

DA Form 1 – Development application details

Approved form (version 1.5 effective 22 July 2024) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) <i>(individual or company full name)</i>	Sutariya Brothers Pty Ltd c/-Clarke and Prince Pty Ltd
Contact name <i>(only applicable for companies)</i>	Steve Cahill
Postal address <i>(P.O. Box or street address)</i>	3 Scott Street
Suburb	Cairns
State	Queensland
Postcode	4870
Country	Australia
Contact number	(07) 4051 4088
Email address <i>(non-mandatory)</i>	Steve@clarkeandprince.com.au
Mobile number <i>(non-mandatory)</i>	
Fax number <i>(non-mandatory)</i>	
Applicant's reference number(s) <i>(if applicable)</i>	1532

2) Owner's consent

2.1) Is written consent of the owner required for this development application?

- Yes – the written consent of the owner(s) is attached to this development application
 No – proceed to 3)

PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2, and 3.3) as applicable)

Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.

3.1) Street address and lot on plan

- Street address **AND** lot on plan (all lots must be listed), **or**
 Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
			Corner Kennedy Highway & Malone Road	Mareeba
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
		15	RP 846956	Mareeba
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

Note: Place each set of coordinates in a separate row.

Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

3.3) Additional premises

- Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application
 Not required

4) Identify any of the following that apply to the premises and provide any relevant details

In or adjacent to a water body or watercourse or in or above an aquifer
 Name of water body, watercourse or aquifer:

On strategic port land under the *Transport Infrastructure Act 1994*
 Lot on plan description of strategic port land:
 Name of port authority for the lot:

In a tidal area
 Name of local government for the tidal area (if applicable):
 Name of port authority for tidal area (if applicable):

<input type="checkbox"/> On airport land under the <i>Airport Assets (Restructuring and Disposal) Act 2008</i>
Name of airport: <input type="text"/>
<input type="checkbox"/> Listed on the Environmental Management Register (EMR) under the <i>Environmental Protection Act 1994</i>
EMR site identification: <input type="text"/>
<input type="checkbox"/> Listed on the Contaminated Land Register (CLR) under the <i>Environmental Protection Act 1994</i>
CLR site identification: <input type="text"/>

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).

- Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

- Material change of use Reconfiguring a lot Operational work Building work

b) What is the approval type? *(tick only one box)*

- Development permit Preliminary approval Preliminary approval that includes a variation approval

c) What is the level of assessment?

- Code assessment Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

Service Station

e) Relevant plans

Note: *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).*

- Relevant plans of the proposed development are attached to the development application

6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

- Material change of use Reconfiguring a lot Operational work Building work

b) What is the approval type? *(tick only one box)*

- Development permit Preliminary approval Preliminary approval that includes a variation approval

c) What is the level of assessment?

- Code assessment Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

e) Relevant plans

Note: *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).*

- Relevant plans of the proposed development are attached to the development application



6.3) Additional aspects of development

- Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application
- Not required

6.4) Is the application for State facilitated development?

- Yes - Has a notice of declaration been given by the Minister?
- No

Section 2 – Further development details**7) Does the proposed development application involve any of the following?**

Material change of use	<input type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input checked="" type="checkbox"/> Yes – complete division 3
Building work	<input type="checkbox"/> Yes – complete <i>DA Form 2 – Building work details</i>

Division 1 – Material change of use

Note: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

8.1) Describe the proposed material change of use

Provide a general description of the proposed use	Provide the planning scheme definition <i>(include each definition in a new row)</i>	Number of dwelling units <i>(if applicable)</i>	Gross floor area (m ²) <i>(if applicable)</i>

8.2) Does the proposed use involve the use of existing buildings on the premises?

- Yes
- No

8.3) Does the proposed development relate to temporary accepted development under the Planning Regulation?

- Yes – provide details below or include details in a schedule to this development application
- No

Provide a general description of the temporary accepted development	Specify the stated period dates under the Planning Regulation

Division 2 – Reconfiguring a lot

Note: This division is only required to be completed if any part of the development application involves reconfiguring a lot.

9.1) What is the total number of existing lots making up the premises?

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9.2) What is the nature of the lot reconfiguration? *(tick all applicable boxes)*

<input type="checkbox"/> Subdivision <i>(complete 10)</i>	<input type="checkbox"/> Dividing land into parts by agreement <i>(complete 11)</i>
<input type="checkbox"/> Boundary realignment <i>(complete 12)</i>	<input type="checkbox"/> Creating or changing an easement giving access to a lot from a constructed road <i>(complete 13)</i>

10) Subdivision**10.1) For this development, how many lots are being created and what is the intended use of those lots:**

Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?

<input type="checkbox"/> Yes – provide additional details below <input type="checkbox"/> No	
How many stages will the works include?	
What stage(s) will this development application apply to?	

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?

Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment**12.1) What are the current and proposed areas for each lot comprising the premises?**

Current lot		Proposed lot	
Lot on plan description	Area (m ²)	Lot on plan description	Area (m ²)

12.2) What is the reason for the boundary realignment?

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**13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement?
(attach schedule if there are more than two easements)**

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

Note: This division is only required to be completed if any part of the development application involves operational work.

14.1) What is the nature of the operational work?

<input checked="" type="checkbox"/> Road work	<input type="checkbox"/> Stormwater	<input type="checkbox"/> Water infrastructure
<input type="checkbox"/> Drainage work	<input type="checkbox"/> Earthworks	<input type="checkbox"/> Sewage infrastructure
<input type="checkbox"/> Landscaping	<input type="checkbox"/> Signage	<input type="checkbox"/> Clearing vegetation
<input type="checkbox"/> Other – please specify:		

14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)

<input type="checkbox"/> Yes – specify number of new lots:	
<input checked="" type="checkbox"/> No	

14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)

\$ 129,991 + GST

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application

Baker Building Certification

16) Has the local government agreed to apply a superseded planning scheme for this development application?

- Yes – a copy of the decision notice is attached to this development application
- The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- No

PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements?

Note: A development application will require referral if prescribed by the Planning Regulation 2017.

- No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **Chief Executive of the Planning Act 2016:**

- Clearing native vegetation
- Contaminated land (*unexploded ordnance*)
- Environmentally relevant activities (ERA) (*only if the ERA has not been devolved to a local government*)
- Fisheries – aquaculture
- Fisheries – declared fish habitat area
- Fisheries – marine plants
- Fisheries – waterway barrier works
- Hazardous chemical facilities
- Heritage places – Queensland heritage place (*on or near a Queensland heritage place*)
- Infrastructure-related referrals – designated premises
- Infrastructure-related referrals – state transport infrastructure
- Infrastructure-related referrals – State transport corridor and future State transport corridor
- Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
- Infrastructure-related referrals – near a state-controlled road intersection
- Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
- Koala habitat in SEQ region – key resource areas
- Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
- Ports – Brisbane core port land – environmentally relevant activity (ERA)
- Ports – Brisbane core port land – tidal works or work in a coastal management district
- Ports – Brisbane core port land – hazardous chemical facility
- Ports – Brisbane core port land – taking or interfering with water
- Ports – Brisbane core port land – referable dams
- Ports – Brisbane core port land – fisheries
- Ports – Land within Port of Brisbane's port limits (*below high-water mark*)
- SEQ development area
- SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
- SEQ regional landscape and rural production area or SEQ rural living area – community activity
- SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
- SEQ regional landscape and rural production area or SEQ rural living area – urban activity
- SEQ regional landscape and rural production area or SEQ rural living area – combined use
- SEQ northern inter-urban break – tourist activity or sport and recreation activity



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- SEQ northern inter-urban break – community activity
- SEQ northern inter-urban break – indoor recreation
- SEQ northern inter-urban break – urban activity
- SEQ northern inter-urban break – combined use
- Tidal works or works in a coastal management district
- Reconfiguring a lot in a coastal management district or for a canal
- Erosion prone area in a coastal management district
- Urban design
- Water-related development – taking or interfering with water
- Water-related development – removing quarry material (*from a watercourse or lake*)
- Water-related development – referable dams
- Water-related development – levees (*category 3 levees only*)
- Wetland protection area

Matters requiring referral to the local government:

- Airport land
- Environmentally relevant activities (ERA) (*only if the ERA has been devolved to local government*)
- Heritage places – Local heritage places

Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:

- Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:

- The **Chief Executive of the holder of the licence**, if not an individual
- The **holder of the licence**, if the holder of the licence is an individual
- Infrastructure-related referrals – Oil and gas infrastructure

Matters requiring referral to the Brisbane City Council:

- Ports – Brisbane core port land

Matters requiring referral to the Minister responsible for administering the Transport Infrastructure Act 1994:

- Ports – Brisbane core port land (*where inconsistent with the Brisbane port LUP for transport reasons*)
- Ports – Strategic port land

Matters requiring referral to the relevant port operator, if applicant is not port operator:

- Ports – Land within Port of Brisbane’s port limits (*below high-water mark*)

Matters requiring referral to the Chief Executive of the relevant port authority:

- Ports – Land within limits of another port (*below high-water mark*)

Matters requiring referral to the Gold Coast Waterways Authority:

- Tidal works or work in a coastal management district (*in Gold Coast waters*)

Matters requiring referral to the Queensland Fire and Emergency Service:

- Tidal works or work in a coastal management district (*involving a marina (more than six vessel berths)*)

18) Has any referral agency provided a referral response for this development application?

- Yes – referral response(s) received and listed below are attached to this development application
- No

Referral requirement	Referral agency	Date of referral response

Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application (*if applicable*).

PART 6 – INFORMATION REQUEST

19) Information request under the DA Rules

I agree to receive an information request if determined necessary for this development application

I do not agree to accept an information request for this development application

Note: By not agreeing to accept an information request I, the applicant, acknowledge:

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties
- Part 3 under Chapter 1 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules or
- Part 2 under Chapter 2 of the DA Rules will still apply if the application is for state facilitated development

Further advice about information requests is contained in the [DA Forms Guide](#).

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)

Yes – provide details below or include details in a schedule to this development application

No

List of approval/development application references	Reference number	Date	Assessment manager
<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Development application	MCU/21/0014	21.03.22	Mareeba Shire Council
<input type="checkbox"/> Approval <input type="checkbox"/> Development application			

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)

Yes – a copy of the receipted QLeave form is attached to this development application

No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid

Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

Yes – show cause or enforcement notice is attached

No

23) Further legislative requirements

Environmentally relevant activities

23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

- Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below
- No

Note: Application for an environmental authority can be found by searching "ESR/2015/1791" as a search term at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

- Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a **hazardous chemical facility**?

- Yes – *Form 536: Notification of a facility exceeding 10% of schedule 15 threshold* is attached to this development application
- No

Note: See www.business.qld.gov.au for further information about hazardous chemical notifications.

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

- Yes – this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)
- No

Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.
2. See <https://www.qld.gov.au/environment/land/vegetation/applying> for further information on how to obtain a s22A determination.

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

- Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter
- No

Note: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.

Koala habitat in SEQ Region

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

- Yes – the development application involves premises in the koala habitat area in the koala priority area
- Yes – the development application involves premises in the koala habitat area outside the koala priority area
- No

Note: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at www.desi.qld.gov.au for further information.

Water resources

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the *Water Act 2000***?

Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development

No

Note: Contact the Department of Resources at www.resources.qld.gov.au for further information.

DA templates are available from planning.statedevelopment.qld.gov.au. If the development application involves:

- Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
- Taking or interfering with water in a watercourse, lake or spring: complete DA Form 1 Template 2
- Taking overland flow water: complete DA Form 1 Template 3.

Waterway barrier works

23.7) Does this application involve **waterway barrier works**?

Yes – the relevant template is completed and attached to this development application

No

DA templates are available from planning.statedevelopment.qld.gov.au. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

Marine activities

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants**?

Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*

No

Note: See guidance materials at www.daf.qld.gov.au for further information.

Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake under the *Water Act 2000***?

Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development

No

Note: Contact the Department of Resources at www.resources.qld.gov.au and www.business.qld.gov.au for further information.

Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water under the *Coastal Protection and Management Act 1995***?

Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development

No

Note: Contact the Department of Environment, Science and Innovation at www.desi.qld.gov.au for further information.

Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the *Water Supply Act*)?

Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the *Water Supply Act* is attached to this development application

No

Note: See guidance materials at www.resources.qld.gov.au for further information.

Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

- Yes – the following is included with this development application:
- Evidence the proposal meets the code for assessable development that is prescribed tidal work (*only required if application involves prescribed tidal work*)
 - A certificate of title

No

Note: See guidance materials at www.desi.qld.gov.au for further information.

Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

Yes – details of the heritage place are provided in the table below

No

Note: See guidance materials at www.desi.qld.gov.au for information requirements regarding development of Queensland heritage places.

For a heritage place that has cultural heritage significance as a local heritage place and a Queensland heritage place, provisions are in place under the Planning Act 2016 that limit a local categorising instrument from including an assessment benchmark about the effect or impact of, development on the stated cultural heritage significance of that place. See guidance materials at www.planning.statedevelopment.qld.gov.au for information regarding assessment of Queensland heritage places.

Name of the heritage place:

Place ID:

Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*

No

Decision under section 62 of the Transport Infrastructure Act 1994

23.15) Does this development application involve new or changed access to a state-controlled road?

Yes – this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)

No

Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered

No

Note: See guidance materials at www.planning.statedevelopment.qld.gov.au for further information.

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

Yes

Note: See the *Planning Regulation 2017* for referral requirements

If building work is associated with the proposed development, Parts 4 to 6 of [DA Form 2 – Building work details](#) have been completed and attached to this development application

Yes

Not applicable

Supporting information addressing any applicable assessment benchmarks is with the development application

Yes

Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning)



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schemes, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning Report Template](#).

Relevant plans of the development are attached to this development application Yes
Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21) Yes Not applicable

25) Applicant declaration

- By making this development application, I declare that all information in this development application is true and correct
- Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

Note: It is unlawful to intentionally provide false or misleading information.

