

# DA Form 1 – Development application details

Approved form (version 1.6 effective 2 August 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) (individual or company full name)	Elite D&C Projects Pty Ltd C/- DEQ Consulting Engineers
Contact name (only applicable for companies)	Nathan Trotter
Postal address (P.O. Box or street address)	5 Parkview St
Suburb	Milton
State	QLD
Postcode	4064
Country	
Contact number	(07) 3367 0211
Email address (non-mandatory)	<a href="mailto:civil@deq.com.au">civil@deq.com.au</a>
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	26.0011

### 1.1) Home-based business

Personal details to remain private in accordance with section 264(6) of *Planning Act 2016*

### 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
		12	Reynolds Street	Mareeba
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	4880	5	M356201	Mareeba Shire Council
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):*

Veterinary clinic

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 <sup>2</sup> ) <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?**

--

**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> |



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

\$900,000

## PART 4 – ASSESSMENT MANAGER DETAILS

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

Mareeba Shire Council

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



Queensland  
Government

- 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 type="checkbox"/> Approval <input type="checkbox"/> Development application			
<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](http://www.qld.gov.au). An ERA requires an environmental authority to operate. See [www.business.qld.gov.au](http://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](http://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](http://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](http://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](http://www.resources.qld.gov.au) for further information.

DA templates are available from [planning.statedevelopment.qld.gov.au](http://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](http://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](http://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](http://www.resources.qld.gov.au) and [www.business.qld.gov.au](http://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](http://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](http://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](http://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](http://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](http://www.planning.statedevelopment.qld.gov.au) for information regarding assessment of Queensland heritage places.

Name of the heritage place:

Place ID:

### **Decision under section 62 of the Transport Infrastructure Act 1994**

23.14) 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**

23.15) 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](http://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

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

Yes

Relevant plans of the development are attached to this development application

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

Yes

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



Queensland  
Government

**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	

# PROPOSED DEVELOPMENT 12 REYNOLDS STREET MAREEBA

## COORDINATION NOTES

1. REFER ARCHITECT'S DRAWINGS FOR BUILDING AND CARPARK SETOUT.
2. REFER HYDRAULICS CONSULTANT'S DRAWINGS FOR DOWNPIPE CONNECTIONS AND INTERNAL SEWER RETICULATION.
3. REFER ELECTRICAL CONSULTANT'S DRAWINGS FOR ELECTRICAL RETICULATION LAYOUT.
4. REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPE AND SOIL STABILISATION DETAILS.
5. CONTRACTOR TO CONDUCT A BEFORE YOU DIG AUSTRALIA SEARCH PRIOR TO COMMENCEMENT OF WORKS ON SITE TO CONFIRM THE LOCATION OF ALL EXISTING SERVICES. ENGINEER TO BE CONTACTED OF ANY CONFLICTS FOR RESOLUTION.
6. COUNCIL SPECIFICATIONS AND STANDARD DRAWINGS ARE AVAILABLE TO DOWNLOAD FOR FREE FROM THE COUNCIL WEBSITE.

## STORMWATER DRAINAGE NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR IS TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH THE IDENTIFIED EXISTING SERVICES PRIOR TO ANY TRENCH EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVICE OF ANY REDESIGN REQUIREMENTS.
2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT COUNCIL STANDARD SPECIFICATIONS AND DRAWINGS, UNLESS NOTED OTHERWISE.
3. ALL UPVC STORMWATER PIPES SHALL BE CLASS SN6, RCP PIPES SHALL BE CLASS 2, FRC PIPES SHALL BE CLASS 1 UNLESS NOTED OTHERWISE.
4. ROOFWATER DRAINAGE TO CONNECT INTO PITS AS REQUIRED. FOR ROOFWATER DRAINAGE DETAILS REFER HYDRAULICS CONSULTANT'S DRAWINGS.
5. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
6. PROVIDE 'AS CONSTRUCTED' SURVEY OF ALL STORMWATER DRAINAGE INFRASTRUCTURE.



### SITE PLAN

NOT TO SCALE  
17°00'23.5"S 145°25'1.7"E

**REAL PROPERTY DESCRIPTION**  
LOT 5 ON M356201  
LOCAL AUTHORITY:  
MAREEBA SHIRE COUNCIL

### DRAWING REGISTER

DRG	DRAWING TITLE
C.01	DRAWING REGISTER AND NOTES
C.02	LAYOUT PLAN
C.03	BULK EARTHWORKS PLAN
C.04	STORMWATER CATCHMENT PLAN AND LONGITUDINAL SECTIONS
C.05	STORMWATER CALCULATIONS
C.06	BIORETENTION BASIN DETAILS
C.07	BIORETENTION BASIN CROSS SECTIONS
C.08	ESC MANAGEMENT NOTES AND DETAILS
C.09	ESC MANAGEMENT PLAN
C.10	CONSTRUCTION DETAILS
C.11	CONCRETE PAVEMENT AND JOINT PLAN
C.12	SEWERAGE DESIGN NOTES AND DETAILS
C.13	SEWERAGE DESIGN PLAN
C.14	WATER SERVICE DESIGN NOTES AND DETAILS
C.15	WATER SERVICE DESIGN PLAN

## ROADWORKS NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK. ALL EXISTING SERVICES AND STRUCTURES ARE TO MAINTAINED IN GOOD ORDER FOR THE DURATION OF THE CONTRACT. ANY COSTS ASSOCIATED WITH REPAIRING DAMAGE TO EXISTING SERVICES SHALL BE PAID FOR BY THE CONTRACTOR.
2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT COUNCIL STANDARD SPECIFICATIONS.
3. THE CONTRACTOR SHALL ERECT TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE RELEVANT SPECIFICATIONS.
4. ALL DIMENSIONS ON THE DRAWING ARE IN METRES UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
6. ALL LEVELS ARE TO AHD (REFER LEVEL DATUM).
7. ALL KERB SETOUT IS TO NOMINAL FACE OF KERB. PROPOSED LEVELS ARE PAVEMENT LEVELS.
8. REFER PAVEMENT NOTES FOR DETAILS OF FLEXIBLE PAVEMENT CONSTRUCTION.



**NOTE:** LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF EXISTING SERVICES SHALL BE REPORTED TO THE SUPERINTENDENT.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

CONTRACTOR TO ENSURE THAT NO DUST EMISSIONS EXTEND BEYOND THE BOUNDARY OF THE SITE, INCLUDING DUST FROM CONSTRUCTION VEHICLES ENTERING AND LEAVING SITE

DEWATERING ACTIVITIES DURING CONSTRUCTION SHALL DO SO IN ACCORDANCE WITH THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION ACT 1994 AND ENVIRONMENTAL PROTECTION REGULATION 2008

CONTRACTOR TO REPAIR ANY DAMAGE TO KERB AND CHANNEL, FOOTWAY, FOOTPATH, ROAD PAVEMENT OR SERVICES CAUSED DURING CONSTRUCTION TO THE SATISFACTION OF COUNCIL

ALL RELEVANT SERVICE AUTHORITIES MUST BE NOTIFIED AND APPROVE CONSTRUCTION ACTIVITIES

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
22.01.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au  
E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD

MSC REF:

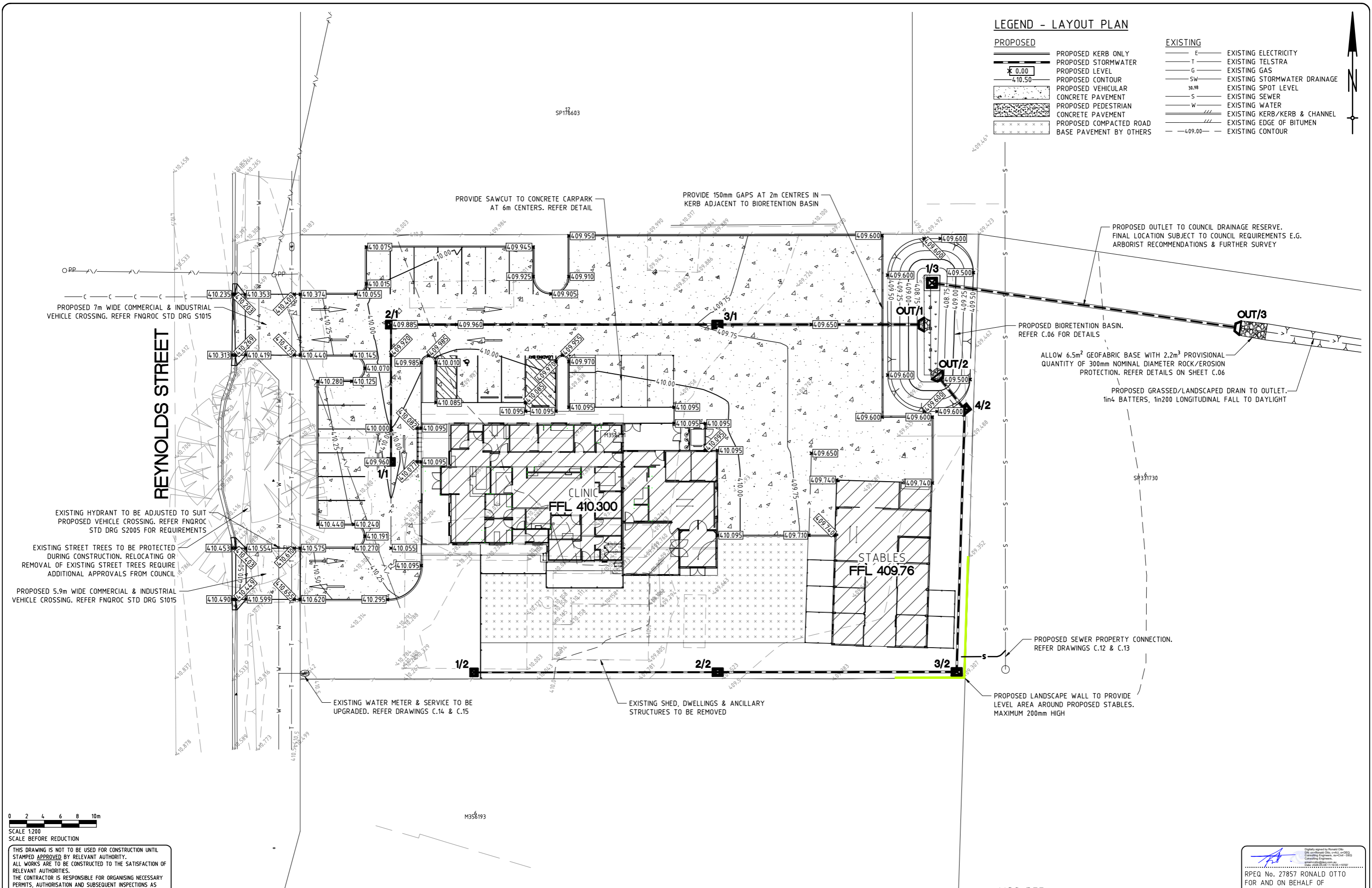
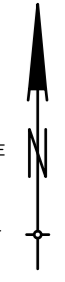
CIVIL SITEWORKS  
DRAWING REGISTER AND NOTES

Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ  
Consulting Engineers, ou=DEQ  
Consulting Engineers, email=ronald.otto@deq.com.au  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 1 OF 15
26.0011	C.01
JOB No.	DRG. No.
CHECKED	DATUM : AHD

**LEGEND - LAYOUT PLAN**

PROPOSED		EXISTING	
	PROPOSED KERB ONLY		EXISTING ELECTRICITY
	PROPOSED STORMWATER		EXISTING TELSTRA
	PROPOSED LEVEL		EXISTING GAS
	PROPOSED CONTOUR		EXISTING STORMWATER DRAINAGE
	PROPOSED VEHICULAR CONCRETE PAVEMENT		EXISTING SPOT LEVEL
	PROPOSED PEDESTRIAN CONCRETE PAVEMENT		EXISTING SEWER
	PROPOSED COMPACTED ROAD BASE PAVEMENT BY OTHERS		EXISTING WATER
			EXISTING KERB/KERB & CHANNEL
			EXISTING EDGE OF BITUMEN
			EXISTING CONTOUR



0 2 4 6 8 10m  
SCALE 1:200  
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD

MSC REF:  
**CIVIL SITEWORKS**  
LAYOUT PLAN

RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

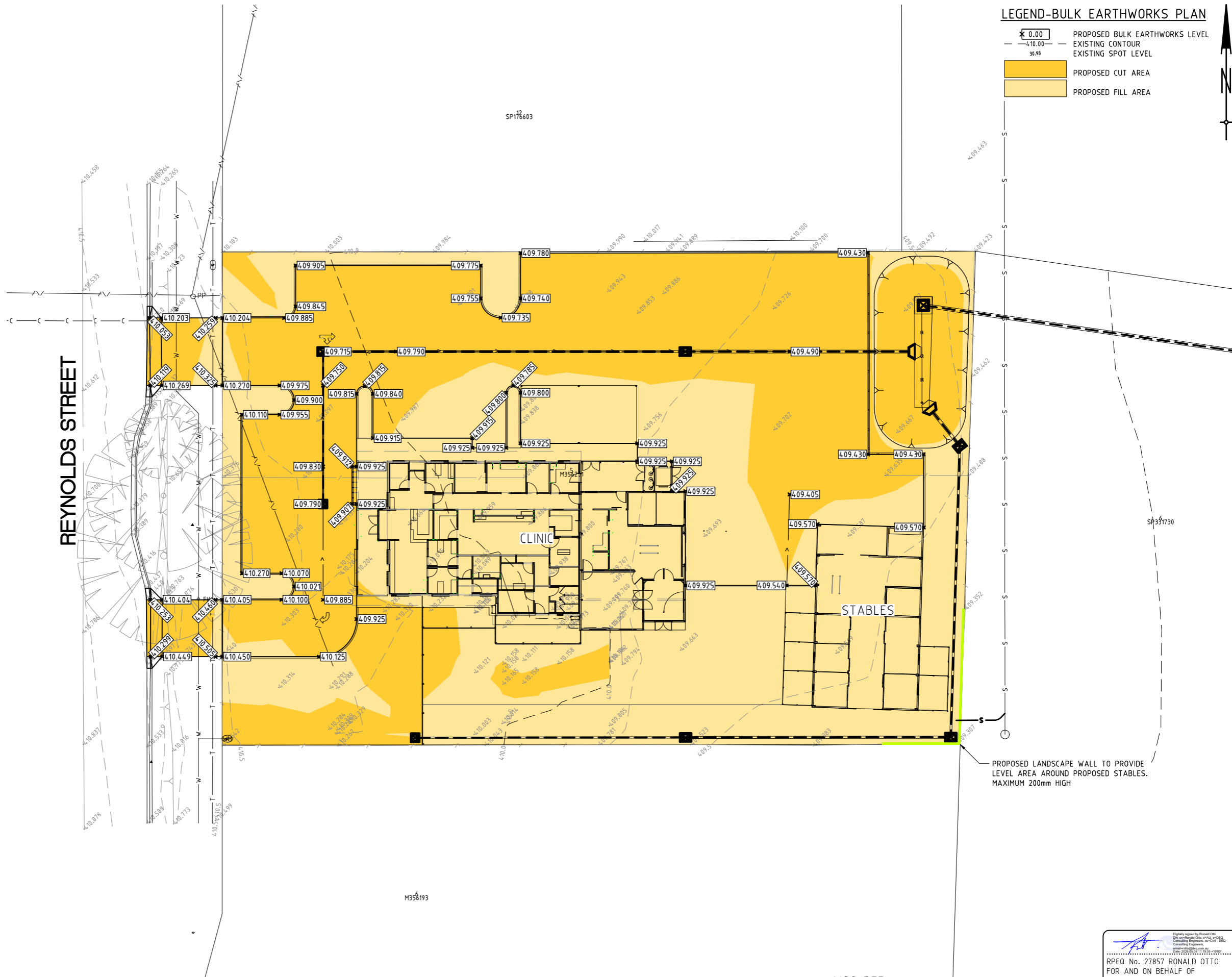
SCALE A5 SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 2 OF 15
<b>26.0011</b>	<b>C.02</b>
JOB No.	DRG. No.
CHECKED	DATUM: AHD

**EARTHWORKS NOTES**

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK. ALL EXISTING SERVICES AND STRUCTURES ARE TO BE MAINTAINED IN GOOD ORDER FOR THE DURATION OF THE CONTRACT. ANY COSTS ASSOCIATED WITH REPAIRING DAMAGE TO EXISTING SERVICES SHALL BE PAID FOR BY THE CONTRACTOR
2. THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
3. ALL LEVELS ARE TO AHD (UNO) REFER SURVEYOR'S LEVEL DATUM.
4. THE SITE OF THE PROPOSED WORKS SHALL BE CLEARED OF ALL UNDESIRABLE MATTER. THIS SHALL INCLUDE DEAD TIMBER, GRASS, OLD FOUNDATIONS, CONCRETE, REDUNDANT MASONRY REMAINS, GARBAGE, DEBRIS AND ALL OTHER OBSTRUCTIONS TO THE WORKS. HOLES LEFT BY THE REMOVAL OF ANY OF THE ABOVE SHALL BE FILLED WITH APPROVED COMPACTED MATERIAL WITH PROPERTIES AT LEAST SIMILAR TO THE INSITU SOILS.
5. CLEARED MATERIAL AND EARTHWORKS SPOIL SHALL BE REMOVED FROM SITE.
6. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY ALL EARTHWORKS AND CLEARING OPERATIONS.
7. SITE EARTHWORKS GENERALLY, SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3798-2007, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS, UNO.
8. TOPSOIL, WHERE ENCOUNTERED SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OPERATION. THE LOCATION OF THE STOCKPILE ON SITE SHALL BE AS DIRECTED BY THE SUPERINTENDENT. TOPSOIL TO BE RESPREAD TO LANDSCAPE AREAS AFTER CIVIL WORKS ARE COMPLETE. SURPLUS TOPSOIL TO BE REMOVED FROM SITE.
9. IF DURING EARTHWORKS OPERATIONS UNSUITABLE MATERIAL IS ENCOUNTERED, AS DEFINED IN SECTION 4 OF AS3798-2007, THEN PRIOR TO ANY FILLING OPERATION THIS MATERIAL SHALL BE REMOVED AND REPLACED, AS DIRECTED BY THE SUPERINTENDENT, WITH AN APPROVED SUITABLE MATERIAL.
10. FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING STANDARD, WHERE DRY DENSITY RATIO IS DETERMINED IN ACCORDANCE WITH AS1289, USING STANDARD COMPACTION METHODS:
  - 100% DRY DENSITY RATIO FOR ROAD SUBGRADE
  - 98% DRY DENSITY RATIO FOR COMMERCIAL BUILDING PADS
  - 95% DRY DENSITY RATIO FOR RESIDENTIAL BUILDING PADS
  - 95% DRY DENSITY RATIO FOR ALL AREAS OTHER THAN THE ROADWAY AND BUILDING PADS
11. THROUGHOUT THE EARTHWORKS OPERATION THE CONTRACTOR IS TO ENSURE THAT THE SITE IS SELF DRAINING, AND THAT WATER IS NOT ALLOWED TO COLLECT ON THE SUBGRADE. DAMAGE RESULTING FROM THE EXPOSURE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12. EARTHWORKS COMPACTION TO BE MONITORED BY FIELD DENSITY TESTS CARRIED OUT IN ACCORDANCE WITH REQUIREMENTS OF AS3798-2007, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. ALL EARTHWORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS3798-2007 APPENDIX B, GEOTECHNICAL TESTING AUTHORITY, LEVEL 1 REQUIREMENTS INCLUDING RPEQ CERTIFICATION BY GITA.
13. ALL ACCESS ROADS TO AND FROM SITE TO BE MAINTAINED FREE OF ALL FILL MATERIAL AND CLEANED AS NECESSARY.
14. ALL ADJOINING PROPERTIES AND ROADS TO BE PROTECTED FROM STORMWATER PONDING OR NUISANCE RESULTING FROM EARTHWORKS OPERATIONS.
15. ALL VEHICLES EXITING THE SITE ARE TO BE CLEANED AND TREATED TO PREVENT ANY MATERIAL BEING TRACKED OR DEPOSITED ON PUBLIC ROADS. REFER EROSION AND SEDIMENT CONTROL PLAN FOR TRUCK SHAKER DETAIL.
16. ALL FILL MATERIAL PLACED ON THE SITE TO BE NATURAL EARTH AND ROCK; FREE OF CONTAMINANTS (REFER SEC. 11 OF EPA 1994), NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. FILL MATERIAL IS TO COMPLY WITH CLAUSE 4.3 OF AS3798-2007 GUIDELINES FOR EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
17. BULK EARTHWORKS LEVELS AT BUILDING PLATFORMS BASED ON PRELIMINARY FOUNDATION DESIGNS. REVISED LEVELS TO SUIT FINAL DESIGN SHOULD BE CONFIRMED PRIOR TO FINAL TRIM OF BUILDING PLATFORMS.
18. ALL AREAS DISTURBED BY EARTHWORKS ARE TO BE STABILISED WITHIN 14 DAYS OF COMPLETION OF EARTHWORKS.

