

THIS DRAWING TO BE READ IN CONJUNCTION WITH THE FOLLOWING SA POWER NETWORKS TECHNICAL STANDARDS

- TS-085 Trenching and Conduit Standard for Underground Distribution Cable Networks
- TS-099 Distribution and Sub-Transmission CAD Drafting Standards
- TS-100 Electrical Design Standard for Underground Distribution Cable Networks
- TS-101 Public Lighting - Design and Installation
- TS-102 Easement Standard for Distribution Networks
- TS-105 Testing for Underground & Overhead Distribution Powerlines up to and including 33kV Networks
- TS-107 Overhead Line Design Standard for Transmission & Distribution Systems
- TS-108 Technical Standard for Distribution Equipment and Transformer Rooms
- TS-109 Earthing of the Distribution Network
- NCC-400 Information for an Applicant Undertaking a Contestable Extension
- NCC-404 Working in the Vicinity of SA Power Networks Infrastructure - Network Access Permit Process

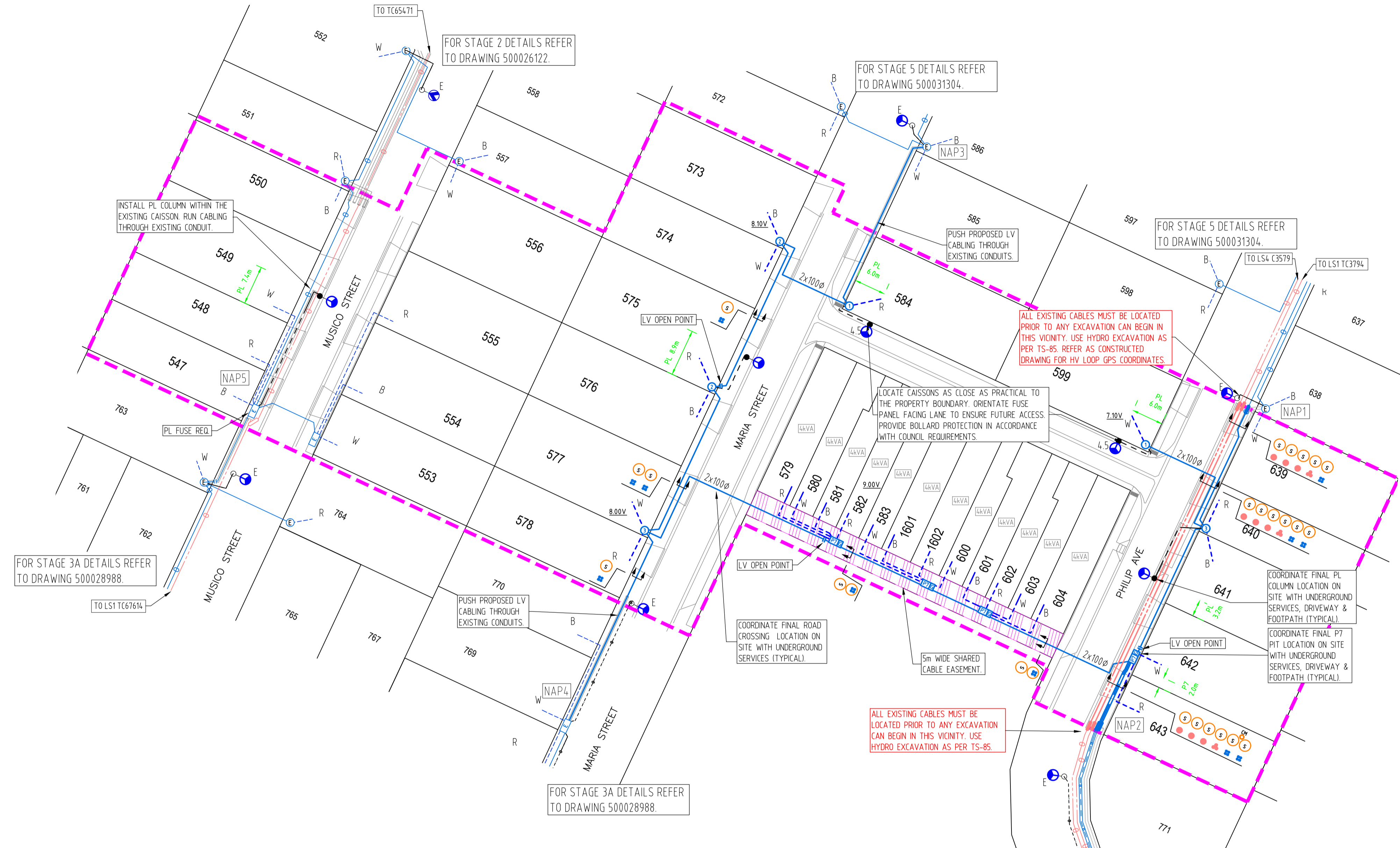
Visit SA Power Networks web site for the current version of the Technical Standards