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager’s and/or referral agency’s website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received: Reference number(s):

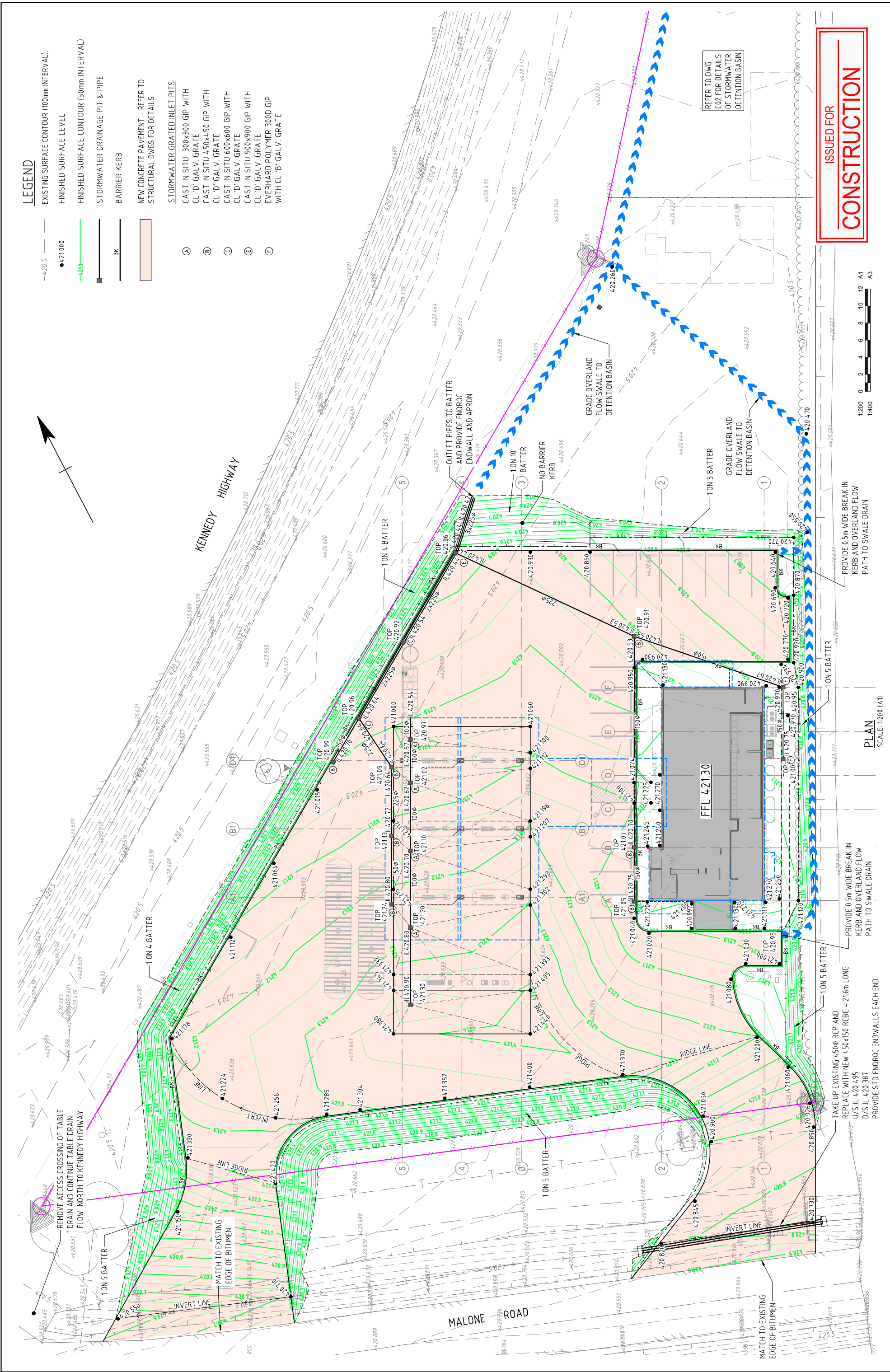
Notification of engagement of alternative assessment manager

Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment

Note: For completion by assessment manager if applicable

Description of the work	
QLeave project number	
Amount paid (\$)	Date paid (dd/mm/yy)
Date receipted form sighted by assessment manager	
Name of officer who sighted the form	



ISSUED FOR
CONSTRUCTION

LEGEND

- 420.5 — EXISTING SURFACE CONTOUR (100mm INTERVAL).
- 421.000 FINISHED SURFACE LEVEL
- 421.1 — FINISHED SURFACE CONTOUR (50mm INTERVAL)
- BK — STORMWATER DRAINAGE PIT & PIPE
- BK — BARRIER KERB
- NEW CONCRETE PAVEMENT - REFER TO STRUCTURAL DWGS FOR DETAILS
- Ⓐ STORMWATER GRATED INLET PITS
- Ⓑ CAST IN SITU 300x300 GIP WITH CL 'D' GALV. GRATE
- Ⓒ CAST IN SITU 450x450 GIP WITH CL 'D' GALV. GRATE
- Ⓓ CAST IN SITU 600x600 GIP WITH CL 'D' GALV. GRATE
- Ⓔ CAST IN SITU 900x900 GIP WITH CL 'D' GALV. GRATE
- Ⓕ EVERHARD POLYMER 300D GIP WITH CL 'B' GALV. GRATE

1:200 0 2 4 6 8 10 12 A1
1:400

PLAN
SCALE: 1:200 (A1)

<p>CURF: SUTARIYA BROTHERS PTY LTD</p> <p>PROJECT: PROPOSED SERVICE STATION KENNEDY HIGHWAY MAREEBA, QLD</p>	<p>TITLE: CIVIL WORKS GENERAL ARRANGEMENT - SHEET 1</p> <p>DESIGNED: EWK ENGINEER: A1 PLAN</p> <p>SCALE: 1:200 (A1) PROJECT NO.: 210220 REV.: C1</p>	<p>RODGERS CONSULTING ENGINEERS</p> <p>124 SPENCE STREET P.O. BOX 1769 CAIRNS 4870 admin@roddgersconsulting.com.au</p> <p>PHONE: 07 4051 9466 FAX: 07 4051 9477 Heath Rodgers RPQC 7859</p>	<p>THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM.</p> <p>THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>APP'D</th> <th>DATE</th> <th>REV</th> <th>DESCRIPTION</th> <th>APP'D</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	APP'D	DATE	REV	DESCRIPTION	APP'D	DATE						
APP'D	DATE	REV	DESCRIPTION	APP'D	DATE											

NOTES

ALL WORKS
CONSTRUCTION AND INSTALLATION OF ALL WORKS AS DETAILED ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE PROCEDURES, SPECIFICATIONS AND DRAWINGS CONTAINED IN THE CURRENT ISSUE OF THE FNROC DEVELOPMENT MANUAL.

EARTHWORKS NOTES

1. THE CONTRACTOR SHALL REMOVE ALL STRUCTURES, DEBRIS AND FENCES FROM THE SITE TO THE SATISFACTION OF THE SUPERINTENDENT.
2. ALL ENVIRONMENTAL WEEDS SHALL BE REMOVED FROM THE SITE.
3. THE EXISTING SURFACE IS TO BE CLEARED OF VEGETATION MATTER PRIOR TO THE START OF EARTHWORKS OPERATIONS.
4. ALL TREES THAT ARE REMOVED SHALL BE MULCHED. THE MULCH SHALL BE STOCKPILED ON SITE FOR USE IN EROSION AND SEDIMENT CONTROL OR LANDSCAPING.
5. TOPSOIL SHALL BE STRIPPED FROM ALL AREAS OF PROPOSED EARTHWORKS PRIOR TO THE START OF EARTHWORKS OPERATIONS AND STOCKPILED IN AN APPROVED LOCATION FOR RE-USE AT A LATER DATE. THE DEPTH OF TOPSOIL STRIPPING SHALL BE AS AGREED WITH THE SUPERINTENDENT.
6. SITE FILLING SHALL BE CARRIED OUT IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS: (LEVEL 1 SUPERVISION)".
7. IMPORTED FILL MATERIAL SHALL BE APPROVED BY THE SUPERINTENDENT PRIOR TO COMMENCING FILLING OPERATIONS.
8. SITE PREPARATION SHALL ENCOMPASS PROPOSED BUILDING FOOTPRINT PLUS 15m BEYOND THE BUILDING PERIMETER.
9. FINISHED SURFACE TO BE GRADED UNIFORMLY BETWEEN LEVELS SHOWN.
10. THE CONTRACTOR IS TO ENSURE THAT LANDSCAPING (eg. GARDEN BEDS, MULCH ETC) DOES NOT INTERFERE WITH SURFACE GRADES AND OVERLAND FLOW PATHS SHOWN ON THIS DRAWING.
11. ALL COMPLETED EARTHWORKS SURFACES FLATTER AND INCLUDING 10N 4 SLOPE TO BE DRILL SEEDED WITH AN APPROVED GRASS SPECIES AND SUITABLY IRRIGATED TO PROMOTE GROWTH.
12. EARTHWORKS SHALL NOT PROCEED PAST THE FOLLOWING HOLD POINTS UNTIL APPROVAL TO PROCEED BY THE SUPERINTENDENT IS ISSUED IN WRITING.
 - AFTER STRIPPING TOPSOIL, PRIOR TO UNDERTAKING ANY FILLING OPERATIONS.
 - AFTER LAYING SUBSOIL DRAINAGE PIPES, PRIOR TO BACKFILLING.
 - AFTER SUBGRADE PREPARATION, PRIOR TO PLACING PAVEMENT MATERIALS. (NOTE THAT A SUBGRADE PROOF ROLL, INSPECTED BY THE SUPERINTENDENT, WILL BE DONE AFTER THE INSTALLATION OF SUBSOIL DRAINS, UNLESS THE SUBSOIL DRAINS EXTEND THROUGH THE SUBBASE, IN WHICH CASE SUBGRADE AND SUBBASE PROOF ROLLS WILL BE REQUIRED).

SERVICES

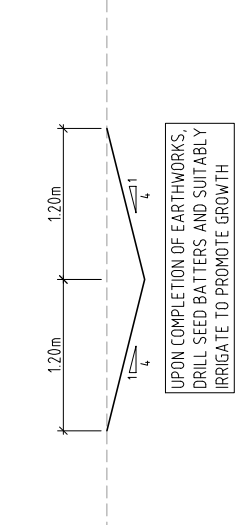
THE CONTRACTOR SHALL COORDINATE ALL BUILDING SERVICES (eg. LANDSCAPING, IRRIGATION, WATER, POWER, SEWER, GAS, TELECOMMUNICATIONS) FOR CONSTRUCTION, AND SHALL CHECK FOR ANY SERVICE ALIGNMENT CLASHES PRIOR TO COMMENCING WORKS ON SITE. NOTIFY THE RELEVANT CONSULTANT SHOULD THERE BE ANY PROBLEMS OR CLASHES FOR DESIGN ADJUSTMENTS.

STORMWATER DRAINAGE

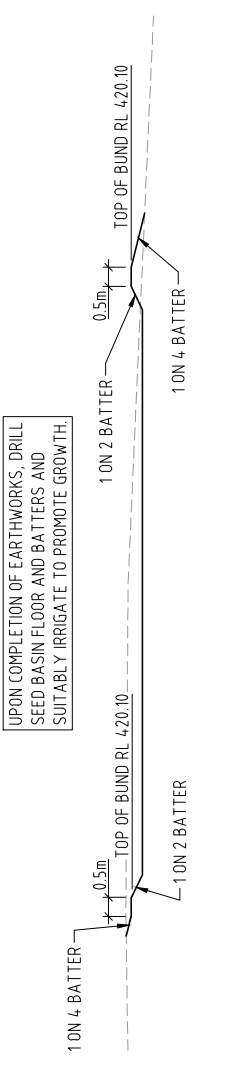
1. UNDERGROUND STORMWATER DRAINAGE PIPES SHOWN ON THIS DRAWING ARE TO BE STORMWATER CLASS uPVC OR PP PIPE BEDDED IN ACCORDANCE WITH FNROC STD DWG S1046. BACKFILLING TO BE CARRIED OUT IN LAYERS OF 200mm AND COMPACTED TO 98% R.D.. CONTRACTOR MAY ELECT TO BACKFILL WITH SAND PROVIDED SAND IS FLOODED WITH WATER AND COMPACTED IN LAYERS NOT EXCEEDING 250mm.
2. GRADED INLET PITS ON THESE DRAWINGS ARE TO BE CAST-IN-SITU CONCRETE PITS WITH CLASS 'D' GALVANISED STEEL GRATES IN TRAFFICABLE AREAS UNLESS NOTED OTHERWISE.

SURVEY AND EXISTING SERVICES

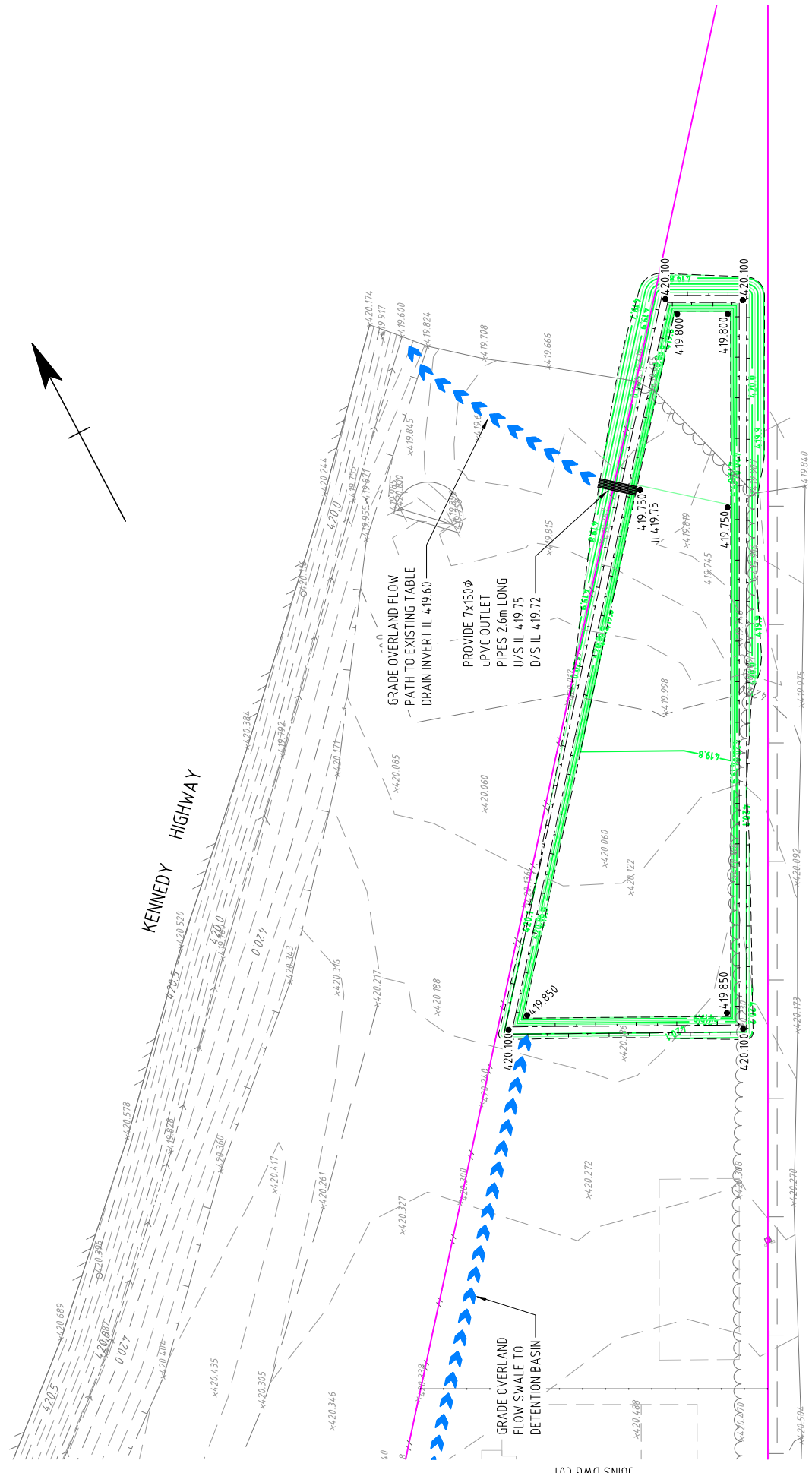
1. SURVEY BY RPS AUSTRALIA EAST PTY LTD (REF: PRL19751-1)
2. SURVEY DATUM: A.H.D. - OPM 197482 RL 420.243 MERIDIAN: RP846956
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING SERVICES PRIOR TO ANY EXCAVATION, PARTICULARLY ON FOOTPATHS.
4. ALL DAMAGE TO EXISTING SERVICES SHALL BE MADE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT AND THE RELEVANT AUTHORITY, ALL AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL NOTIFY THE RELEVANT AUTHORITY IMMEDIATELY WHEN ANY DAMAGE OCCURS.
5. THE LINE AND LEVEL OF EXISTING UNDERGROUND SERVICES SHALL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER SHALL BE NOTIFIED OF ANY POTENTIAL CLASHES WITH DESIGN STRUCTURES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION.
6. EXISTING OUTLET LEVELS OR CONNECTION LEVELS FOR ALL DESIGN STORMWATER AND SEWER SHALL BE CONFIRMED BY THE CONTRACTOR AND THE ENGINEER SHALL BE NOTIFIED OF ANY VARIATIONS PRIOR TO COMMENCING CONSTRUCTION.
7. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR IS TO ESTABLISH ON SITE THE EXACT POSITION OF ALL UNDERGROUND SERVICES IN THE PROPOSED WORKS AREA. METHODS FOR ACHIEVING THIS WILL INCLUDE BUT NOT BE LIMITED TO:
 - CAREFUL EXAMINATION OF THE CONTRACT DRAWINGS.
 - CONSULTATION WITH THE RELEVANT SERVICE AUTHORITIES.
 - COMPREHENSIVELY SCANNING THE AFFECTED AREAS WITH A CABLE DETECTOR AND MARKING ON THE GROUND THE POSITION OF ALL SERVICES.
 - HAND EXCAVATING TO EXPOSE ALL SUCH SERVICES WHICH MAY BE AFFECTED BY THE PROPOSED WORKS UNDER THE DIRECTION OF THE RELEVANT SERVICE AUTHORITY.