**LEGEND-BULK EARTHWORKS PLAN**

- PROPOSED BULK EARTHWORKS LEVEL
- EXISTING CONTOUR
- EXISTING SPOT LEVEL
- PROPOSED CUT AREA
- PROPOSED FILL AREA



SCALE 1:200  
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

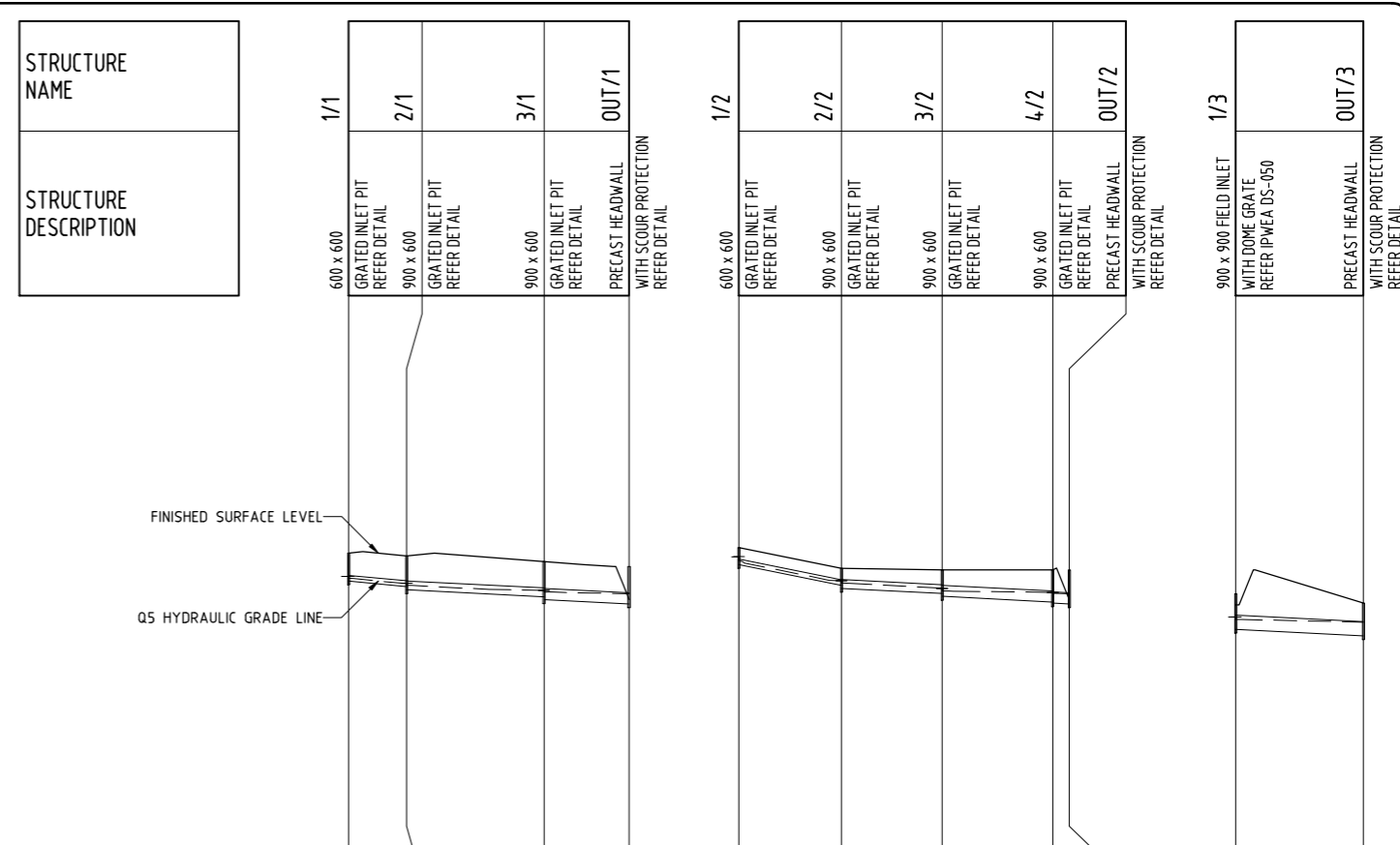
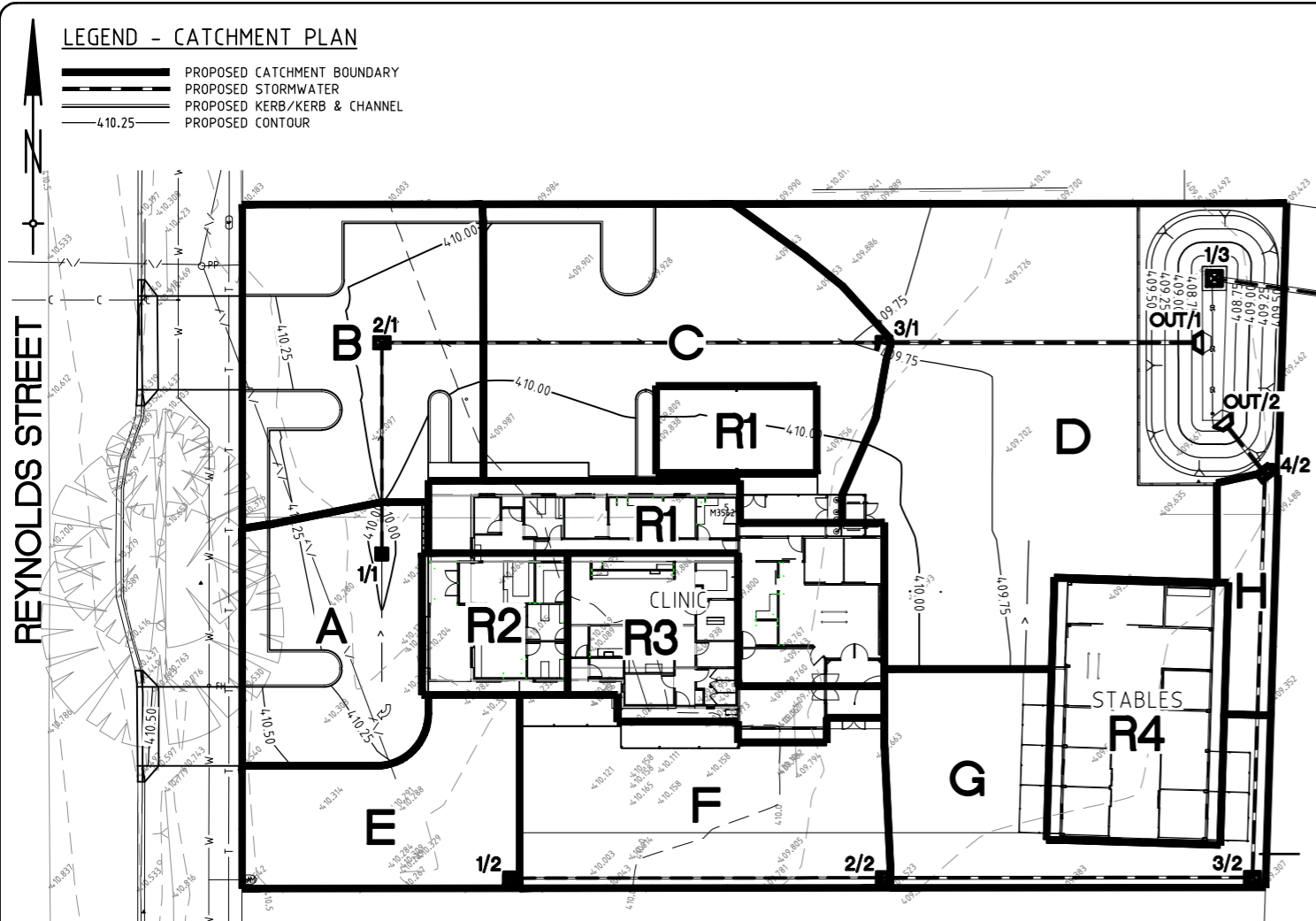
**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD

MSC REF:  
**CIVIL SITWORKS**  
BULK EARTHWORKS PLAN

RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

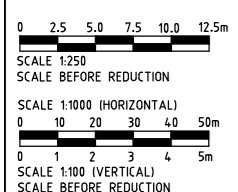
SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 3 OF 15
<b>26.0011</b>	<b>C.03</b>
JOB No.	DRG. No.
CHECKED	DATUM : AHD



PIPE SIZE (mm) (Class)	LINE 1				LINE 2				LINE 3							
	1/1	2/1	3/1	OUT/1	1/2	2/2	3/2	4/2	OUT/2	1/3	OUT/3					
PIPE GRADE %	0.95%	0.51%	0.52%		2.03%	0.51%	0.53%	0.66%		0.52%						
PIPE SLOPE 1 in X	105.38	197.63	193.55		49.18	196.42	188.73	151.11		193.70						
FULL PIPE FLOW VELOCITY (m/s)	0.49	0.53	0.73		0.66	0.69	0.57	0.71		0.87						
PART FULL FLOW VELOCITY (m/s)	1.01 (0.88 1y)	1.01 (0.90 1y)	1.23 (1.12 1y)		1.44 (1.29 1y)	1.07 (0.97 1y)	1.17 (1.06 1y)	1.35 (1.21 1y)		1.45 (1.43 1y)						
WATER LEVEL IN STRUCTURE	409.329	409.136	408.949	408.850	409.858	409.206	408.997	408.890	408.850	408.218	408.075					
HYDRAULIC GRADE LEVEL	409.329	409.136	408.949	408.850	409.805	409.206	408.997	408.850	408.850	408.218	408.075					
PIPE FLOW (Cumecs)	0.009	0.024	0.053		0.012	0.032	0.041	0.052		0.102						
PIPE CAPACITY AT GRADE (Cumecs)	0.019	0.045	0.085		0.028	0.046	0.086	0.096		0.160						
DEPTH TO INVERT	0.760	0.935	0.962	1.030	0.460	0.465	0.545	0.680	0.900	0.970	0.900					
INVERT LEVEL OF DRAIN	409.200	409.050	408.960	408.770	409.650	409.080	409.000	408.860	408.600	407.880	407.700					
DESIGN SURFACE LEVEL	409.960	409.885	409.732	409.600	410.110	409.545	409.500	409.500	409.500	408.850	408.600					
ROAD CHAINAGE (Offset)																
RUNNING CHAINAGE	0.000	15.810	37.551	53.361	76.586	0.000	28.031	27.501	55.532	30.198	85.730	4.533	90.263	0.000	34.865	34.865

**CATCHMENT TABLE**

CATCHMENT	AREA (Ha)	PIT
A	0.0255	1/1
B	0.0405	2/1
C	0.0508	3/1
D	0.0950	1/3
E	0.0229	1/2
F	0.0347	2/2
G	0.0286	3/2
H	0.0070	4/2
R1	0.0338	3/1
R2	0.0115	1/2
R3	0.0191	2/2
R4	0.0255	4/2



THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au

**PROPOSED DEVELOPMENT**  
12 REYNOLDS STREET  
MAREEBA

**ELITE D&C PROJECTS PTY LTD**

MSC REF:  
**CIVIL SITWORKS**  
STORMWATER CATCHMENT PLAN  
AND LONGITUDINAL SECTIONS

Digitally signed by Ronald Otto  
(DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=Consulting Engineers, email=ronald.otto@deq.com.au)

RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN DATE JAN 2026  
CONTACT: NT SHEET 4 OF 15  
**26.0011** **C.04** **A**  
JOB No. DRG. No. AMMT.  
CHECKED DATUM: AHD



## STORMWATER MANAGEMENT PLAN - DESIGN DETAILS

### 1. SURFACE TREATMENT

MULCH - STONES / PEBBLES / NON-FLOATING ORGANIC MULCH (50mm DIAMETER MIN) OR APPROVED EQUIVALENT.  
 PLANTING - PLANT SPECIES AND DENSITIES SHALL BE SELECTED FOR BIORETENTION SYSTEMS.  
 NATIVE TUBES 50mm WIDE x 125mm DEEP (TYP.).  
 PLANTING RATE IN ACCORDANCE WITH LOCAL AUTHORITY LANDSCAPING GUIDELINES & APPROVED LANDSCAPE PLAN WHERE APPLICABLE.

### 2. FILTER LAYERS

FILTER LAYER - 15.4m<sup>2</sup> 'BIORETENTION FILTER MEDIA' AREA  
 400mm DEEP 'BIORETENTION FILTER MEDIA'.  
 SATURATED HYDRAULIC CONDUCTIVITY (K<sub>sat</sub>) MODEL TARGET = 180mm/h.  
 2-6% CLAY & SILT (PARTICLES <0.05mm).  
 3-5% ORGANIC CONTENT. pH 5.5-7.5.  
 <3% FINE GRAVEL (PARTICLES 2.0-3.4mm).  
 85-92% WELL-GRADED SAND:  
 VERY FINE (0.05-0.15mm) 5-30%  
 FINE (0.15-0.25mm) 10-30%  
 MEDIUM TO COURSE (0.25-1.0mm) 40-60%  
 COARSE (1.0-2.0mm) 7-10%  
 TOTAL NITROGEN (TN) CONTENT <1000mg/kg, ORTHOPHOSPHATE CONTENT <80mg/kg.  
 ELECTRICAL CONDUCTIVITY (EC) <1.2dS/m

TRANSITION LAYER - 100mm DEEP CLEAN, WELL-GRADED SAND BRIDGING LAYER  
 BETWEEN 'BIORETENTION FILTER MEDIA' & DRAINAGE LAYER.  
 <2% FINES. 1mm COARSE SAND NOMINAL DIAMETER AND PARTICLE SIZE DISTRIBUTION SHALL MEET 'BRIDGING CRITERIA' (SMALLEST 15% OF SAND PARTICLES BRIDGE WITH LARGEST 15% OF FILTER MEDIA PARTICLES)  
 BRIDGING CRITERIA: D15 (TRANSITION LAYER) ≤ 5 x D85 (FILTER MEDIA)

### 3. DRAINAGE LAYER

GRAVEL LAYER - 50mm (MIN.) DEEP LAYER FREE DRAINING GRAVEL ABOVE SUBSOIL DRAIN (UNDERDRAINAGE)  
 200mm (MIN.) DEEP LAYER FREE DRAINING GRAVEL BELOW SUBSOIL DRAIN (UNDERDRAINAGE)  
 CLEAN, FINE GRAVEL / WASHED SCREENINGS. Ø2-5mm NOMINAL DIAMETER AND PARTICLE SIZE DISTRIBUTION SHALL MEET 'BRIDGING CRITERIA' (SMALLEST 15% OF GRAVEL PARTICLES BRIDGE WITH LARGEST 15% OF TRANSITION LAYER PARTICLES)  
 BRIDGING CRITERIA: D15 (GRAVEL LAYER) ≤ 5 x D85 (TRANSITION LAYER)

SUBSOIL DRAIN - 100Ø PVC SCJ SLOTTED WALL TO AS1254. (NO SOCK) FLAT - NO FALL. (UNDERDRAINAGE) SLOT NOTE: ENSURE 85th PERCENTILE PARTICLE IN THE DRAINAGE LAYER (D85) IS GREATER THAN PERFORATED PIPE / SLOT DIAMETER

SUBSOIL DRAINAGE SPACING - 1.0m CENTERS U.N.O  
 SUBSOIL DRAINAGE CLEANOUT - uPVC VERTICAL SECTION (UNPERFORATED) PIPES AND CAPPED (PROVIDED TO ALL SUBSOIL DRAINAGE LINES).

GEOFABRIC - BIDIM OR APPROVED EQUAL TO UNDERSIDE OF GRAVEL AND SIDES OF BASIN.  
 DO NOT PLACE GEOFABRIC BETWEEN FILTER LAYERS.

### 4. MATERIALS TESTING & CERTIFICATION

- GRADING OF FILTER LAYER (NATA LAB CERTIFICATION FROM SUPPLIER)  
 - GRADING OF TRANSITION LAYER (NATA LAB CERTIFICATION FROM SUPPLIER)  
 - GRADING OF GRAVEL LAYER (NATA LAB CERTIFICATION FROM SUPPLIER)  
 - SATURATED HYDRAULIC CONDUCTIVITY AS4419-2003 - APPENDIX H SOIL PERMEABILITY (5 SAMPLES MIN)

CONTRACTOR SHALL PROVIDE COPY OF DELIVERY DOCKETS & RECEIPTS OF SUPPLIED PRODUCTS AND MATERIALS.

HEALTHY WATERWAYS BIORETENTION BASIN CONSTRUCTION AND ESTABLISHMENT SIGN OFF FORMS ARE TO BE USED THROUGHOUT CONSTRUCTION.

