Gladstone Ports Corporation

Growth, prosperity, community.

#1966822: EC: TS
GPC Reference: RR2024/006/01

21 October 2024

Department of Transport and Main Roads (DTMR)
Wide Bay Burnett Regional Office
Locked Bag 486
BUNDABERG QLD 4670
Att: Helen Stevenson

Dear Helen,

REFERRAL AGENCY RESPONSE – LIMITED TO ADVICE - RR2024/006/01

(GIVEN UNDER S56 PLANNING ACT 2016)

1 Application Details

The development application was properly referred to the Gladstone Ports Corporation Limited under section 54 of the *Planning Act 2016* on **25 September 2024**

Application Number:	RR2024/006/01
Applicant Name:	Department of Transport and Main Roads
Applicant Contact Details:	Wide Bay Burnett Regional Office Locked Bag 486 BUNDABERG QLD 4670 Att: Helen Stevenson Email: Helen.A.Stevenson@tmr.qld.gov.au
Approval Sought (Port Limits):	*Planning Regulation 2017* Part 13, Schedule 10, Division 3 – Table 1 - Prescribed assessable development on land below high-water mark and within the limits of a port under the Transport Infrastructure Act - GPC as the Referral Agency (limited to advice)
Details of Proposed Development:	Operational Works – Prescribed Tidal Works – Scour Protection at Lamington Bridge, Tinana
Location Street Address:	23 Gympie Road, Tinana Qld 4650

Location Real Property Description:	Lot 2 RP92894
Land Owner:	Department of Resources

2 Description of Proposed Development

Flood remediation works for the Lamington Bridge slope comprising a concrete block retaining wall on a piled foundation. The works are required to increase the structural integrity on the Queensland Heritage Listed bridge (ID600721).

3 Referral Triggers

This development application was referred to the Gladstone Ports Corporation Limited under the following provisions of the *Planning Regulation 2017*:

Schedule 10, Part 13, Division 3, Table 1, Item 1 –

a. Prescribed assessable development within limits of a port and
b. On land below high-water mark and within the limits of a port under the Transport Infrastructure Act

4. Details of Referral Response

This development application has been assessed against port authority functions under the *Transport Infrastructure Act 1994*, Chapter 8, Part 3 as required in Schedule 10, Part 13, Division 3, Table 1, Item 4 of the *Planning Regulation 2017*.

The Gladstone Ports Corporation Limited requests the Assessment Manager, under section 56(3) of the *Planning Act 2016* to give the following advice stated in Attachment 1.

For further information please contact Trudi Smith, Planning Specialist on 07 4976 1314 or via email planning@gpcl.com.au.

Yours sincerely

Kim Gebers

Acting Chief Executive Officer

Cc: Assessment manager

Enc. Attachment 1: Referral Agency Advice

Gladstone Ports Corporation Limited
T: +61 7 4976 1333 • Fax: +61 7 4972 3045 • 40 Goondoon St/PO Box 259, Gladstone QLD, 4680, AUSTRALIA • www.gpcl.com.au
ACN 131 965 896 ABN 96 263 788 242

Attachment 1: Referral Agency Response (Limited to Advice)

PART 1: ADVICE

In general the development proposal is in compliance with the requirements of the *Transport Infrastructure Act 1994*. This development approval is subject to each the following advice notes which are stated by GPC, the Referral Agency (limited to advice).

Part 1a: Approval sought under *Planning Act 2016* – Prescribed assessable development on land below high-water mark and within the limits of a port under the Transport Infrastructure Act

General

1. Unless otherwise stated, all conditions must be complied with and completed prior to the commencement of the development.

2. Where additional "approval" is required under these conditions by the Referral Agency (Gladstone Ports Corporation Limited) for drawings or documentation the Applicant must submit for review, amend to the satisfaction of, and obtain written approval from the Referral Agency.

   Furthermore, the Referral Agency will require no less than 10 business days, unless otherwise conditioned by the Referral Agency, to initially assess the drawings or documentation provided prior to the commencement of the works. Should further information be required for assessment, the Referral Agency will require a further 5 business days to complete the information request assessment and response.

   Note: Where the Applicant is required to submit further documentation to the Referral Agency, this is to be directed to the Planning section at planning@gpcl.com.au, including reference to the allocated referral response number.

3. The development must be a designed and constructed to mitigate potential adverse impacts to port functions, services and facilities, and to maintain safe navigable access within Port Limits.

4. All development should proceed in accordance with the duty of care guidelines under the *Aboriginal Cultural Heritage Act 2003*. Penalties may apply where duty of care under that Act has been breached.

