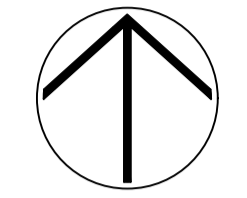




- Telecommunications infrastructure will be provided by NBN™
- NBN™ will own the conduits and pits.
- This installation shall comply with NBN-TE-CTO-194 V8.0

**NBN PITS**  
**NBN PITS MUST BE INSTALLED IMMEDIATELY OUTSIDE THE EXCLUSION ZONE (ERGON 400mm & ENERGEX 600mm) OF THE ELECTRICITY PILLAR & EXACTLY 3m FROM CORNER TRUNCATIONS AS PER DETAIL B.**

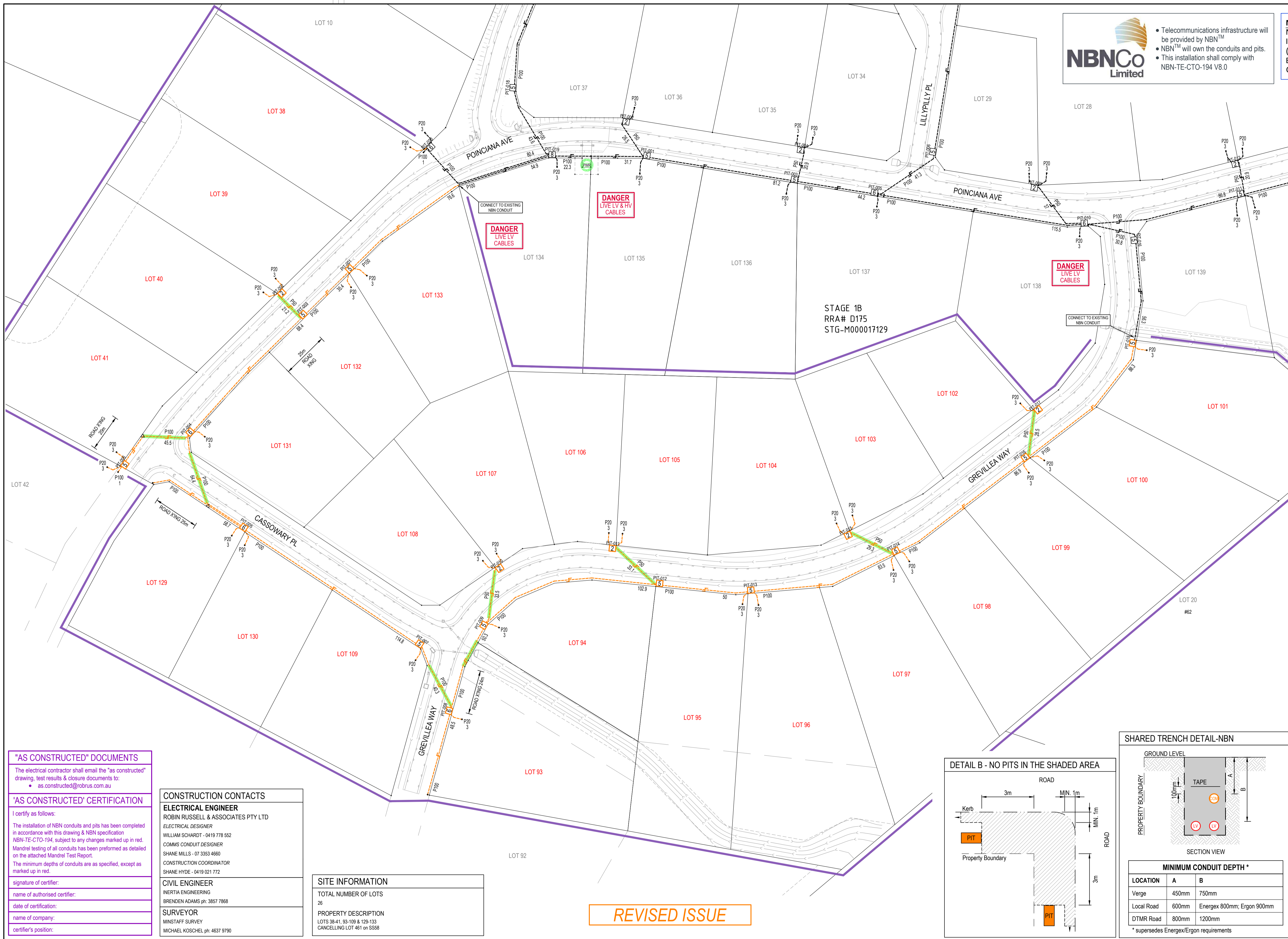


PLAN VIEW  
SCALE 1:1000

0 20 40 60m

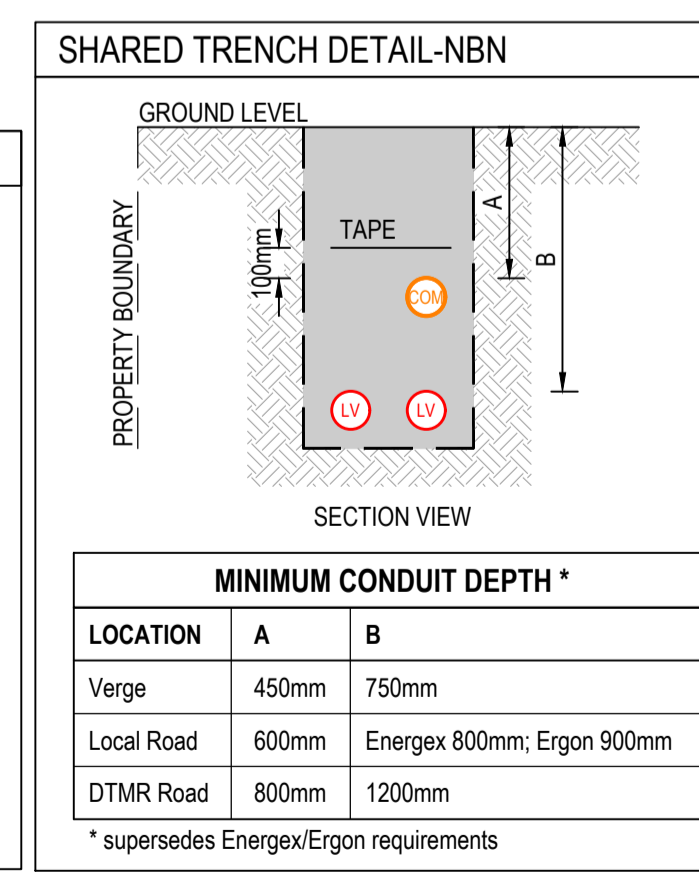
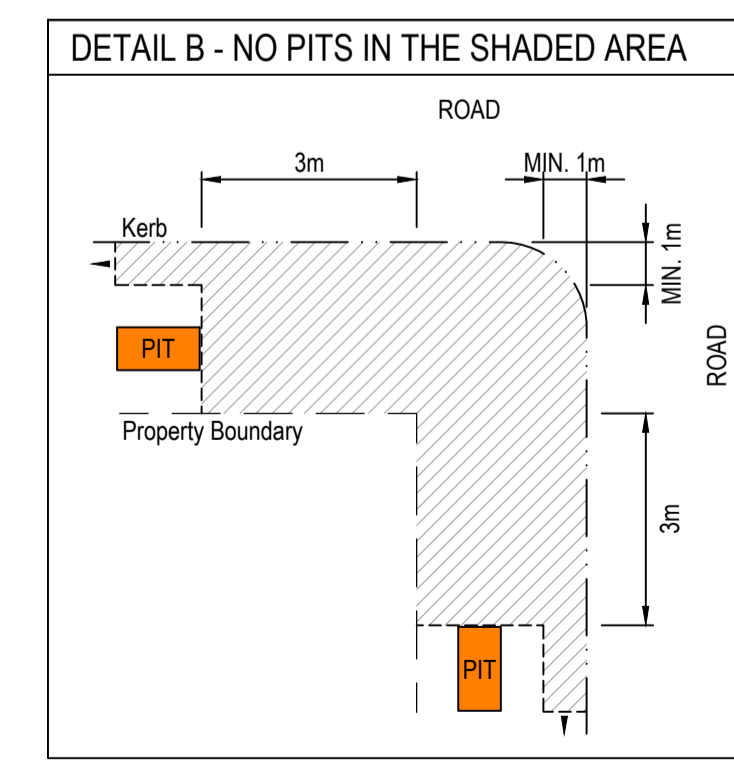
1 : 1000 (A1 - NOT REDUCED)

Note: Pits and FDH plinths are not drawn to scale.



