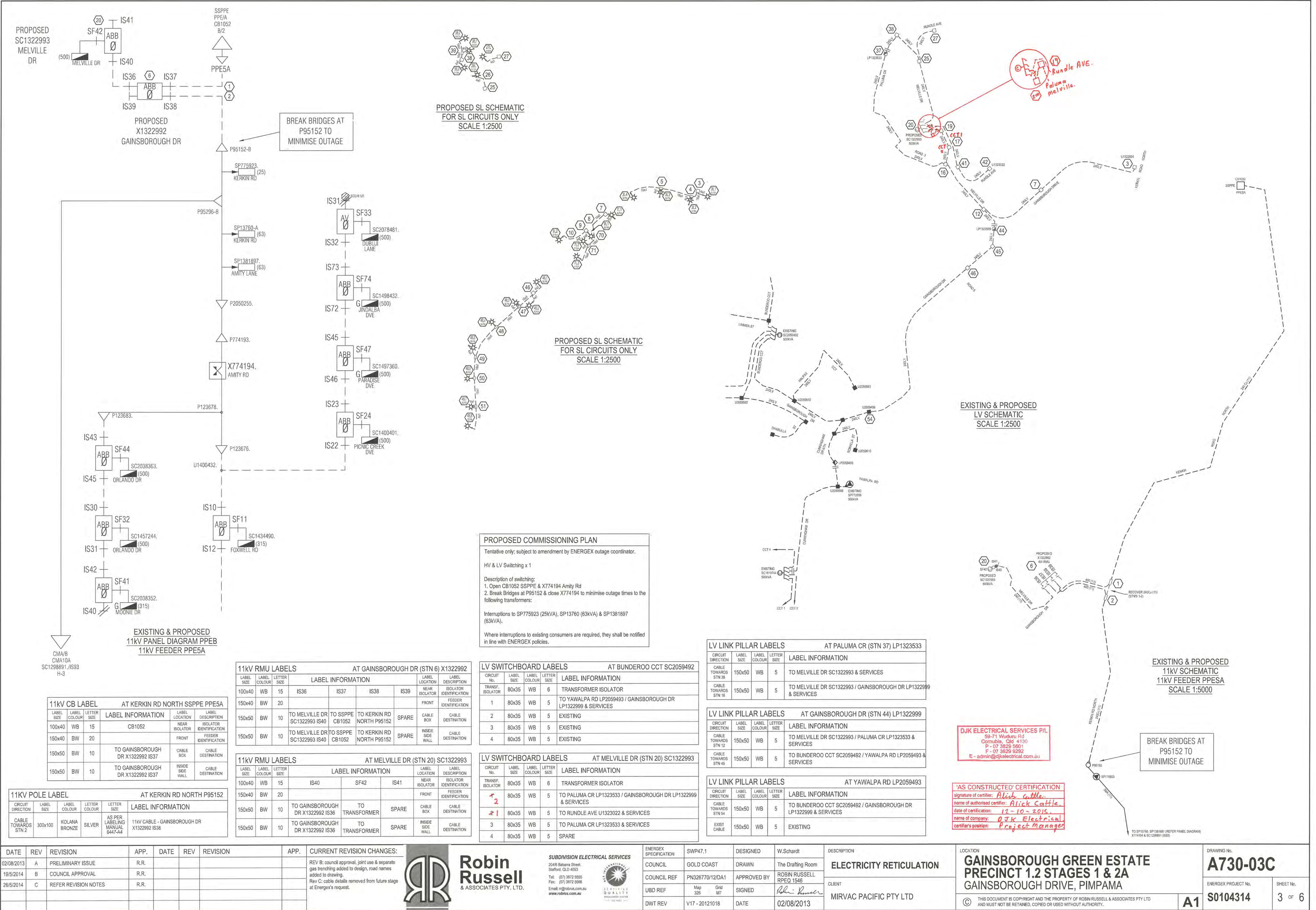


ENERGEX SPECIFICATION	SWP47.1	DESIGNED	W.Scharlt
COUNCIL	GOLD COAST	DRAWN	The Drafting Room
COUNCIL REF	PN326770/12/DA1	APPROVED BY	ROBIN RUSSELL RPEQ 1546
UBD REF	Map 326 Grid M7	SIGNED	<i>Robin Russell</i>
DWT REV	V17 - 20121018	DATE	02/08/2013

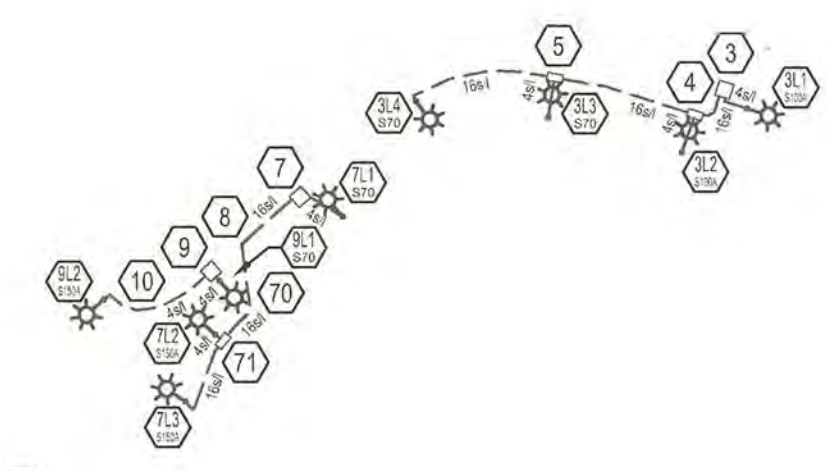
DESCRIPTION	ELECTRICITY RETICULATION
CLIENT	MIRVAC PACIFIC PTY LTD

LOCATION	GAINSBOURGH GREEN ESTATE PRECINCT 1.2 STAGES 1 & 2A GAINSBOURGH DRIVE, PIMPAMA
ENERGEX PROJECT No.	S0104314
AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.	