5. The *Environmental Protection Act 1994* states that a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm. Environmental harm includes environmental nuisance. In this regard persons and entities, involved in the civil, earthworks, construction, and operational phases of this development, are to adhere to their 'general environmental duty' to minimise the risk of causing environmental harm.

Engineering

6. Upon completion of the works, the Applicant must supply the Referral Agency with RPEQ certified "As Constructed" plans in both hard copy (2 of) and electronic (CAD format) which illustrate all infrastructure and services installed on, under or over Port limits associated with the activity unless otherwise approved in writing by the Referral Agency.

7. The Applicant must inform the Referral Agency of completion of works within Port Limits within 14 days of practical completion and certify that the site is fit for purpose.

8. Any site lighting used during construction / development should not negatively impact on the visibility of Navigational Aids utilised for the primary shipping channels within Port Limits nor illuminate a landward glare beyond the site boundary. Lighting must be reviewed during construction and use of the development with respect to navigation. Where an issue is identified or a validated complaint received, the Applicant must immediately rectify to the satisfaction of the Referral Agency.

9. Any material which is deposited (not authorised under this approval) or any debris which falls or is deposited within Port Limits during the construction of the approved development shall be removed by the applicant at their cost and expense prior to the commencement of the use of approved structure.

   Upon completion of construction, the applicant shall provide the Referral Agency with written confirmation that the waterway is clear of foreign materials not authorised under this approval.

10. If, as a result of the works, or other cause attributable to the Applicant, any bank or tidal structure within Port Limits is displaced (excluding approved works), the Applicant at its cost and expense shall restore the bank or structure to its former condition and take such other action as is necessary to ensure the stability of the bank or structure.

11. Prior to works within Port Limits commencing, the Applicant or their contractor must supply to the Referral Agency for review and approval an Emergency Management Plan for the works within Port Limits for all potential incidents e.g. contaminant spill, riverine flood, adverse weather etc.

Incident Notification

12. At all times, Gladstone Ports Corporation Environmental Hotline (07) 4976 1617 is to be notified of the occurrence of any:

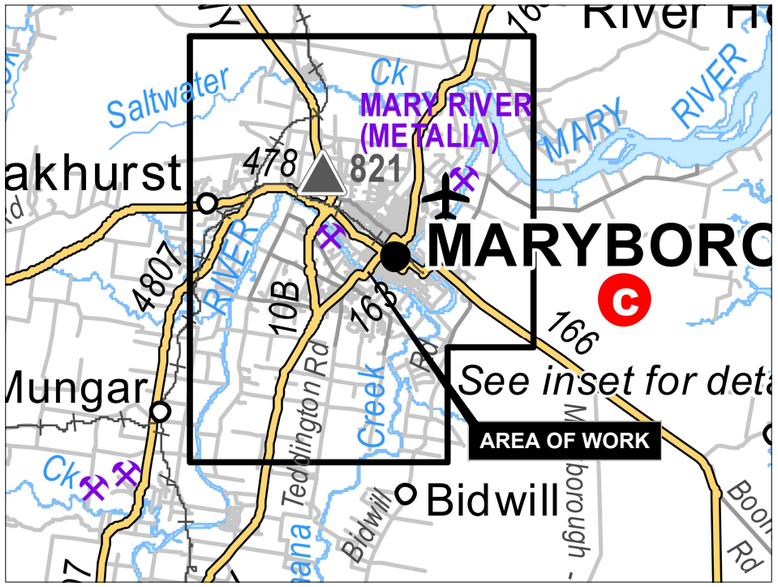
    a) Release / spill of contaminants (e.g. fuels / chemicals / sewerage) of any amount to water, and

    b) Any environmental complaints received by the holder of this approval.

13. Environmental incident notification must be included in any Management Plans for the works within Port Limits.

AECOM

RECONSTRUCTION OF ESSENTIAL PUBLIC ASSET
(DTMR Event ID:22A)
163 Lamington Bridge - Gympie Road
228/163/2835872



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953832	NL-02	GENERAL NOTES AND LEGEND - SHEET 2
953833	NL-03	GENERAL NOTES AND LEGEND - SHEET 3
953834	TC-01	TYPICAL SECTION - SHEET 1
953835	TC-02	TYPICAL SECTION - SHEET 2
953836	GD-01	GENERAL DETAILS - SHEET 1
953837	GD-02	GENERAL DETAILS - SHEET 2
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SCHEME SUBMITTED *(External Consultants or Internal Business Unit):*

This design meets the requirements of all relevant Australian Standards, Austroads Guidelines and Transport and Main Roads - Policies. References, Standards, Planning and Design Instructions, Guidelines and the requirements of the project brief/functional specifications.