FOR CONDUIT BEND
DETAIL REFER
SA POWER NETWORKS
TS-085 TABLE 7 to 9.

Hundred of Munno Para
in the area named
ANGLE VALE
City of Playford

LEGEND

- PROPOSED 3x30mm² 11kV XLPE CABLE (CK6039)
- EXISTING 630mm² 11kV CABLE
- PROPOSED 3x95mm² 11kV XLPE CABLE (CK6006)
- EXISTING 95mm² 11kV CABLE
- PROPOSED 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING 150mm² LV CABLE
- PROPOSED PARALLEL 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING PARALLEL 150mm² LV UBC XLPE CABLE
- PROPOSED PUBLIC LIGHTING CABLE 6mm² TWIN & 6mm² EARTH IN 40mm CONDUIT
- EXISTING PUBLIC LIGHTING CABLE
- PROPOSED 40mm HD ORANGE ELECTRICAL CONDUIT & DRAW ROPE FOR CONSUMERS MAIN TO/AS/NZS 3000 DEPTH 800mm. REFER TYPICAL CST CROSS SECTION & STANDARD SA POWER NETWORKS SERVICE PIT LOCATION ARRANGEMENT.
- PROPOSED LV UNDERGROUND OPEN POINT
- EXISTING SPARE CONDUITS
- BOUNDARY OF DESIGN AREA
- EXISTING SERVICE PIT
- PROPOSED FUSED RADIAL PILLAR AS PER E1923 SHT 3 (RAS507)
- PROPOSED FUSED LOOP PILLAR AS PER E1923 SHT 5 ARRGT 1 (RAS507)
- PROPOSED FUSED-T/OFF PILLAR AS PER E1923 SHT 5 ARRGT 2 (RAS507)
- PROPOSED HV CABLE JOINT
- PROPOSED HV CABLE JOINT
- PROPOSED LV CABLE JOINT
- T/W STREETLED AEROSCREEN LED, 4000K, BLACK FINISH (EM4022) MOUNTED ON BLACK 65m MODERN COLUMN WITH 15m DECORATIVE MODERN OUTREACH (WA4077)
- T/W STREETLED AEROSCREEN LED, 4000K, BLACK FINISH (EM4022) MOUNTED ON 4.5M COLUMN (WA4003) WITH 0.65m OUTREACH (WA4025)
- EXISTING LED LUMINAIRE



SCOPE OF WORKS

CONTESTABLE WORKS
Electrical Contractor to:

- Undertake all new work within development.
- Provide completed TS-105 C1 & C2 forms.
- Provide 'As Constructed' drawings within 7 days of submitting certificate of compliance to SA Power Networks Network Management group at no charge.
- Provide documented results proving condition of the existing assets to NPO prior commencing works on any existing infrastructure.
 - megger and phase ID all cables
 - megger all screens and carry out core to screen/earth test for all HV cables
 - contact NPO for direction if any faults discovered
- Obtain network access permits for work near live network assets and excavate jointing boys to facilitate works.

NAP1

- Locate all existing underground cables prior to excavation.
- Cut existing HV cable loop and transition joints adj lot 639 Philip Ave.
 - Supply and install 3x630mm² S/J jointing proposed HV cable to exiting HV cable from L54 C3579
 - Supply and install 3x95mm² S/J jointing proposed HV cable to exiting HV cable from L51 TC3794
- Supply and install 4x150mm² LV cable straight joints adj lot 639 Philip Ave.

