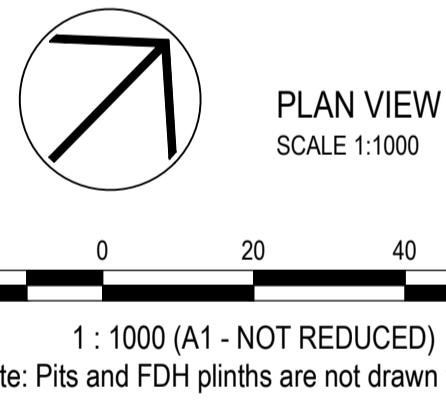


**LEGEND: NBN CONDUITS & PITS**

- 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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- Existing Telstra Pits (size 2,3,4,5,6,7,8 or 9)
- Existing Telstra Manholes (Access Chambers)
- Existing Traffic Signals Box
- Existing network item to be removed/replaced
- 'C' communications marker plate



**SITE INFORMATION**

TOTAL NUMBER OF LOTS: 28

PROPERTY DESCRIPTION: PROPOSED LOTS 52-79 CANCELLING LOT 461 ON CCS8

**ORIGINAL ISSUE**

- 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.**

**'AS CONSTRUCTED' DOCUMENTS**

The electrical contractor shall email the "as constructed" drawing, test results & closure documents to:

- as.constructed@robrus.com.au

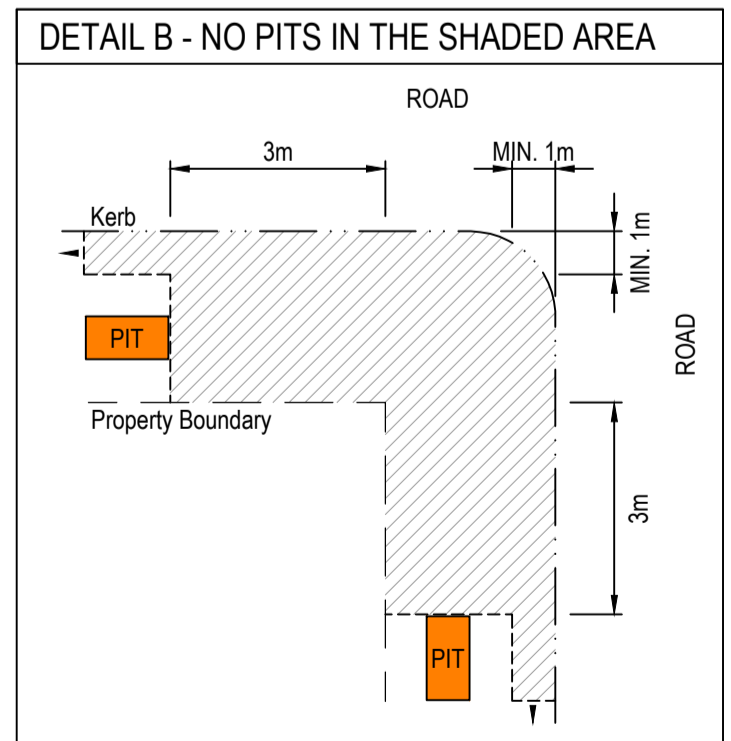
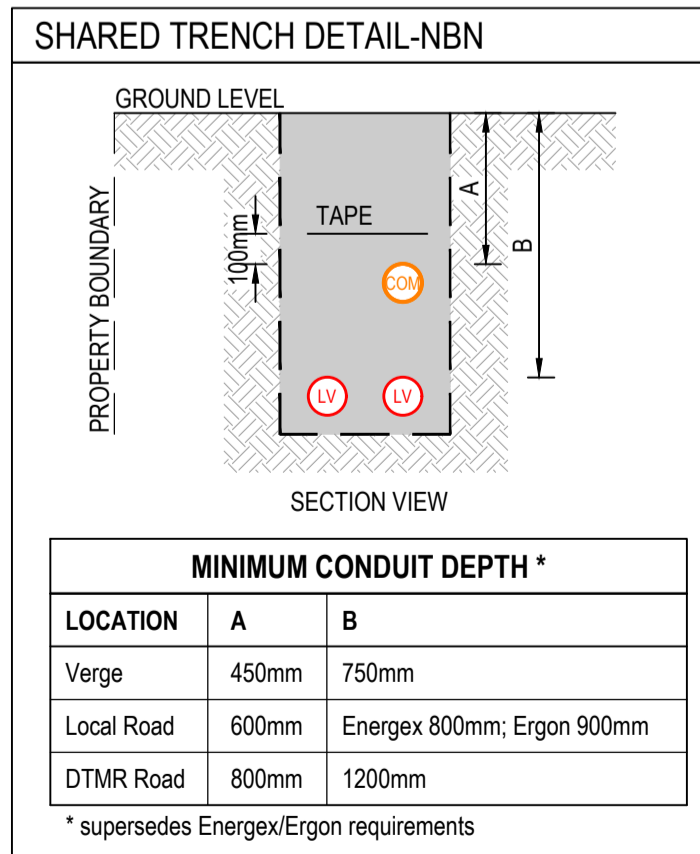
**'AS CONSTRUCTED' CERTIFICATION**