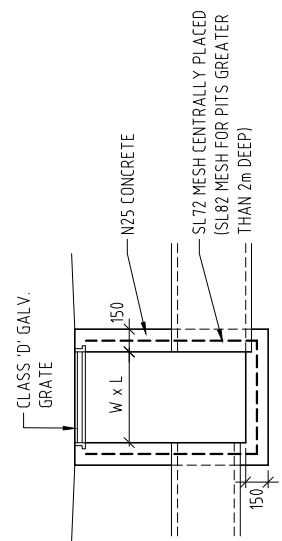
TYPICAL SECTION SWALE DRAIN
SCALE: 1:100 (A1)



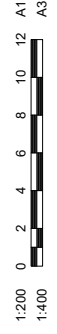
TYPICAL SECTION DETENTION BASIN
SCALE: 1:100 (A1)



PLAN
SCALE: 1:200 (A1)



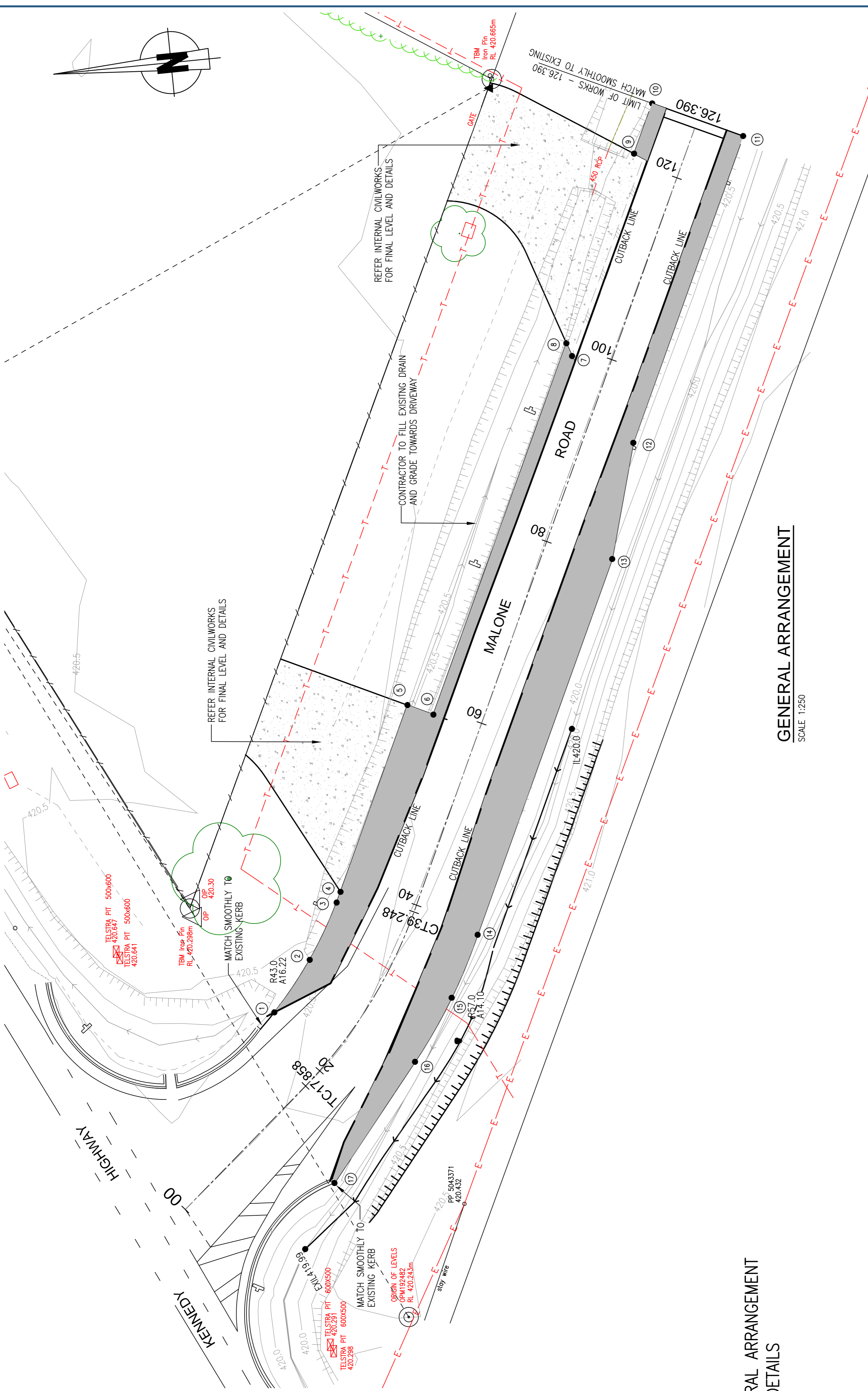
CAST IN SITU GRATED INLET PIT
N.T.S.



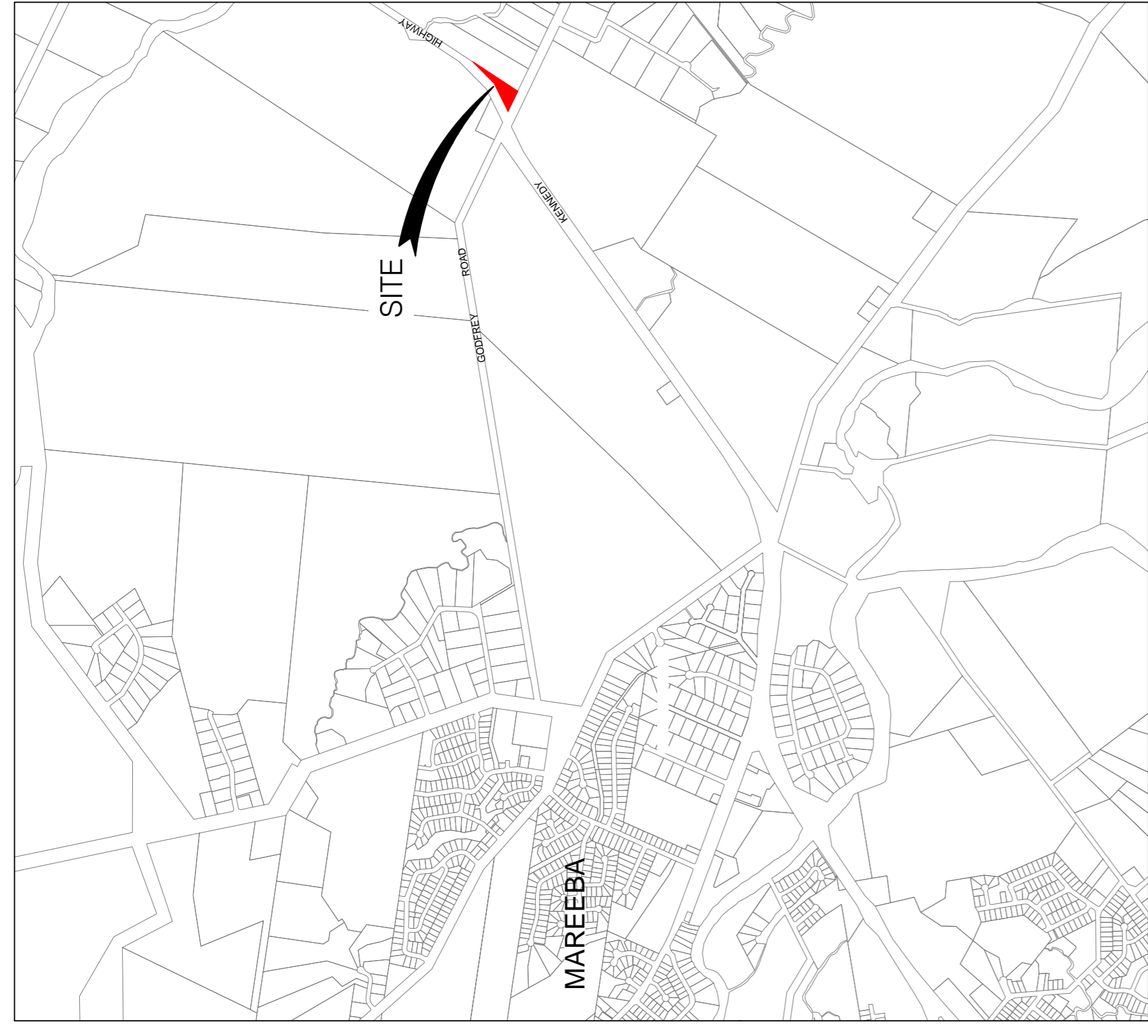
ISSUED FOR CONSTRUCTION

<p>CURR: SUTARIYA BROTHERS PTY LTD</p> <p>PROJECT: PROPOSED SERVICE STATION KENNEDY HIGHWAY MAREEBA, QLD</p>	<p>TITLE: CIVIL WORKS GENERAL ARRANGEMENT - SHEET 2</p> <p>PHONE: 07 4051 9466 FAX: 07 4051 9477 Heath Rodgers RP02 7859</p> <p>admin@roddersconsulting.com.au</p>	<p>DATE: 18/06/24</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p>	<p>DATE: [Blank]</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p>	<p>DATE: [Blank]</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p> <p>APP'D: [Signature]</p> <p>DATE: [Blank]</p>
<p>THE ENGINEERING NOTES ATTACHED TO THE CERTIFICATE FOR THIS JOB NUMBER ARE PART OF THE DRAWINGS, AND ARE TO BE ATTACHED TO EACH SET OF DRAWINGS TO BE WORKED FROM. THIS DRAWING IS COPYRIGHT AND MUST NOT BE COPIED OR USED WITHOUT THE AUTHORITY OF RODGERS CONSULTING. DO NOT SCALE FROM THIS DRAWING. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE DESIGNER ANY DISCREPANCIES PRIOR TO COMMENCING RELATED WORK.</p>		<p>SCALE: 1:200 (A1)</p>		
<p>RODDERS CONSULTING ENGINEERS</p> <p>124 SPENCE STREET CAIRNS 4870</p>		<p>PROJECT NO: 210220</p> <p>REV: C1</p>		

DO NOT SCALE



GENERAL ARRANGEMENT
SCALE 1:250



LOCALITY PLAN
NTS

SCHEDULE OF PROJECT DRAWINGS
AR00218-C01 LOCALITY PLAN, DRAWING SCHEDULE AND GENERAL ARRANGEMENT
AR00218-C02 MALONE ROAD TYPICAL CROSS SECTIONS AND DETAILS
AR00218-C03 LINEMARKING SETOUT AND DETAILS

NOTES

- ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH FNROC DEVELOPMENT MANUAL GUIDELINES AND SPECIFICATIONS.
- DIMENSIONS, RADI AND LEVELS SHOWN ARE TO THE EDGE OF SHOULDER.
- LEVELS ARE SHOWN EQUALLY DIVIDED BETWEEN TANGENT POINTS.
- REFER ALSO TO ROAD SETOUT DETAILS FOR COORDINATES OF ROAD CHANGES AND TANGENT POINTS.
- REFER TO THE FOLLOWING FNROC STANDARD DRAWINGS:
S1015 - ACCESS CROSSOVERS

LEGEND

- NATURAL SURFACE CONTOUR (0.1m INTERVAL) ——— 4.6
- DESIGN SURFACE CONTOUR (0.1m INTERVAL) ——— 4.6
- RADIUS R10.00 ———
- ARC LENGTH A15.75 ———
- OFFSET FROM ROAD CENTRELINE ——— 3.00
- ROAD CHANGING ——— 140
- KERB SETOUT POINT (25) ———

EDGE OF ROAD SETOUT TABLE

POINT No.	EASTING	NORTHING	LEVEL
1	336725.991	8120338.774	420.698
2	336731.045	8120334.588	420.769
3	336736.674	8120331.238	420.910
4	336737.736	8120330.728	420.914
5	336737.736	8120330.728	421.016
6	336755.057	8120319.360	421.120
7	336790.596	8120301.405	421.215
8	336791.970	8120301.861	421.205
9	336810.819	8120292.955	421.216
10	336815.807	8120290.572	421.249
11	336811.524	8120281.531	421.143
12	336781.029	8120295.979	421.108
13	336765.289	8120293.338	420.916
14	336755.057	8120320.155	420.852
15	336725.682	8120324.784	420.781
16	336719.464	8120324.323	420.781
17	336707.753	8120334.323	420.509

SURVEY ORIGIN

SURVEY COMPLETED BY D. K. OERTEL JOB No. 19/5/21
 CO-ORDINATE SYSTEM MGA2020, ZONE 55
 MERIDIAN : RPR46956
 PSM 192482 TYPE "C"
 EASTING : 4957.697 E
 NORTHING : 9977.332 N
 LEVEL : RL 420.243m

0 2.5 5 7.5 10 12.5m
 SCALE 1:250 (A1 SIZE)