NAP2

- Locate all existing underground cables prior to excavation.
- Supply and install 3x630mm² S/J adj lot 643 Philip Ave, jointing proposed HV cable to exiting HV cable from L51 C3607
- Supply and install 3x95mm² S/J adj lot 643 Philip Ave, jointing proposed HV cable to exiting HV cable from L51 TCxxxx
- Supply and install 2 sets of 4x150mm² LV cable straight joints adj lot 643 Philip Ave.

NAP3

- Push 4x150mm² LV cable through existing conduit into existing service pillar adj lot 586 Maria St, cap for termination by SA Power Networks.

NAP4

- Locate all existing underground cables prior to excavation.
- Push 4x150mm² LV cable through existing conduit into existing P7 pit adj lot 769 Maria St, cap for termination by SA Power Networks.

NAP5

- Locate all existing underground cables prior to excavation.
- Push PL LV cable through existing conduit into existing P7 pit adj lot 547 Musico St, cap for termination by SA Power Networks.

Developer Civil Contractor to:

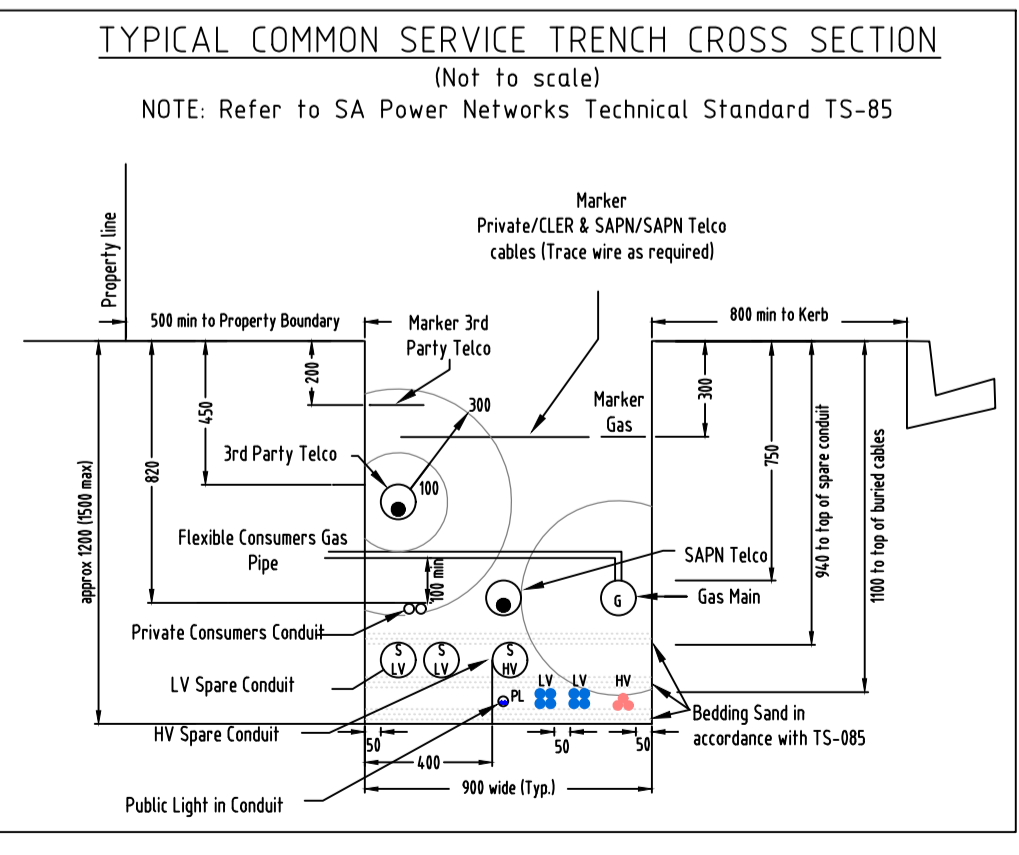
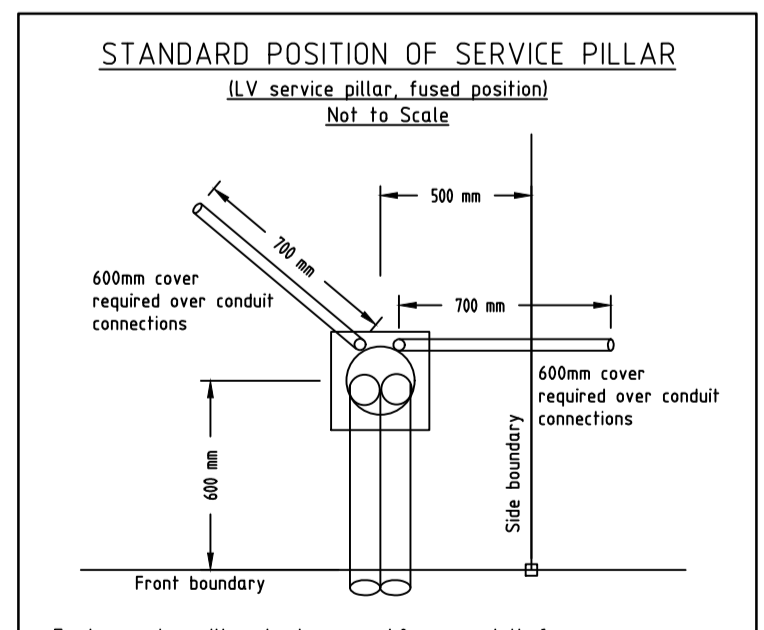
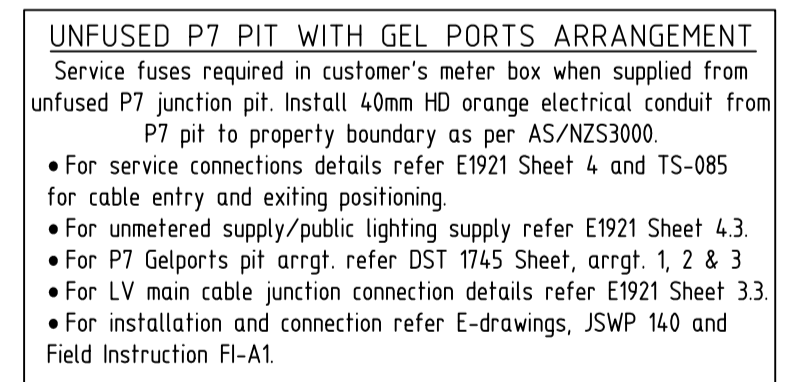
- Comply with requirements of NCC-404, TS105-C1 & C2 when working in the vicinity of the electricity network.
- Undertake civil on request by SA Power Networks.

