

Our Reference: RAL/2015/1869
Your Reference: 17-1123
Contact Officer: Dennis Raccanello
Contact: 07 4688 6317
Email: development@tr.qld.gov.au

STREET LIGHTING PLAN REVIEW

Thurgoona Developments Pty Ltd
C/- Adams & Sparkes Town Planning & Development
PO Box 3080
TOOWOOMBA QLD 4350

Email: TerryM@ashburnerfrancis.com.au

6 August 2019

Dear Sir/Madam

Approval Number: RAL/2015/1869
Application Description: S242 Preliminary Approval to Vary the Effect of the Planning Scheme (MCUI/2015/1868) and Reconfiguring of a Lot - Subdivision of 1 into 314 Lots, drainage reserve (2 lots) and park (1 lot) Stages 1-5
Location: Lot 12 RP839447 Drayton Wellcamp Road and Lot 13 RP839447 390 Drayton Wellcamp Road, GLENVALE QLD 4350
Property Description: Lot 12 RP839447, Lot 13 RP839447

Council concurs with the following lighting design plan proposed for the abovementioned development approval:

1. Electrical Reticulation & Street Lighting Layout, Sheet no. U01 Issue P1, prepared by Ashburner Francis Consulting Engineers and dated 23/04/2019.

In concurrence with the proposed design for this project, Council has carried out an audit check of information submitted by Ashburner Francis Consulting Engineers. Accordingly, Council has placed reliance on the design signed by the Registered Professional Engineer Queensland (RPEQ) that the Approved Plans and specifications are correct and in accordance with required engineering standards. The RPEQ bears full responsibility for all aspects of the engineering design.

Council reserves the right to require further amendments and/or additions at a later stage, should design errors become apparent:

- a) Should any subsequent amendments, changes or alterations of the proposed lighting design occur as a result of an assessment/approval process of a relevant Council application (i.e. RAL/MCU/OW), it will become the responsibility of both the Civil and Electrical Registered Professional Engineer Queensland (RPEQ) to co-ordinate these changes.
- b) Any such changes must be to Council's satisfaction in order to obtain subsequent approval of the lighting design or other impacted Council assets prior to requesting "On-Maintenance" or endorsement of the survey plan.

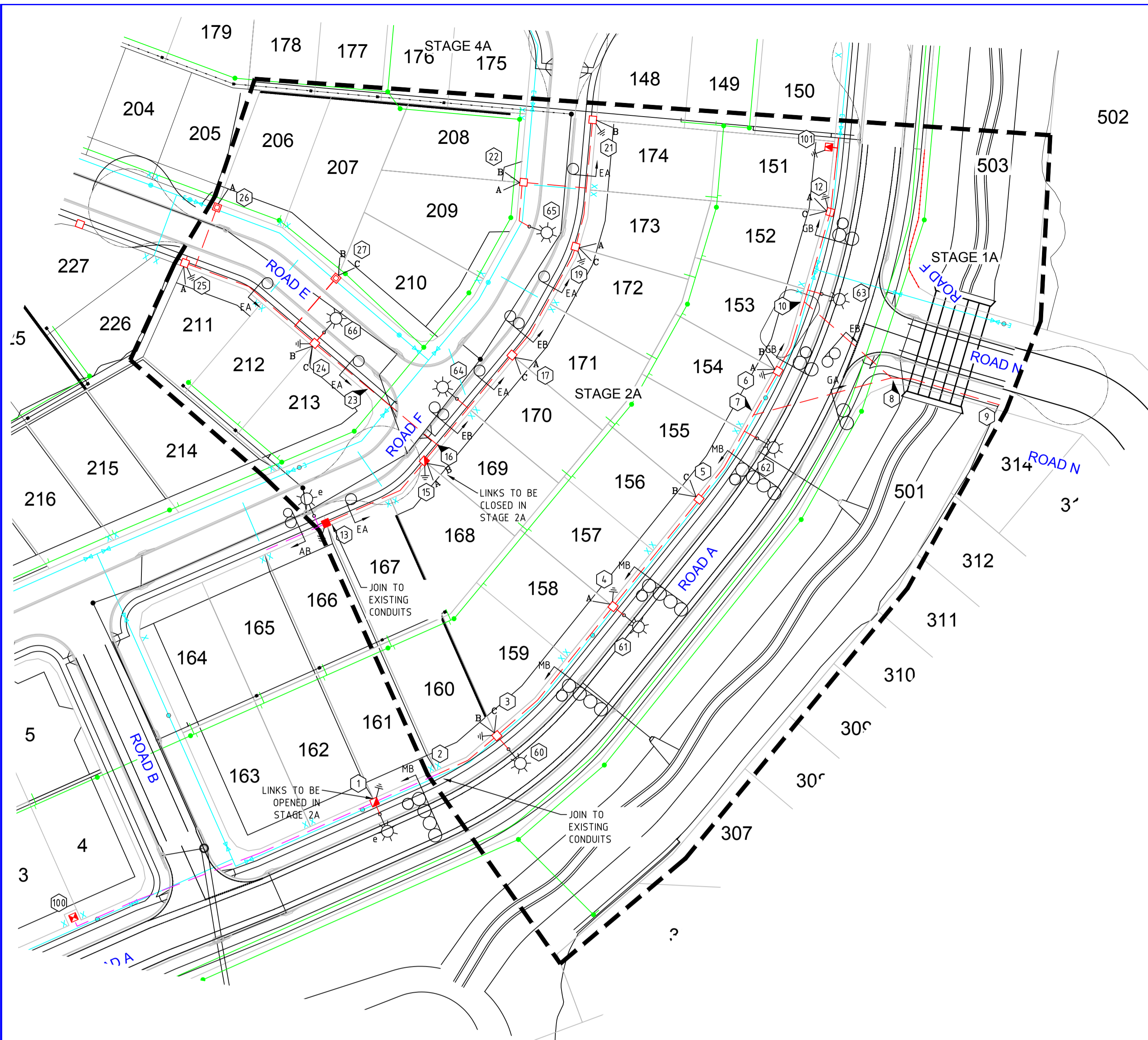
- c) Modification to any existing or approved infrastructure as a result of any changes is at no cost to Council.
- d) Review of this documentation does not include detailed review of adjoining development approvals.
- e) The construction method for any required road crossings (for service conduits or mains) that are to occur on existing roads will require separate approval from Council's Road Operations Branch as part of any Works in Road Permit.