CONSTRUCTION ISSUE

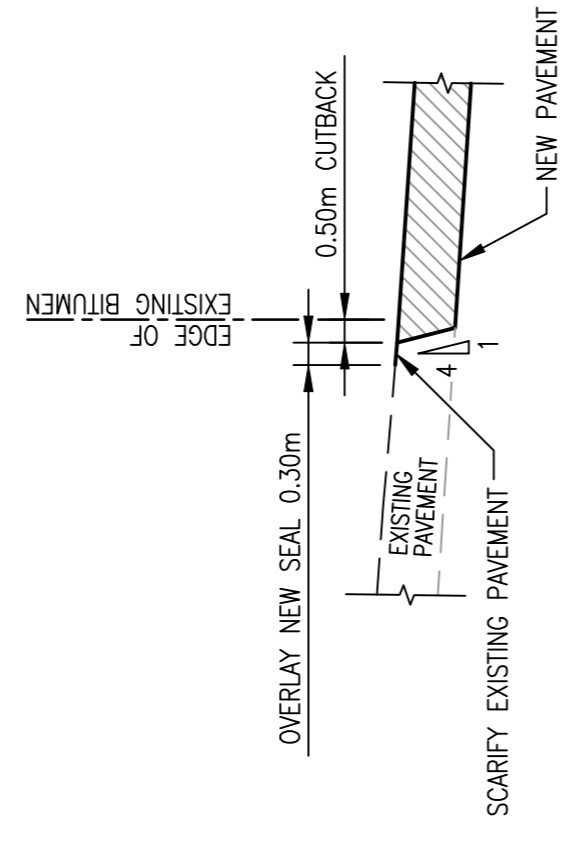
		44 McLeod Street Cairns Qld 4870 T (07) 4281 6897 E admin@arindustries.com.au W www.arindustries.com.au ABN: 49 641 461 298	
Client: SUTARIYA BROTHERS PTY LTD Project: EMERALD CREEK SERVICE STATION Title: MALONE ROAD WIDENING LOCALITY PLAN, DRAWING SCHEDULE AND GENERAL ARRANGEMENT Drawing No. ARO0218-C01		Scale (A1 size) AS SHOWN Drawing is not to be used for construction unless approved.	Approved A. ARMSTRONG Date 15/11/22
Drawn MS AA	Design Check MS AA	RPEO 21116 Date 15/11/22	Revision A

NOTES

1. ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH FNROCC DEVELOPMENT MANUAL GUIDELINES AND SPECIFICATIONS.
2. PAVEMENT DESIGN IS BASED ON AN ASSUMED SUBGRADE CBR OF 8. CONSTRUCTION OF THE SUBGRADE SHOULD BE CONFIRMED BY SUPERINTENDENT AND TABLELANDS REGIONAL COUNCIL.
3. REFER TO GENERAL ARRANGEMENT PLAN ON DRG ARO0218-C01 FOR SETOUT DETAILS.

- △ 2 COAT BITUMEN SEAL DETAILS
- 1st COAT
 - SIDE PMB @ 1.4l/m²
 - 14mm AGGREGATE AT 115m²/m³
 - 2nd COAT
 - SIDE PMB @ 0.9l/m²
 - 7mm AGGREGATE AT 250m²/m³
- ALL ALTERNATE OR NON-CONFORMING SEAL DESIGN TO BE APPROVED BY SUPERINTENDENT.

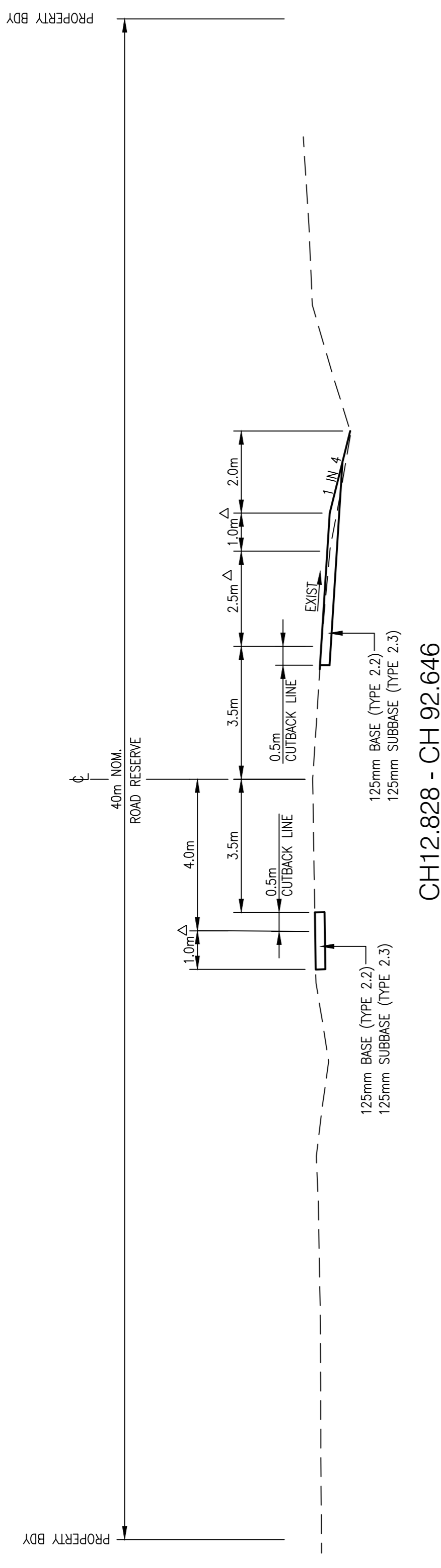
DESIGN SUBGRADE CBR 8
(REFER NOTE 2)



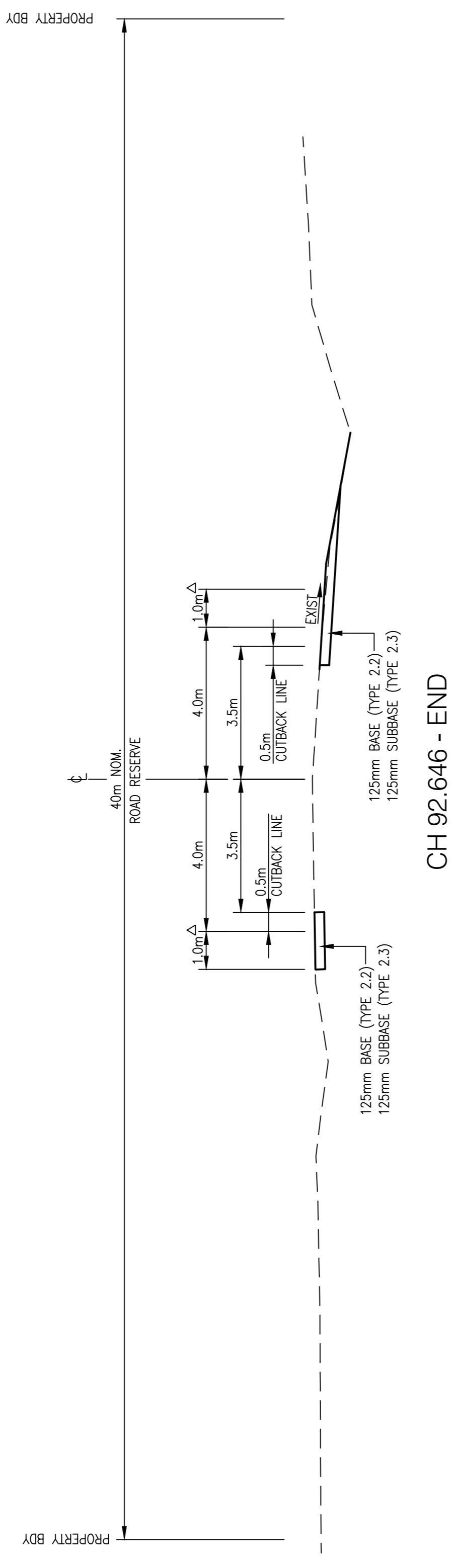
CUTBACK DETAIL
NOT TO SCALE

MALONE ROAD CONTROL LINE SETOUT

CHANGING	EASTING	NORTHING	BEARING	RAD/SPIRAL	LENGTH	DEFLANGE
0.000	336706.586	8120349.967	138°51'44.98"			
TC 17.858	336718.097	8120336.314	138°51'44.98"		21.390	
CT 39.248	336734.014	8120303.360	115°21'03.81"	R = -50.000		24°30'41.17"
125.464	356612.827	8120286.446	115°21'03.81"			

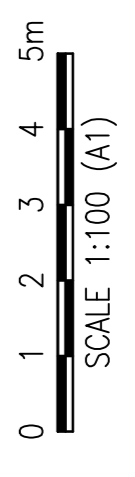


CH12.828 - CH 92.646



CH 92.646 - END

MALONE ROAD TYPE SECTIONS
SCALE 1:100



CONSTRUCTION ISSUE

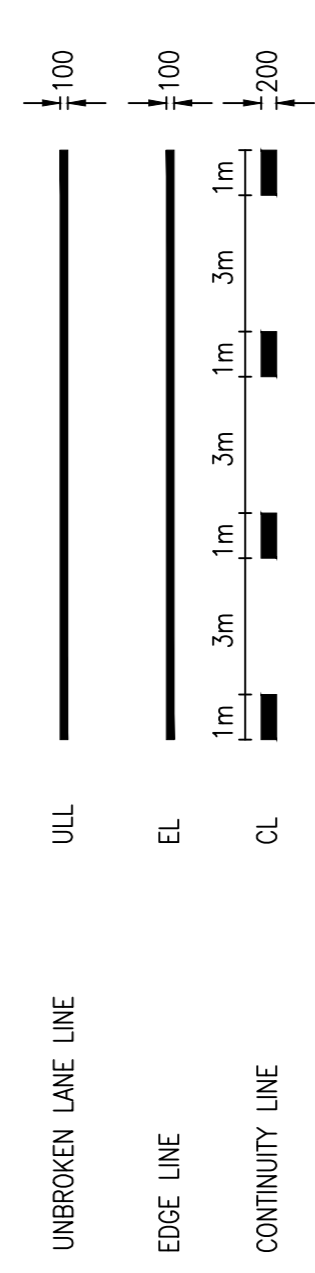
		44 McLeod Street Cairns Qld 4870 T (07) 4281 6897 E admin@arindustries.com.au W www.arindustries.com.au ABN: 49 641 461 298	
Client Logo SUTARIYA BROTHERS PTY LTD EMERALD CREEK SERVICE STATION		Scale (A1 size) AS SHOWN	
Title MALONE ROAD WIDENING TYPE CROSS SECTIONS AND MISCELLANEOUS DETAILS		Approved A. ARMSTRONG	
Drawing No. ARO0218-C02		Date 15/11/22	
Reviewed / Approved / Date		Design Check / RPEO / Date	
1 CONSTRUCTION ISSUE 1 PRELIMINARY ISSUE		AA 21116 AA 15/11/22	
Drawing is not to be used for construction unless approved.			

DO NOT SCALE

PAVEMENT MARKING LEGEND

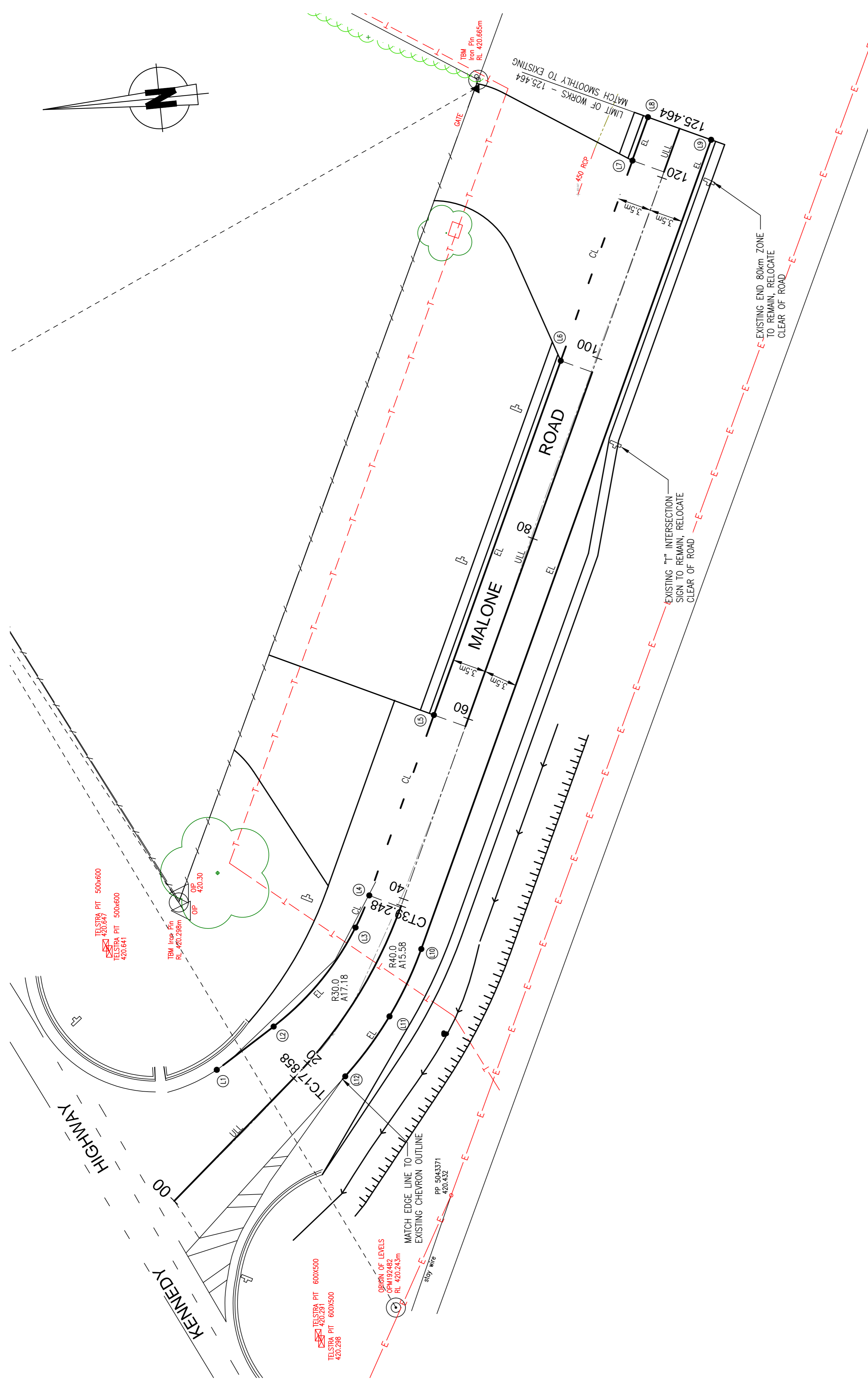
- PAVEMENT MARKERS
 UN-DIRECTIONAL
 EXISTING SIGN
 PROPOSED SIGN

PAVEMENT MARKING LEGEND
 (UNLABELLED DIMENSIONS ARE IN MILLIMETRES.)