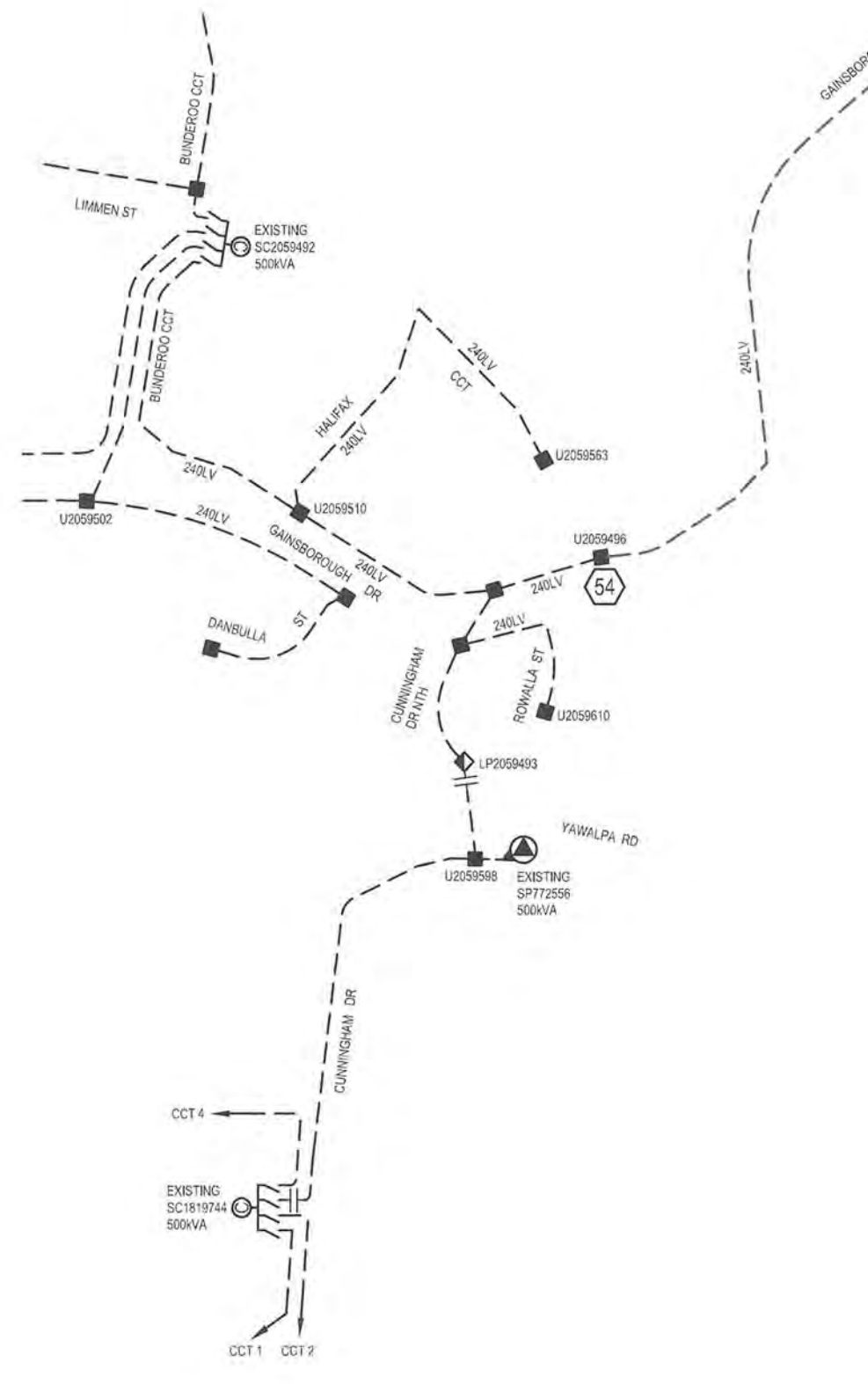
DRAWING No.	A730-02C
SHEET No.	2 OF 6



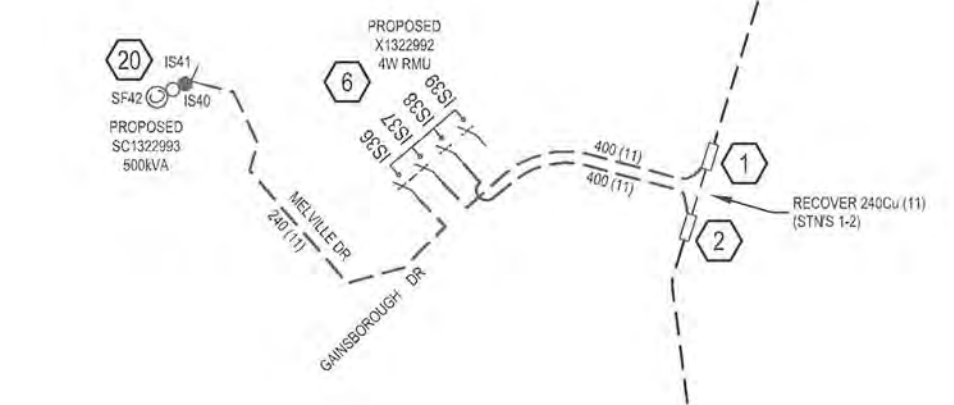
PROPOSED SL SCHEMATIC FOR SL CIRCUITS ONLY SCALE 1:2500



PROPOSED SL SCHEMATIC FOR SL CIRCUITS ONLY SCALE 1:2500



EXISTING & PROPOSED LV SCHEMATIC SCALE 1:2500



EXISTING & PROPOSED 11kV SCHEMATIC 11kV FEEDER PPESA SCALE 1:5000

EXISTING & PROPOSED 11kV PANEL DIAGRAM PPEB 11kV FEEDER PPE5A

PROPOSED COMMISSIONING PLAN
Tentative only; subject to amendment by ENERGEX outage coordinator.
HV & LV Switching x 1
Description of switching:
1. Open CB1052 SSPPE & X774194 Amity Rd
2. Break Bridges at P95152 & close X774194 to minimise outage times to the following transformers:
Interruptions to SP775923 (25kVA), SP13760 (63kVA) & SP1381897 (63kVA).
Where interruptions to existing consumers are required, they shall be notified in line with ENERGEX policies.

11kV CB LABEL AT KERKIN RD NORTH SSPPE PPE5A

LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	LABEL LOCATION	LABEL DESCRIPTION
100x40	WB	15	CB1052	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20		FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO GAINSBOROUGH DR X1322992 IS37	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO GAINSBOROUGH DR X1322992 IS37	INSIDE SIDE WALL	CABLE DESTINATION

11kV POLE LABEL AT KERKIN RD NORTH P95152

CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 2	300x100	KOLANA BRONZE	SILVER	AS PER LABELING MANUAL 0447-444
				11kV CABLE - GAINSBOROUGH DR X1322992 IS36

11kV RMU LABELS

AT GAINSBOROUGH DR (STN 6) X1322992

LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION				LABEL LOCATION	LABEL DESCRIPTION
100x40	WB	15	IS36	IS37	IS38	IS39	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20					FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO MELVILLE DR SC1322993 IS40	TO SSPPE CB1052	TO KERKIN RD NORTH P95152	SPARE	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO MELVILLE DR SC1322993 IS40	TO SSPPE CB1052	TO KERKIN RD NORTH P95152	SPARE	INSIDE SIDE WALL	CABLE DESTINATION

11kV RMU LABELS

AT MELVILLE DR (STN 20) SC1322993

LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION
100x40	WB	15	IS40	SF42	IS41	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20				FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO GAINSBOROUGH DR X1322992 IS36	TO TRANSFORMER	SPARE	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO GAINSBOROUGH DR X1322992 IS36	TO TRANSFORMER	SPARE	INSIDE SIDE WALL	CABLE DESTINATION

LV SWITCHBOARD LABELS AT BUNDEROO CCT SC2059492

CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
TRANSF. ISOLATOR	80x35	WB	6	TRANSFORMER ISOLATOR
1	80x35	WB	5	TO YAWALPA RD LP2059493 / GAINSBOROUGH DR LP1322999 & SERVICES
2	80x35	WB	5	EXISTING
3	80x35	WB	5	EXISTING
4	80x35	WB	5	EXISTING