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: \_\_\_\_\_



**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	89
P100	road crossing	PN9	114mm	104mm	147
P100	footpath conduits adj. retaining walls	PN9	114mm	104mm	-
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	84
P50	MDU service drop	PN12	60mm	54mm	-
P50	footpath	PN12	60mm	54mm	52
P100	footpath	PN9	114mm	104mm	1510
P100	distribution network	PN9	114mm	104mm	-
Additional trenching					-

**SOURCE DOCUMENTS**

CREATOR	DRAWING	DWG. NO.	REV. NO.	DATE
ROBIN RUSSELL & ASSOCIATES	ELECTRICAL	D178	A	28/10/2021
INERTIA ENGINEERING	CIVIL BASE	9659-vc_base 20210804.dwg		04/08/2021

**NBN PIT SCHEDULE - ELECTRICAL CONTRACTOR**

PIT CODE	ITEM	NOMINAL EXTERNAL DIMENSIONS	QUANTITY
2	service drop access pit	650 x 280 x 565mm	3
5	service/boundary pit (single lid)	700 x 450 x 650mm	11
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	-

**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.

**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  
 CALVIN KIRK ph: 3857 7868

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

DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/11/2021	A	INITIAL ISSUE	RR					

**Robin Russell & Associates Pty. Ltd.**  
 CONSULTING ENGINEERS - ELECTRICAL

**SUBDIVISION ELECTRICAL SERVICES**  
 204/5 Sebring Street, Stafford, QLD 4053  
 Tel: (07) 3872 5556  
 Fax: (07) 3872 5566  
 Email: r@robrus.com.au  
 www.robrus.com.au  
 A.B.N. 78 010 589 661

COUNCIL	SOMERSET (ESK)	DESIGNED	SHANE MILLS	DESCRIPTION
COUNCIL REF	DA5613	DRAWN	SHANE MILLS	<b>TELECOMMUNICATION</b>
UBD REF	Map Gnd	CHECKED	K.R.	
DWT REV	V48 20210504	APPROVED BY	ROBIN RUSSELL RPEQ 1546	CLIENT
DATE	02/11/2021	SIGNED	<i>Robin Russell</i>	<b>PARKLANDS AT CLARENDON Pty Ltd</b>