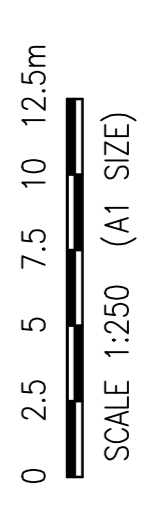


LINEMARKING SETOUT

POINT No.	EASTING	NORTHING
L1	336719.777	8120344.202
L2	336723.688	8120337.848
L3	336733.133	8120328.323
L4	336736.329	8120326.563
L5	336754.407	8120317.998
L6	336769.009	8120301.777
L7	336784.325	8120289.810
L8	336811.329	8120283.283
L9	336811.329	8120321.710
L10	336730.223	8120321.710
L11	336724.552	8120325.708
L12	336717.780	8120330.821



LINEMARKING SETOUT AND DETAILS
 SCALE 1:250



CONSTRUCTION ISSUE

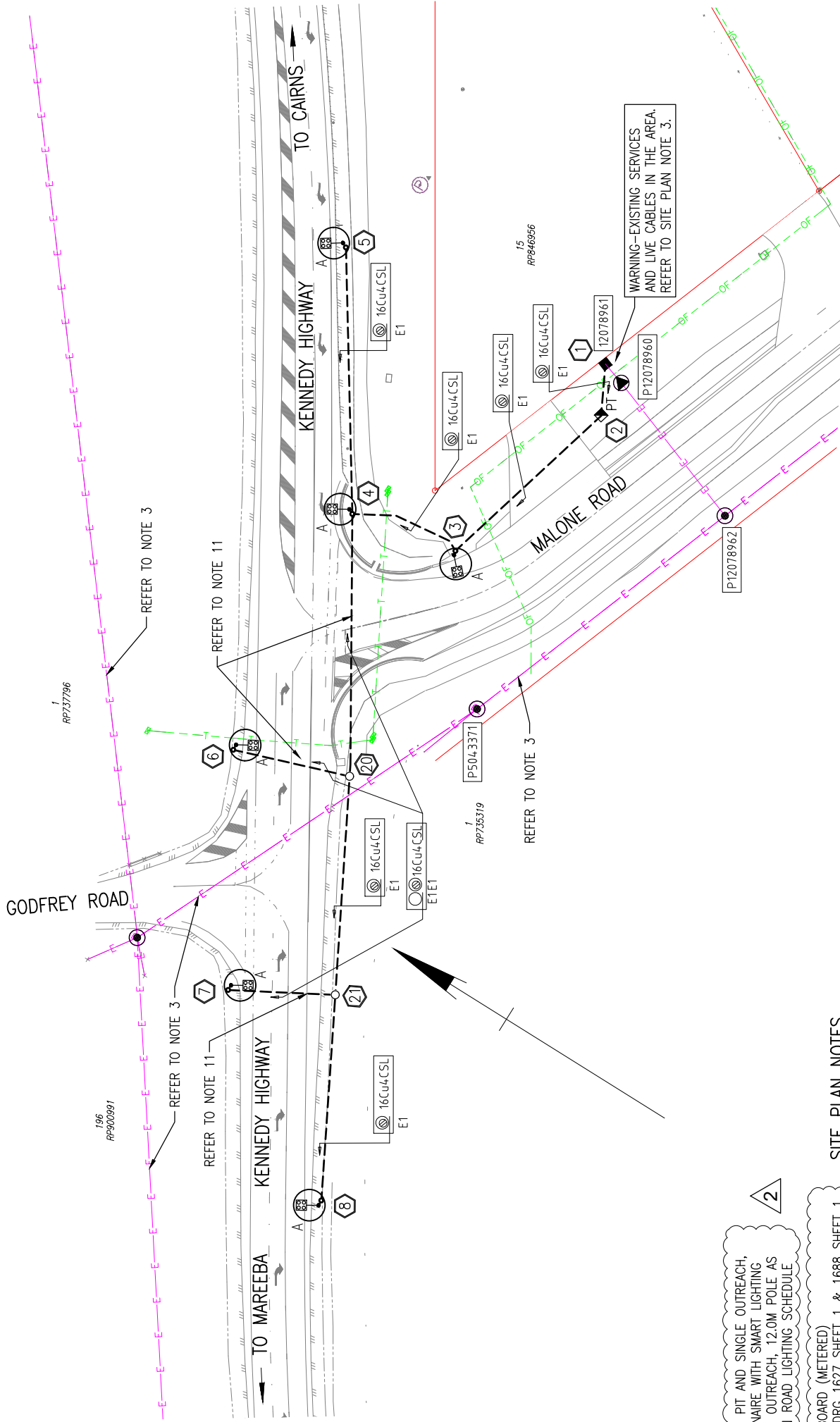
No. Description 1 CONSTRUCTION ISSUE 1 PRELIMINARY ISSUE	Reviewed	Approved	Date	Client Logo	Client	Drawn	Designed	Approved	Scale (A1 size)
					SUTARIYA BROTHERS PTY LTD EMERALD CREEK SERVICE STATION MALONE ROAD WIDENING LINEMARKING SETOUT AND DETAILS	MS	MS	A. ARMSTRONG	1:250
Revisions						AA	AA	21116	15/11/22
			15/11/2022			AA	AA		Drawing is not to be used for construction unless approved.
			29/07/2022						



WARNING
SERVICES ARE NOT SHOWN
ALL CONTRACTORS ARE RESPONSIBLE FOR AVOIDING
CONFLICTS WITH SERVICES AND MUST CARRY OUT
CHECKS WITH ALL SERVICE AUTHORITIES BEFORE
COMMENCING WORKS.

TEMPORARY WARNING SIGNS TO BE
ERECTED IN ACCORDANCE WITH THE
MANUAL OF UNIFORM TRAFFIC
CONTROL DEVICES BEFORE
COMMENCING WORK.

Locality of Mareeba



LEGEND

- NEW POLE ROUND PIT AND SINGLE OUTREACH, AEROSCREEN LUMINAIRE WITH SMART LIGHTING CONTROLLER, 3.0M OUTREACH, 12.0M POLE AS PER SPECIFIED IN ROAD LIGHTING SCHEDULE
- NEW MAIN SWITCHBOARD (METERED) AS PER TMR STD DRG. 1627 SHEET 1 & 1688 SHEET 1
- EXISTING OVERHEAD CONDUCTOR
- EXISTING UNDERGROUND CONDUIT
- NEW STREETLIGHT CONDUIT AS SPECIFIED ON SITE PLAN
- 100mm ELECTRICAL (ORANGE)
- STATION NUMBER
- NEW PIT CIRCULAR
- ERGON POLE
- SITE LABEL
- EXISTING UNDERGROUND OPTIC FIBRE
- EXISTING UNDERGROUND TELECOMMUNICATIONS
- EXISTING ERGON PILLAR
- TRANSFORMER

SITE PLAN NOTES

1. INSTALLATION SHALL COMPLY WITH AS3000 AND TMR STANDARD DRAWINGS.
2. LEAVE 2m CABLE COILED AT EACH CABLE PIT.
3. WARNING: EXISTING SERVICES IN AREA. CARRY OUT DIAL BEFORE YOU DIG ENQUIRY AND LOCATE. POTHOLE TO CONFIRM LOCATION PRIOR TO EXCAVATION. ENSURE WHEN WORKING NEAR OVERHEAD POWERLINES THAT THE REQUIRED CLEARANCES ARE MAINTAINED THROUGHOUT CONSTRUCTION.
4. PITS AND SWITCHBOARDS ARE IN INDICATIVE LOCATIONS. CONTRACTOR TO DETERMINE SUITABLE LOCATION FOR PITS AND SWITCHBOARDS AS PER TMR STANDARDS. CONTRACTOR TO LAISE WITH TMR REPRESENTATIVE TO DETERMINE SUITABLE LOCATION.
5. WHERE ELECTRICAL CONDUIT CROSSES SERVICES (STORMWATER, TELSTRA, WATER, ETC) CONTRACTOR TO COORDINATE WITH CIVIL CONTRACTOR TO DETERMINE SUITABLE ROUTE OF CONDUIT ENSURING ADEQUATE CLEARANCE TO ALL SERVICES.
6. REFER TO POLE PLACEMENT SCHEDULE FOR LIGHT POLE LOCATION.
7. MAINS SUPPLY CABLE NOMINATED AS 4 CORE CABLE AS PER TMR PREFERENCE. CONTRACTOR TO COORDINATE WITH ERGON ENERGY REGARDING P.O.S. AND ENSURE CABLES ARE TERMINATED SAFELY.
8. CONTRACTOR TO LEAVE 2m EXTRA CABLE COILED AT THE BASE OF PILLAR FOR ERGON CONNECTION.
9. NEW TMR SWITCHBOARD TO BE INSTALLED AS PER TMR STANDARDS AND POINT OF SUPPLY FOR SWITCHBOARD IS TO BE FROM EXISTING PILLAR 12078961 STN1. NEW STREETLIGHT RETICULATION IS TO BE PROVIDED FROM NEW TMR SWITCHBOARD. REFER TO CIRCUIT SCHEMATIC.
10. ENSURE PITS AT ARE NOT INSTALLED ON BATTER WITH SLOPES GREATER THAN 1:3.
11. CONTRACTOR TO BORE UNDERNEATH ROAD TO INSTALL CONDUITS FROM STN4 TO STN20, STN20 TO STN6 AND STN21 TO STN7.
12. CONTRACTOR TO LAISE WITH TMR TO OBTAIN/PROVIDE ASSET DATA DETAILS AND LABEL ACCORDINGLY.

LIGHTING DESIGN COMPLIANCE CERTIFICATE
THIS LIGHTING DESIGN COMPLES GENERALLY WITH THE NOMINATED CATEGORIES OF AST158.1:12005 & AST158.1:2010.

NAME: JANE ERREY
SIGNATURE: [Signature]
TITLE: SENIOR ELECTRICAL ENGINEER
RPEQ: 6863
LIGHTING CATEGORY: PARTIAL V3

LUMINAIRE DETAILS:
MANUFACTURER & MODEL: GERARD SYLVANIA ROADLED GEN 2
TYPE & WATTAGE: MK2 300W LED AEROSCREEN 0° UPCAST ROADLED 300W 4K AERO 216193.0ie, ROADLED 300W 4K AERO 216193.0es, 35.3 klm

INITIAL LUMENS

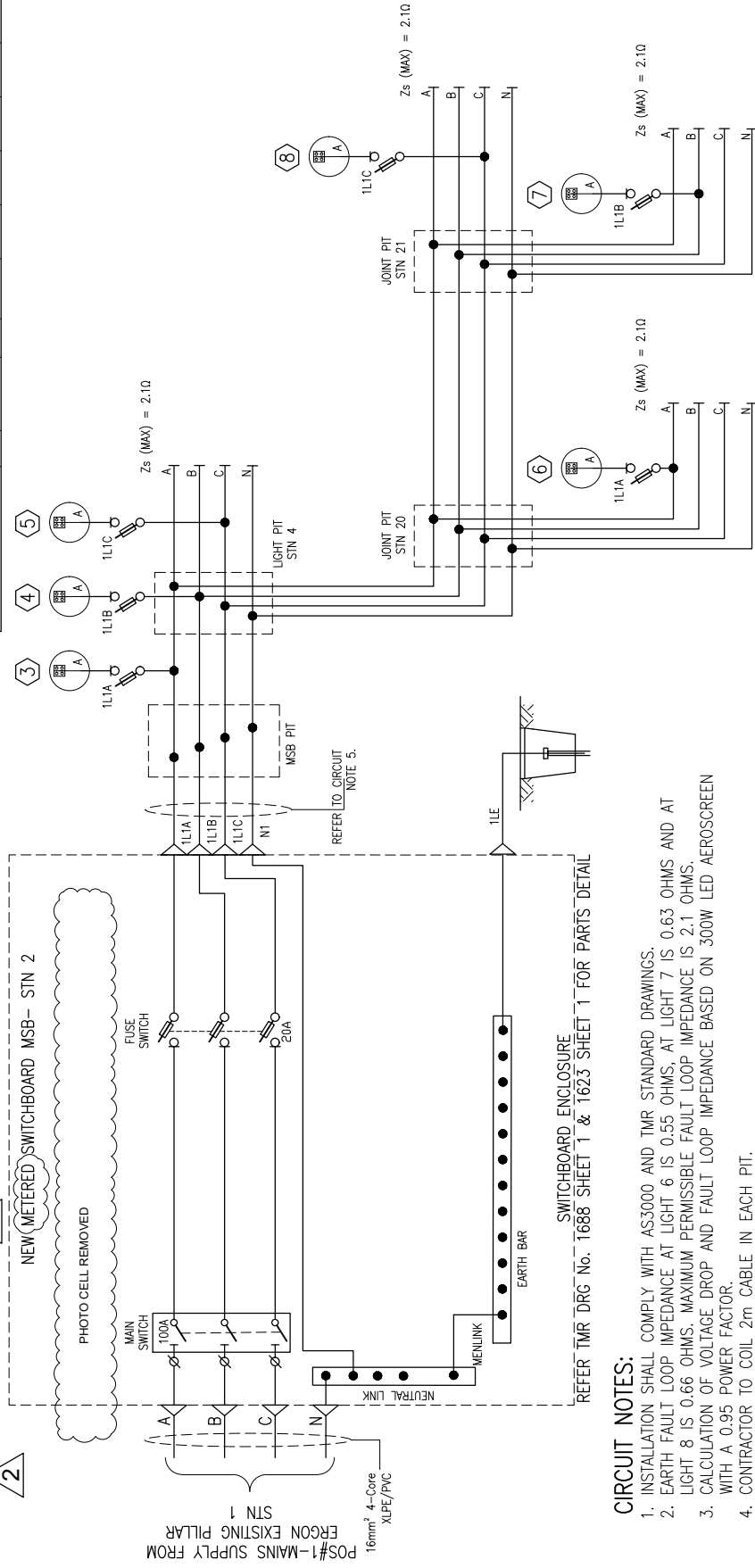
COMPUTER DESIGN DETAILS:
AST158.2:2005 COMPLIANT S/WARE: AGI 32 & PERFECT LITE
SOURCE OF PROGRAM: LIGHTING ANALYSIS INC.
MAINTENANCE FACTOR: 0.8
ROAD REFLECTION CHAR: CE-R3

ALL LIGHTING CALCULATIONS ARE AVAILABLE UPON REQUEST.
FOR LIGHTING ARRANGEMENT, SPACINGS, MOUNTING HEIGHTS, OUTREACH DETAILS AND SIGNIFICANT ROAD FEATURES, REFER TO DRAWING.
THIS LIGHTING DESIGN IS BASED ON THE FOLLOWING MAINTENANCE SCHEDULE. BULK LAMP CHANGE INTERVAL AS PER MANUFACTURERS RECOMMENDATIONS AT WHICH TIME OPTICAL SURFACES AND DEFUSERS OF THE LUMINAIRE WILL BE CHECKED FOR DEGRADATION AND REPLACED WHERE NECESSARY. SPOT LAMP REPLACEMENTS WILL BE UNDERTAKEN TO ENSURE THAT ALL LUMINAIRES ARE IN SERVICE AT ALL TIMES.