LV SWITCHBOARD LABELS AT MELVILLE DR (STN 20) SC1322993

CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
TRANSF. ISOLATOR	80x35	WB	6	TRANSFORMER ISOLATOR
2	80x35	WB	5	TO PALUMA CR LP1323533 / GAINSBOROUGH DR LP1322999 & SERVICES
21	80x35	WB	5	TO RUNDLE AVE U1323022 & SERVICES
3	80x35	WB	5	TO PALUMA CR LP1323533 & SERVICES
4	80x35	WB	5	SPARE

LV LINK PILLAR LABELS AT PALUMA CR (STN 37) LP1323533

CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 38	150x50	WB	5	TO MELVILLE DR SC1322993 & SERVICES
CABLE TOWARDS STN 16	150x50	WB	5	TO MELVILLE DR SC1322993 / GAINSBOROUGH DR LP1322999 & SERVICES

LV LINK PILLAR LABELS AT GAINSBOROUGH DR (STN 44) LP1322999

CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 38	150x50	WB	5	TO MELVILLE DR SC1322993 / PALUMA CR LP1323533 & SERVICES
CABLE TOWARDS STN 46	150x50	WB	5	TO BUNDEROO CCT SC2059492 / YAWALPA RD LP2059493 & SERVICES

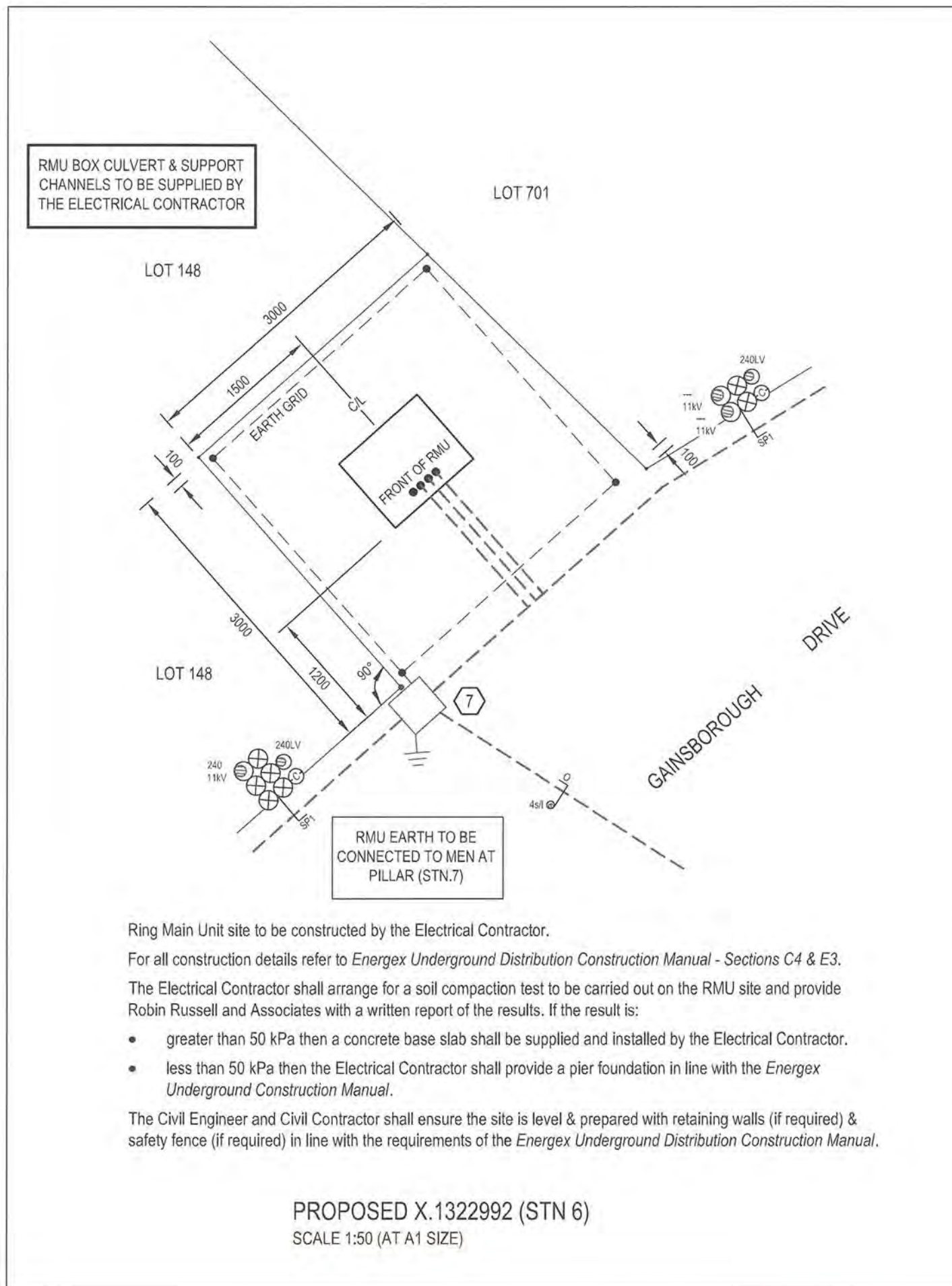
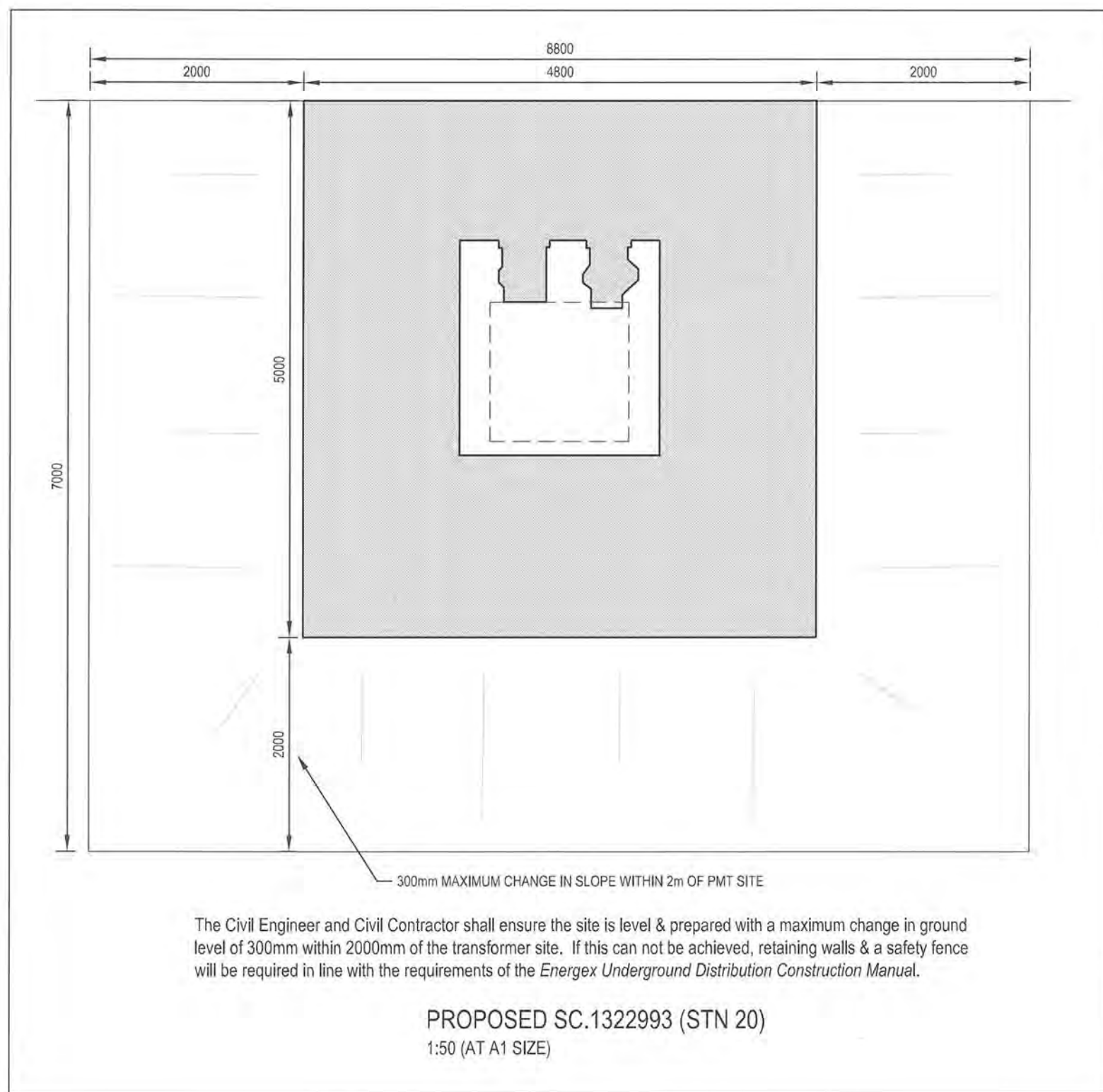
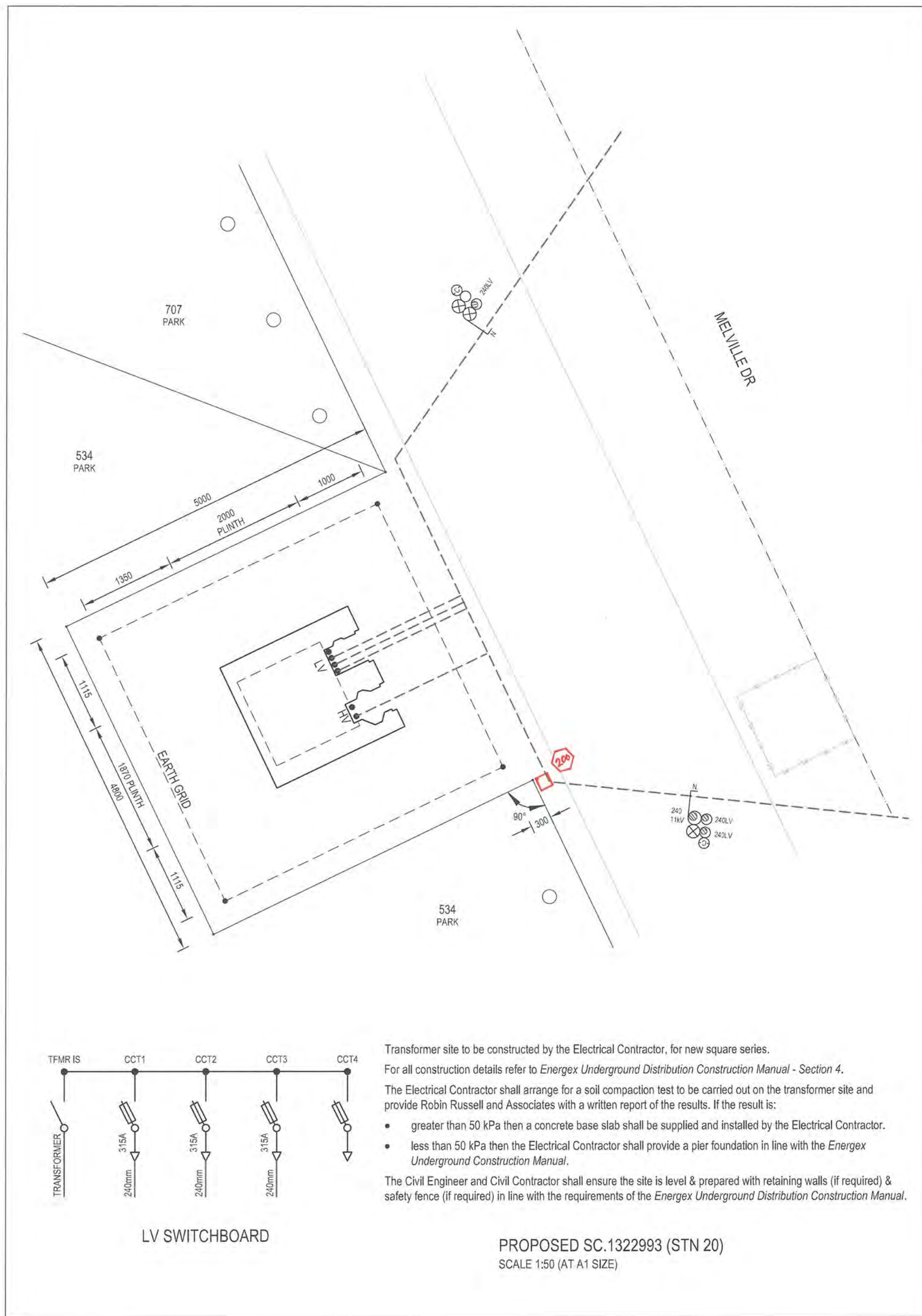
LV LINK PILLAR LABELS AT YAWALPA RD LP2059493

CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 54	150x50	WB	5	TO BUNDEROO CCT SC2059492 / GAINSBOROUGH DR LP1322999 & SERVICES
EXIST CABLE	150x50	WB	5	EXISTING

DJK ELECTRICAL SERVICES PT/L
59-71 Wundur Rd
Carnegie, Qld 4130
P - 07 3828 5601
F - 07 3828 9292
E - admin@djk-electrical.com.au

'AS CONSTRUCTED' CERTIFICATION
signature of certifier: Alick Cattle
name of authorised certifier: Alick Cattle
date of certification: 12-10-2015
name of company: DJK Electrical
certifier's position: Project Manager

BREAK BRIDGES AT P95152 TO MINIMISE OUTAGE



DJK ELECTRICAL SERVICES P/L
59-71 Wurtulu Rd
Carnubie, Qld 4130
P - 07 3829 5601
F - 07 3829 9292
E - admin@djk-electrical.com.au

'AS CONSTRUCTED' CERTIFICATION
signature of certifier: *Alick Cattle*
name of authorised certifier: *Alick Cattle*
date of certification: *12-10-2015*
name of company: *DJK Electrical*
certifier's position: *Project Manager*

EQUIPMENT SCHEDULE - SERVICE PILLARS

LOCATION	STN NO.	SITE I.D.	EX	REC	IN	SIZE AND DESCRIPTION	COMP I.D.	CU/SC	QTY	REMARKS
KERKIN RD NORTH	3	U1322994			*	1 WAY PILLAR, S/L & MEN	PI1	LVSP2-6SL 1011-2	1	
	4	U1322995			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	5	U1322996			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	7	U1322997			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	.				*	ADDITIONAL EARTH		ADE	1	JOIN TO RMU EARTH GRID
	9	U1323998			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	71	U1323583			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	44	LP1322999			*	2 WAY LINK PILLAR, S/L & MEN (L) LETTER	PI1	LVSP14-6SL 1037-1 S17319	1	
	45	U1323000			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	46	U1323001			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	47	U1323002			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	48	U1323003			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	49	U1323004			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	50	U1323005			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
MELVILLE DR	51	U1323006			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	54	U2059560	*		*	240 mmsq LV TERMINATION		LVSP1240	1	
	12	U1323007			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	13	U1323008			*	CROSS-ROAD PILLAR & S/L	PI1	LVSP12-6SL	1	
	14	U1323009			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	15	U1323010			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	16	U1323011			*	3 WAY PILLAR & S/L	PI1	LVSP9-6SL	1	
	17	U1323012			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	19	U1323013			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	21	U1323014			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	22	U1323015			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	24	U1323016			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	25	U1323017			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	38	U1323018			*	3 WAY PILLAR & S/L	PI1	LVSP9-6SL	1	
RUNDE AVE	39	U1323019			*	No.4 PIT, LID & J'BOX (NO FUSE)		SLM15528	1	
	41	U1323020			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	27	U1323021			*	1 WAY PILLAR, S/L & MEN	PI1	LVSP2-6SL 1011-2	1	
	42	U1323022			*	1 WAY PILLAR, S/L & MEN	PI1	LVSP2-6SL 1011-2	1	
PALUMA CR	43	U1323023			*	CROSS-ROAD PILLAR & S/L	PI1	LVSP12-6SL	1	
	28	U1323024			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	29	U1323025			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	30	U1323026			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	31	U1323027			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	32	U1323028			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	33	U1323029			*	CROSS-ROAD PILLAR & S/L	PI1	LVSP12-6SL	1	
	34	U1323030			*	2 WAY PILLAR, S/L & MEN	PI1	LVSP4-6SL 1011-2	1	
	35	U1323031			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	36	U1323032			*	2 WAY PILLAR & S/L	PI1	LVSP4-6SL	1	
	37	LP1323533			*	2 WAY LINK PILLAR, S/L & MEN (L) LETTER	PI1	LVSP14-6SL 1037-1 S17319	1	
VARIOUS LOCATIONS						SL FUSES		S04434	23	
Melville DR.	200	U2117694			*	2 Way Pillar.	PI1	LVSP4-6	1	

EQUIPMENT SCHEDULE - TFMR & JOINT

LOCATION	STN NO.	SITE I.D.	EX	REC	IN	SIZE & DESCRIPTION	COMP I.D.	CU/SC	QTY	REMARKS
KERKIN RD NORTH	1	U1322990			*	11KV S/JOINT 240CT / 400AT HEATSHRINK CAP	CJ1	SC0022376 S06614	1	
	2	U1322991			*	11KV S/JOINT 240CT / 400AT HEATSHRINK CAP	CJ1	SC0022376 S06614	2	
GAINSBOROUGH DR	6	X1322992			*	CULVERT, BASE & STEEL SUPPORTS	RM1	34142 21511 DSRMSIGN 1SGTPM40XG S06614 1SGTPM9524XG S06614 DSSQPMEG DSPMTEGSA	1	CONTRACTOR SUPPLY
	.	.			*	CONCRETE SURROUND			1	CONTRACTOR SUPPLY
	.	.			*	4 WAY RMU			1	
	.	.			*	11KV SHROUD			3	
	.	.			*	RMU SIGN			1	
	.	.			*	400 mmsq AL 11KV CFC TERM HEAT SHRINK CAP			2	
MELVILLE DR	.	.			*	240 mmsq AL 11KV CFC TERM HEAT SHRINK CAP	TR1	S21660 DSHVF5SLK 2DBSTA24D S06614 LVPT4C240 DSLVF31 DSSQPMEG DSPMTEGSA	1	CONTRACTOR SUPPLY
	.	.			*	EARTH GRID			1	CONTRACTOR SUPPLY
	.	.			*	ADDITIONAL EARTH			1	
	.	.			*	UNICULVERT & BASE			1	
	.	.			*	CONCRETE SURROUND			1	
	.	.			*	500kVA PADMOUNT			1	
	.	.			*	HV FUSE LINK			1	
	.	.			*	240 mmsq AL 11KV CFC TERM HEAT SHRINK CAP			1	
	.	.			*	240mmsq LV TERMINATION			3	
	.	.			*	315A LV FUSE			3	
	.	.			*	EARTH GRID - COMMON			1	
	.	.			*	ADDITIONAL EARTH			1	

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/08/2013	A	PRELIMINARY ISSUE	R.R.					REV B: council approval, joint use & separate gas trenching added to design, road names added to drawing.
19/5/2014	B	COUNCIL APPROVAL	R.R.					Rev C: cable details removed from future stage at Energex's request.
26/5/2014	C	REFER REVISION NOTES	R.R.					



Robin Russell
& ASSOCIATES PTY. LTD.

SUBDIVISION ELECTRICAL SERVICES
204/6 Babara Street,
Stafford, QLD 4053
Tel: (07) 3872 2655
Fax: (07) 3872 5966
Email: info@robusr.com.au
www.robusr.com.au

ENERGEX SPECIFICATION
COUNCIL GOLD COAST
COUNCIL REF PN326770/12/DA1
UBD REF Map 326 Grid M7
DWT REV V17 - 2012/018
DESIGNED W.Schardt
DRAWN The Drafting Room
APPROVED BY ROBIN RUSSELL RPEQ 1546
SIGNED Robin Russell
DATE 02/08/2013

DESCRIPTION
ELECTRICITY RETICULATION
CLIENT
MIRVAC PACIFIC PTY LTD

LOCATION
**GAINSBOROUGH GREEN ESTATE
PRECINCT 1.2 STAGES 1 & 2A
GAINSBOROUGH DRIVE, PIMPAMA**
THIS DOCUMENT IS COPYRIGHT AND THE PROPERTY OF ROBIN RUSSELL & ASSOCIATES PTY LTD
AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

DRAWING No.
A730-04C
ENERGEX PROJECT No.
S0104314
SHEET No.
4 of 6

NOTES

1. ROAD CROSSING CONDUITS SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH THE ENERGEX *UNDERGROUND DISTRIBUTION CONSTRUCTION (UDC) MANUAL*.
2. ROAD CROSSING CONDUITS SHALL HAVE A MINIMUM COVER OF **800mm** AT ALL PLACES UNDER THE ROAD, EXCEPT UNDER STATE-CONTROLLED "MAIN" ROADS, WHERE CONDUITS SHALL HAVE A MINIMUM COVER OF **1200mm**.
3. CONDUITS SHALL EXTEND TO WITHIN 900mm OF PROPERTY ALIGNMENT; PVC PROTECTIVE COVER STRIPS SHALL BE LAID ABOVE ALL ROAD-CROSSING CONDUITS FOR THEIR FULL LENGTH.
4. REFER ENERGEX *UDC MANUAL* V.5 SECT. C2 FOR CROSS-SECTION DETAILS.
5. BRASS "E" MARKERS SHALL BE INSTALLED IN KERBS DIRECTLY ABOVE ELECTRICITY CONDUITS.
6. CAUTION: DO NOT CONSTRUCT RETAINING WALLS, CONCRETE PATHS OR WATER SERVICES UNTIL FOOTPATH CONDUITS HAVE BEEN INSTALLED.
7. GAS MAINS WILL BE INSTALLED IN JOINT USE ELECTRICITY TRENCH, WHERE HIGHLIGHTED IN YELLOW ON LAYOUT DRAWING.