## STORMWATER MANAGEMENT PLAN - CONSTRUCTION STAGES

### 1. EARTHWORKS

PROVIDE ESC MANAGEMENT IN ACCORDANCE WITH ESC MANAGEMENT PLANS & DETAILS TO PREVENT SEDIMENT RUNOFF FROM THE SITE. EXCAVATE BASIN TO 0.5M MINIMUM DEPTH FOR USE AS TEMPORARY SEDIMENT BASIN.

### 2. CARPARK CONSTRUCTION - FUNCTIONAL INSTALLATION

PROVIDE ESC MANAGEMENT TO PREVENT SEDIMENT RUNOFF FROM THE SITE. EXCAVATE BASINS AND PLACE GRAVEL LAYER WITH SLOTTED PVC PIPES, FILTER LAYERS & MULCH LAYER OF BIORETENTION BASINS. PROVIDE TEMPORARY SILT FENCE AROUND BIORETENTION BASINS TO RESTRICT ACCESS AND PROTECT FROM DAMAGE AND SEDIMENT LOSS.

### 3. OPERATIONAL ESTABLISHMENT

PLANTING AND CLEAN UP OF MULCH LAYER TO BE UNDERTAKEN AFTER BUILDING & CARPARK COMPLETE. TEMPORARY SILT FENCE TO BE REMOVED WHEN LANDSCAPING ESTABLISHED. FILTER BASKET TO BE FITTED TO EXISTING GULLY PIT. LANDSCAPE WATERING IN ACCORDANCE WITH WATER RESTRICTION GUIDELINES IN FORCE AT TIME OF WATERING UNTIL LANDSCAPING ESTABLISHED. LITTER & SEDIMENT TO BE REMOVED FROM BASINS.

### 4. OFF MAINTENANCE

PRIOR TO THE 'OFF MAINTENANCE' INSPECTION, BASINS TO BE WEEDED AND LITTER & SEDIMENT TO BE REMOVED. PLANTING TO BE INSPECTED AND REPLACED WHERE REQUIRED.

## SQID MAINTENANCE PLAN - OPERATION PHASE

### SCHEDULE OF MAINTENANCE

ROUTINE INSPECTION: MONTHLY FOR THE FIRST 6 MONTHS, THEN EVERY 2 MONTHS DURING THE WET SEASON AND EVERY 4 MONTHS DURING THE DRY SEASON  
 ANNUAL INSPECTION: ONCE DURING SUMMER  
 ROUTINE MAINTENANCE: EVERY 6 MONTHS  
 THE ABOVE SCHEDULE IS A GUIDE ONLY. CLEAN OUT OF SEDIMENT SHOULD BE BASED ON OUTCOME OF ROUTINE INSPECTION.

### INSPECTIONS

#### 1. ROUTINE INSPECTION

THE MINIMUM INTERVAL SHOULD BE MONTHLY FOR THE FIRST 6 MONTHS THEN EVERY 2 TO 4 MONTHS DEPENDING ON SEASON AND AFTER HEAVY RAIN. THE STORMWATER PITS & GRATED DRAINS SHOULD BE CHECKED FOR BLOCKAGE. REMOVE LITTER & DEBRIS FROM THE BASIN.

#### 2. ROUTINE MAINTENANCE

A ROUTINE INSPECTION SHOULD BE CARRIED OUT WITH GARDEN MAINTENANCE. THE STORMWATER PITS & GRATED DRAINS SHOULD BE CLEANED OUT. LITTER, SEDIMENT, WEEDS & DEBRIS SHOULD BE REMOVED FROM THE BASIN & FILTER BASKET.

#### 3. ANNUAL MAINTENANCE

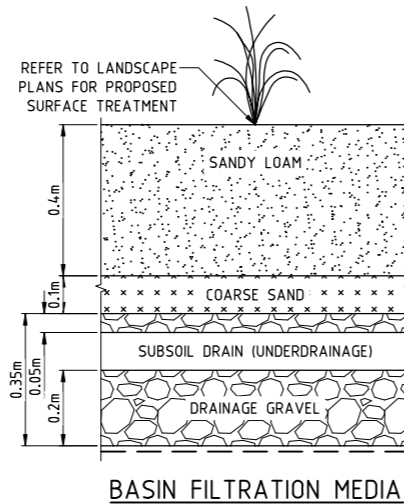
ONCE A YEAR THE PLANTS SHOULD BE TRIMMED IN ACCORDANCE WITH THE LANDSCAPE MAINTENANCE PLAN & MULCH/PEBBLES TOPPED UP IF REQUIRED. FLUSHOUT AGG LINES EVERY 2 YEARS OR IF HOLDING WATER.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY.  
 ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES.  
 THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

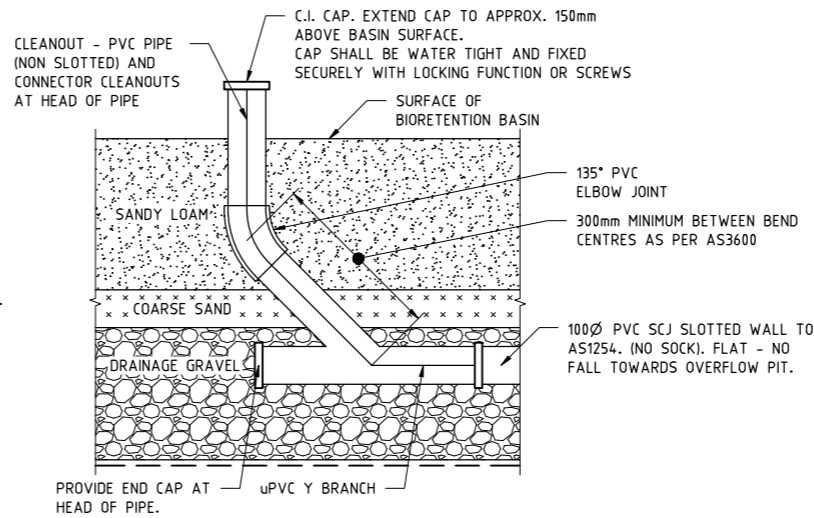


THIS IS A CAD DRAWING.  
 UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE.  
 COPYRIGHT IS RESERVED.  
 COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED.  
 DISCLAIMER:  
 THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION.  
 THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

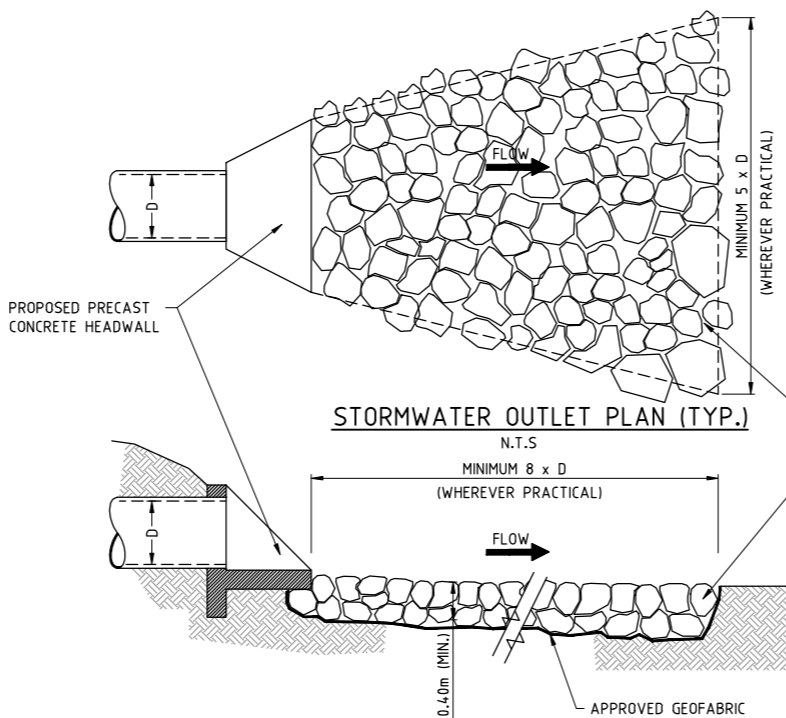
DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				



BASIN FILTRATION MEDIA  
SCALE 1:10



SUBSOIL DRAIN CLEANOUT  
SCALE 1:10



STORMWATER OUTLET SECTION DETAIL (TYP.)  
N.T.S

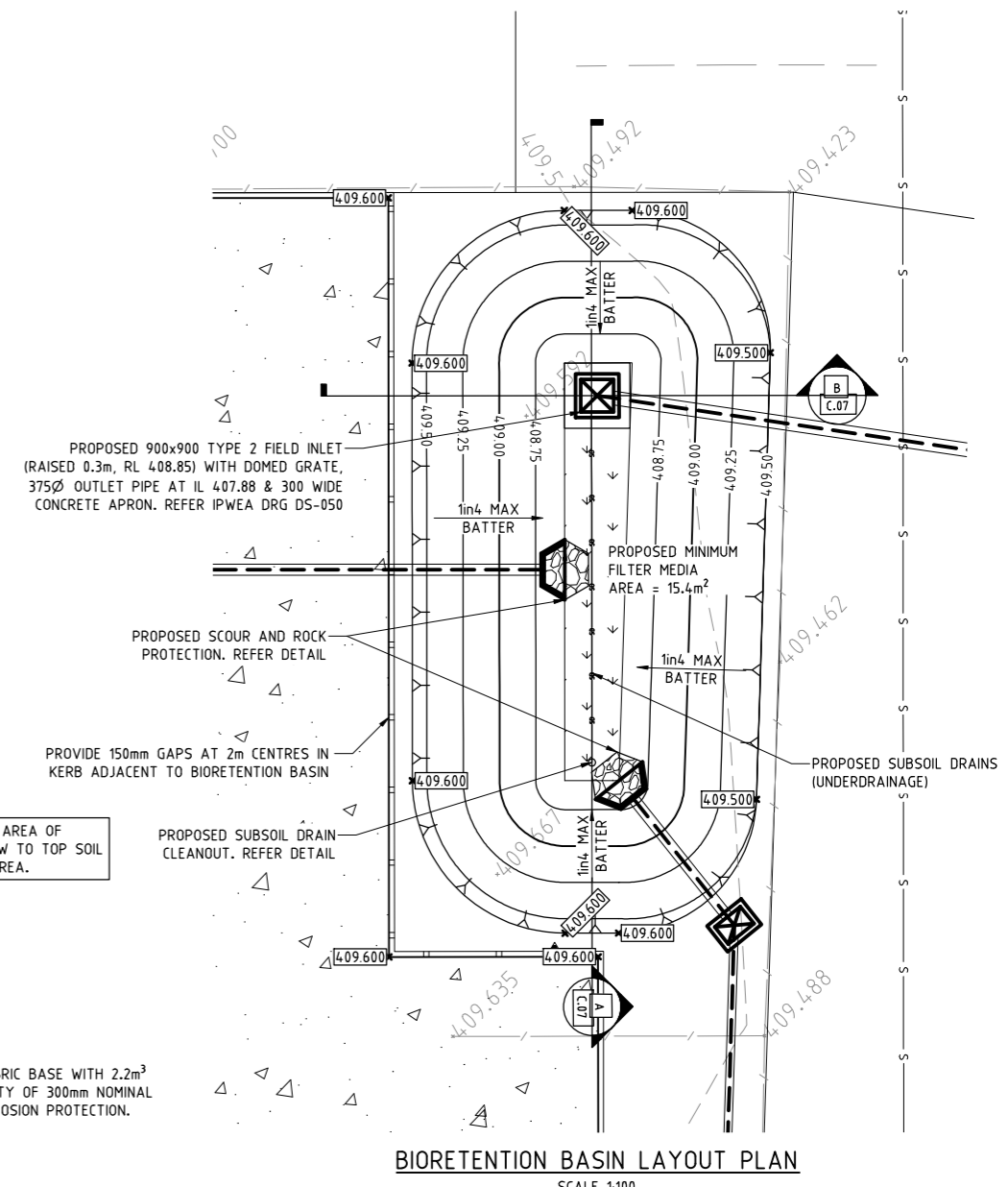
## LEGEND - LAYOUT PLAN

### PROPOSED

PROPOSED KERB ONLY  
 PROPOSED STORMWATER  
 PROPOSED LEVEL  
 PROPOSED CONTOUR  
 PROPOSED VEHICULAR CONCRETE PAVEMENT  
 PROPOSED PEDESTRIAN CONCRETE PAVEMENT  
 PROPOSED COMPACTED ROAD BASE PAVEMENT BY OTHERS

### EXISTING

E EXISTING ELECTRICITY  
 T EXISTING TELSTRA  
 G EXISTING GAS  
 SW EXISTING STORMWATER DRAINAGE  
 38.98 EXISTING SPOT LEVEL  
 S EXISTING SEWER  
 W EXISTING WATER  
 EXISTING KERB/KERB & CHANNEL  
 EXISTING EDGE OF BITUMEN  
 -4.09.00 EXISTING CONTOUR



BIORETENTION BASIN LAYOUT PLAN  
SCALE 1:100

MSC REF:

CIVIL SITEWORKS  
 BIORETENTION BASIN DETAIL

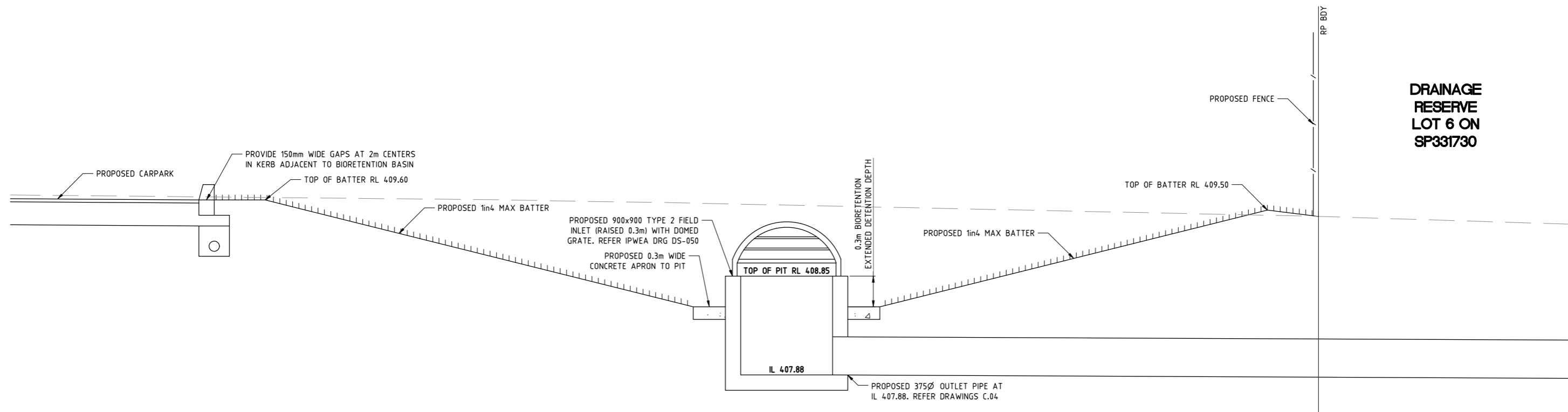
Digitally signed by Ronald Otto  
 DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=DEQ Consulting Engineers, email=ronald.otto@deq.com.au, c=AU  
 RPEQ No. 27857 RONALD OTTO  
 FOR AND ON BEHALF OF  
 DEQ CONSULTING ENGINEERS

SCALE	AS SHOWN	DATE	JAN 2026
CONTACT:	NT	SHEET	6 OF 15
JOB No.	26.0011	DRG. No.	C.06
CHECKED		DATUM	AHD

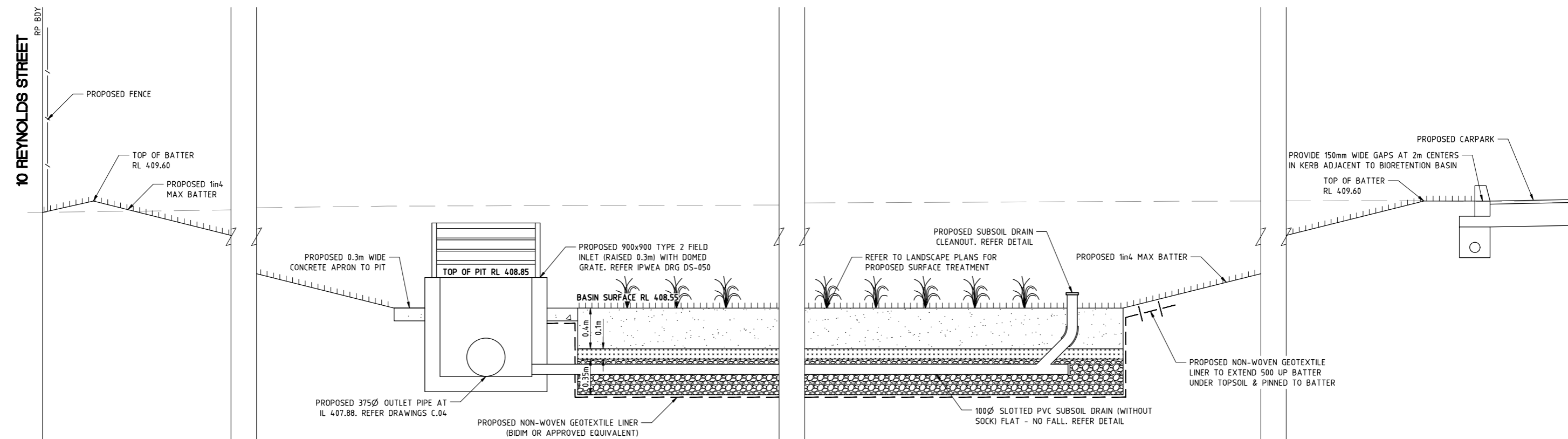
**DEQ** DESIGN ENGINEERS QUEENSLAND  
 Consulting Engineers  
 Civil, Structural and Soil Testing  
 DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
 12 REYNOLDS STREET  
 MAREEBA  
 ELITE D&C PROJECTS PTY LTD

**DRAINAGE  
RESERVE  
LOT 6 ON  
SP331730**



SECTION B  
C.06



SECTION B  
C.06



SCALE 1:100  
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA

ELITE D&C PROJECTS PTY LTD

MSC REF:

**CIVIL SITEWORKS**  
BIORETENTION BASIN DETAIL

Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=Queensland  
Date: 2026.01.15 11:25:45 +1100  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 6 OF 15
<b>26.0011</b>	<b>C.06</b>
JOB No.	DRG. No.
CHECKED	DATUM: AHD

## SITE EROSION & SEDIMENT CONTROL

- PERSON(S) CONDUCTING LAND-DISTURBING DEVELOPMENT SHALL CONDUCT SUCH DEVELOPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF RELEVANT ENVIRONMENTAL LEGISLATION (E.G. THE ENVIRONMENTAL PROTECTION ACT 1994 AND THE ASSOCIATED ENVIRONMENTAL PROTECTION (WATER) POLICY 1997).
- ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES, THE INSTITUTION OF ENGINEERS, AUSTRALIA (QLD), 1996, OR LATER VERSION.
- DO NOT STRIP SURFACE OF EXISTING GROUND COVER UNTIL READY FOR EARTHWORKS AND SUFFICIENT RUNOFF DIVERSIONS AND EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE.
- THE PROVIDED SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE STAGED TO SUIT CONSTRUCTION OPERATIONS.
- MINIMISE FLOWS ONTO EARTHWORKS AREAS BY PROVIDING CUT OFF DRAINS AT TOP OF BATTERS AND UPSTREAM OF CONSTRUCTION AREAS.
- PROVIDE SILT FENCES DOWNSTREAM OF ALL EARTHWORK AREAS TO CONTAIN SEDIMENT-LADEN RUNOFF FROM STORMWATER FLOWS.
- MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES FOR THE FULL PERIOD OF SITE DISTURBING ACTIVITIES AND UNTIL ALL EXPOSED SOIL AREAS ARE STABILISED AGAINST EROSION.