Date		MARCH 2023	
Scale		1:500@A3	
Drawn		MD	
Approved		JE	
Drawing Number		3631-L01	
Revision		2	

Drawing Title		LIGHTING LAYOUT AND LEGENDS SHEET 1 OF 2	
Project Description		KENNEDY HIGHWAY AND MALONE ROAD INTERSECTION LIGHTING	
CIVIL CONSULTANT		 ARO Industries 44 MCLEOD STREET CAIRNS, QLD 4870 Ph: 07 4261 6897	
CLIENT		CLARKE & PRINCE PTY LTD 3 SCOTT STREET CAIRNS, QLD 4870 Ph: 07 4051 4088	
Date	Description	Revised Code	Date
25/06/23	UPDATED AS PER TMR COMMENTS	MD	
12/04/23	80% PRELIMINARY ISSUE	MD	

ROAD LIGHTING SCHEDULE																	
LOCATION	SITE ID (POLE NO)	POLE OR COMPONENTS			LUMINAIRE			OUTREACH BRACKET			MOUNT HEIGHT (M)	REMARKS					
		STN NO.	COMP ID	EXIST (M)	REC (M)	ERECT (M)	DATE DE-ENERG	RECOVER LUMINAIRE	EXISTING	COMP ID			EXIST (M)	REC (M)	ERECT (M)	PART NO. SD 1689	
KENNEDY HIGHWAY	4	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	5	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	6	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	7	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	8	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	3	P01		10 SBM	238	=						580	3.0	227	12	NEW POLE, OUTREACH & LUMINAIRE	
	MALONE ROAD																



CIRCUIT NOTES:

- INSTALLATION SHALL COMPLY WITH AS3000 AND TMR STANDARD DRAWINGS.
- EARTH FAULT LOOP IMPEDANCE AT LIGHT 6 IS 0.55 OHMS, AT LIGHT 7 IS 0.63 OHMS AND AT LIGHT 8 IS 0.66 OHMS. MAXIMUM PERMISSIBLE FAULT LOOP IMPEDANCE IS 2.1 OHMS.
- CALCULATION OF VOLTAGE DROP AND FAULT LOOP IMPEDANCE BASED ON 300W LED AEROSCREEN WITH A 0.95 POWER FACTOR.
- CONTRACTOR TO COIL 2m CABLE IN EACH PIT.
- ALL LIGHTING CABLE TO BE AS PER UNDERGROUND POWER CABLE SCHEDULE.
- REFER TO TMR STANDARD DRAWINGS 1625 DETAIL A & B.

CIRCUIT SCHEDULE										
LOCATION/SWITCHBOARD	PHASE	CIRCUIT	STATIONS	LOAD	START CURRENT	RUN CURRENT	VOLTAGE DROP (%)	EFLI (OHMS)	FUSE	MINIMUM CONDUCTOR SIZE
MALONE ROAD	A	1L1A	3, 6	2 x 300W	REFER TO NOTE 5 BELOW	2.78A	0.4	0.55	20A	16 mm ² 4C XLPE/HDPE
	B	1L1B	4, 7	2 x 300W	REFER TO NOTE 5 BELOW	2.78A	0.42	0.63	20A	16 mm ² 4C XLPE/HDPE
	C	1L1C	5, 8	2 x 300W	REFER TO NOTE 5 BELOW	2.78A	0.43	0.66	20A	16 mm ² 4C XLPE/HDPE

RATE 3 NOTES

- LIGHTING SCHEME TO COMPLY WITH AS/NZS 11.58:2005 AND AS/NZS 3000:2000.
- LIGHTING SCHEME TO COMPLY WITH THE REQUIREMENTS OF CATEGORY V3 OF AS/NZS 11.58.1:2005.
- LIGHTING SCHEME TO COMPLY WITH TMR ROAD PLANNING AND DESIGN MANUAL VOLUME 6.
- LIGHTING SCHEME TO COMPLY WITH TMR STANDARD SPECIFICATIONS MRTS91, MRTS92, MRTS94, MRTS97, MRTS201, MRTS228, MRTS256.
- CIRCUIT SCHEDULE START CURRENT TESTED BY TMR. WHEN COMMISSIONING LIGHTS, TMR ARE REQUIRED TO BE PRESENT.

UNDERGROUND CABLE SCHEDULE							
LOCATION	STATIONS FROM TO	VOLTS	EX	REC IN	CABLE SIZE/TYPE	PART NO. TOTAL LENGTH	REMARKS
MALONE ROAD	POS ERCON PILLAR 12078961 (STN 1) - SB 1 (STN 2)	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 2 - STN 3	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
KENNEDY HIGHWAY	STN 3 - STN 4	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 4 - STN 5	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 4 - STN 20	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 4 - STN 6	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 20 - STN 21	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 21 - STN 7	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 21 - STN 8	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE
	STN 21 - STN 21	400	-	X	16 mm ² 4c XLPE/HDPE	26	INSTALL NEW CABLE

POLE PLACEMENT SCHEDULE

LOCATION	STN NO	POLE		REMARKS
		EASTING	NORTHING	
KENNEDY HIGHWAY	4	336727.2665	8120359.288	NEW FOOTING TO BE INSTALLED
	5	336771.5393	8120382.586	NEW FOOTING TO BE INSTALLED
	6	336678.2188	8120358.673	NEW FOOTING TO BE INSTALLED
	7	336637.3541	8120339.469	NEW FOOTING TO BE INSTALLED
	8	336607.6359	8120306.408	NEW FOOTING TO BE INSTALLED
	3	336728.292	8120337.879	NEW FOOTING TO BE INSTALLED
	MALONE ROAD	20	336682.3799	8120336.9452
21		336644.4356	8120321.1314	CIRCULAR NEW PIT TO BE INSTALLED

PITS PLACEMENT SCHEDULE

LOCATION	STN NO	POLE		TYPE	REMARKS
		EASTING	NORTHING		
KENNEDY HIGHWAY	20	336682.3799	8120336.9452	CIRCULAR	NEW PIT TO BE INSTALLED
	21	336644.4356	8120321.1314	CIRCULAR	NEW PIT TO BE INSTALLED

Date		MARCH 2023	
Scale		NTS	
Drawn		MD	
Approved		JE	
Drawing Number		3631-L02	
Revision		2	
Project Description			
KENNEDY HIGHWAY AND MALONE ROAD INTERSECTION LIGHTING			
Drawing Title			
SCHEMATIC, CABLE, CIRCUIT, POLE & LIGHTING SCHEDULES SHEET 2 OF 2			
Civil Consultant			
 CAIRNS 07 4632 3311 TOWNSVILLE 07 4728 3026 www.spaconsulting.com.au Email Address admin@spaconsulting.com.au Ph: 07 4651 4088			
Client			
CLARKE & PRINCE PTY LTD 3 SCOTT STREET CAIRNS, QLD 4870 Ph: 07 4651 4088			
Description			
Date Code Revised Code Date Description Approved			

ARO INDUSTRIES

EMERALD CREEK SERVICE STATION TRAFFIC REPORT



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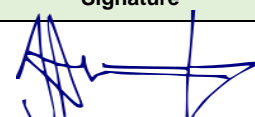
ARO Industries Pty Ltd Cairns Office: 44 McLeod Street Cairns QLD 4870 Atherton Office: 57B Mabel Street Atherton QLD 4883 Telephone: (07) 4281 6897 www.aroindustries.com.au	Title: ARO0218 - Emerald Creek Service Station Traffic Impact Assessment
	Project Manager: Andrew Armstrong Author: Andrew Armstrong
	Client: Sutariya Brothers Pty Ltd Client Contact: c/- clarke and prince Steve Cahill
	Synopsis: Traffic Impact Assessment on the proposed service station and caretakers' residence on Malone Road

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1. INTRODUCTION

This engineering report has been prepared by ARO Industries to assess the traffic impacts of a proposed Service Station located on the corner of Malone Road and the Kennedy Highway (Cairns to Mareeba). The site is Lot 15 on RP846956. It is located approximately 4km east of Mareeba township. The site is located within the jurisdiction of Mareeba Shire Council and is subject to its planning controls.



Figure 1 – Locality Plan (Courtesy of Queensland Globe)

2. EXISTING USE OF SITE

The site of the proposed Service Station is 7448m² of vacant land adjacent to the Kennedy Highway. The site is currently accessed from Malone Road.

3. ADJACENT DEVELOPMENT

The surrounding parcels of land to the East, South and West are unimproved rural lots with an agricultural rural lot to the north on the opposite side of the Highway.



Figure 2 – Site Location (Courtesy of Queensland Globe)

4. TRAFFIC ENVIRONMENT

4.1. Kennedy Highway

The Kennedy Highway is a State Controlled Road providing the link between Mareeba and Cairns. The highway consists of a two-lane, undivided road, 7.0m wide with line marking and sealed shoulders. The existing speed zone on the Kennedy Highway adjacent to the site is 100km/hr, has flat gradients approaching the site from the north-east and a gentle slope down (approximately 2%) towards south-west.

4.2. Malone Road

Malone Road is a local rural road intersecting with the Kennedy Highway. It services agricultural land and residential rural properties. The road consists of a two-lane, undivided road, 7.0m wide with centre-line marking. The existing speed zone on the Malone Road is 60km/hr.

5. TRAFFIC VOLUMES

Traffic volume data on the Kennedy Highway is available from the TMR on the Queensland data portal. The latest traffic data for the section of the Kennedy Highway (Site ID 111679) adjacent to the development site is from 2019. The data includes directional splits, hourly counts and heavy vehicle percentages.

Traffic counts for Malone Road have been sourced from Mareeba Shire Council. This survey was conducted in 2019 and only provides hour counts for the total traffic in both directions. The PM peak directional split on the Kennedy highway has been applied to Malone Road traffic counts.

A conservative linear growth rate of 2% has been applied to the background traffic (year 2019) to the year 2023. This growth rate has also been applied from the current base year (2023) for a period of 10 years into the future (2033). A summary of the estimated traffic on Kennedy Highway and Malone Road has been provided in Table 1.

Table 1a – Background traffic on the Kennedy highway

Year	AADT (%HV)	PM Peak 4:00PM – 5:00PM North-East bound	PM Peak 4:00PM – 5:00PM South-Westbound
2019	7972 (10%)	384	302
2023	8610 (10%)	415	326
2033	10204 (10%)	492	387

Table 1b – Background traffic on Malone Road

Year	AADT (%HV)	PM Peak 4:00PM – 5:00PM East bound	PM Peak 4:00PM – 5:00PM West bound
2019	933 (12%)	47	37
2023	1008 (12%)	51	40
2033	1194 (12%)	60	47

5.1. Network Capacity and Performance

In accordance with TMR's cost-benefit analysis manual, the hourly capacity of the Kennedy Highway and Malone Road adjacent to the development site is 2,450 passenger cars per hour, being a 2-lane sealed road 7m wide and corresponding with the Model Road State 9 (MRS 9). The Kennedy Highway and Malone Road operate at approximately 29% and 4% of the road capacity under the existing conditions, respectively.

6. DEVELOPMENT SITE

6.1. Traffic Generation

6.1.1. Existing use

The site is an unimproved rural property with access to Malone Road. For the purpose of the traffic impact assessment, it is assumed that there are no trips generated by the existing approved use.

6.1.2. Proposed Development

Details of the proposed service station on the site have been provided by the Client and are attached in Appendix A. The uses consist of a caretaker's residence and service station with an attached convenience store. The RTA (RMS) Guide to Traffic Generating Developments provides traffic generation rates for this use, which is presented in Table 2, below.

A 'linked' trip discount of 80% is typically adopted for service station development. Accordingly, it has been assumed that 80% of the trips associated with the proposed development will be passing trade with the remaining 20% being primary trips (i.e., new trips on the network).

Table 2 – Development trip generation

Development	Size (m ² GFA)	Trip generation rate	PM Peak trips	PM Peak Primary trips (addition to network)
Service station with Convenience Store	217	66/100m ² GFA	143	29
Caretakers Residence	N/A	1	1	1
Total			144 trips/hr	30 trips/hr

6.2. Traffic Distribution

The development traffic has been distributed commensurate with the background traffic distribution in the PM peak period. The resultant development traffic volumes at opening (2023) are shown in Figure 3c.

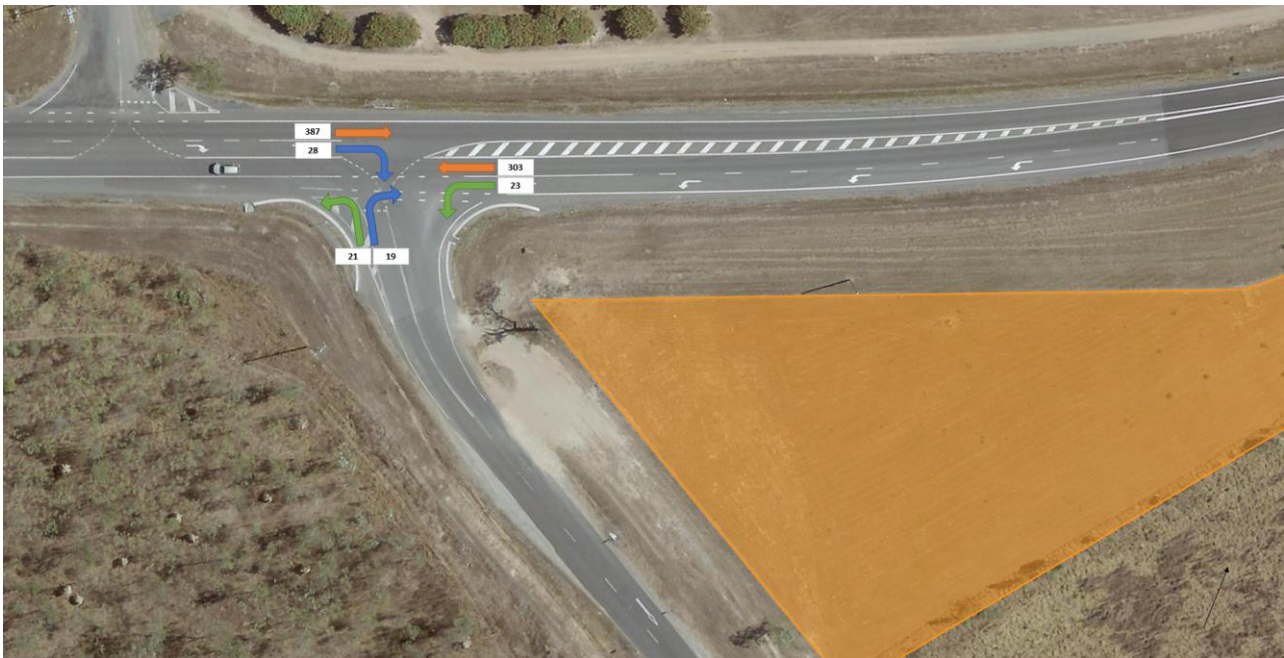


Figure 3a – Background Traffic Distribution (PM Peak)



Figure 3b –Development Traffic Distribution (PM Peak)



Figure 3c –Traffic Distribution with Development (+20% Primary Trips) (PM Peak)

7. IMPACT ON NETWORK PERFORMANCE

The most adverse impact of the development will be at the PM peak. In summary the traffic volume on the Kennedy Highway during the PM peak experiences less than a 2% increase both directions due to the development. In accordance with TMR’s Guide to Traffic Impact Assessment, the impact of the development is considered minor and does not warrant further investigation.