**LEGEND: NBN CONDUITS & PITS**

- Fibre Access Node (FAN) site
- Fibre Distribution Hub (FDH) site - 1m x 1m
- Proposed 100mm Main Conduit
- Proposed 50mm Lateral Conduit
- Proposed 23mm Service Drop
- Proposed length of bored conduit
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- Depth over alignment indicator (used with every Marker Post)
- Descriptor Box (Description of type of work & Quantity involved)
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- Existing Telstra Manholes (Access Chambers)
- Existing Traffic Signals Box
- Existing network item to be removed/replaced
- 'C' communications marker plate



**REVISED ISSUE**

**"AS CONSTRUCTED" DOCUMENTS**  
 The electrical contractor shall email the "as constructed" drawing, test results & closure documents to:  
 • as.constructed@robruss.com.au

**'AS CONSTRUCTED' CERTIFICATION**  
 I certify as follows:  
 The installation of NBN conduits and pits has been completed in accordance with this drawing & NBN specification NBN-TE-CTO-194, subject to any changes marked up in red. Mandrel testing of all conduits has been performed as detailed on the attached Mandrel Test Report. The minimum depths of conduits are as specified, except as marked up in red.

signature of certifier:  
 name of authorised certifier:  
 date of certification:  
 name of company:  
 certifier's position:

**CONSTRUCTION CONTACTS**

**ELECTRICAL ENGINEER**  
 ROBIN RUSSELL & ASSOCIATES PTY LTD  
 ELECTRICAL DESIGNER  
 WILLIAM SCHARDT - 0419 778 552  
 COMMS CONDUIT DESIGNER  
 SHANE MILLS - 07 3353 4660  
 CONSTRUCTION COORDINATOR  
 SHANE HYDE - 0419 021 772

**CIVIL ENGINEER**  
 INERTIA ENGINEERING  
 BRENDEN ADAMS ph: 3857 7868

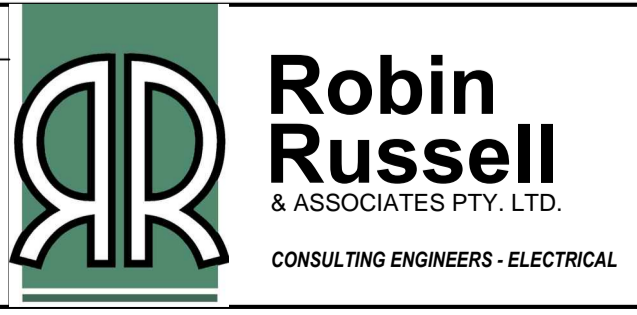
**SURVEYOR**  
 MINSTAFF SURVEY  
 MICHAEL KOSCHEL ph: 4637 9790

**SITE INFORMATION**

TOTAL NUMBER OF LOTS  
26

PROPERTY DESCRIPTION  
 LOTS 38-41, 89-109 & 129-133  
 CANCELLING LOT 461 on 5558

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
08/05/2021	A	INITIAL ISSUE	RR					
05/08/2021	B	LOT 94 ALIGNMENT REVISED	RR					Rev C: Lot 94 boundary alignment revised.



**ROBIN RUSSELL & ASSOCIATES PTY. LTD.**  
 CONSULTING ENGINEERS - ELECTRICAL

**SUBDIVISION ELECTRICAL SERVICES**  
 20/45 Seaview Street, Shalford, QLD 4053  
 Tel: (07) 3872 5556  
 Fax: (07) 3872 5566  
 Email: m@robruss.com.au  
 www.robruss.com.au  
 A.B.N. 78 010 589 661

COUNCIL	SOMERSET REG (ESK)	DESIGNED	SHANE MILLS	DESCRIPTION
COUNCIL REF	DA5613	DRAWN	SHANE MILLS	<b>TELECOMMUNICATION</b>
UBD REF	Map Grd	CHECKED	K.R.	
DWT REV	V48 20210504	APPROVED BY	ROBIN RUSSELL RPEQ 1546	CLIENT
DATE	08/05/2021	SIGNED	<i>Robin Russell</i>	<b>PARKLANDS AT CLARENDON P/L</b>

LOCATION  
**PARKLANDS AT CLARENDON STAGE 2A**  
**CLARENDON ROAD**  
**RIFLE RANGE, 4311**

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DRAWING No.  
**D176-N-01B**

NBN ID REQUEST NO./TELSTRA AFR SHEET No.  
 STG-M000017130 1 OF 2

**NOTES - NBN**

NBN conduits and pits shall be installed in compliance with NBN Co specification: NBN-TE-CTO-194 V 8.0 *New Developments: Deployment of the NBN Co Conduit and Pit Network - Guidelines for Developers*. This can be downloaded at: <http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments/design-build-install/pit-and-pipe-build-process.html>

Additional requirements and explanatory information are contained in Robin Russell & Associates' *General Specification for Installation of Electricity Reticulation and Street Lighting - Issue 'AA'*.