## CLEARING AND VEGETATION PROTECTION

- VEGETATION PROTECTION ORDERS ON THE SITE ARE TO BE OBSERVED AT ALL TIMES AND UNDERTAKEN IN ACCORDANCE WITH AN APPROVED VEGETATION MANAGEMENT PLAN WHERE REQUIRED.
- ALL REASONABLE AND PRACTICABLE EFFORTS MUST BE TAKEN TO MINIMISE DISTURBANCE OR REMOVAL OF TREES, SHRUBS AND GOOD GROUND COVER ON THE SITE PRIOR TO, AND DURING LAND-DISTURBING DEVELOPMENT.
- NO CLEARING CAN BE UNDERTAKEN UNLESS PRECEDED OR ACCOMPANIED BY INSTALLATION OF ADEQUATE RUNOFF AND SEDIMENT CONTROL MEASURES. MAINTAIN VEGETATION ON FOOTPATH WHERE PRACTICABLE.
- CLEARING IS TO BE STAGED TO SUIT CONSTRUCTION WHERE POSSIBLE TO MINIMISE EROSION POTENTIAL.
- PROTECTED VEGETATION IS TO BE CLEARLY MARKED/FENCED OFF TO ENSURE VEGETATION IS NOT DISTURBED DURING ANY STAGE OF THE PROPOSED WORKS.

## SOIL MANAGEMENT

- SOIL THAT IS STOCKPILED MUST BE PROTECTED FROM WIND AND WATER EROSION.
- SEDIMENT-LADEN RUNOFF FROM STOCKPILES MUST BE CONTROLLED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
- LOCATE STOCKPILES UPSTREAM OF EROSION AND SEDIMENT CONTROL MEASURES.
- STOCKPILES MUST NOT BE LOCATED WITHIN AN OVERLAND FLOW PATH OR ON A COUNCIL FOOTPATH.

## REHABILITATION

- PRE DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS ARE TO BE REINSTATED.
- PRE DISTURBANCE VEGETATION PATTERNS SHOULD BE RESTORED. FOR FURTHER INFORMATION CONTACT COUNCIL ECOLOGICAL ASSESSMENT OFFICER, PH 3403 8888.
- WHERE REHABILITATION OF VEGETATION IS REQUIRED, SIMILAR INDIGENOUS SPECIES MUST BE USED WHERE POSSIBLE.

## EROSION & SEDIMENT CONTROL - CONSTRUCTION STAGES

### 1. PRESTART

#### ESC MEASURE- SILT FENCES, DIVERSION DRAINS & DUST CONTROL (CLEARING)

LIMIT DISTURBANCE TO EXISTING SURFACE WHERE POSSIBLE. DO NOT STRIP SURFACE OF EXISTING GROUND COVER UNTIL READY FOR EARTHWORKS. ERECT SILT FENCES ALONG ALL DOWNSTREAM PROPERTY BOUNDARIES & STRATEGIC AREAS WITHIN THE SITE. SILT FENCES TO BE CLEANED WHEN CAPACITY IS REDUCED BY 25%.

### 2. BULK EARTHWORKS

#### ESC MEASURE- SILT FENCES, DIVERSION DRAINS, SEDIMENT BASIN & DUST CONTROL (EARTHWORKS STOCKPILES)

PROTECT AGAINST WIND & WATER EROSION. PROVIDE SILT FENCE AROUND BASE AND COVER WHERE POSSIBLE. STOCKPILES NOT PERMITTED TO STORED WITHIN ROAD RESERVE.

### 3. CONSTRUCTION

#### ESC MEASURE- SILT FENCES, DIVERSION DRAINS, SEDIMENT BASIN, DUST CONTROL, GULLY PIT PROTECTION, ROAD SWEEPING & LITTER CONTROL

PROVIDE SEDIMENT & EROSION CONTROL AS SOON AS EARTHWORKS HAVE COMMENCED AND STAGE TO SUIT CONSTRUCTION. PROVIDE DIVERSION DRAINS AT TOP OF BATTERS TO MINIMISE FLOWS ONTO EARTHWORKS AREAS. PROVIDE ROCK CHECK DAM TO OUTLETS OF DIVERSION DRAINS. ERECT SILT FENCES ALONG ALL PROPERTY BOUNDARIES. PROVIDE TEMPORARY CONSTRUCTION EXIT AT ALL TRUCK EXITS FROM SITE. ENSURE WETTING OF DUST PRODUCING AREAS & SWEEPING OF ROADS ADJACENT TO THE SITE TO REMOVE SILT/DUST. PROVIDE BIN OR LITTER TRAP FOR WASTE MATERIAL. CONCRETE RUN-OFF FROM WASH-DOWN OF EXPOSED AGGREGATE AREAS TO BE PREVENTED FROM DISCHARGING INTO STORMWATER DRAINS.

**PIPE LAYING** - PLACE EXCAVATED MATERIAL ON HIGH SIDE OF TRENCH. STOCKPILE TOPSOIL & SUBSOIL SEPARATELY. TRENCHES TO BE BACKFILLED, CAPPED WITH TOPSOIL & COMPACT TO MIN 100mm ABOVE ADJACENT GROUND LEVEL.

### 4. MAINTENANCE PERIOD

ESC MEASURE - SILT FENCES, GROUND COVER, DUST CONTROL, TURF FILTER STRIPS & ROAD SWEEPING SILT FENCE TO REMAIN IN PLACE FOR MAINTENANCE PERIOD OR UNTIL GRASSING, TURFING AND LANDSCAPING ESTABLISHED.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
22.01.26	P1	PRELIMINARY ISSUE	NT				

**DEQ** DESIGN ENGINEERS QUEENSLAND  
Consulting Engineers  
Civil, Structural and Soil Testing  
5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

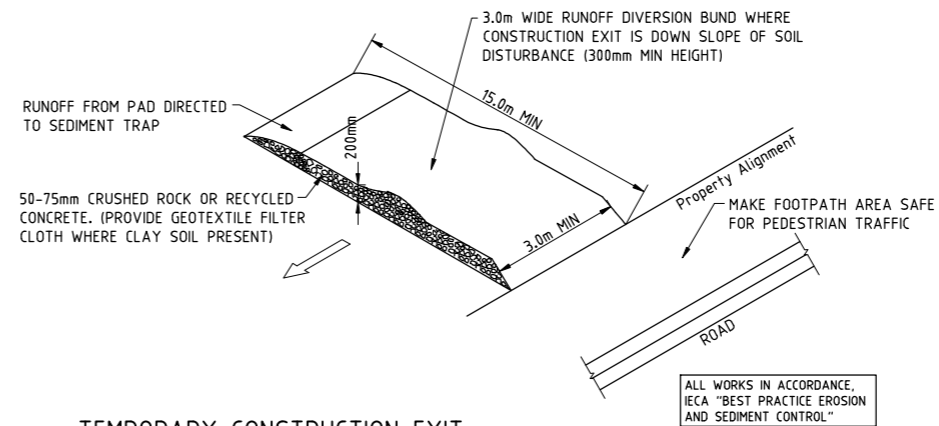
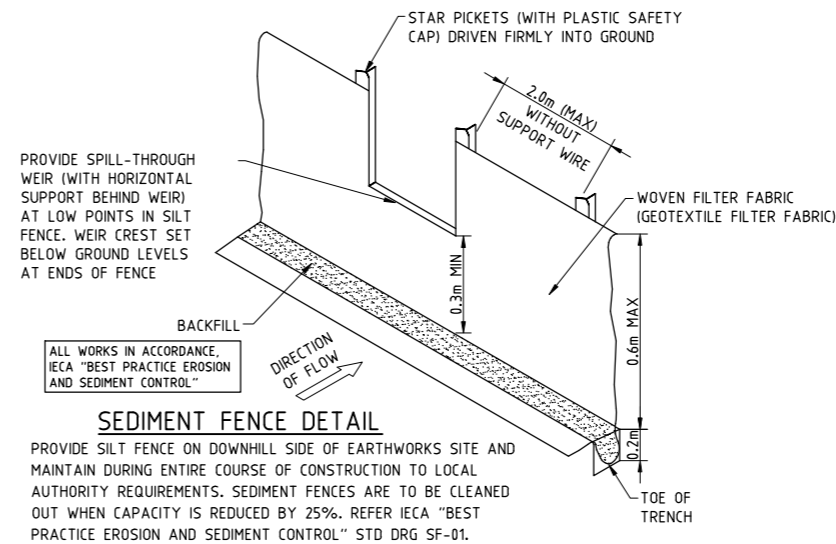
PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA

ELITE D&C PROJECTS PTY LTD

MSC REF:

CIVIL SITEWORKS  
ESC MANAGEMENT NOTES  
AND DETAILS

SCALE	AS SHOWN	DATE	JAN 2026
CONTACT:	NT	SHEET	8 OF 15
JOB No.	26.0011	DRG. No.	C.08
CHECKED		DATUM :	AHD
		AMMT.	A

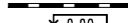
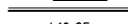
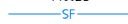






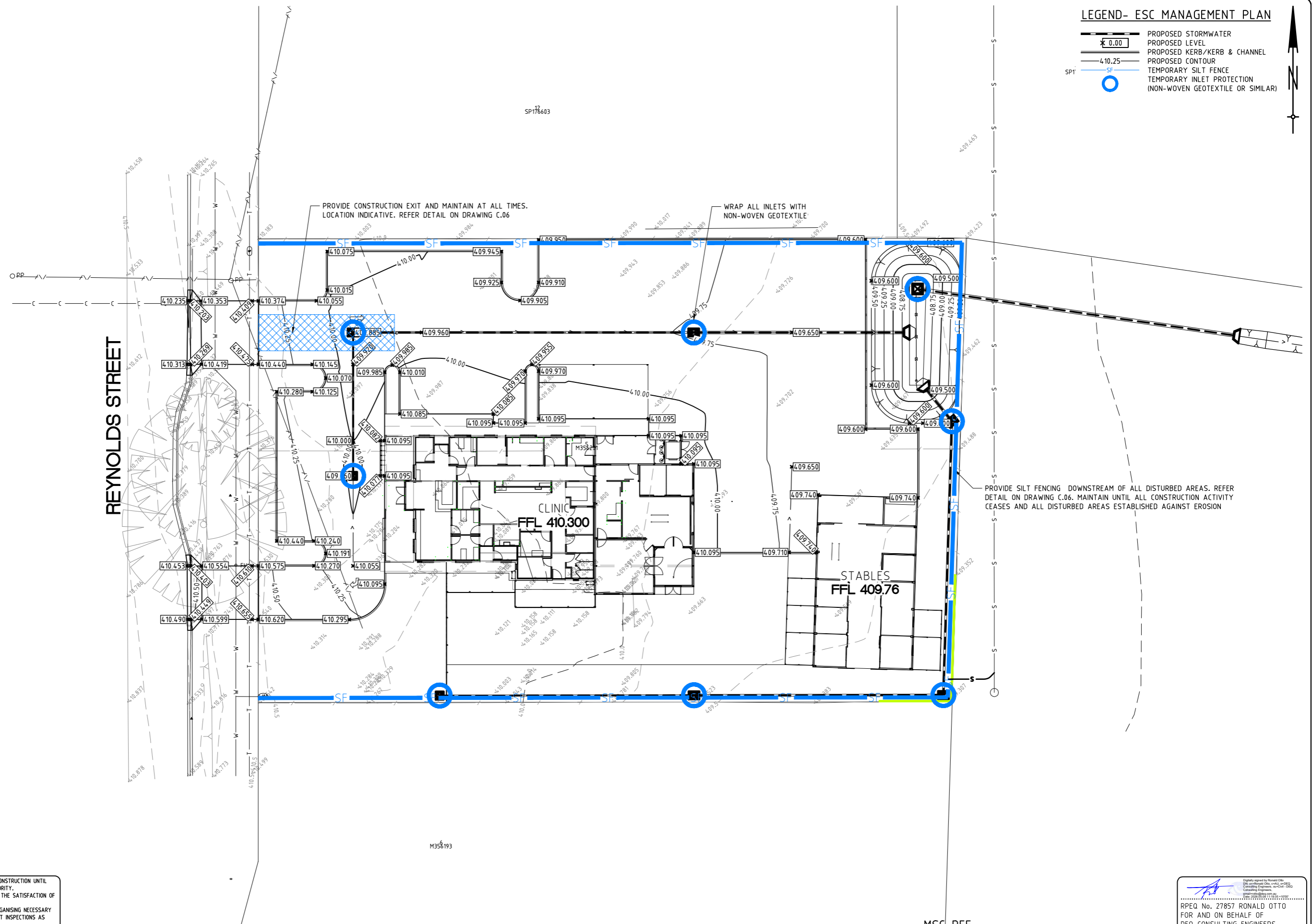
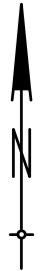
## TEMPORARY CONSTRUCTION EXIT

- THIS COMPRISES A PAD OF COARSE GRAVEL, OCCASIONALLY WITH A CONCRETE, STEEL OR TIMBER SHAKER RAMP, LOCATED AT EXITS FROM CONSTRUCTION SITES. IT IS DESIGNED TO MINIMISE THE TRANSPORT OF SEDIMENT FROM CONSTRUCTION SITES ONTO PUBLIC ROADS VIA THE WHEELS AND SIDES OF VEHICLES.
- WHEN A SITE IS DRY, MUCH OF THE SOIL IS SHAKEN FROM THE VEHICLES AS THEY TRAVERSE THIS RAMP. IN WET WEATHER, MUD IS HOSED OFF ON THE RAMP AS VEHICLES LEAVE THE SITE.
- WHERE THE EXIT SLOPES TOWARDS THE ROAD, A BUND (HUMP) SHOULD BE INSTALLED ACROSS THE AGGREGATE PAD TO DEFLECT STORMWATER RUN-OFF TO THE SIDE WHERE IT CAN BE FILTERED BY A SEDIMENT FENCE.
- ADDITIONAL GRAVEL MAY HAVE TO BE ADDED PERIODICALLY, TO MAINTAIN THE CORRECT FUNCTIONING OF THE PAD.
- REFER IECA "BEST PRACTICE EROSION AND SEDIMENT CONTROL" STD DRG EXIT-01.

Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=Queensland  
Consulting Engineers, email=ronald.otto@deq.com.au  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

**LEGEND- ESC MANAGEMENT PLAN**

-  PROPOSED STORMWATER
-  PROPOSED LEVEL
-  PROPOSED KERB/KERB & CHANNEL
-  PROPOSED CONTOUR
-  TEMPORARY SILT FENCE
-  TEMPORARY INLET PROTECTION
-  (NON-WOVEN GEOTEXTILE OR SIMILAR)



0 2 4 6 8 10m  
SCALE 1:200  
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. **DISCLAIMER:** THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au

**PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA**

**ELITE D&C PROJECTS PTY LTD**

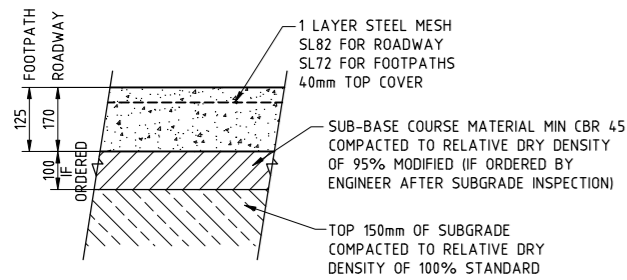
MSC REF:

**CIVIL SITEWORKS  
ESC MANAGEMENT PLAN**

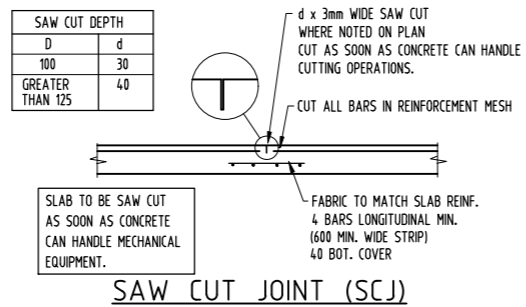
Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=Queensland  
Serial: 20250311172510, c=au

RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

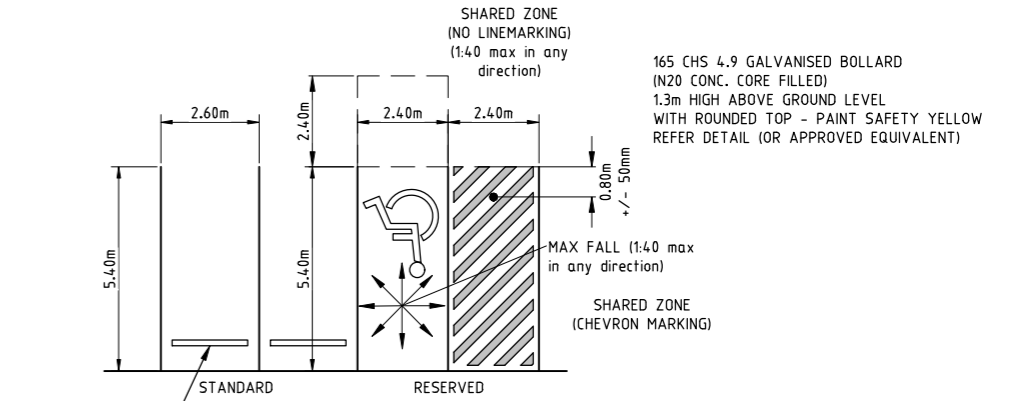
SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 9 OF 15
<b>26.0011</b>	<b>C.09</b>
JOB No.	DRG. No.
CHECKED	DATUM: AHD



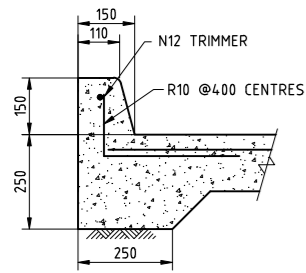
**CONCRETE PAVEMENT DETAIL**  
SCALE 1:10