BY

NOTES

1. CONDUITS SHALL BE INSTALLED WITHIN A CORRIDOR 300-900mm FROM PROPERTY ALIGNMENT, IN ACCORDANCE WITH ENERGEX *UNDERGROUND DISTRIBUTION CONSTRUCTION (UDC) MANUAL* V.5.0 SECT. C.2.
2. FOOTPATH ELECTRICITY CONDUITS SHALL HAVE MINIMUM 750mm COVER, REGARDLESS OF ENERGEX'S REQUIREMENTS.
3. CONNECT EXISTING CONDUITS, INCLUDING ROAD CROSSING CONDUITS TO NEW FOOTPATH CONDUITS
4. **TELECOMMUNICATION CONDUITS SHALL BE INSTALLED ABOVE THE ENERGEX CONDUITS IN A JOINT USE TRENCH ARRANGEMENT.**
5. GAS MAINS WILL BE INSTALLED IN JOINT USE ELECTRICITY TRENCH, WHERE HIGHLIGHTED IN YELLOW ON LAYOUT DRAWING.

NOTES

1. CONDUITS SHALL BE INSTALLED WITHIN A CORRIDOR 300-900mm FROM PROPERTY ALIGNMENT, IN ACCORDANCE WITH ENERGEX *UNDERGROUND DISTRIBUTION CONSTRUCTION (UDC) MANUAL*.
2. FOOTPATH CONDUITS SHALL HAVE MINIMUM 750mm COVER, , REGARDLESS OF ENERGEX'S REQUIREMENTS.
3. CONNECT EXISTING CONDUITS, INCLUDING ROAD CROSSING CONDUITS, TO NEW FOOTPATH CONDUITS
4. **TELECOMMUNICATION CONDUITS SHALL BE INSTALLED ABOVE THE ENERGEX CONDUITS IN A JOINT USE TRENCH ARRANGEMENT.**
5. GAS MAINS WILL BE INSTALLED IN JOINT USE ELECTRICITY TRENCH, WHERE HIGHLIGHTED IN YELLOW ON LAYOUT DRAWING.

LOCATION	40mm DIA	100mm DIA	125mm DIA
horizontal bend	600	1830	1830
pillar - main cable	-	1200	-
pillar - x-road cable	-	450	-
pillar - street light cable	600	-	-
street light	300	-	-
pole termination	300	1200	1830
transformer	no bends required		

'AS CONSTRUCTED' CERTIFICATION
signature of certifier: *Alick Cattle*
name of authorised certifier: *Alick Cattle*
date of certification: *12-10-2015*
name of company: *PJK Electrical*
certifier's position: *Project manager*



CONSTRUCTION CONTACTS			
ELECTRICAL ENGINEER			
ROBIN RUSSELL & ASSOCIATES PTY LTD			
DESIGNER			
WILLIAM SCHARDT ph: 0419 778 552			
CONSTRUCTION MANAGER			
BERNIE RUSSELL ph: 0413 598 580			
CIVIL ENGINEER			
KN GROUP PTY LTD			
GEOFF GREENHALGH ph: 3017 1900			
SURVEYOR			
LANDPARTNERS LTD			
JOHN DAVIDSON ph: 3842 1000			

PLAN VIEW
SCALE 1:1000

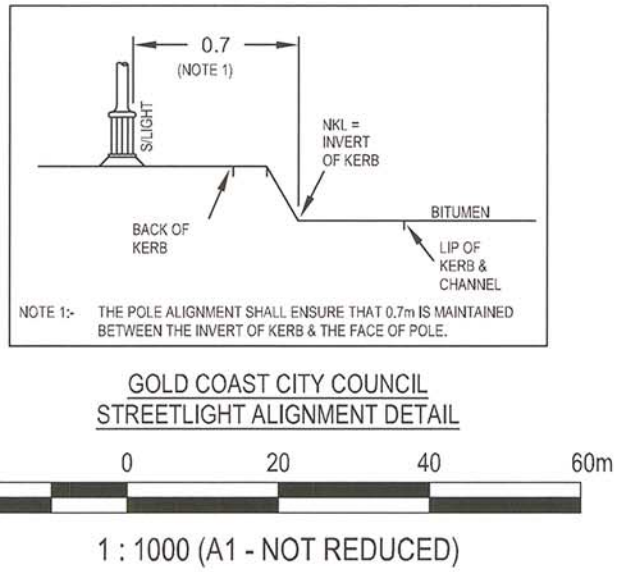
DJK ELECTRICAL SERVICES P/L
59-71 Wubuna Rd
Corryville, Qld 4130
P - 07 3829 5601
F - 07 3829 5232
E - admin@djk-electrical.com.au

'AS CONSTRUCTED' CERTIFICATION
signature of certifier: *Aliak Cattle*
name of authorised certifier: *Aliak Cattle*
date of certification: *12-10-2015*
name of company: *DJK Electrical*
certifier's position: *Project Manager*

JOINT USE GAS INSTALLATION
GAS IS TO BE RETICULATED THROUGHOUT THIS PROJECT IN BOTH A JOINT USE TRENCH ARRANGEMENT & ON A SEPARATE ALIGNMENT. THE JOINT USE TRENCH LOCATIONS ARE DETAILED ON THE DRAWING & SEPARATE TRENCHES FOR GAS ARE TO BE TAKEN FROM THE GAS DESIGN (REFER APA PLAN E04510-003)

THE SPERATE GAS ALIGNMENT WILL BE 900-1200.

THE SEPARATE GAS TRENCH IS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR



SOURCE DOCUMENTS			
CREATOR	DRAWING	DWG. NO.	REV. NO. DATE
KN GROUP PTY LTD	CIVIL BASE	x11-126 BASE.dwg	- 1/5/2013

TELECOMMUNICATIONS INFRASTRUCTURE			
TELECOMMUNICATIONS INFRASTRUCTURE	CONDUITS & PITS	to be designed by:	Telstra's contractor
		to be installed by:	Telstra's contractor
		to be owned by:	Telstra
		to be provided by:	Telstra
		Telstra AFR:	n/a (Telstra Velocity Estate)

LV LINK PILLAR LABELS				AT PALUMA CR LP1323533
CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 10	150x50	WB	5	TO MELVILLE DR SC1322993 / RUNDLE AVE LP1323595 & SERVICES
CABLE SOUTH	150x50	WB	5	EXIST

LV LINK PILLAR LABELS				AT RUNDLE AVE (STN 7) LP1323595
CIRCUIT DIRECTION	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
CABLE TOWARDS STN 10	150x50	WB	5	TO MELVILLE DR SC1322993 / PALUMA CR LP1323533 & SERVICES
CABLE TOWARDS STN 2	150x50	WB	5	TO MELVILLE DR SC1322993 & SERVICES

LV SWITCHBOARD LABELS				AT MELVILLE DR SC1322993
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
TRANSF. ISOLATOR	80x35	WB	6	TRANSFORMER ISOLATOR
1	80x35	WB	5	EXIST
2	80x35	WB	5	TO RUNDLE AVE LP1323595 & SERVICES
3	80x35	WB	5	TO PALUMA CR LP1323533 / RUNDLE AVE LP1323595 & SERVICES
4	80x35	WB	5	SPARE

PROPOSED COMMISSIONING PLAN
Tentative only; subject to amendment by ENERGEX outage coordinator.