Should you require further information or clarification of the above, please contact Coordinator operational Works, Dennis Raccanello on the above number.

Yours faithfully

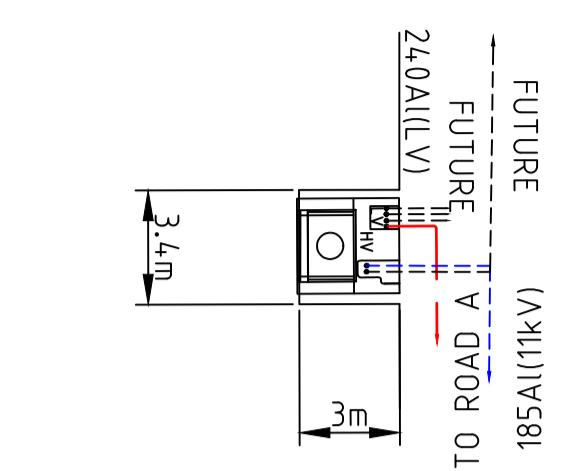


Alan Gould
Principal Engineer, Development Engineering and Plumbing Services

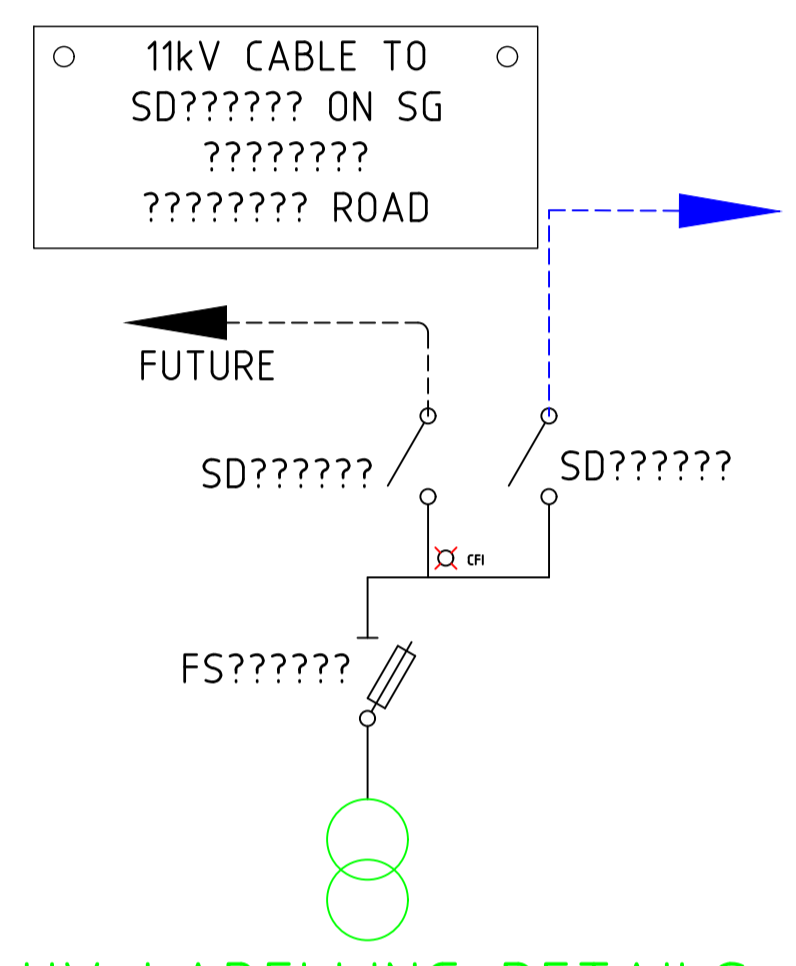


PROPOSED PMT
SG?????? - 315kVA

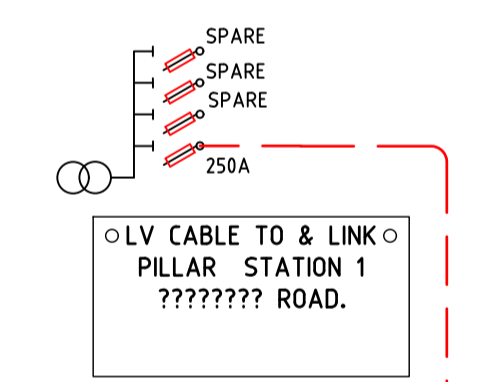
PMT SITE TO BE REGISTERED AS ROAD RESERVE



PMT DETAIL
STATION 101 (NTS)



HV LABELLING DETAILS
AT PROPOSED PMT - SG??????



PROPOSED PMT
LV LABELLING DETAILS

CONDUIT LEGEND

- LINK PILLAR
- EXISTING PILLAR
- URBAN RESIDENTIAL PILLAR
- CROSSROAD PILLAR
- PADMOUNT TRANSFORMER - 315kVA
- RING MAIN UNIT
- STREETLIGHT - REFER SCHEDULE
- ECM
- PHASING R W B
- 11kV CONDUIT - REFER SCHEDULE
- LOW VOLTAGE CONDUIT - REFER SCHEDULE
- LOW VOLTAGE CONDUIT - REFER SCHEDULE
- STREETLIGHT CONDUIT - C40H
- EXISTING LOW VOLTAGE CONDUIT

ELECTRICAL LEGEND

- LINK PILLAR
- EXISTING PILLAR
- URBAN RESIDENTIAL PILLAR
- CROSSROAD PILLAR
- PADMOUNT TRANSFORMER - 315kVA
- RING MAIN UNIT
- STREETLIGHT - REFER SCHEDULE
- CABLE CONNECTION
- LINK PILLAR OPEN POINT
- 11kV CIRCUIT - 185HV
- LOW VOLTAGE CIRCUIT - 240LV
- LOW VOLTAGE CIRCUIT - 16LV
- STREETLIGHT CIRCUIT - 6LV
- EXISTING LOW VOLTAGE

ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO NETWORK DATA GROUP FOR REGION.

CHANGES Yes / No. _____

COMPLETION DATE. _____

NAME. _____

POSITION. _____

SIGNATURE. _____

DATE. _____

- NOTES**
- THE CONTRACTOR TO SUPPLY ALL LOCKS TO ERGON REQUIREMENTS.