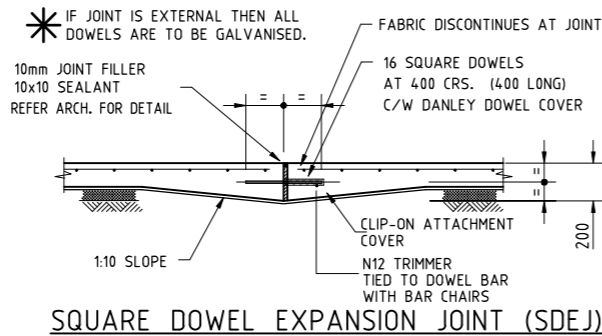
**SAW CUT JOINT (SCJ)**



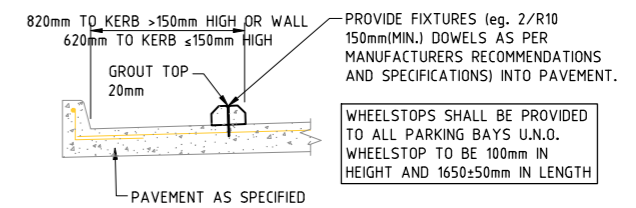
**CARPARK LINEMARKING DETAIL**  
SCALE 1:100  
NOTE: LINEMARKING TO BE 100mm WIDE AND IN ACCORDANCE WITH AS1742 & AS2890



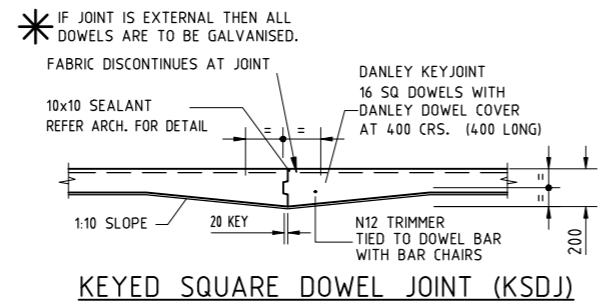
**TYPICAL EDGE THICKENING WITH INTEGRAL KERB**  
SCALE 1:10



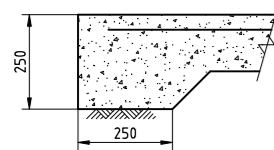
**SQUARE DOWEL EXPANSION JOINT (SDEJ)**



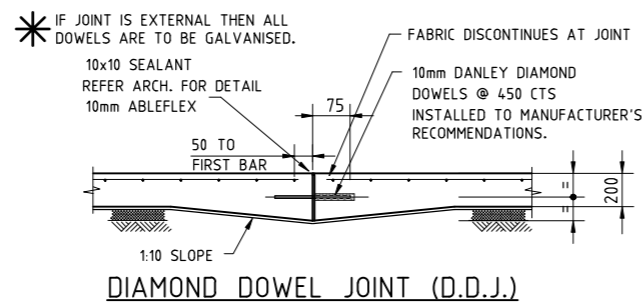
**CONCRETE WHEELSTOPS DETAIL**  
SCALE 1: 20



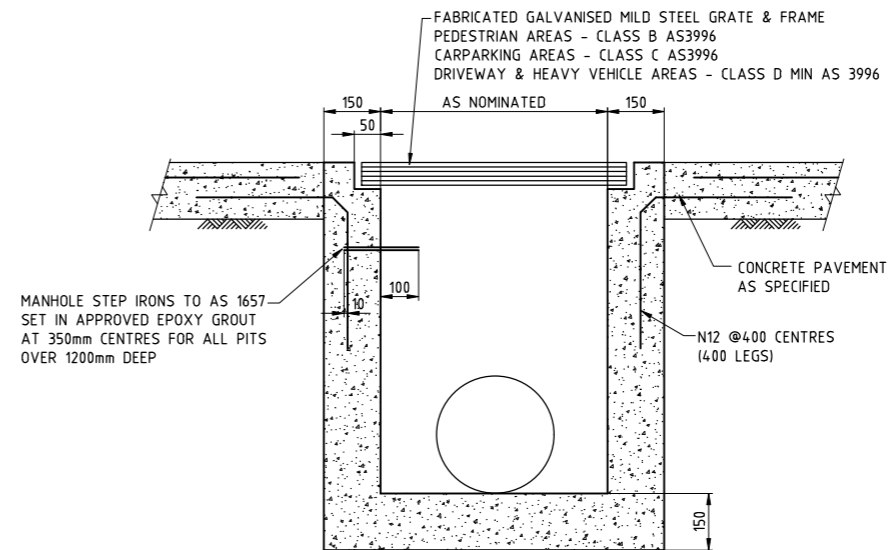
**KEYED SQUARE DOWEL JOINT (KSDJ)**



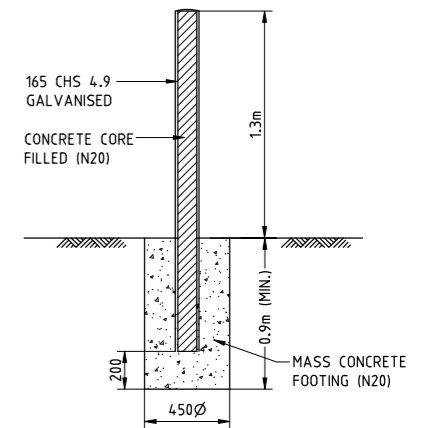
**TYPICAL PAVEMENT EDGE THICKENING**  
SCALE 1:10



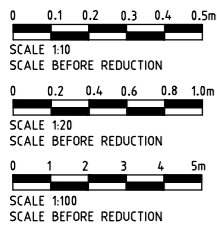
**DIAMOND DOWEL JOINT (D.D.J.)**



**GRATED PIT (GP) / INSPECTION PIT (IP)**  
SCALE 1:10



**BOLLARD DETAIL**  
SCALE 1:20



THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORIZATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
22.01.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD

MSC REF:  
**CIVIL SITEWORKS**  
CONSTRUCTION DETAILS

Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=Consulting Engineers, email=ronald.otto@deq.com.au, c=AU  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 10 OF 15
<b>26.0011</b>	<b>C.10</b>
JOB No.	DRG. No.
CHECKED	DATUM: AHD

**CONCRETE**

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600.
- CONCRETE STRENGTH GRADE FOR PARTICULAR ELEMENTS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE.

ELEMENT	CONCRETE STRENGTH GRADE	COVER
SLABS ON GROUND	32	40 TOP

MAX AGGREGATE SIZE = 20mm  
SLUMP = 80mm +/- 15mm (AT POINT OF DISCHARGE)

- CONCRETE TESTING -
  - REGISTER PROJECT FOR DISSEMINATION OF CONCRETE PRODUCTION INFORMATION. MANUFACTURER TO CARRY OUT PRODUCTION ASSESSMENT OF CONCRETE FOR COMPLIANCE WITH REQUIREMENTS OF AS1379. FORWARD PRODUCTION ASSESSMENT REPORTS TO SUPERINTENDENT AS PER AS1379 CLAUSE 6.4
  - CARRY OUT PROJECT ASSESSMENT OF CONCRETE TO AS1379 CLAUSE 6.4 & 6.5. TAKE SAMPLES AT PROJECT SITE. SAMPLE CONCRETE FOR PROJECT ASSESSMENT CONCURRENTLY WITH EACH SAMPLE TAKEN FOR PRODUCTION ASSESSMENT AT PROJECT SITE. FOR EACH CONCRETE DESIGN MIX TAKE ONE SAMPLE FROM EACH 25 CUBIC METRES OF CONCRETE DELIVERED PER DAY, NOT LESS THAN FIVE SAMPLES TOTAL. EACH SAMPLE TO COMPRISE FOUR CYLINDERS. TEST TWO AT 7 DAYS AND TWO AT 28 DAYS.
- UNLESS NOTED OTHERWISE ALL FORMED EDGES AND CORNERS OF CONCRETE MEMBERS SHALL HAVE 20mm CHAMFERS.
- EXACT SIZE AND LOCATION OF PENETRATIONS ARE TO BE OBTAINED FROM WORKSHOP DRAWINGS PRIOR TO SCHEDULING OF REINFORCEMENT, AND ARE NOT TO EXCEED DIMENSIONS WHERE SHOWN ON STRUCTURAL DRAWINGS.
- NO CHASES, HOLES GREATER THAN 150mm DIAMETER, OR EMBEDMENT OF PIPES GREATER THAN 40mm DIAMETER OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN THE CONCRETE SLABS OR ALL OTHER CONCRETE MEMBERS. NO PENETRATION, CHASES OR EMBEDMENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER.
- BREAK BOND BETWEEN ALL LOAD BEARING MASONRY (NON REINFORCED) AND CONCRETE WITH MINIMUM OF TWO LAYERS OF SUPER ALCOR AND OR 2 LAYERS FC SHEET OR APPROVED EQUIVALENT.
- CONSTRUCTION BREAK LOCATIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
- THE FACE OF ALL CONCRETE AGAINST WHICH NEW CONCRETE IS TO BE CAST SHALL BE CAST VERTICAL OR HORIZONTAL AND TO BE THOROUGHLY SCABBLED. APPLY COAT OF BONDCRETE TO SCABBLED FACE, IN ACCORDANCE WITH MANUFACTURER SPECIFICATION & RECOMMENDATIONS PRIOR TO POURING SECOND POUR.
- ALL CONCRETE SURFACES ARE TO BE CURED FOR SEVEN DAYS AFTER CASTING USING A CURING COMPOUND THAT CONFORMS TO THE RELEVANT AUSTRALIAN STANDARDS AND IS COMPATIBLE WITH THE SPECIFIED FINISHES. U.N.O.
- CONCRETE SURFACE FINISH TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION OR COMPATIBLE WITH APPLIED SURFACE FINISH.
- CONCRETE SLAB SURFACE TOLERANCE FOR INTERNAL SLABS SHALL BE THE MOST STRINGENT OF THE FOLLOWING
  - AS REQUIRED BY THE APPLIED SURFACE FINISH.
  - 3mm OVER A 3000 STRAIGHT EDGE.

**MEMBER SCHEDULE**

- SLABS**
- A 170thk., N32 GRADE CONCRETE, 1 LAYER OF S192 SLAB MESH, 40 TOP COVER, ON 100 CBR 15 SUBGRADE. REFER ARCH. FOR COLOUR SPECIFICATIONS

REFER ARCHITECT FOR REQUIREMENTS FOR COLOURED CONCRETE.  
REFER ARCHITECT FOR PAVER DETAILS AND SET-DOWN & SET-OUT REQUIREMENTS.

⚡ DENOTES 2/12 x1200 RE-ENTRANT BARS TIED TO U/S OF SLAB TOP MESH.

**SLAB JOINTS (REFER TYPICAL DETAILS)**

- SCJ: SAW CUT JOINT
- SDEJ: SQUARE DOWEL EXPANSION JOINT
- CDJ: CRADLE DOWEL JOINT
- KSDJ: KEYED SQUARE DOWEL JOINT
- KSDEJ: KEYED SQUARE DOWEL EXPANSION JOINT
- KB1: KERB TYPE 1
- ET: EDGE THICKENING



SCALE 1:200  
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

M356193

SP176603

SP176603

SP331730

REYNOLDS STREET



Digitally signed by Ronald Otto  
DN: cn=Ronald Otto, o=DEQ Consulting Engineers, ou=DEQ Consulting Engineers, email=ronald.otto@deq.com.au  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

MSC REF:

CIVIL SITWORKS  
CONCRETE PAVEMENT AND  
JOINT PLAN

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 11 OF 15
26.0011	C.11
JOB No.	DRG. No.
CHECKED	DATUM: AHD

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au  
E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD



NAME OF ESTATE	12 REYNOLDS STREET MAREEBA
SUBDIVIDER	ELITE D&C PROJECTS PTY LTD
APPLICATION No.	-
LCC DELEGATES APPROVAL DATE	-
DRAWING/PLAN No.	26.0011 C12 & C.13
No. OF ALLOTMENTS	1
AREA IN ha.	0.4047 ha
LENGTH OF SEWERS	100mm - 150mm -

ALL PRODUCTS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE CURRENT SEQ. CODE INFRASTRUCTURE PRODUCTS AND MATERIALS (IPAM) LIST

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL ALL OF THE BLOCK AT A GRADE OF 1.60 AT A MAXIMUM DEPTH OF PROPERTY CONNECTION OF 1.500m UNLESS OTHERWISE STATED. FOR JUNCTION DETAILS REFER SEQ-SEW-1104-1 TO SEQ-SEW-1105-1

ALL WATER AND SEWERAGE CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE 1300 362 128.

CONTRACTOR TO REPAIR ANY DAMAGE TO KERB AND CHANNEL, FOOTWAY, FOOTPATH, ROAD PAVEMENT OR SERVICES CAUSED DURING CONSTRUCTION TO THE SATISFACTION OF COUNCIL.

EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS. CONTRACTOR TO LOCATE EXISTING SERVICES PRIOR TO STARTING WORKS AND ENSURE THAT THEY HAVE SUFFICIENT COVER TO NEW FINISHED SURFACE. SERVICES SHALL BE RELAID/LOWERED WHERE NECESSARY. REFER SERVICES AUTHORITY REQUIREMENTS.

**NOTE:** EXISTING SERVICES AND CONNECTIONS TO EXISTING SERVICES ARE TO BE LOCATED AND CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO ANY EXCAVATION. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES FOR POSSIBLE REVISIONS.



**NOTE:** LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF EXISTING SERVICES SHALL BE REPORTED TO THE SUPERINTENDENT.

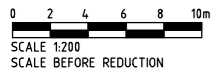
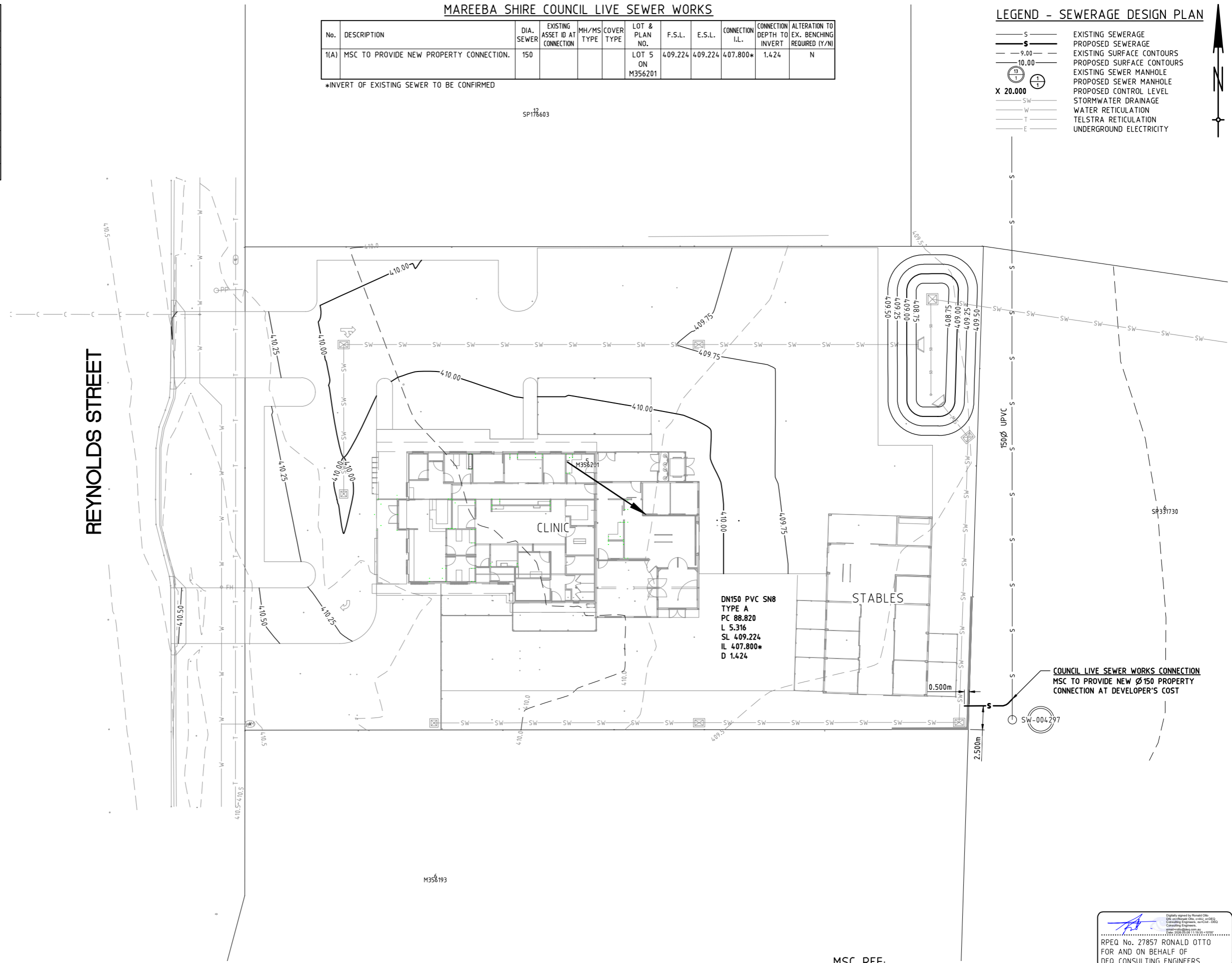
MAREEBA SHIRE COUNCIL LIVE SEWER WORKS

No.	DESCRIPTION	DIA. SEWER	EXISTING ASSET ID AT CONNECTION	MH/MS TYPE	COVER TYPE	LOT & PLAN NO.	F.S.L.	E.S.L.	CONNECTION I.L.	CONNECTION DEPTH TO INVERT	ALTERATION TO EX. BENCHING REQUIRED (Y/N)
1(A)	MSC TO PROVIDE NEW PROPERTY CONNECTION.	150				LOT 5 ON M356201	4.09.224	4.09.224	4.07.800*	1.424	N

\*INVERT OF EXISTING SEWER TO BE CONFIRMED

LEGEND - SEWERAGE DESIGN PLAN

- EXISTING SEWERAGE
- PROPOSED SEWERAGE
- EXISTING SURFACE CONTOURS
- PROPOSED SURFACE CONTOURS
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED CONTROL LEVEL
- STORMWATER DRAINAGE
- WATER RETICULATION
- TELSTRA RETICULATION
- UNDERGROUND ELECTRICITY



THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. DISCLAIMER: THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
5 Parkview Street  
Milton Qld. 4064  
P: (07) 3367 0211  
F: (07) 3367 0205  
W: www.deq.com.au  
E: structural@deq.com.au  
E: civil@deq.com.au  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT  
12 REYNOLDS STREET  
MAREEBA  
ELITE D&C PROJECTS PTY LTD

MSC REF:  
CIVIL SITEWORKS  
SEWERAGE DESIGN PLAN

COUNCIL LIVE SEWER WORKS CONNECTION  
MSC TO PROVIDE NEW Ø150 PROPERTY CONNECTION AT DEVELOPER'S COST

Digitally signed by Ronald Otto  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE	A5 SHOWN	DATE	JAN 2026
CONTACT:	NT	SHEET	13 OF 15
JOB No.	26.0011	DRG. No.	C.13
CHECKED		DATUM	AHD

**GENERAL NOTES**

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT FNQROC DEVELOPMENT MANUAL AND CTM WATER ALLIANCE WATER CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. COVER ON MAINS FROM PERMANENT TO BE AS SHOWN IN SEQ-WAT-1200-2.
5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWINGS.
6. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR MAREEBA SHIRE COUNCIL.
7. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE COUNCIL'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY THE COUNCIL.
8. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
9. TEST/CHLORINATION POINTS TO BE INSTALL IN ACCORDANCE WITH STANDARD DRAWING NO. SEQ-WAT-1410-1.
10. THE CONSTRUCTION OF THE WATER RETICULATION SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
11. ALL LIVE WORKS TO BE CARRIED OUT UNDER A PRIVATE WORKS APPLICATION TO COUNCIL AT DEVELOPER'S COST.