8. INTERSECTION PERFORMANCE

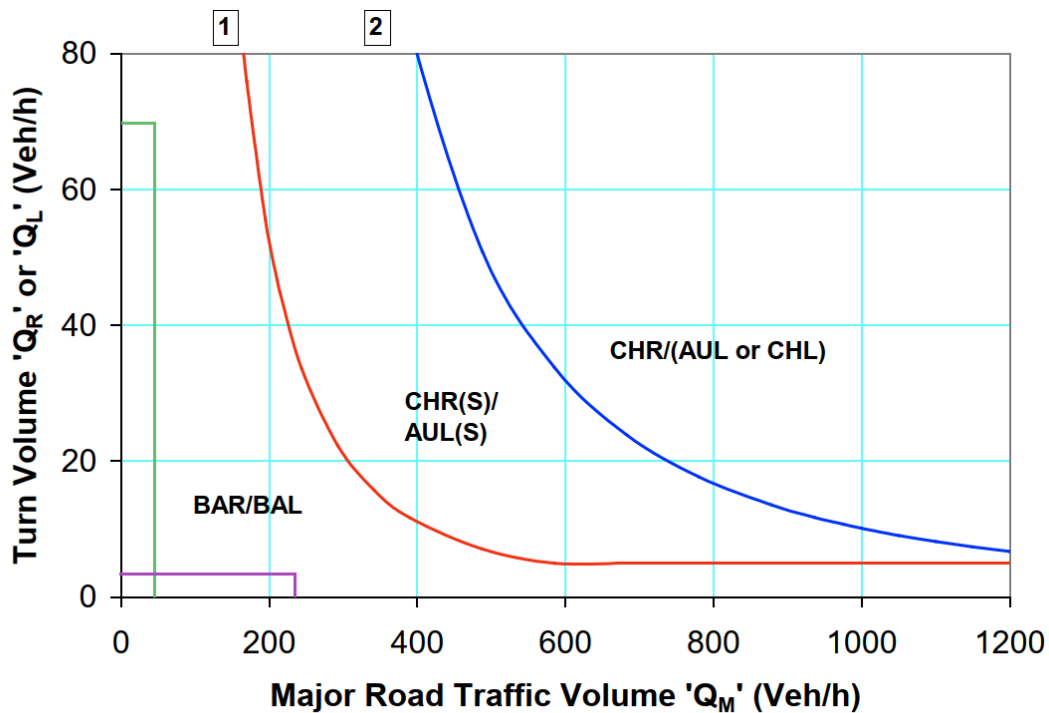
A SIDRA Intersection analysis has been performed on the intersection of the Kennedy Highway and Malone Road to determine if the intersection operates safely with the proposed development. The Right-turn queue length on the Kennedy highway is constrained by the intersection with Godfrey Road, which only allows 30 metres of queue capacity. Accordingly, the 95th percentile back of queue distance for the 2023 and 2033 development cases is 2.7 metres and 3.5 metres, respectively. The queue length takes into consideration the proportion of heavy vehicles. The SIDRA analysis output is contained in Appendix B.

9. ACCESS AND CIRCULATION

Access to the development will be from Malone Road with separate ingress and egress. The entry and exit are approximately 40m and 100m from the intersection with the Kennedy Highway, respectively.

The turn treatment for development ingress has been assessed against the Austroads Guide to Road Design Part 4, 'Warrants for turn treatment on a major road...' using the traffic distribution from section 6.2 of this report. It was determined that Basic Turn treatments (BAR/BAL) are required as demonstrated in Graph 1 below. The green line represents the Left-turn volume and the purple line represents the right turn volumes.

Graph 1: Warrants for turn treatments on major road at unsignalized intersections



(b) Design speed < 100 km/h

A basic right-turn treatment (BAR) designed in accordance with the Austroads Guide to Road Design is proposed to facilitate safe manoeuvres around vehicles queued to turn into the development. Plans for the BAR treatment are contained in Appendix C.

The bowser configuration will allow 12 passenger vehicles to fill simultaneously with an additional 6 waiting vehicle. Assuming each vehicle is stopped at a bowser for 5 minutes, the service station will have the capacity to cater for twice the peak hour traffic generation. Circulation is adequate so as not to cause cueing issues on Malone Road.

10. SIGHT DISTANCE

The site egress on Malone Road is approximately 100 metres from the Kennedy Highway and 300 metres from Bellevue Close. It is noted that the sight distance exceeds the distance to the respective intersections. The negotiation speed of the Kennedy Highway intersection is assumed to be 40km/hr, while the speed limit on Malone Road is 80km/hr. According to Austroads Guide to Road Design Part 4A, the Safe Intersection Sight Distance is 73 metres towards the Kennedy Highway intersection and 181 metres towards Bellevue Close. Therefore, the sight distance exceeds the minimum required.

11. CONCLUSION

The proposed development of Lot 15 on RP846956, consisting of a caretaker's residence and Service Station with an attached convenience store, has been assessed as having a minor impact on the surrounding transport network. In accordance with the Guide to Traffic Impact Assessment, no upgrades are required to mitigate the impact of the development on the Malone Road / Kennedy Highway Intersection.

A Basic Right-turn (BAR) treatment is required on Malone Road at the entrance to the development to allow safe passing of vehicles queued to turn right into the service station.

APPENDIX A
Site Plan

PROPERTY INFORMATION
 LOT NUMBER 15
 PLAN NUMBER RP 846956
 PARISH TIMAROO
 COUNTY MARES
 SITE AREA 7448 m²

AMENDMENTS
 P1 PRELIMINARY ISSUE 07/06/22



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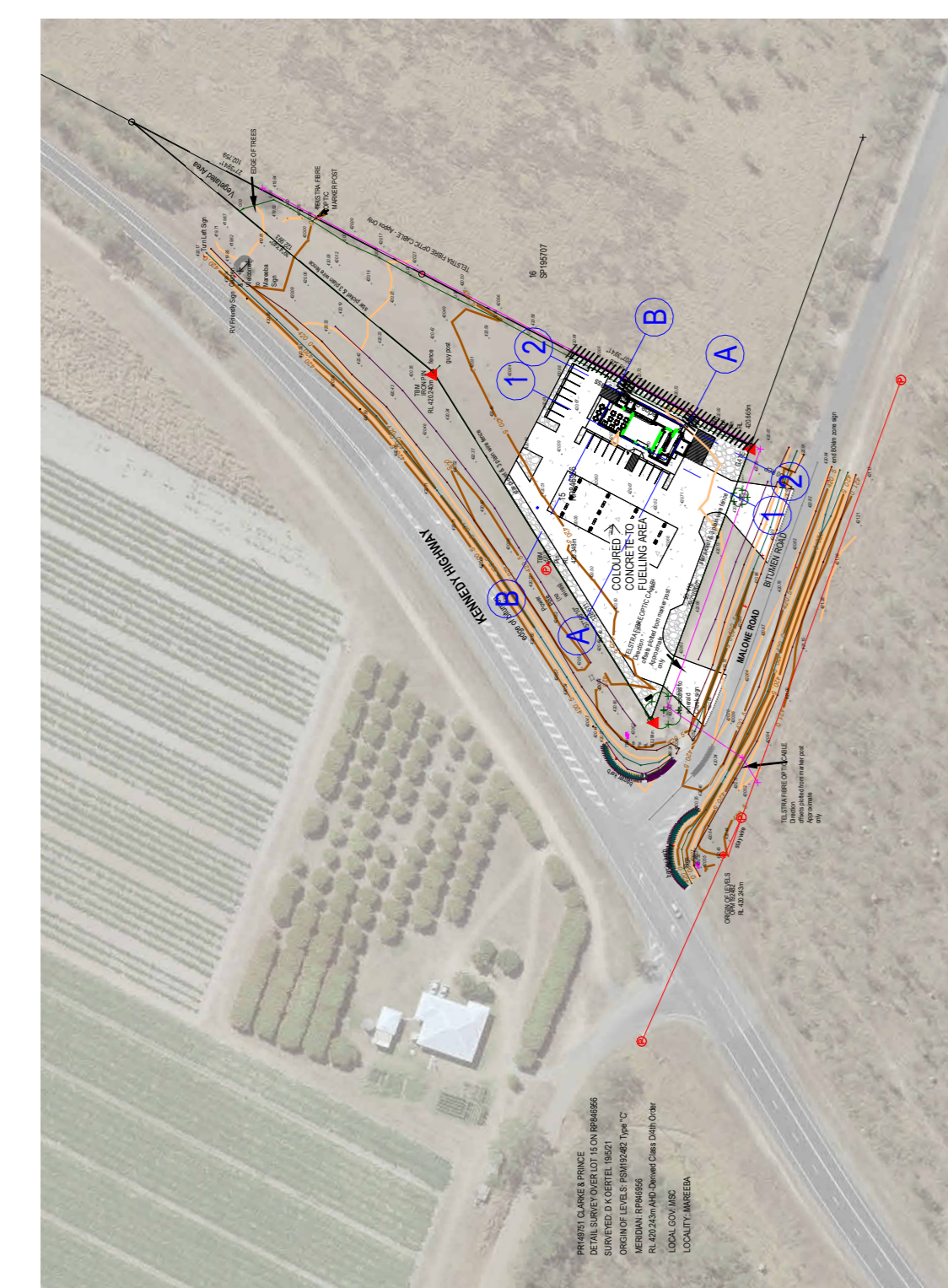
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 APPROVED BY AS Indicated
 DATE JUNE 2022

PROJECT PROPOSED SERVICE
 STATIONING
 KENNEDY HIGHWAY,
 MAREEBA
 FOR SUTARIYA BROTHERS PTY
 LTD
 SITE PLAN

DWG No: 1532-CD-A-02
 ISSUE P1
 PRELIMINARY



2 SITE PLAN
 SCALE - 1:250



1 LOCALITY PLAN
 SCALE - 1:2000

APPENDIX B
SIDRA Analysis

LANE SUMMARY

Site: 101 [2023 Development (Site Folder: General)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Lane Use and Performance													
	DEMAND FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %						[Veh	Dist] m				
SouthEast: Malonne Road													
Lane 1	115	12.0	445	0.258	100	14.5	LOS B	1.0	7.9	Full	5000	0.0	0.0
Approach	115	12.0		0.258		14.5	LOS B	1.0	7.9				
NorthEast: Kennedy Highway													
Lane 1	56	10.0	1752	0.032	100	8.1	LOSA	0.0	0.0	Short	150	0.0	NA
Lane 2	294	10.0	1850	0.159	100	0.1	LOSA	0.0	0.0	Full	5000	0.0	0.0
Approach	349	10.0		0.159		1.4	NA	0.0	0.0				
SouthWest: Kennedy Highway													
Lane 1	375	10.0	1840	0.204	100	0.2	LOSA	0.0	0.0	Full	5000	0.0	0.0
Lane 2	71	10.0	925	0.076	100	9.6	LOSA	0.3	2.3	Short	30	0.0	NA
Approach	445	10.0		0.204		1.7	NA	0.3	2.3				
Intersection	909	10.3		0.258		3.2	NA	1.0	7.9				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Approach Lane Flows (veh/h)										
SouthEast: Malonne Road										
Mov.	L2	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
From SE To Exit:	SW	NE								
Lane 1	54	61	115	12.0	445	0.258	100	NA	NA	
Approach	54	61	115	12.0		0.258				
NorthEast: Kennedy Highway										
Mov.	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
From NE To Exit:	SE	SW								
Lane 1	56	-	56	10.0	1752	0.032	100	0.0	2	
Lane 2	-	294	294	10.0	1850	0.159	100	NA	NA	
Approach	56	294	349	10.0		0.159				
SouthWest: Kennedy Highway										
Mov.	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL %	Ov. Lane No.	
From SW To Exit:	NE	SE								
Lane 1	375	-	375	10.0	1840	0.204	100	NA	NA	
Lane 2	-	71	71	10.0	925	0.076	100	0.0	1	

Approach	375	71	445	10.0	0.204
Total %HV Deg.Satn (v/c)					
Intersection	909	10.3		0.258	

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Malonne Road											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthEast Exit: Kennedy Highway											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: Kennedy Highway											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

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LANE SUMMARY

Site: 101 [2033 Development (Site Folder: General)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)
 Design Life Analysis (Final Year): Results for 10 years

Lane Use and Performance													
	DEMAND FLOWS		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
	[Total veh/h	HV %						[Veh	Dist] m				
SouthEast: Malonne Road													
Lane 1	126	12.0	345	0.366	100	19.3	LOS C	1.6	12.3	Full	5000	0.0	0.0
Approach	126	12.0		0.366		19.3	LOS C	1.6	12.3				
NorthEast: Kennedy Highway													
Lane 1	67	10.0	1752	0.038	100	8.1	LOS A	0.0	0.0	Short	150	0.0	NA
Lane 2	352	10.0	1850	0.190	100	0.2	LOS A	0.0	0.0	Full	5000	0.0	0.0
Approach	419	10.0		0.190		1.4	NA	0.0	0.0				
SouthWest: Kennedy Highway													
Lane 1	450	10.0	1838	0.245	100	0.2	LOS A	0.0	0.0	Full	5000	0.0	0.0
Lane 2	85	10.0	844	0.100	100	10.1	LOS B	0.4	3.0	Short	30	0.0	NA
Approach	534	10.0		0.245		1.8	NA	0.4	3.0				
Intersection	1080	10.2		0.366		3.7	NA	1.6	12.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Approach Lane Flows (veh/h)										
SouthEast: Malonne Road										
Mov. From SE To Exit:	L2	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	59	67	126	12.0	345	0.366	100	NA	NA	
Approach	59	67	126	12.0		0.366				
NorthEast: Kennedy Highway										
Mov. From NE To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	67	-	67	10.0	1752	0.038	100	0.0	2	
Lane 2	-	352	352	10.0	1850	0.190	100	NA	NA	
Approach	67	352	419	10.0		0.190				
SouthWest: Kennedy Highway										
Mov. From SW To Exit:	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	450	-	450	10.0	1838	0.245	100	NA	NA	
Lane 2	-	85	85	10.0	844	0.100	100	0.0	1	

Approach	450	85	534	10.0	0.245
Total %HV Deg.Satn (v/c)					
Intersection	1080	10.2		0.366	