NON CONTESTABLE WORKS
SA Power Networks to:

- Terminate & connect 4x150mm² LV cable into existing service pillar lot 586 Maria St.
- Terminate & connect 4x150mm² LV cable into existing P7 pit adj lot 769 Maria St.
- Terminate & connect PL cable into existing P7 pit adj lot 547 Musico St. Install PL fuse.
- SA Power Networks to carry out testing, connection and energising of the development, including public lighting.

NOTES:

- Developer responsible for trenching in accordance with SA Power Networks trenching & conduit standard TS-085. Construction to be in accordance with SA Power Networks technical standards and SA Power Networks 'E' drawings.
- Cables to be laid in 1x100mm dia LD (low duty) orange conduit for all road crossings unless otherwise stated. Road crossing conduits for radial (type) service pits are to extend to the boundary line of the property and be fully continuous. Other road crossings to extend 900mm beyond kerb.
- The conduit for a radial low voltage road crossing installation needs to be continuous (fully conduit) as per E1904 Sheet 4, with conduit between pillars installed in such a way that it will facilitate quick cable replacement. If this is achieved a spare conduit is not required.
- Spare conduits for LV cables are to be inserted to approximately 25mm and capped within P7 pits. HV spares are to be diverted around pits, as per TS-085 section 11.2 and appendix D requirements.
- For NBN Developments, install the CST Road Crossing 90° to the allotment boundary.
- Cables to have 1000mm minimum cover.
- Cables through easements to be installed in conduit with spare and marker tape as per TS-085 clause 10.12. Cable markers are to be installed in cable easement as per E1979.
- Any existing underground services shown on these drawings are indicative only, no claim is made that the existing services shown are accurate or complete. Other services may be present which shall be the contractor's responsibility to locate and depth prior to any construction works. Any cable system and equipment must be treated as energised unless otherwise confirmed by SA Power Networks.
- Phasing of consumer connections as shown.
- Public lighting to be all-right burning.
- Number of allotments - 21 @ 6kVA & 12 @ 4kVA = 174kVA total.
- Number of public lights - 5x17W LED (TFI Tariff).
- Developer - Lanser Communities.
- Consulting Engineer - Kellogg Brown & Root Pty Ltd.
- Surveyor - Alexander Symonds Pty Ltd.
- Due to the schematic nature of the drawing, the position of equipment shown is indicative only. Actual locations should be verified on site.
- Retaining walls are required around transformer and switching cubicle easements where the final level changes by more than 300mm in the 2.0m adjacent the easement. The walls are to be built prior to installation of the transformer or switching cubicle and are to be located on the easement.
- All walls, fences, ceilings and floors within 12m of the padmount transformer station shall have a 3 hour fire rating as determined by the Building Code of Australia.
- SA Power Networks is responsible for the connecting and energising of the stage.
- Contractor to ensure Hydro Vacuum Excavation maximum working pressure is limited to 2000psi as per TS-085 section 10.14. Any proposed excavation methods adjacent SA Power Networks infrastructure should be in accordance with NCC-404. Network Access Permits (NAP) required for works on and/or around SA Power Networks exclusion and/or restricted zones as per NCC-404 section 9.1 - figures 1.2 and 3.
- Contractor to provide as constructed drawings to SA Power Networks for approval prior to practical completion. Changes can be made by design consultant for hourly rate charge or AutoCAD format drawings can be purchased from consultant for revision by contractor.
- Construction by -
'As Constructed' details provided by -
WGA is not responsible for the accuracy of the 'As Constructed' details provided.



WGA
WALLBRIDGE GILBERT
AZTEC

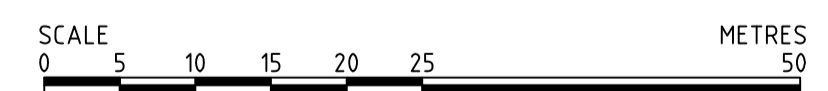
AS1588.3:2020
LIGHTING DESIGN

ROAD CATEGORY
PR3
PRS

DATE: 03/08/2022

NAME: L. Lukanov (TechIES)

FOR CONSTRUCTION
05 DECEMBER 2022



ADMD TABLE		
Total	Lot Numbers	
4kVA	12	579-583, 600-604, 1601, 1602
6kVA	21	All Other.

NOTE:
Any changes to be made on site to the location of the common service trench, and/or electrical & street lighting equipment must first be verified by the electrical designer and the project manager/engineering consultant. Any changes to work within proposed SA Power Networks easements must also be verified by the project surveyor.

DESIGN INFORMATION

Termite resistant cable: YES
Earthing: Local CMEN REFER TABLE
The design ADM / lot: TABLE

WGA
WALLBRIDGE GILBERT
AZTEC

60 Wyatt Street, Adelaide
South Australia 5000
Telephone 08 8223 7433
Email adelaide@wga.com.au
WGA Project No. WGA189172

SURVEYORS NAME: MAP REF: 6628-19-B

SURVEY DATE: GRID REF: 284164.90 E
6162859.40 N

CO-ORDINATE DATUM: GDA94
GROUND SCALE: 1:1

FEEDER NO: EL-17
FEEDER NAME: CURTIS ROAD 11kV
SUBSTATION NO: SSD-273
SUB NAME: ANGLE VALE SUBSTATION

ASSET OWNER: SA POWER NETWORKS

PROJECT DEFINITION: NOTIFICATION TYPE: PROJECT TYPE

XX-000000 CN RD

283908.10 E
6162757.50 N

FOR CONSTRUCTION

REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE					
B	FOR CONSTRUCTION	WGA	LL			05.12.22																			
A	PRELIMINARY ISSUE	WGA	LL			06.08.22																			

DRAWN	CHECKED	INSPECTED	APPROVED
T TOFIGHI	L LUKANOV		SAAD KHAN ELIZABETH 0488 743 421
07-07-22	06-08-22		05-12-22

SA Power Networks

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Adelaide 03 333 339 7149

MIRAVALE (MUSICO)- STAGE 3B
UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV. No. 292/D068/17

SCALE: 1:500

A1

500035616

SHEET 1 OF 1

REV B