**WATER METER NOTES**

1. FOR VALVE BOX INSTALLATION REFER TO STANDARD DRAWING S2000.
2. COPPER PIPE CONFIGURATION MAY BE ROTATED TO HORIZONTAL AND MODIFIED TO SUIT ANGLE OF TAKE OFF, SO DEPTH OF COVER TO MAIN AND VALVE IS MAINTAINED.
3. CONNECTIONS TO EXISTING MAINS SHALL BE CARRIED OUT ONLY WITH PRIOR APPROVAL OF COUNCIL, WITH ALL FITTINGS TO BE SUPPLIED READY FOR INSTALLATION BY THE CONTRACTOR.
4. STANDARD DOMESTIC SERVICE IS Ø20mm.
5. STANDARD LOCATION OF WATER SERVICE TO BE ON OPPOSITE BOUNDARY TO ELECTRICAL SUPPLY AND 1000mm INSIDE THE FRONT BOUNDARY AND OFFSET 300mm FROM THE SIDE BOUNDARY.
6. CONDUITS UNDER FOOTPATHS (WHERE REQUIRED) SHALL BE A MINIMUM OF Ø50mm OF PVC CLASS 6 WITH 450MM COVER, 300MM OFFSET FROM THE SIDE BOUNDARY AND EXTENDING 200mm PAST THE EDGE OF THE FOOTPATH.
7. THE POSITION OF THE CONDUITS UNDER FOOTPATHS SHALL BE CLEARLY MARKED BY THE CASTING OF NON-FERROUS CUPHEAD BOLT INTO THE PROPERTY SIDE OF THE FOOTPATH WHILE THE CONCRETE IS WET.
8. ALL METER INSTALLATIONS TO BE UNDERTAKEN BY MAREEBA SHIRE COUNCIL.
9. ALL DIMENSIONS ARE IN MILLIMETERS.

**VEGETATION PROTECTION**

- A. TREES LOCATED ALONG THE FOOTPATH SHOULD BE, WHERE POSSIBLE TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHOULD BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES MUST BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- C. WHERE POSSIBLE TREE ROOTS SHOULD BE TUNNELLED UNDER, RATHER THAN SEVERED. IF THE ROOTS ARE SEVERED, THE DAMAGED AREA SHOULD BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT COUNCIL ARBORIST FOR FURTHER ADVICE.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

**SOIL PROTECTION**

- A. TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
- B. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THROUGH THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING THE APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

**REHABILITATION**

- A. PRE DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS ARE TO BE REINSTATED.
- B. PRE DISTURBANCE VEGETATION PATTERNS SHOULD BE RESTORED.

**NOTE**

ALL ENVIRONMENTAL PROTECTION MEASURES SHOULD BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.



**REAL PROPERTY DESCRIPTION**  
 LOT 5 ON M356201  
 LOCAL AUTHORITY:  
 MAREEBA SHIRE COUNCIL

**LOCALITY PLAN**  
 NTS

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. **DISCLAIMER:** THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

**DEQ DESIGN ENGINEERS QUEENSLAND**  
 Consulting Engineers  
 Civil, Structural and Soil Testing  
 DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

5 Parkview Street  
 Milton Qld. 4064  
 P: (07) 3367 0211  
 F: (07) 3367 0205  
 W: www.deq.com.au  
 E: structural@deq.com.au  
 E: civil@deq.com.au

**PROPOSED DEVELOPMENT**  
 12 REYNOLDS STREET  
 MAREEBA

**ELITE D&C PROJECTS PTY LTD**

MSC REF:  
**CIVIL SITWORKS**  
 WATER SERVICE DESIGN NOTES  
 AND DETAILS

RPEQ No. 27857 RONALD OTTO  
 FOR AND ON BEHALF OF  
 DEQ CONSULTING ENGINEERS

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 14 OF 15
<b>26.0011</b>	<b>C.14</b>
JOB No.	DRG. No.
CHECKED	DATUM : AHD

ALL PRODUCTS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE CURRENT SEQ CODE INFRASTRUCTURE PRODUCTS AND MATERIALS (IPAM) LIST

MARKERS FOR PROPERTY SERVICES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1110-1 TO 1108. MARKERS FOR WATER MAIN ROAD CROSSING, HYDRANTS AND VALVES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1300-1

ALL PIPE EMBEDMENT TO BE TYPE C SUPPORT IN ACCORDANCE WITH SEQ-WAT-1201-1

THRUST BLOCK SIZES ARE BASED ON AN ASSUMED MINIMUM SOIL BEARING PRESSURE OF 100kPa (TO BE CONFIRMED BY GEOTECHNICAL ASSESSMENT) AND SHALL BE IN ACCORDANCE WITH SEQ-WAT-1205-1 TO 1208-1.

ALL WATER AND SEWERAGE CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE 1300 362 128.

CONTRACTOR TO REPAIR ANY DAMAGE TO KERB AND CHANNEL, FOOTWAY, FOOTPATH, ROAD PAVEMENT OR SERVICES CAUSED DURING CONSTRUCTION TO THE SATISFACTION OF COUNCIL.

EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS. CONTRACTOR TO LOCATE EXISTING SERVICES PRIOR TO STARTING WORKS AND ENSURE THAT THEY HAVE SUFFICIENT COVER TO NEW FINISHED SURFACE. SERVICES SHALL BE RELAID/LOWERED WHERE NECESSARY. REFER SERVICES AUTHORITY REQUIREMENTS.



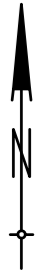
**NOTE:** LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF EXISTING SERVICES SHALL BE REPORTED TO THE SUPERINTENDENT.

**SYMBOLS**

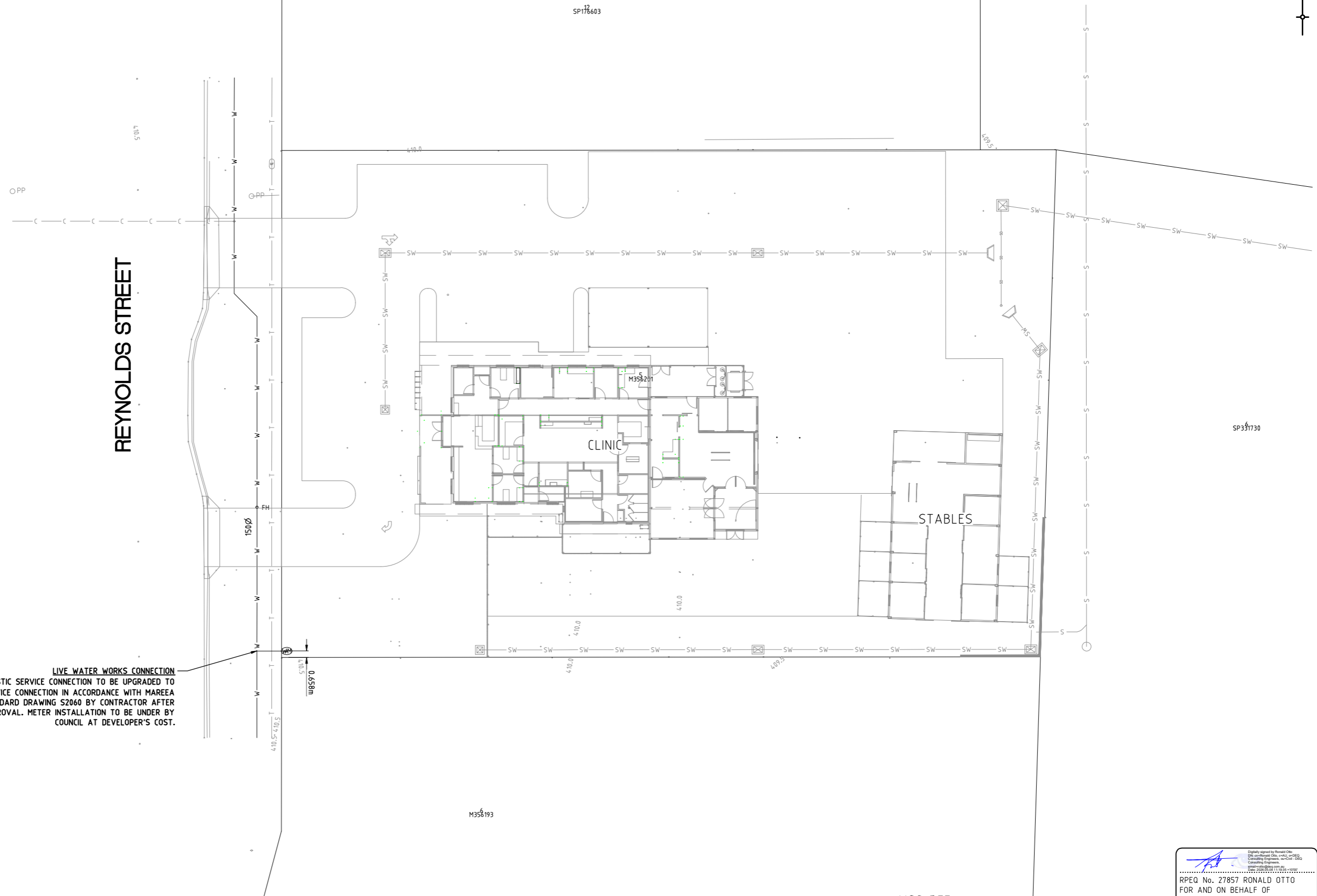
SLUICE VALVE	
SCOUR BRANCH	
DEAD END	
FIRE HYDRANT	
TEST/CHLORINATION POINT	
REDUCER	

**LEGEND - WATER SERVICE DESIGN PLAN**

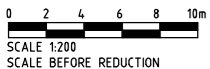
	EXISTING WATER MAIN
	PROPOSED WATER MAIN
	PROPOSED CONDUIT
	EXISTING WATER MAIN TO BE DISUSED
	STORMWATER DRAINAGE
	SEWERAGE
	UNDERGROUND ELECTRICITY
	TELECOMMUNICATION CONDUIT



**REYNOLDS STREET**



**LIVE WATER WORKS CONNECTION**  
EXISTING 200mm DOMESTIC SERVICE CONNECTION TO BE UPGRADED TO 250mm DOMESTIC SERVICE CONNECTION IN ACCORDANCE WITH MAREEA SHIRE COUNCIL STANDARD DRAWING S2060 BY CONTRACTOR AFTER COUNCIL APPROVAL. METER INSTALLATION TO BE UNDER BY COUNCIL AT DEVELOPER'S COST.



THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY. ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

THIS IS A CAD DRAWING. UNDER NO CIRCUMSTANCES MANUAL ALTERATIONS MAY BE MADE. COPYRIGHT IS RESERVED. COPYING OR REPRODUCTION OF THIS DRAWING OR ELECTRONIC DATA WITHOUT WRITTEN PERMISSION OF DEQ CONSULTING ENGINEERS IS NOT PERMITTED. **DISCLAIMER:** THE HARD COPY ACCOMPANYING THE ELECTRONIC DATA IS THE LEGAL TRANSMISSION OF INFORMATION. THE ELECTRONIC DATA ARE ISSUED ONLY FOR CONVENIENCE OF USE. NO RESPONSIBILITY FOR THE ACCURACY OR FOR ANY CONSEQUENCE RESULTING FROM THE USE OR ALTERATION OF THIS INFORMATION IS ACCEPTED.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
08.05.26	A	OPERATIONAL WORKS APPLICATION	NT				
27.04.26	P5	PRELIM SEWER & WATER ADDED	NT				
16.04.26	P4	PRELIMINARY ISSUE 4	NT				
04.03.26	P3	PRELIMINARY ISSUE 3	NT				
16.02.26	P2	PRELIMINARY ISSUE 2	NT				
03.02.26	P1	PRELIMINARY ISSUE	NT				

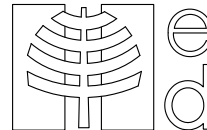
**DEQ DESIGN ENGINEERS QUEENSLAND**  
Consulting Engineers  
Civil, Structural and Soil Testing  
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248 E: soiltesting@deq.com.au

**PROPOSED DEVELOPMENT**  
12 REYNOLDS STREET  
MAREEBA  
**ELITE D&C PROJECTS PTY LTD**

MSC REF:  
**CIVIL SITEWORKS**  
**WATER SERVICE DESIGN PLAN**

Digitally signed by Ronald Otto  
RPEQ No. 27857 RONALD OTTO  
FOR AND ON BEHALF OF  
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN	DATE JAN 2026
CONTACT: NT	SHEET 15 OF 15
<b>26.0011</b>	<b>C.15</b>
JOB No.	DRG. No.
CHECKED	DATUM: AHD



PLEASE NOTE THIS LANDSCAPE PLAN DOES NOT TAKE INTO ACCOUNT ANY UNFORESEEN SUBSURFACE ROCK FORMATIONS.

AMENDMENTS

Issue	Date	Description
A	19.03.26	ISSUE TO CLIENT FOR APPROVAL
B	24.04.26	ISSUE TO COUNCIL FOR APPROVAL



element design landscape architecture

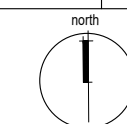
MASTER PLANNING • SUBDIVISIONS • COMMERCIAL DEVELOPMENTS • RESORTS • PARKLANDS • REVEGETATION • MULTI-UNITS  
151 Brisbane Rd, Mooloolaba  
Phone 07 5444 6155  
PO Box 1546, Bundaberg QLD 4556  
admin@elementdesign.net.au

PROJECT PROPOSED VETERINARY CLINIC AT #12 REYNOLDS ST MAREEBA

CLIENT ELITE FITOUT P/L

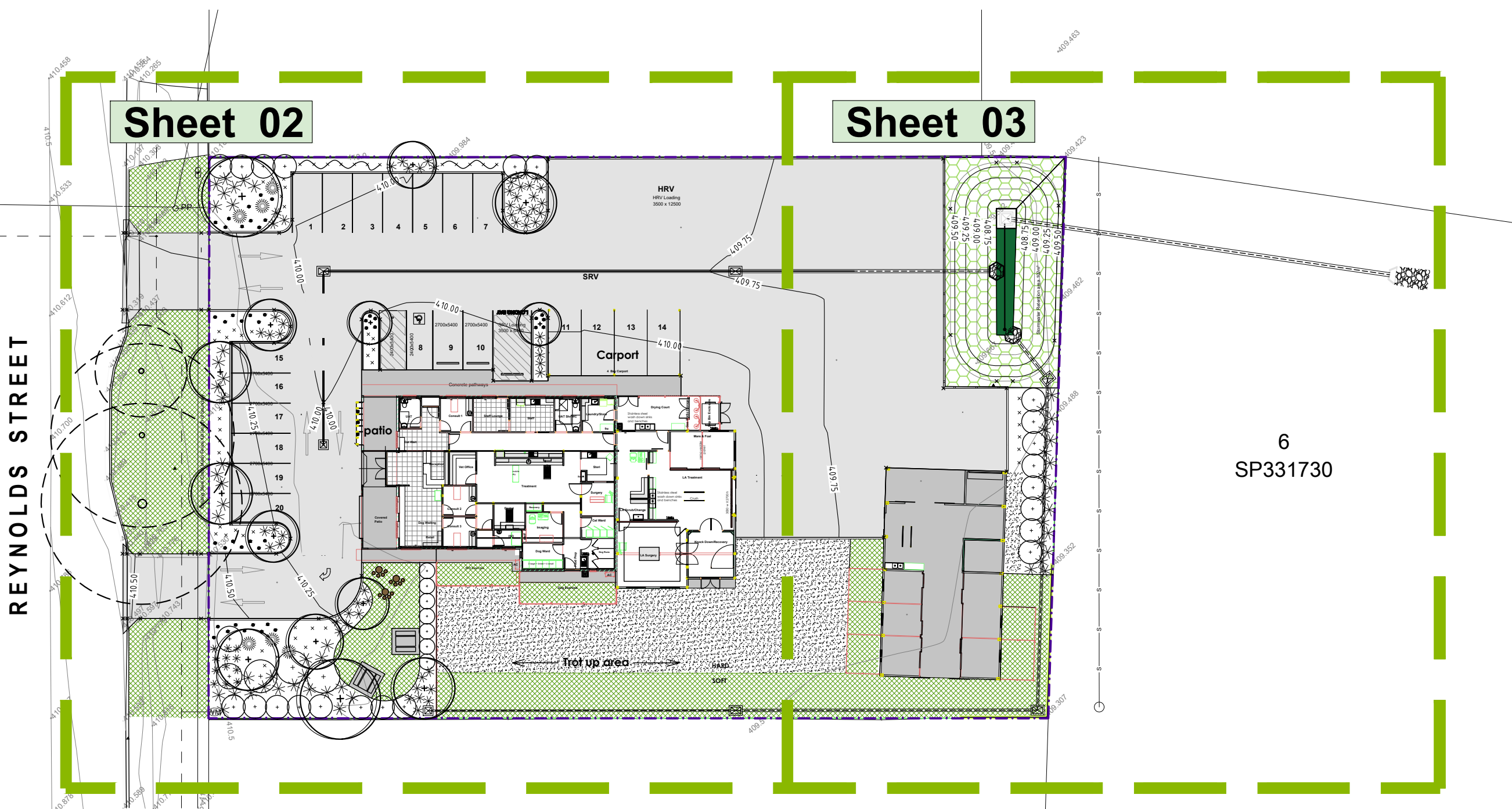
DRG TITLE OVERALL SITE PLAN

ISSUE	B
ED 25160	OPW - 01



Date	MARCH 2026
Scale	1:400 @ A3
Design	JV
Drawn	JV
Sheet	01 OF 05

©COPYRIGHT 2010 ELEMENT DESIGN QLD PTY LTD  
Copyright in the whole and every part of this document belongs to ELEMENT DESIGN QLD PTY LTD and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in any media to any person without the prior written consent of ELEMENT DESIGN QLD PTY LTD.