 - CONTRACTOR TO SUPPLY ALL LABELS TO ERGON SPECIFICATION.
 - EARTHING. A MAXIMUM VALUE OF 1 OHMS IS REQUIRED WITHIN THE BOUNDARIES OF THE STAGE BEFORE HANDOVER TO ERGON FOR TESTING AND CONNECTION.

- NOTES**
- THE FOLLOWING ERGON MANUALS ARE TO BE USED AS REFERENCES IN THE CONSTRUCTION PHASE AS INDICATED IN THE CONTRACT SPECIFICATION.
 - OVERHEAD CONSTRUCTION MANUAL
 - UNDERGROUND CONSTRUCTION MANUAL
 - LIGHTING CONSTRUCTION MANUAL
 - URD CONSTRUCTION SPECIFICATIONS & CIVIL DRAWINGS RSC06 & RSC07
 - CONDUIT, PILLAR, TRANSFORMER AND STREET LIGHT LOCATIONS SHOWN ARE CRITICAL, AND MUST BE FOLLOWED ACCURATELY. DO NOT PLACE PILLARS OR STREET LIGHTS OUT OF MARKED POSITIONS WITHOUT WRITTEN APPROVAL FROM THE ELECTRICAL ENGINEER. CONDUITS MUST BE WITHIN THE DESIGNATED ERGON ALIGNMENT. PLACE THE TRANSFORMER IN THE EXACT CENTRE OF THE DESIGNATED EASEMENT IN ACCORDANCE WITH THE ERGON UNDERGROUND CONSTRUCTION MANUAL. INCORRECTLY PLACED CONDUITS, PILLARS TRANSFORMER FOUNDATIONS AND STREET LIGHTS WILL NEED TO BE RECTIFIED AT THE CIVIL CONTRACTORS COST BEFORE ACCEPTANCE OF THE CONDUIT INSTALLATION.
 - CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO EXCAVATION. CONTACT DBYD (DIAL BEFORE YOU DIG). PHONE:1100, FAX:1300 652077. MINIMUM TWO WORKING DAYS NOTICE REQUIRED.
 - CONTRACTOR TO INSTALL PVC CABLE PROTECTION COVER STRIPS ABOVE CONDUITS WHERE CONDUITS ARE NOT ON NORMAL ALIGNMENT. (300mm - 900mm OFF PROPERTY BOUNDARY).
 - CONTRACTOR TO PROVIDE ELECTRONIC CABLE MARKERS (ECM'S) AS REQUIRED.
 - ELECTRICAL CONDUITS AND WATER PIPES SHALL NOT SHARE A COMMON TRENCH. A MINIMUM SEPARATION OF 1M IS REQUIRED.