LOCATION: **PARKLANDS AT CLARENDON - STAGE 2C CLARENDON ROAD RIFLE RANGE, 4311**

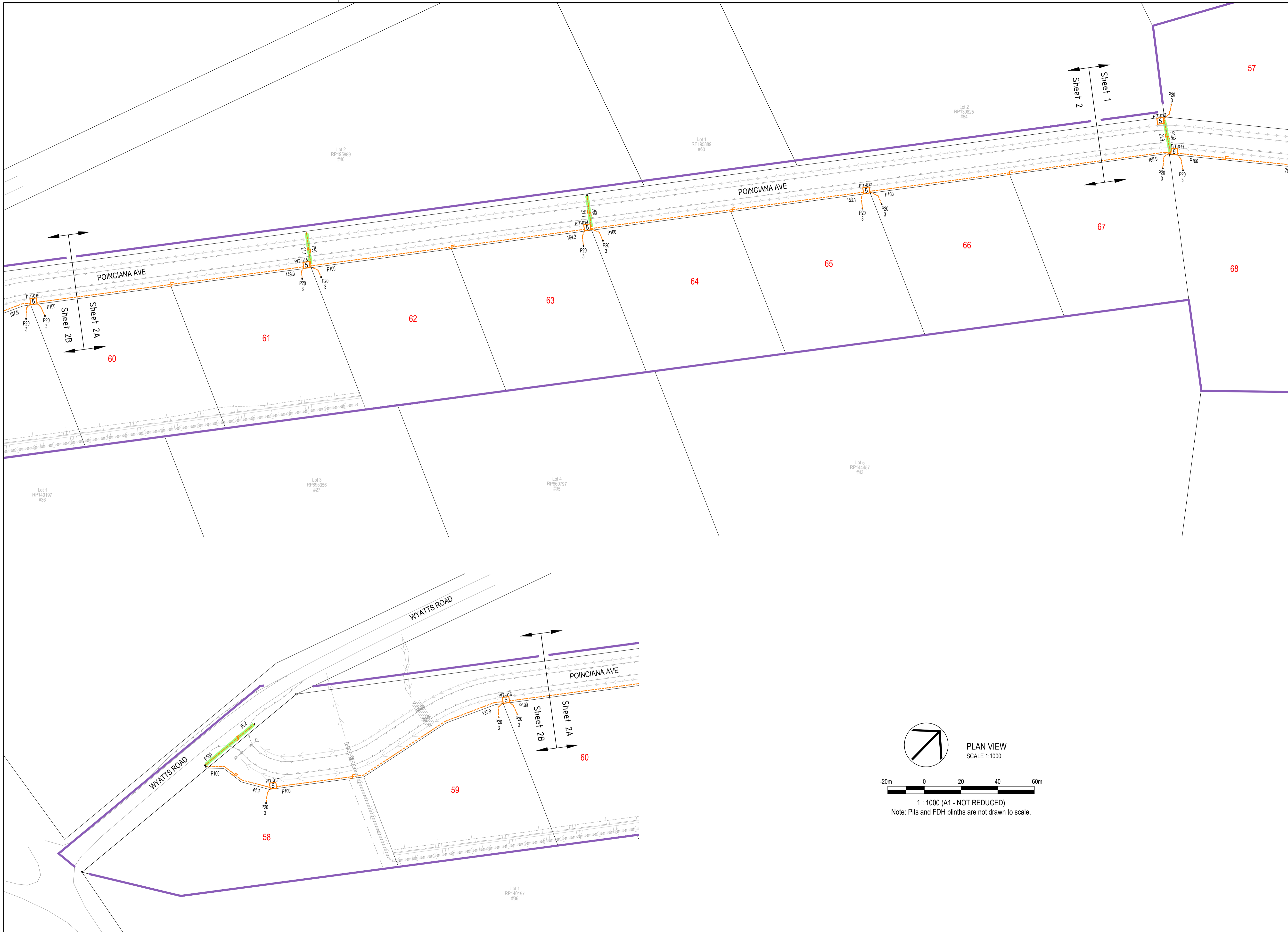
DRAWING No: **D178-N-01A**

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

**A1**

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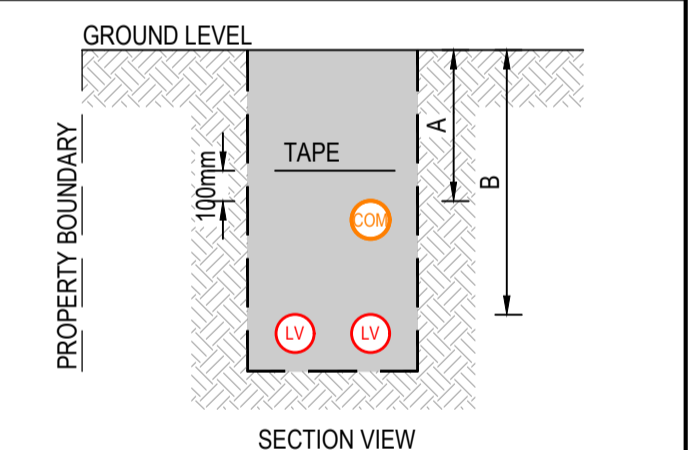