LV Switching x 1

Description of switching:
Bridge in & commission LV UG at Stns 1 & 10.

Where interruptions to existing consumers are required, they shall be notified in line with ENERGEX policies.

ELECTRICAL CONTRACTOR
The works detailed on this drawing shall be constructed in accordance with Robin Russell & Associates' General Specification for Installation of Electricity Reticulation and Street Lighting - Issue 'Y'.

CIVIL CONTRACTOR
The installation of all electrical conduits shall be supervised by the holder of an electrical work licence - Electrical Safety Act 2002.

Energe conduits and transformer site retaining walls shall be installed strictly in accordance with Energe's specifications (see below). They will be inspected for compliance upon completion.

The civil contractor shall install enveloping conduits under retaining walls behind pillars - two 100mm conduits into each lot (one for Electricity, one for Telstra), 800mm deep behind the pillar, near ground level inside the lot.

Relevant specifications in Energe's Underground Distribution Construction Manual are found at -
Section C1: Conduits
Section C2: Excavation
Section C3: Transformer Sites

These sections of the manual can be downloaded from the following Energe web site:
http://www.energe.com.au/about_energe/asp/technical_documents.asp

Civil engineers who have registered for access to the following RRA website may download extracts from Energe's manual at:
<http://www.robrus.com.au>

The civil contractor shall ensure that all conduits have been installed before constructing retaining walls, paths, driveways & water services. The civil contractor shall please inform the electrical contractor of any 'as constructed' departures from the civil design.

Careful Lighting of new or altered existing roads might not comply with specified standards until new road lighting has been commissioned. The civil contractor shall ensure that necessary warning signs are installed and speed restrictions are applied if necessary.

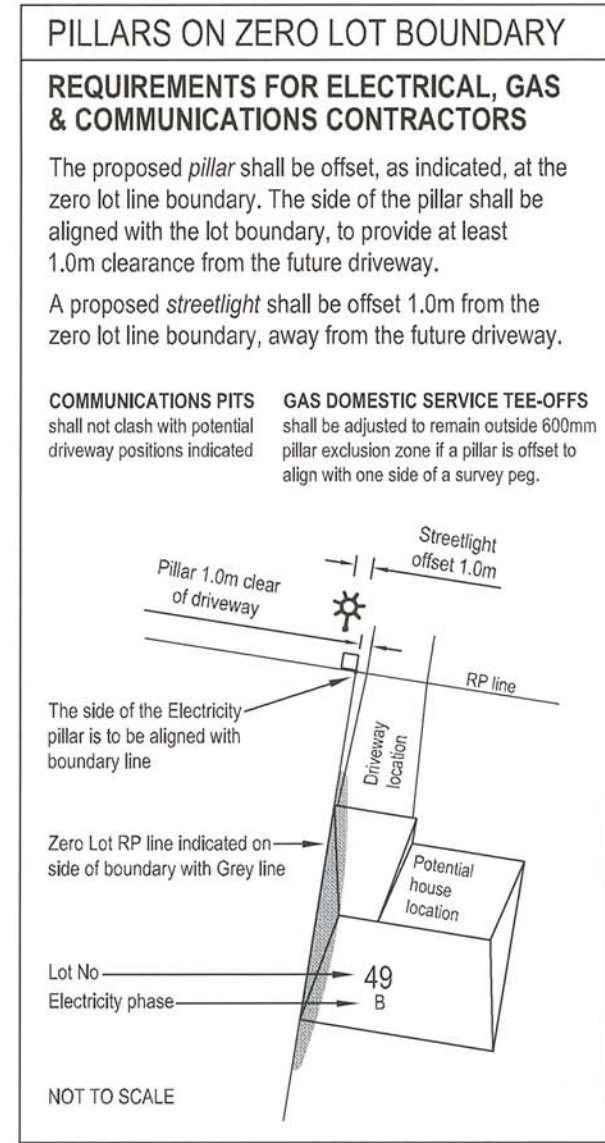
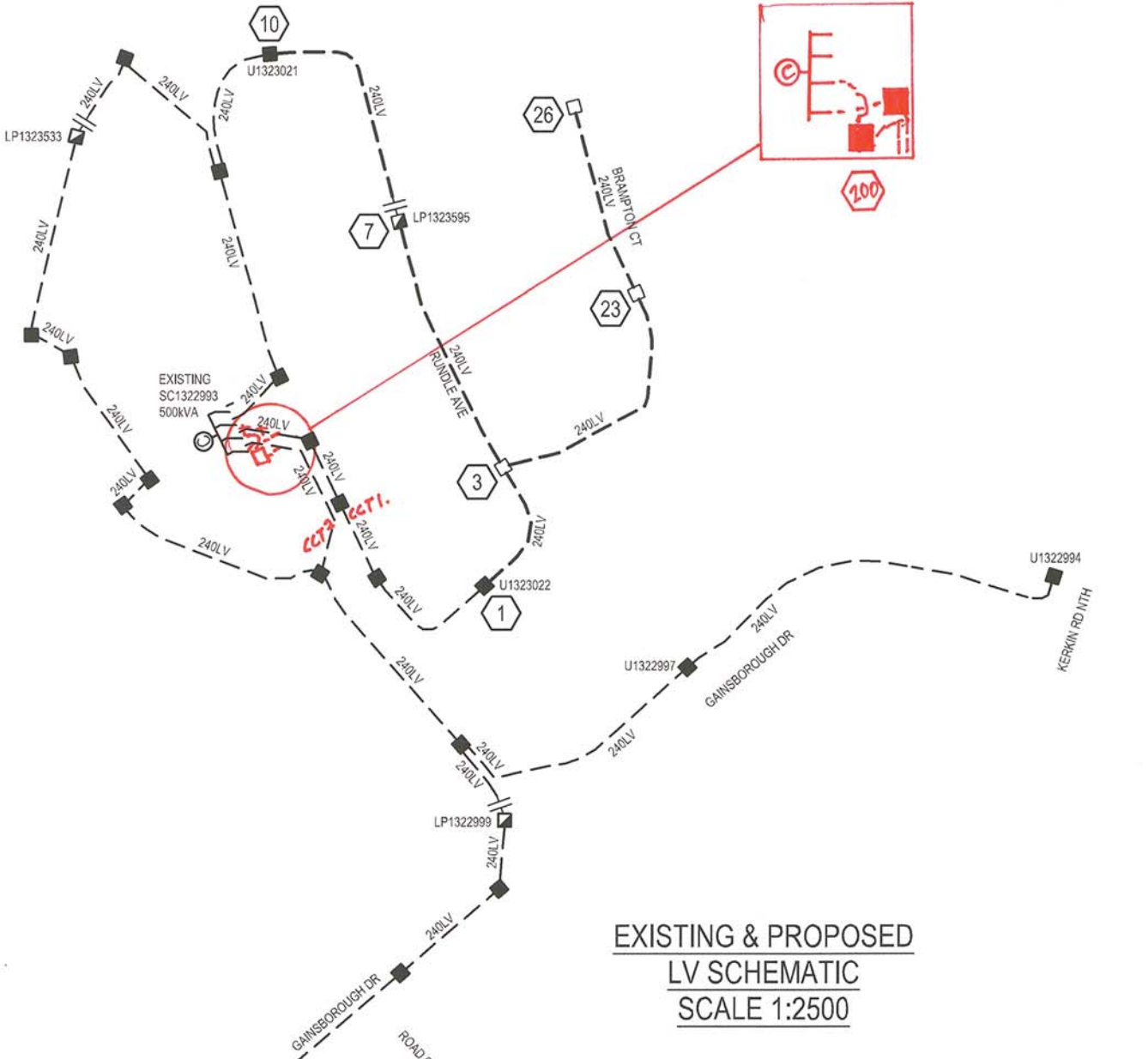
ON-SITE SERVICES CHECKS