Sheet 02

Sheet 03

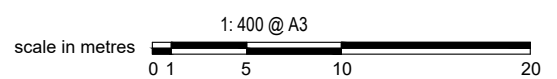
REYNOLDS STREET

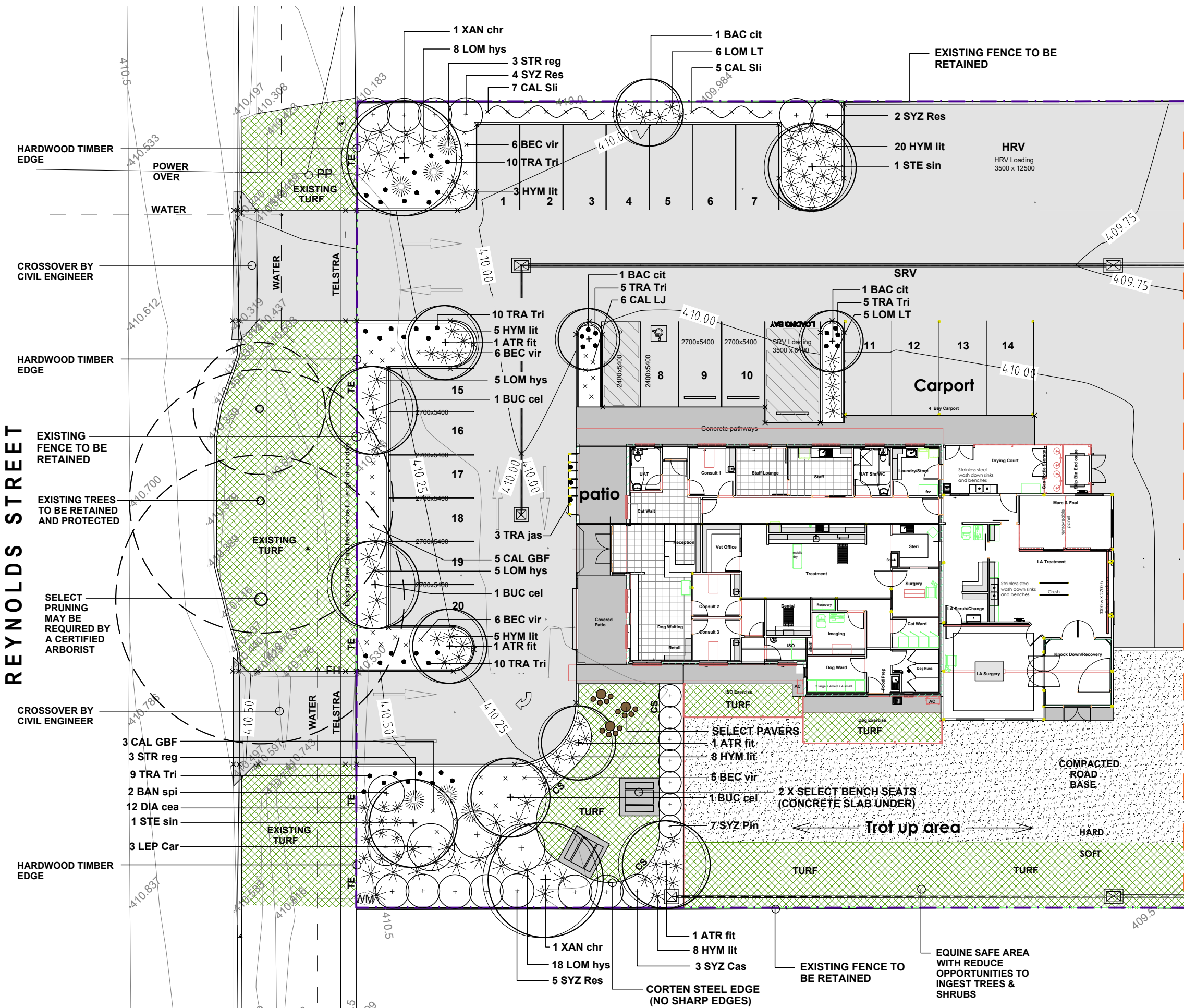
6  
SP331730

SUNDANCE VETERINARY  
PROPOSED VETERINARY CLINIC AT  
#12 REYNOLDS ST, MAREEBA, QLD 4720

**SHEET LEGEND -**  
 SHEET 01 - OVERALL SITE LAYOUT  
 SHEET 02 - LANDSCAPE PLANTING  
 SHEET 03 - LANDSCAPE PLANTING  
 SHEET 04 - LANDSCAPE DETAILS  
 SHEET 05 - SCHEDULE / SPECIFICATION

# LANDSCAPE DOCUMENTATION / OPW - SHEET 01





PLEASE NOTE THIS LANDSCAPE PLAN DOES NOT TAKE INTO ACCOUNT ANY UNFORESEEN SUBSURFACE ROCK FORMATIONS.

**LEGEND**

**PLANTING**

- TREE PLANTING
- SHRUB PLANTING
- SHRUB PLANTING
- ACCENT PLANTING
- GROUND COVER PLANTING
- EXISTING TREE TO REMAIN
- TURF
- COMPACTED ROAD BASE TROT UP AREA

**HARD LANDSCAPE**

- CS CORTEN STEEL EDGE (REDCOR)
- TE TREATED HARDWOOD TIMBER EDGE (100 X 50mm)

**CONTEXT**

- BOUNDARY

AMENDMENTS

Issue	Description
A	19.03.20 ISSUE TO CLIENT FOR APPROVAL
B	24.04.20 ISSUE TO COUNCIL FOR APPROVAL

**element design**  
landscape architecture

MASTER PLANNING • SUBDIVISIONS • COMMERCIAL DEVELOPMENTS • RESORTS • PARKLANDS • REVEGETATION • MULTI-UNITS

151 Brisbane Rd, Mooloolaba  
Phone 07 5444 6155  
PO Box 1544, Bundaram QLD 4556  
admin@elementdesign.net.au

PROJECT: PROPOSED VETERINARY CLINIC AT #12 REYNOLDS ST MAREEBA

CLIENT: ELITE FITOUT P/L

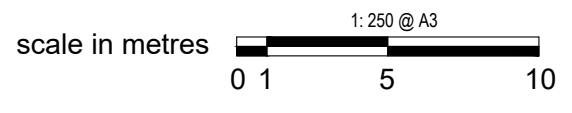
DWG TITLE: LANDSCAPE PLANTING PLAN

ISSUE: B  
ED 25160 OPW - 02

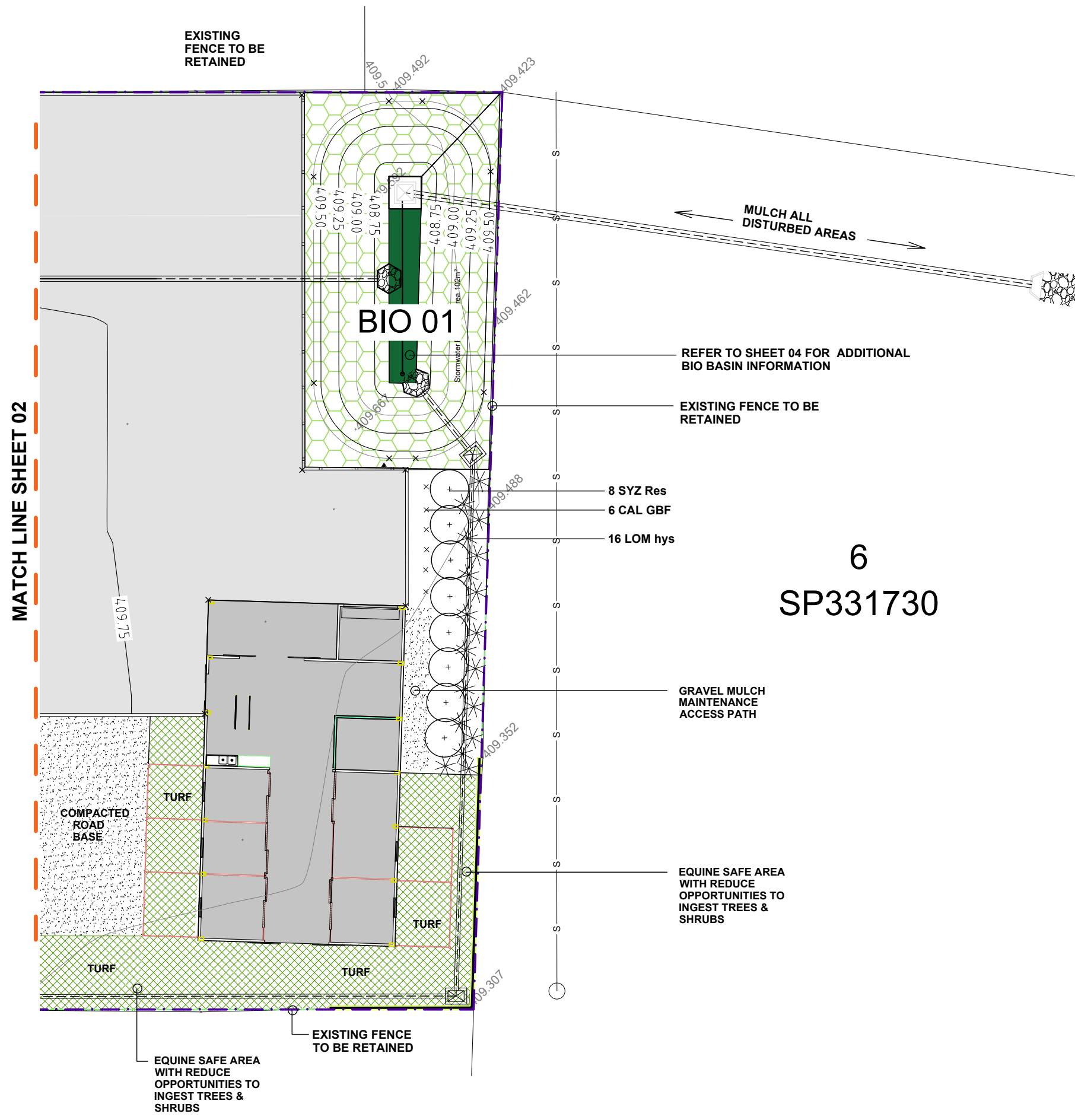
Scale: 1:250 @ A3  
Date: MARCH 2026  
Design: JV Drawn: JV  
Sheet: 02 OF 05

©COPYRIGHT 2010 ELEMENT DESIGN QLD PTY LTD  
Copyright in the whole and every part of this document belongs to ELEMENT DESIGN QLD PTY LTD and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in any way needs to any person without the prior written consent of ELEMENT DESIGN QLD PTY LTD.

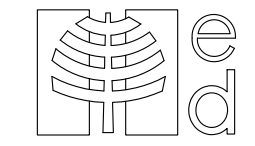
**LANDSCAPE PLAN Operational Works - Sheet 2**



PLEASE NOTE THIS LANDSCAPE PLAN DOES NOT TAKE INTO ACCOUNT ANY UNFORESEEN SUBSURFACE ROCK FORMATIONS.



6  
SP331730



**LEGEND**  
**PLANTING**

- TREE PLANTING
- SHRUB PLANTING
- SHRUB PLANTING
- ACCENT PLANTING
- GROUNDCOVER PLANTING
- EXISTING TREE TO REMAIN
- TURF
- COMPACTED ROAD BASE TROT UP AREA

**HARD LANDSCAPE**

- CORTEN STEEL EDGE (REDCOR)
- TREATED HARDWOOD TIMBER EDGE (100 X 50mm)

**CONTEXT**

- BOUNDARY

AMENDMENTS

Issue	Date	Description
A	19.03.20	ISSUE TO CLIENT FOR APPROVAL
B	24.04.20	ISSUE TO COUNCIL FOR APPROVAL



**element design**  
**landscape architecture**

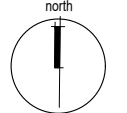
MASTER PLANNING • SUBDIVISIONS • COMMERCIAL DEVELOPMENTS • RESORTS • PARKLANDS • REVEGETATION • MULTI-UNITS  
151 Brisbane Rd., Mooloolaba  
Phone 07 5444 6155  
PO Box 1546, Bundaberg QLD 4556  
admin@elementdesign.net.au

PROJECT **PROPOSED VETERINARY CLINIC AT #12 REYNOLDS ST MAREEBA**

CLIENT **ELITE FITOUT P/L**

DWG TITLE **LANDSCAPE PLANTING PLAN**

ISSUE	B
<b>ED 25160</b>	<b>OPW - 03</b>

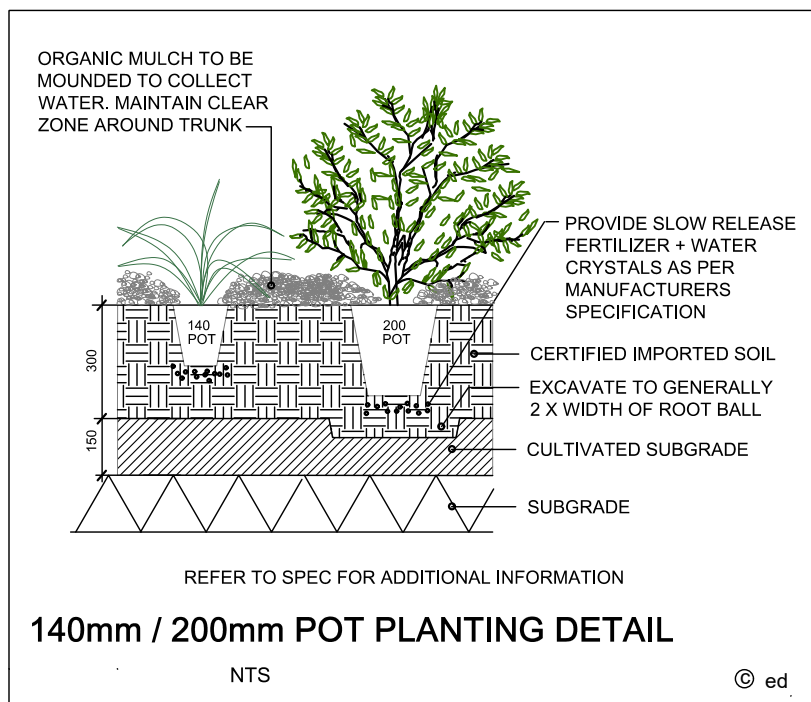
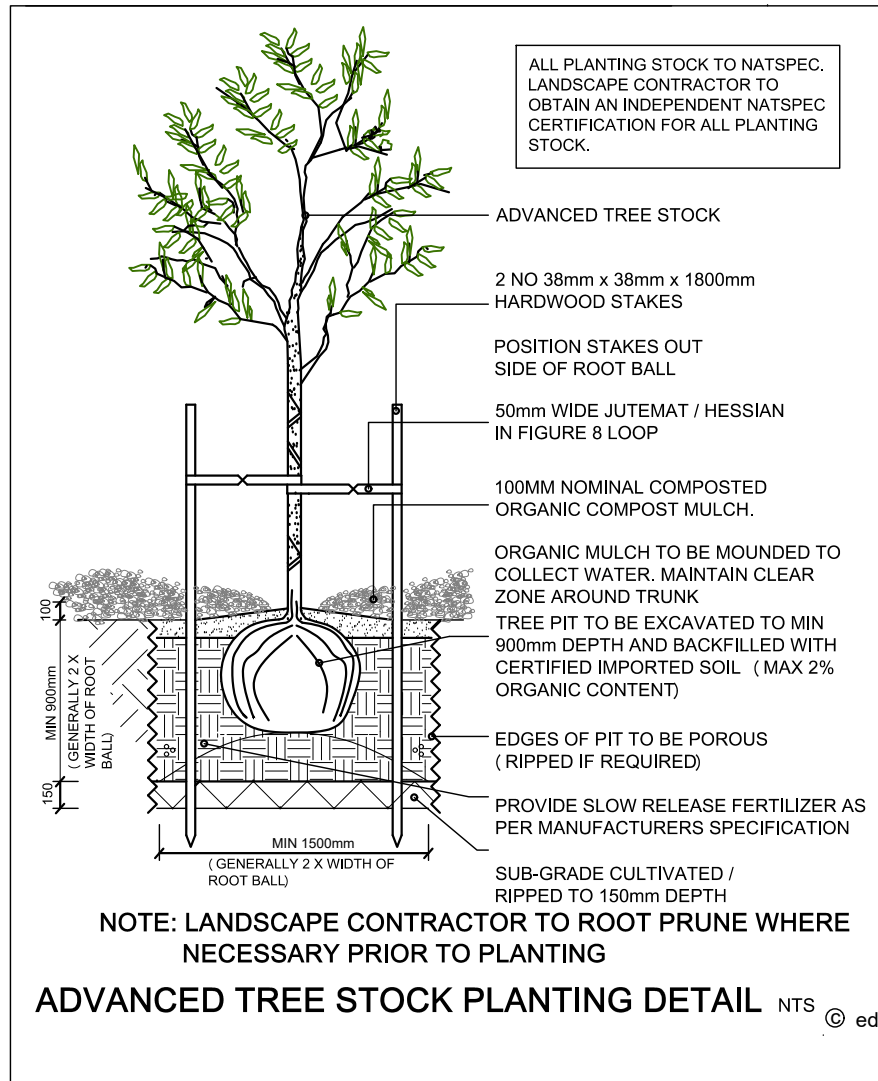


Date	MARCH 2026
Scale	1:250 @ A3
Design	JV Drawn JV
Sheet	03 OF 05



**LANDSCAPE PLAN Operational Works - Sheet 3**

©COPYRIGHT 2010 ELEMENT DESIGN QLD PTY LTD  
Copyright in the whole and every part of this document belongs to ELEMENT DESIGN QLD PTY LTD and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in any media to any person without the prior written consent of ELEMENT DESIGN QLD PTY LTD.