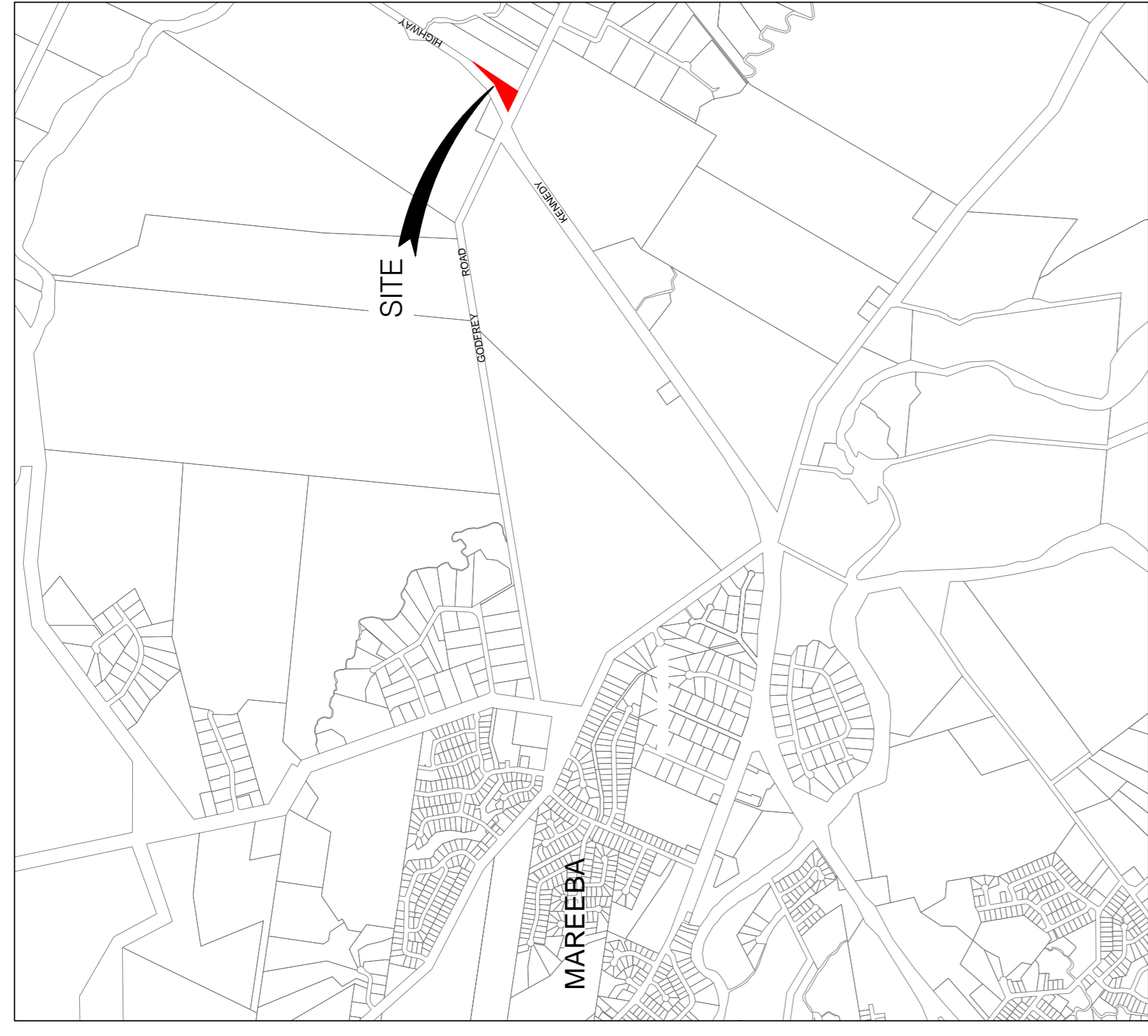
Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Malonne Road											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthEast Exit: Kennedy Highway											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: Kennedy Highway											
Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

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 Organisation: ARO INDUSTRIES PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 2 August 2022 12:37:54 PM
 Project: C:\Users\AndrewArmstrong\ARO Industries Pty Ltd\2022 Synergy Projects - TotalSynergy\ARO0218 Emerald Creek Service Station OPW3. Documentation\c. Technical\ARO0218 Emerald Creek Service Station SIDRA.sip9

APPENDIX C
Malone Road Basic Right-turn Treatment

DO NOT SCALE



LOCALITY PLAN
N15

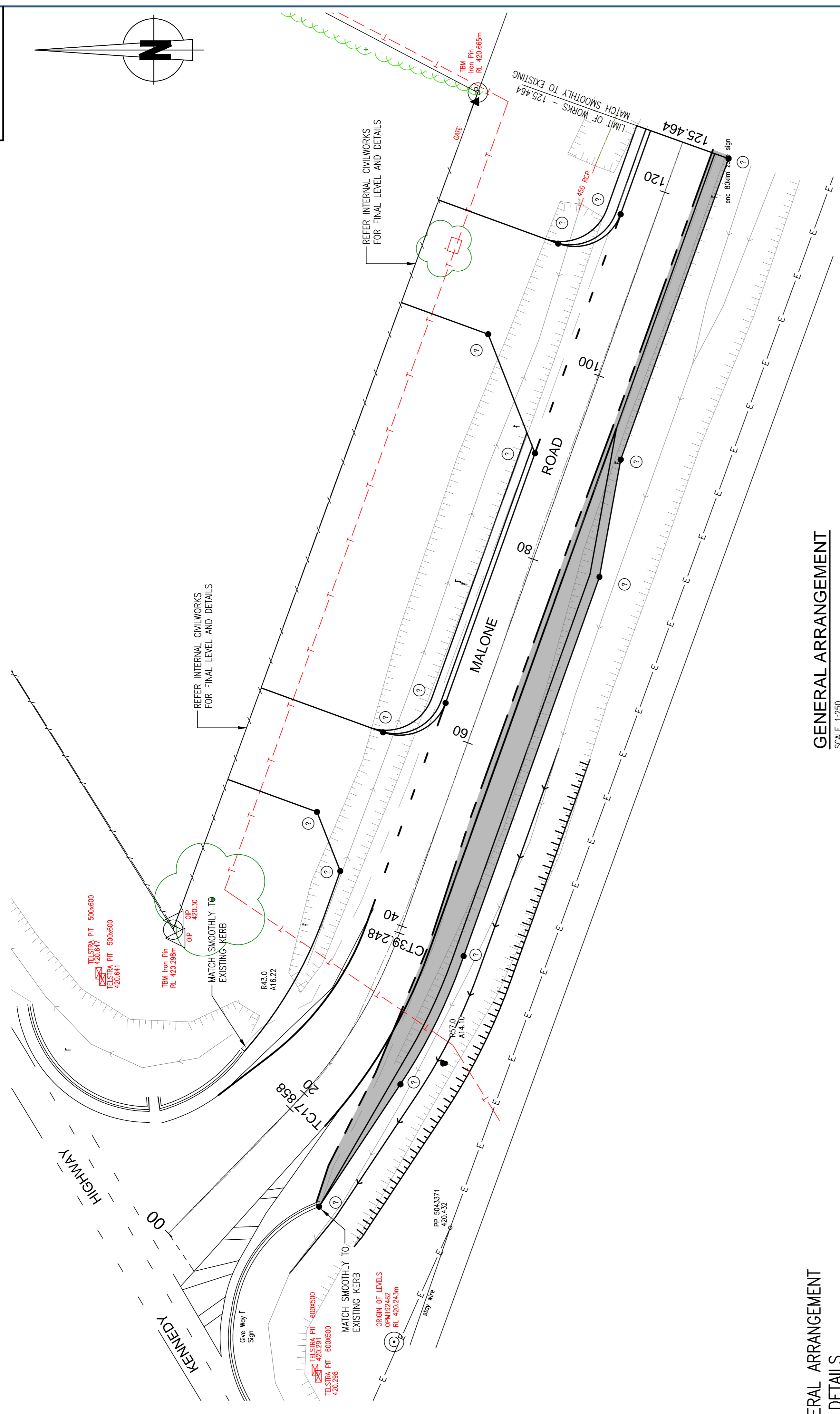
SCHEDULE OF PROJECT DRAWINGS

- ARO0218-C01 LOCALITY PLAN, DRAWING SCHEDULE AND GENERAL ARRANGEMENT
- ARO0218-C02 MALONE ROAD TYPICAL CROSS SECTIONS AND DETAILS
- ARO0218-C03 LINEMARKING SETOUT AND DETAILS

MALONE ROAD CONTROL LINE SETOUT

CHANGEP	EASTING	NORTHING	BEARING	RAD/SPIRAL	LENGTH	DEFLECT
0.000	4968.836	10000.476	134°12'48.58"			
TC17.858	4981.635	9986.023	134°12'48.58"		21.390	24°30'41.17"
28.553	4989.420	9980.449	109°42'07.41"	R = -50.000		
CT 39.248	4999.646	9976.787	109°42'07.41"			
125.464	5080.814	9947.721	109°42'07.41"			

0 2.5 5 7.5 10 12.5m
SCALE 1:250 (A1 SIZE)



GENERAL ARRANGEMENT
SCALE 1:250

LEGEND

- NATURAL SURFACE CONTOUR (0.1m INTERVAL)
- DESIGN SURFACE CONTOUR (0.1m INTERVAL)
- RADIUS
- ARC LENGTH
- OFFSET FROM ROAD CENTRELINE
- ROAD CHANGEP
- KERB SETOUT POINT

NOTES

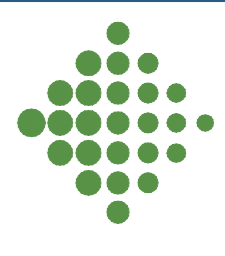
- ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH FNROC DEVELOPMENT MANUAL GUIDELINES AND SPECIFICATIONS.
- DIMENSIONS, RADII AND LEVELS SHOWN ARE TO THE EDGE OF SHOULDER.
- LEVELS ARE SHOWN EQUALLY DIVIDED BETWEEN TANGENT POINTS.
- REFER ALSO TO ROAD SETOUT DETAILS FOR COORDINATES OF ROAD CHANGES AND TANGENT POINTS.
- REFER TO THE FOLLOWING FNROC STANDARD DRAWINGS: S1015 - ACCESS CROSSOVERS

SURVEY ORIGIN

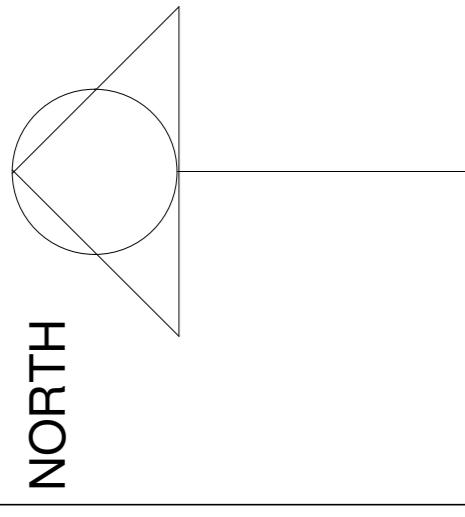
SURVEY COMPLETED BY D K OERTEL JOB No. 19/5/21
 MERIDIAN : RF846956
 PSM 192482 TYPE "C"
 EASTING : 4957.697 E
 NORTHING : 9977.332 N
 LEVEL : RL 420.243m

PRELIMINARY ISSUE

Client		SUTARIYA BROTHERS PTY LTD	
Project		EMERALD CREEK SERVICE STATION	
Title		LOCALITY PLAN, DRAWING SCHEDULE AND GENERAL ARRANGEMENT	
No.	Description	Reviewed / Approved	Date
1	PRELIMINARY ISSUE		29/07/2022
Drawing No.		ARO0218-C01	
Scale (A1 size)		1:500	
Approved		Date	
Designed		RPECO	
MS		Date	
MS		RPECO	
Drawing Check		Date	
Drawing Check		RPECO	
Scale (A1 size)		1:500	
Drawing is not to be used for construction unless approved.			



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 ABN: 49 641 461 298



Revision Number	Revision Description	Revision Date
2	PRELIMINARY	26/08/2022
1	PRELIMINARY	14/06/2022

Revision Number	Revision Description	Revision Date



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PROJECT: **Mareeba Service Station**

TITLE: **Swept Path Analysis Plan**

ISSUED FOR: **PRELIMINARY**

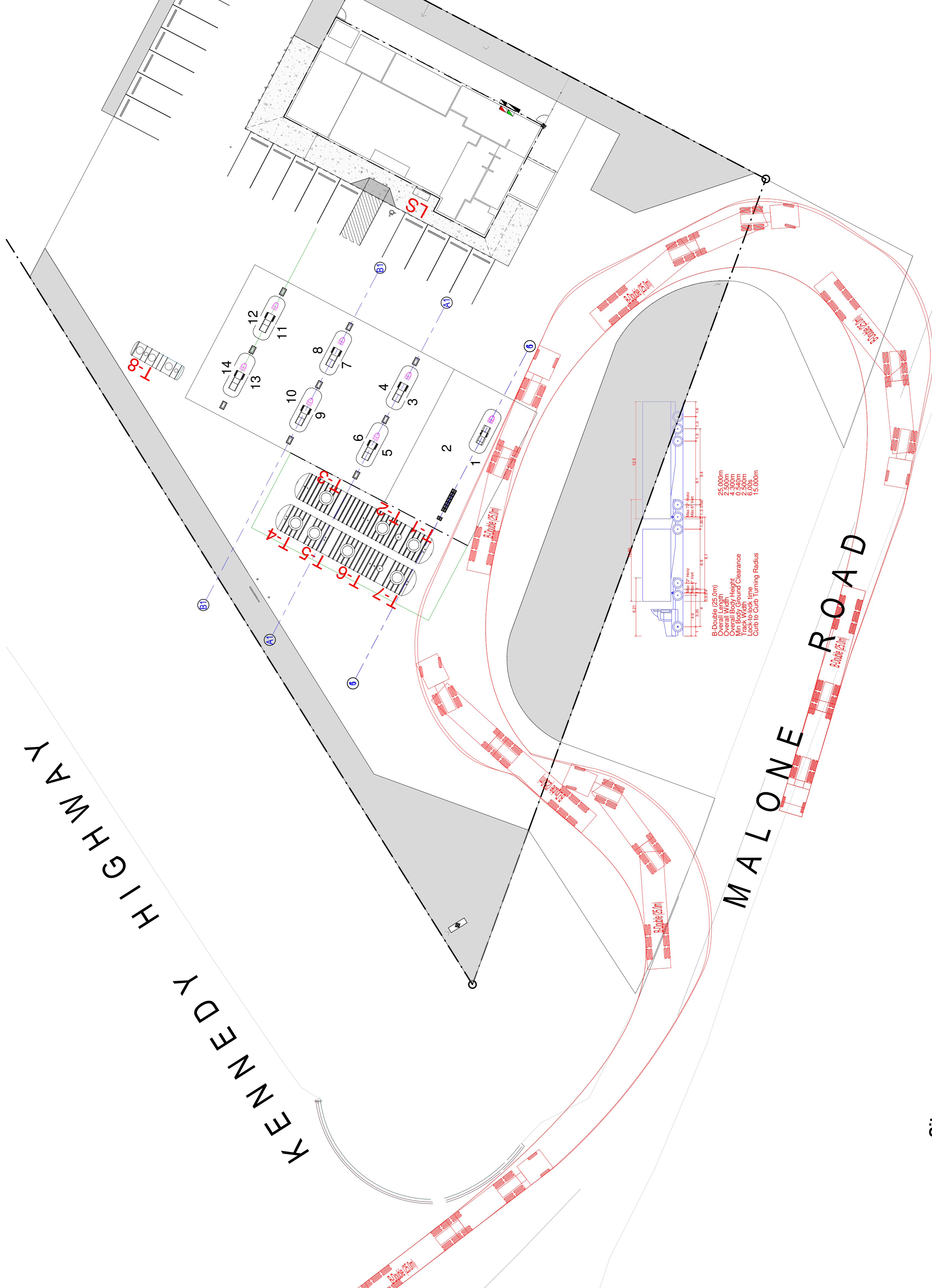
SITE ADDRESS:

KENNEDY HIGHWAY, MAREEBA, QLD

CLIENT:

SUTARIYA BROTHERS PTY LTD

DRAWN BY	CHECKED BY	DATE
TM	VM	26/08/2022
SCALE (@ A1)	PROJECT NUMBER	
1 : 200	20212211	
DRAWING NUMBER	REV	
A1-FSSP-MRB	2	



KENNEDY HIGHWAY

MALONE ROAD