Robin Russell & Associates gives no warranty regarding the presence or location of buried services, including newly-installed services. "As Constructed" locations may differ from what is drawn on this works plan. Contractors shall be responsible to identify and locate all buried services. Initial identification can be obtained from:

Dial Before You Dig Service
Telephone 1100
Fax 1300 652 077
On-line enquiries can be made at:
<http://www.1100.com.au>

Having determined which services may be present, on-site locations should then be arranged with relevant service authorities.

Sewerage and water plans for the subdivision may be obtained on request from the Superintendent.



LEGEND: ELECTRICAL	
---	EXISTING UNDERGROUND CABLE
---	PROPOSED UNDERGROUND CABLE
---	PROPOSED NBN CONDUIT ON COMMS ALIGNMENT
---	BORED CONDUIT
---	GAS IN SHARED TRENCH
12	STATION NUMBER
⊙	PADMOUNT TRANSFORMER
⊙	PROPOSED POLE TRANSFORMER
⊙	METER BOX / LV SWITCHBOARD
□	PROPOSED SERVICE PILLAR
■	EXISTING SERVICE PILLAR
□	FUTURE SERVICE PILLAR
□	EXISTING LINK PILLAR
■	PROPOSED C&I PILLAR
---	EXISTING OVERHEAD ELECTRICITY MAINS
---	PROPOSED OVERHEAD ELECTRICITY MAINS
○	HV POLE
⊙	HV + LV POLE
•	LV or STREET LIGHT POLE
•	PROPOSED STREET LIGHT
•	EXISTING STREET LIGHT
•	FUTURE UNDERGROUND STREET LIGHT
•	RECOVER STREET LIGHT
→	EARTH
---	EXISTING RATE 3 STREETLIGHT CABLE
---	PROPOSED RATE 3 STREETLIGHT CABLE
•	EXISTING RATE 3 STREET LIGHT
•	PROPOSED RATE 3 STREET LIGHT
---	EXISTING CONSUMERS OVERHEAD CABLE
---	PROPOSED CONSUMERS OVERHEAD CABLE
---	EXISTING CONSUMERS UNDERGROUND CABLE
---	PROPOSED CONSUMERS UNDERGROUND CABLE
■	PROPOSED CONSUMERS SWITCHBOARD
•	EXISTING CABLE
•	PROPOSED CABLE
○	32/40mm HD CONDUIT
○	80/100mm LD CONDUIT
○	100mm WHITE ENERGEX COMMS. CONDUIT
⊗	125mm LD CONDUIT
•	CABLE MARKER POST
△	"ENERGEX ELECTRIC CABLE" MARKER PLATE

UNDERGROUND CABLE CERTIFICATION	
All cables detailed on this drawing have been checked using the cable locator described below and are, according to measurements taken, on the correct alignment and at correct depths below the finished level, except as marked up. Alignments are subject to the accuracy of survey pegs present at the time of measurement.	
Make:	Model:
Serial No:	Date Cables Checked: / /
Name of Person Who Conducted Checks:	
Certified (signature of checker):	
Phone No. of checker:	

ROAD LIGHTING CERTIFICATE	
Within the bounds of this estate, this road lighting design is certified to comply generally with the nominated categories of AS1158.1-1986, AS/NZS1158.1.1:2005 and/or AS/NZS1158.3.1:2005 for luminaires and lamps supplied under Energe contract 07075 (2010).	
RUNDLE AVE - P4 BRAMPTON CT - P4	
ROAD LIGHTING MAINTENANCE SCHEDULE This design assumes maintenance factors of 0.7 for minor road lighting and 0.75 for major road lighting. These maintenance factors are based on the following nominal maintenance schedule, which might not necessarily be adopted by Energe.	
1. Lamps shall be replaced at 36-month intervals. 2. At that time, luminaires shall be cleaned, inspected & maintained. 3. Vegetation shall be kept clear of street lights. 4. Inspection patrols and spot lamp replacement shall maintain service availability at not less than 95%. 5. Luminaires and lamps shall be replaced with exact equivalents.	
<i>Robin Russell</i> RPEQ 1546	

SITE INFORMATION	
TOTAL NUMBER OF LOTS	
41	
PROPERTY DESCRIPTION	
PROPOSED LOTS 154-157 & 174-210 CANCELLING LOT 801 ON SP246484	

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/09/2013	A	PRELIMINARY ISSUE	R.R.					REV B: Council approval, joint use & separate gas trench details added, road names.
19/05/2014	B	COUNCIL APPROVAL	R.R.					

Robin Russell
& ASSOCIATES PTY. LTD.

SUBDIVISION ELECTRICAL SERVICES
25/46 Babers Street,
Stifford, QLD 4053
Tel: (07) 3872 5555
Fax: (07) 3872 5566
Email: rr@robrus.com.au
www.robrus.com.au

CERTIFIED QUALITY
MANAGEMENT SYSTEM
ISO 9001

ENERGEX SPECIFICATION	SWP47.1	DESIGNED	W.Schardt	DESCRIPTION ELECTRICITY RETICULATION
COUNCIL	GOLD COAST	DRAWN	The Drafting Room	
COUNCIL REF	PN326770/12/DA1	APPROVED BY	ROBIN RUSSELL RPEQ 1546	
UBD REF	Map 326 Grid M7	SIGNED	<i>Robin Russell</i>	
DWT REV	V17 - 2012/018	DATE	02/09/2013	
				CLIENT MIRVAC PACIFIC PTY LTD

LOCATION	GAINSBOROUGH GREEN ESTATE PRECINCT 1.2 STAGES 2B & 3 GAINSBOROUGH DRIVE, PIMPAMA		
© THIS DOCUMENT IS COPYRIGHT AND THE PROPERTY OF ROBIN RUSSELL & ASSOCIATES PTY LTD AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.		A1	

DRAWING No.		A773-01B
ENERGEX PROJECT No.		SHEET No.
S0104357		1 OF 2