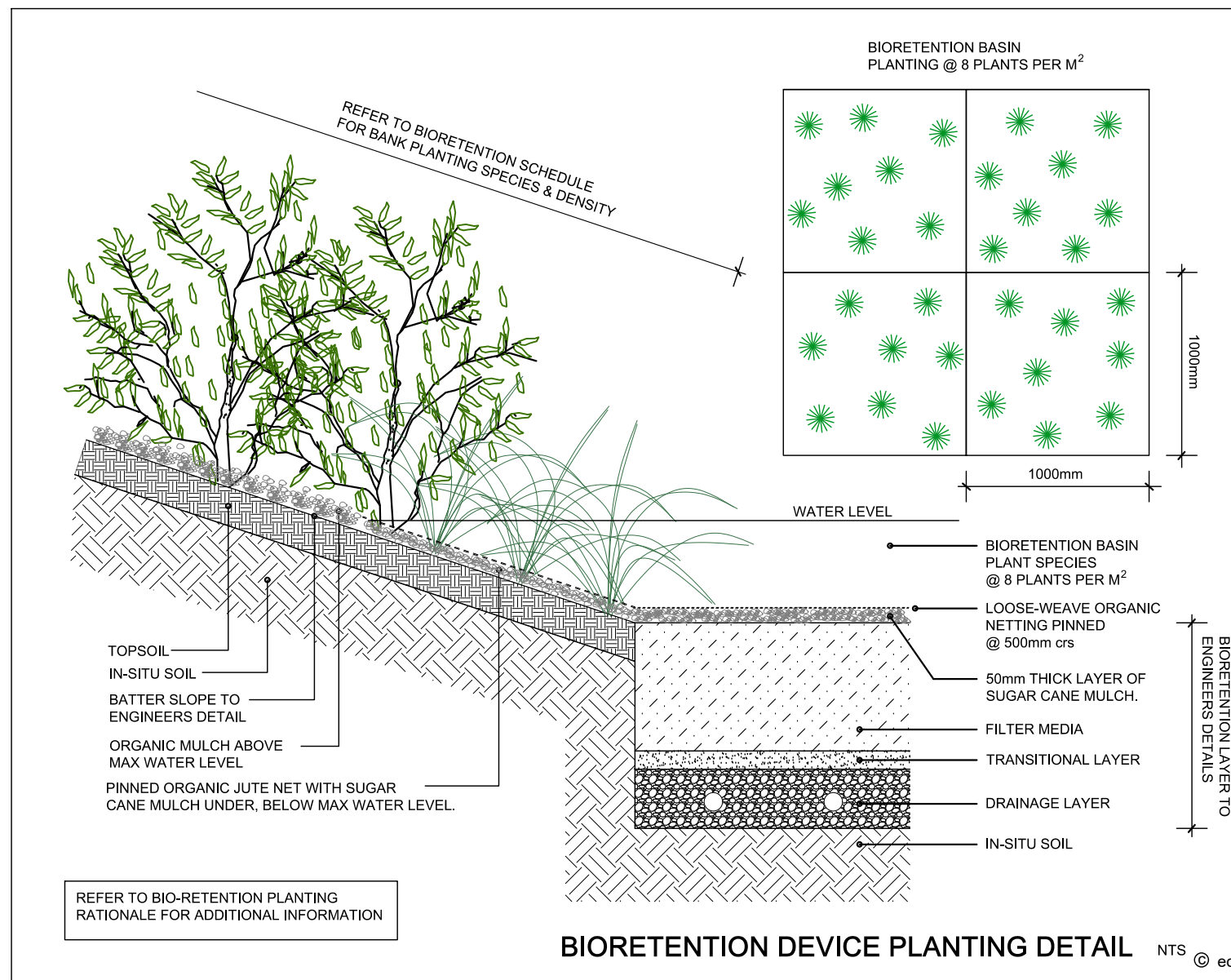


## BIO 01 : BIO-RETENTION BASIN AND BATTER PLANTING DETAILS.

### BIO-RETENTION BASIN PLANTING DETAILS

BASIN No.	LOCATION	AREA (sqm)	PLANT DENSITY (qty / sqm)	QUANTITY	SPECIES
BIO 01	BASE Perimeter	16 m2 22.0 lin.m	8 1	128 22	<b>BASE</b> (Tubestock) 20% <i>Isolepis nodosa</i> 80% <i>Lomandra hystrix</i>
	BATTERS	200 m2	1	200	<b>BATTERS</b> (tubestock) 65% <i>Lomandra hystrix</i> 10% <i>Banksia Robur</i> 10% <i>Melastoma affine</i> 10% <i>Baeckea virgata</i> 5% <i>Melaleuca quinquenervia</i> (140 pot)

DETAILS FOR PLANTING DENSITIES AND SPECIES REFERENCED FROM WSUD TECHNICAL DESIGN GUIDELINES SOUTH EAST QUEENSLAND - VERSION 1 OCTOBER 2012



PLEASE NOTE THIS LANDSCAPE PLAN DOES NOT TAKE INTO ACCOUNT ANY UNFORESEEN SUBSURFACE ROCK FORMATIONS.

AMENDMENTS

Issue	Date	Description
A	19.03.26	ISSUE TO CLIENT FOR APPROVAL
B	24.04.26	ISSUE TO COUNCIL FOR APPROVAL

**element design**  
landscape architecture

MASTER PLANNING • SUBDIVISIONS • COMMERCIAL DEVELOPMENTS • RESORTS • PARKLANDS • REVEGETATION • MULT-UNITS

151 Brisbane Rd., Mooloolaba  
Phone 07 5444 4155  
PO Box 1546, Bunderrim QLD 4556  
admin@elementdesign.net.au

PROJECT **PROPOSED VETERINARY CLINIC AT #12 REYNOLDS ST MAREEBA**

CLIENT **ELITE FITOUT P/L**

DWG TITLE **LANDSCAPE PLAN DETAILS SHEET**

ISSUE	<b>B</b>
<b>ED 25160</b>	<b>OPW - 04</b>

Date MARCH 2026

Scale 1:200

Design JV Drawn JV

Sheet 04 OF 05

© COPYRIGHT 2010 ELEMENT DESIGN QLD PTY LTD  
Copyright in the whole and every part of this document belongs to ELEMENT DESIGN QLD PTY LTD and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of ELEMENT DESIGN QLD PTY LTD.

# PLANT SCHEDULE

Contractor to confirm plant quantities prior to ordering

**element design**™

ED 25160 Issue A

## TREE SPECIES

Code	Botanical Name	Common Name	Size	Quantity
ATR fit	<i>Atractocarpus fitzalanii</i>	Yellow Mangosteem	45 ltr	3
BAC cit	<i>Backhousia citriodora</i>	Lemon Scented Myrtle	45 ltr	3
BUC cel	<i>Buckinghamia celsisima</i>	Ivory Curl Flower	45 ltr	4
STE sin	<i>Stenocarpus sinuatus</i>	Firewheel Tree	45 ltr	2
XAN chr	<i>Xanthostemon chrysanthus</i>	Golden Penda	45 ltr	2

## SHRUB SPECIES

Code	Botanical Name	Common Name	Size	Quantity
BAE vir	<i>Baeckia virgata 'Dwarf'</i>	Baeckea	200 pot	24
BAN spi	<i>Banksia spinulosa</i>	Hairpin Banksia	200 pot	2
DIA cae	<i>Dianella caerulea</i>	Flax Lilly	140 pot	12
CAL LJ	<i>Callistemon 'Little John'</i>	Little John	140 pot	6
CAL GBF	<i>Callistemon 'Great Balls of Fire'</i>	Great Balls of Fire	140 pot	14
CAL Sli	<i>Callistemon vim. 'Slim'</i>	Bottlebrush	200 pot	12
HYM lit	<i>Hymenocallis littoralis</i>	Spider Lily	200 pot	49
LEP Car	<i>Leptospermum Cardwell</i>	Cardwell	200 pot	3
LOM LT	<i>Lomandra longifolia 'Lime Tuff'</i>	Lime Tuff	140 pot	11
LOM hys	<i>Lomandra hystrix</i>	Matt Rush	140 pot	52
SYZ Cas	<i>Syzygium 'Cascade'</i>	Weeping Lily Pilly	300 pot	3
SYZ Pin	<i>Syzygium australe 'Pinnacle'</i>	Pinnacle	200 pot	7
SYZ Res	<i>Syzygium 'Resilience'</i>	Resilience	200 pot	19
STR reg	<i>Strelitzia regina</i>	Bird of Paradise	200 pot	6

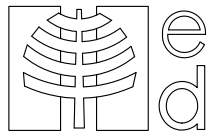
## GROUND COVER SPECIES

Code	Botanical Name	Common Name	Size	Quantity
TRA jas	<i>Trachelospermum jasminoides</i>	Star Jasmine	140 pot	3
TRA Tri	<i>Trachleospermum Tricolor jasminoides</i>	Tricolor Jasmine	140 pot	49

## SPECIFICATION FOR LANDSCAPE WORKS

**element design**™

SCOPE	PERFORMANCE
<b>GENERAL CONDITIONS</b>	<ul style="list-style-type: none"> <li>ALL LANDSCAPE CONSTRUCTION WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH RELEVANT COUNCIL APPROVALS AND TO INDUSTRY BEST PRACTICE. ANY CHANGES FROM DESIGN DOCUMENTATION MUST BE APPROVED BY PROJECT LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION ON SITE. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE UNDERTAKEN WHERE NECESSARY TO ENSURE NO DETRIMENTAL EFFECT TO DOWNSTREAM WATERWAYS OR NEIGHBOURING SITES.</li> </ul>
<b>SITE PREPARATION / EARTHWORKS</b>	<ul style="list-style-type: none"> <li>PRIOR TO COMMENCEMENT OF WORKS, EXISTING SITE CONDITION IS TO BE DOCUMENTED BY CONTRACTOR. ALL EXISTING AND PROPOSED SERVICES ON SITE ARE TO BE LOCATED AND CLEARLY IDENTIFIED. ALL BUILDING RUBBISH AND DELETERIOUS MATERIALS ARE TO BE REMOVED FROM SITE TO APPROVED WASTE LOCATION. LANDSCAPE AREAS SHALL BE SCARIFIED TO A DEPTH OF 150mm TO PROMOTE GOOD GROWTH FOR TURF AND PLANTING.</li> </ul>
<b>MATERIALS / SERVICES</b>	<ul style="list-style-type: none"> <li>ALL MATERIALS TO BE USED IN THE CONSTRUCTION OF THE DESIGNED LANDSCAPE ARE TO BE OF AND INDUSTRY STANDARD QUALITY AND FROM A SUSTAINABLE SOURCE WHERE POSSIBLE. NO MATERIALS USED ON SITE SHALL BE TOXIC TO HUMANS, ANIMALS OR PLANTS. ALL SELECT ITEM MATERIALS ARE TO BE APPROVED BY CLIENT PRIOR TO CONSTRUCTION ON SITE. PROVIDE SERVICE CONDUITS TO ALL GARDEN BEDS FOR IRRIGATION AND DRAINAGE PURPOSE. PROVIDE CONDUITS FOR LIGHTING WHERE REQUIRED. ENSURE ADEQUATE DRAINAGE TO PLANTING AREAS FOR SPECIFIC SITE SOIL CONDITIONS VIA THE USE OF SLOTTED AGRICULTURAL DRAIN (SELECT TYPE FOR APPLICATION), OVERLAND FLOW PATHS WITHIN GARDENS (SELECT RIVER GRAVEL ON GEOFABRIC MATERIAL) AND SURFACE STORMWATER PITS (LOCATED IN GENERALLY CONCEALED POSITIONS).</li> </ul>
<b>HARDSCAPE</b>	<ul style="list-style-type: none"> <li>PROPOSED HARDSCAPE ITEMS ARE TO BE CONSTRUCTED TO AUSTRALIAN STANDARDS AND RELEVANT COUNCIL CODES BY A SUITABLY LICENCED CONTRACTOR. WORKPLACE HEALTH AND SAFETY REGULATIONS MUST BE IMPLEMENTED DURING CONSTRUCTION PHASE.</li> </ul>
<b>PLANT MANAGEMENT</b>	<ul style="list-style-type: none"> <li>ALL PLANT SPECIES ARE DETAILED WITHIN THE PLANT SCHEDULE. NO SUBSTITUTIONS ALLOWED WITHOUT PRIOR ACCEPTANCE BY COUNCIL AND PROJECT LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL PLANTS AS SPECIFIED FROM AN ACCREDITED NURSERY OR OTHER APPROVED SOURCE. PLANTS SHALL BE PRE-WATERED PRIOR TO ARRIVING ON SITE. PLANTS SHALL BE HEALTHY, HARDY AND OF GOOD FORM. THE ROOT SYSTEM OF EACH PLANT SHOULD NOT BE ROOTBOUND AND BE CONDUCTIVE TO SUCCESSFUL TRANSPLANTATION. ALL PLANTS TO BE PEST AND DISEASE FREE WITH CONTAINERS FREE FROM WEEDS. STREET TREE SPECIES ARE TO COMPLY WITH NATSPEC AND RELEVANT COUNCIL CONDITIONS. STAKE TREES WITH A MIN. OF TWO 50x50 HWD STAKES AND HESSION STRAP OR SIMILAR AS NOT TO DAMAGE TREE. FIGURE 'B' DETAIL RECOMMENDED. NO TYPE OF STAKE TO BE PLACED THROUGH ROOTBALL OF PLANT AT ANY TIME. EACH PLANT TO HAVE ADDED WATER CRYSTALS TO PLANTING HOLE AND WATERED IN AFTER PLANTING AS REQUIRED. PLANT STOCK MAY BE REJECTED IF NOT CONFORMING WITH ABOVE SPECIFICATIONS.</li> </ul>
<b>SOFTSCAPE</b> <b>AS 4419-2003, SOILS FOR LANDSCAPING AND GARDEN USE</b> <b>AS 4454-2003, COMPOSTS, SOIL CONDITIONERS AND MULCHES</b>	<ul style="list-style-type: none"> <li>SETOUT OF ALL SOFTSCAPE AREAS TO BE IN ACCORDANCE WITH APPROVED PLANS. PLANTING AREAS TO BE MOUNDED TO ACHIEVE ADEQUATE DRAINAGE AND AESTHETIC PRESENTATION. SOIL: A GOOD QUALITY FRIABLE, MODERATELY DRAINING, ORGANIC ENRICHED LANDSCAPING SOIL MIX SHALL BE IMPORTED FROM AN APPROVED SOURCE. THE SOIL SHOULD NOT CONTAIN ANY CLAY AND BE FREE FROM CONTAMINANTS SUCH AS WEEDS, STICKS AND ROCKS. IMPLEMENTATION WITHIN GARDEN AREAS TO A MIN. OF 300mm DEPTH. ORGANIC MULCH: HOOP PINE MULCH IN ITS VARIETY OF FORMS IS TO BE SUPPLIED AND INSTALLED TO A MIN. DEPTH OF 100mm. MULCH IS TO BE FREE OF FOREIGN MATTER INCLUDING WEEDS, SOIL, STICKS AND ROCKS. AVOID PLACEMENT OF MULCH AGAINST STEM OR TRUNK OF PLANTS. GRADE MULCH TO BE SELF RETAINED WITHIN GARDEN EDGING. GRAVEL MULCH: SELECTED WASHED RIVER MULCH GRADED IN SIZE AND COLOUR. USE IN AREAS AS SPECIFIED ON PLANS. TO BE USED TO SEPARATE ORGANIC MULCH FROM THE WALLS OF BUILDINGS, ADJACENT PATHS AND TOO FACILITATE DRAINAGE WITHIN GARDEN BEDS. MIN. DEPTH TO BE TWICE THE DIAMETER OF THE LARGEST PEBBLE.</li> </ul>
<b>TURF (GREEN COUCH)</b>	<ul style="list-style-type: none"> <li>TURF SHALL CONSIST OF A DENSE, WELL ROOTED, VIGOROUS GRASS GROWTH WITH MIN. 25mm OF TOPSOIL. TURF IS TO BE DELIVERED TO SITE WITHIN 24 HOURS OF BEING CUT. TURF SHOULD BE FREE FROM DELETERIOUS MATERIAL INCLUDING WEEDS, SEEDS OR ROOTS INCLUDING NUT GRASS AND OXALIS. TURF SHALL BE SUPPLIED IN UNIFORM SIZE IN UNBROKEN CONDITION. MOISTURE LEVEL OF TURF TO REMAIN CONSISTANT DURING LAYING. TURF TO BE LAID ALONG CONTOUR AND PINNED IF GREATER THAN 1:4 SLOPE. PREPARE SUBGRADE TO A LEVEL BASE WITH AN APPROVED TOPSOIL AND SPREAD UNDER TURF FERTILIZER AT RECOMMENDED RATE. TURF TO FINISH LEVEL WITH PATHS, EDGES AND KERBS AFTER ROLLING AND SETTLEMENT.</li> </ul>
<b>IRRIGATION (NOT REQUIRED)</b>	<ul style="list-style-type: none"> <li>IRRIGATION TO BE INSTALLED BY A SUITABLY QUALIFIED CONTRACTOR AND BE INSTALLED IN ACCORDANCE WITH ALL COUNCIL WATER REGULATIONS. THE MOST WATER EFFICIENT METHOD OF IRRIGATION IS TO BE USED, CONNECTED TO TANK SUPPLY WHERE POSSIBLE. CONDUITS TO BE LAID TO ALL GARDEN AREAS TO PROVIDE A REGULATED COVERAGE. FLUSH AND PRESSURE TEST PRIOR TO COMMISSIONING. PROVIDE AS CONSTRUCTED DRAWINGS CLEARLY SHOWING LOCATION OF ALL IRRIGATION COMPONENTRY.</li> </ul>
<b>LANDSCAPE ESTABLISHMENT PERIOD</b>	<ul style="list-style-type: none"> <li>THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF ALL LANDSCAPE WORKS FOR A PERIOD OF 13 WEEKS AFTER COMPLETION. MAINTENANCE IS TO INCLUDE MOWING OF TURF, REMOVAL AND SPRAYING OF WEEDS, PRUNING AND TRIMMING OF SHRUBS WHERE REQUIRED, REPLACEMENT OF DEAD OR DISEASED PLANT STOCK AND CORRECT WORKING OF IRRIGATION SYSTEM. WATER IS TO BE PROVIDED TO ALL SOFT LANDSCAPING AT A REQUIRED RATE DURING THE ESTABLISHMENT PERIOD TO ENSURE HEALTHY AND VIGOROUS GROWTH.</li> </ul>



PLEASE NOTE THIS LANDSCAPE PLAN DOES NOT TAKE INTO ACCOUNT ANY UNFORESEEN SUBSURFACE ROCK FORMATIONS.

AMENDMENTS  
 Issue Date Description  
 A 19.03.26 ISSUE TO CLIENT FOR APPROVAL  
 B 24.04.26 ISSUE TO COUNCIL FOR APPROVAL



**element design**  
**landscape architecture**

MASTER PLANNING • SUBDIVISIONS • COMMERCIAL DEVELOPMENTS • RESORTS • PARKLANDS • REVEGETATION • MULTIHUNTS  
 151 Brisbane Rd., Mooloolaba  
 Phone 07 5444 6155  
 PO Box 1546, Buderim QLD 4556  
 admin@elementdesign.net.au

PROJECT **PROPOSED VETERINARY CLINIC AT #12 REYNOLDS ST MAREEBA**

CLIENT **ELITE FITOUT P/L**

DWG TITLE **PLANT SCHEDULE & SPECIFICATION**

Issue **B**  
**ED 25160 OPW - 05**

Date MARCH 2026  
 Scale 1:200  
 Design JV Drawn JV  
 Sheet 05 OF 05

**DIAL BEFORE YOU DIG**  
 WWW. 1100.COM.AU

©COPYRIGHT 2010 ELEMENT DESIGN QLD PTY LTD  
 Copyright in the whole and every part of this document belongs to ELEMENT DESIGN QLD PTY LTD and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of ELEMENT DESIGN QLD PTY LTD.

# LANDSCAPE PLAN Operational Works - Sheet 5