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**SHARED TRENCH DETAIL-NBN**

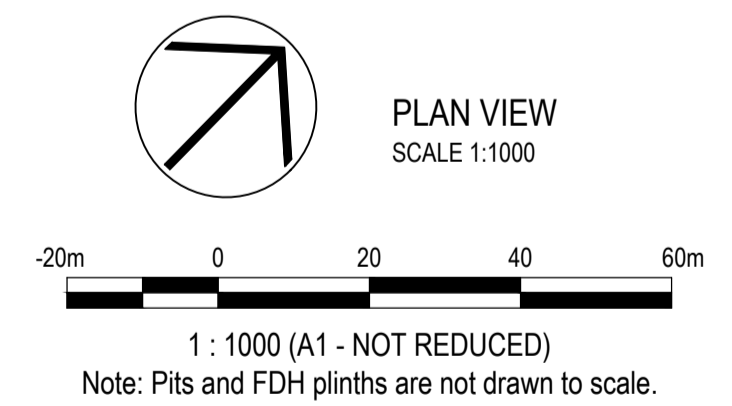
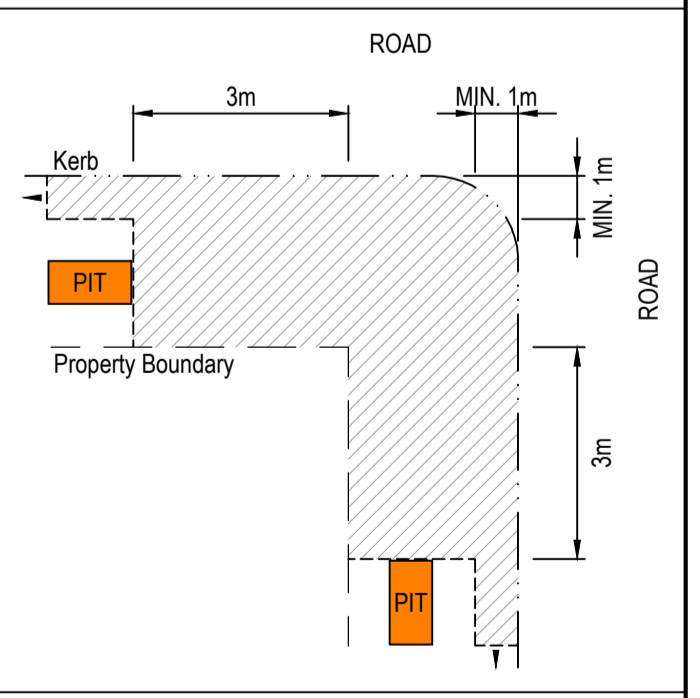


**MINIMUM CONDUIT DEPTH \***

LOCATION	A	B
Verge	450mm	750mm
Local Road	600mm	Energex 800mm; Ergon 900mm
DTMR Road	800mm	1200mm

\* supersedes Energex/Ergon requirements

**DETAIL B - NO PITS IN THE SHADED AREA**



DATE	REV	REVISION	APP.	DATE	REV	REVISION	APP.	CURRENT REVISION CHANGES:
02/11/2021	A	INITIAL ISSUE	RR					

**Robin Russell & Associates Pty. Ltd.**  
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20/45 Sebring Street, Stafford, QLD 4053  
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COUNCIL	SOMERSET (ESK)	DESIGNED	SHANE MILLS	DESCRIPTION	TELECOMMUNICATION
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DWT REV	V48 20210504	APPROVED BY	ROBIN RUSSELL RPEQ 1546		
DATE	02/11/2021	SIGNED	<i>Robin Russell</i>		

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

DRAWING No. **D178-N-02A**

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

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