- STREETLIGHTING NOTES**
- ROAD LIGHTING CERTIFIED TO COMPLY WITH THE NOMINATED CATEGORIES OF AS/NZS 1518 FOR THE LUMINAIRES NOMINATED ON THE DRAWINGS.
 - THE LIGHTING DESIGN IS BASED ON THE FOLLOWING MAINTENANCE SCHEDULE.
 - A. LAMP REPLACEMENT AT 18 MONTH INTERVALS INCL INSPECTION AND CLEANING OF LUMINAIRE.
 - B. VEGETATION TO BE KEPT CLEAR OF THE LUMINAIRES.
 - C. INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN 95%.
 - D. LUMINAIRES AND LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS.
 - THE CENTRELNE OF THE STREET LIGHT POLES SHALL BE AS PER THE SCHEDULE.
 - STREET LIGHT DESIGN TO AS158 CATEGORY P4.

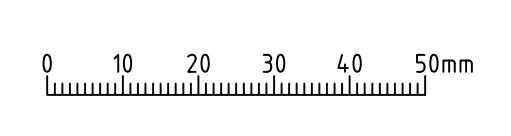
STREET LIGHT SCHEDULE										
LOCATION	STN No	SITE LABEL	ACTION (INSTALL)	STREETLIGHT TYPE	CONSTRUCTION CODE	RATE	OWNER	ALIGNMENT	MOUNTING HEIGHT	OUTREACH ARM
	60		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	61		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	62		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	63		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	64		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	65		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m
	66		INSTALL	Gerard Lighting Street LED Aeroscreen 18w	SLED GL0219A	RATE 2	Toowoomba Regional Council	600mm behind BOK	7.5m	1.5m

**PRELIMINARY DRAWING
NOT FOR TENDER OR
CONSTRUCTION**

This drawing is to be considered preliminary until this disclaimer is removed by Ashburner Francis Pty. Ltd.

©Copyright Ashburner Francis Pty. Ltd., 2017
These drawings and designs and the copyright thereof are the property of Ashburner Francis Pty. Ltd. and must not be used, retained or copied without the written permission of Ashburner Francis Pty. Ltd.

ELECTRONIC TRANSFER
Where this drawing has been transferred by electronic media, no responsibility is accepted for the usability, completeness or accuracy of the electronic data.
Check reference scale below to confirm accuracy of drawing reproduction



issue	date	description	init.
P1	23/4/19	COUNCIL APPROVAL ISSUE	

client
**GLENVALE DEVELOPMENT
PTY LTD**

DESIGN CERTIFICATION
BRIAN KENNY RPEQ No. 2150
FOR AND ON BEHALF OF ASHBURNER FRANCIS PTY LTD

Signature: *[Signature]* Date: 23/04/2019

Ashburner Francis consulting engineers
ASHBURNER FRANCIS PTY LTD (A.B.N. 46 009 975 197)

TOOWOOMBA BRISBANE TOWNSVILLE DARWIN PERTH CAIRNS

Unit 5, 323 Ruthven Street, Toowoomba QLD 4330
t: (07) 4638 9244
e: toowoomba@ashburnerfrancis.com.au

project
**DRAYTON - WELLCAMP ROAD
SUBDIVISION
STAGE 2A**

ERGON PROJECT: WR1382299

ELECTRICAL SERVICES
title
**ELECTRICAL RETICULATION &
STREET LIGHTING LAYOUT**

date: DEC'17 scale: 1:750 @A1
designed: TM
drawn: AF
checked: _____
CAD file name: 17-1123 ST-2A URD.DWG
job no: 17-1123 sheet no: U01 1 of 3 P1 issue

PLOTDATE: 2019-04-23 V:0201171123 DRAYTON WELLCAMP ROAD.DWGSAF_CURRENT/ELECT/17-1123 ST-2A URD.DWG