For details of trenching and electrical conduits, refer associated RRA works plan.

In residential subdivisions, NBN conduits shall be laid in shared trenches, above electricity conduits. The Civil Contractor shall install road-crossing conduits and other conduits as shown (see legend).

In commercial subdivisions, or where no electricity conduit is present, NBN conduits shall be laid on the standard telecommunications alignment, as specified.

On State roads, the required cover of 1200mm precludes the use of shared trenches.

The installation of white warning tape is NOT required. If conduit is not installed in a shared trench with electricity, brass 'C' markers shall be installed in the kerbs directly above road-crossing conduits.

Contractors shall not access existing Telstra pits or conduits.

Pits shall be installed relative to the property boundary as shown, immediately outside the exclusion zone of the electricity pillar.

The Electrical Contractor shall ascertain final verge levels from the Civil Contractor before installing conduits & pits.

The Electrical Contractor shall give the Superintendent written notice (a) 10 business days before it anticipates achieving Practical Completion of the conduit and pit installation, and (b) on achieving Practical Completion, to allow the required notices to be given to NBN Co.

Conduit lengths are nominal horizontal distances only. Fibre lengths shall be verified in advance by actual measurement.

The electrical contractor shall perform mandrel testing of all telecommunications conduits, including cross-road and lead-in conduits installed by the civil contractor.

NBN CONDUIT SCHEDULE - CIVIL CONTRACTOR					
CODE	ITEM	Refer: AS/NZS 1477:2006 - Table 4.2(A)			QUANTITY (metres)
		WALL THICKNESS	MEAN OUTSIDE DIA.	MEAN INSIDE DIA.	
P20	SDU service drop	PN12	27mm	24mm	-
P50	MDU service drop	PN12	60mm	54mm	-
P50	road crossing	PN12	60mm	54mm	133
P100	road crossing	PN9	114mm	104mm	85
P100	footpath conduits	PN9	114mm	104mm	16
Additional trenching					-

NBN CONDUIT SCHEDULE - ELECTRICAL CONTRACTOR					
CODE	ITEM	Refer: AS/NZS 1477:2006 - Table 4.2(A)			QUANTITY (metres)
		WALL THICKNESS	MEAN OUTSIDE DIA.	MEAN INSIDE DIA.	
P20	SDU service drop	PN12	27mm	24mm	81
P50	MDU service drop	PN12	60mm	54mm	-
P50	footpath	PN12	60mm	54mm	18
P100	footpath	PN9	114mm	104mm	950
P100	distribution network	PN9	114mm	104mm	-
Additional trenching					-

SOURCE DOCUMENTS				
CREATOR	DRAWING	DWG. NO.	REV. NO.	DATE
ROBIN RUSSELL & ASSOCIATES	ELECTRICAL	D176	C	04/08/2021
INERTIA ENGINEERING	CIVIL BASE	9365-xc_base	-	25/3/2021

NBN PIT SCHEDULE - ELECTRICAL CONTRACTOR			
PIT CODE	ITEM	NOMINAL EXTERNAL DIMENSIONS	QUANTITY
2	service drop access pit	650 x 280 x 565mm	5
5	service/boundary pit (single lid)	700 x 450 x 650mm	10
6	local network connection pit (dual lid)	1360 x 555 x 650mm	3
8	distribution/local network connection pit (dual lid)	1360 x 555 x 860mm	-



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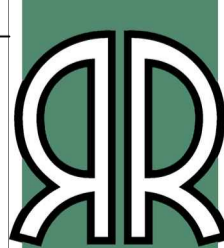
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05/08/2021	B	LOT 94 ALIGNMENT REVISED	RR					

CURRENT REVISION CHANGES:  
 Rev C: Lot 94 boundary alignment revised.



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**SUBDIVISION ELECTRICAL SERVICES**  
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[www.robrus.com.au](http://www.robrus.com.au)  
 A.B.N. 78 010 589 661

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<b>D176-N-02B</b>	STG-M000017130	2 OF 2