FULL NAME: MICHAEL HARBER DATE: 19/07/2024

POSITION TITLE: PROJECT MANAGER Organisation: AECOM

SIGNED (IF IN WET INK):

SCHEME SCOPE AND FINANCIAL APPROVAL: *(Regional Director or Delegate):*

I hereby certify that this scheme complies with the intent of the scope and financial limits of the relevant project on QTRIP and the scheme is approved for release in accordance with that program.

FULL NAME: DATE:

POSITION TITLE: Organisation:

SIGNED (IF IN WET INK):

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:41 pm, 21/10/2024

	Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. or - Full Name and Position Title	Date
4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024

Last Modified :- Jul 30, 2024 - 1:49PM

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-01001-DI

Associated Job Nos
Auxiliary Drg Nos

Survey Data
Horiz. Datum: GDA2020
Horiz. Grid: MGA 56
Height Datum: AHD
Survey Books: 200418 001 200418

Scales: NTS

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE - GYMPIE ROAD
CTL CHGE 2824 - 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
DRAWING INDEX AND LOCALITY PLAN

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953830 4
Series Number	DI-01 of 01

AECOM

GENERAL NOTES

1. The drawings are to be read in conjunction with the following documents:
   - Technical Specifications
   - Supplementary Specifications
   - Tectonic Factual Report Geotechnical Investigation 23329–001–Rev0 dated 12 March 2024
   - AECOM development design Report 60701625–RP–DE–0003
2. The contractor is responsible for the design and provision of any temporary works required for permanent works construction.
3. All locations, orientation and levels shall be verified on site before commencing any work. Discrepancies shall be referred to the administrator (hold point).
4. All dimensions are in millimetres unless noted otherwise.
5. Any permits and approvals required for construction of permanent or temporary works shall be obtained by the contractor.
6. The contractor is responsible for protection of all existing infrastructure. All damages and reinstatement works shall be done to the satisfaction of the administrator at the Contractor's expense.
7. Where trade names have been used for a particular product requirement, equivalent products may be submitted to the Administrator for approval.
8. The structures in this package shall be constructed in accordance with TMR Technical Specifications.

SERVICES

1. Quality Level A survey has been undertaken for services.
2. All services must be located, identified and protected before works are carried out in vicinity of retaining walls.

EARLY WORKS

1. The drawings shall be read in conjunction with the following documents:
   - Environmental management plan
   - Traffic management plan
2. Clearing and grubbing shall be in accordance with MRTS04. The site shall be inspected by designer's RPEQ geotechnical engineer to direct extent of works.
3. Drainage, erosion and sedimentation control measures shall be in accordance with the environmental management plan.
4. Silt retention and temporary surface drainage works shall be in place prior to construction.
5. The works shall be constructed in accordance with the Contractor's approved work method statements.

PROTECTION OF THE WORKS

1. Suitable measures shall be taken to protect the excavated area against inclement weather during construction.
2. Areas disturbed for any temporary works / stockpiling shall be reinstated to the existing condition.
3. Any damage to the existing pavement or infrastructure during the piling operations shall be repaired by the Contractor at the Contractor's expense.

EARTHWORKS

1. Measures shall be taken to prevent the uncontrolled fall, roll, topple, slump or slide of debris / slope material arising from the works.
2. Excavation shall be carried out to form benches at a maximum slope angle of 1:1.5 U.N.O. Typical excavation detail is provided in the drawings.
3. The extent of the works and transition into existing side slopes shall be confirmed on site by the designer's RPEQ geotechnical engineer.
4. Excavation of existing rock shall be re–used on site if suitable as approved by the administrator, any excess shall be removed from site.
5. The Contractor's RPEQ Geotechnical Engineer shall verify the minimum allowable bearing capacity for base slab foundations and the adequacy of piles embedment into the medium dense sand layer.
6. Excavation, backfilling and compaction operations shall be carried out in accordance with the provisions of MRTS04 General Earthworks and MRTS Annexure 04.1
7. Procedures and processes for the identification, removal and replacement of any unsuitable materials shall comply with the provisions of MRTS04 clause 9.
8. The constructor shall be responsible for maintaining the excavation in a stable condition during construction.
9. The constructor shall exercise caution when backfilling, concreting or compacting and shall consider the need for additional temporary supports for sensitive construction activities.

MASS BLOCKS (KEPPEL BLOCK)

1. Mass blocks shall be in accordance with Keppel Block
2. Placement of backfill to reinforced slope shall be in accordance with MRTS04.
3. Placement of soil reinforcement and compaction of reinforced fill material to be in accordance with MRTS100
4. Compliance testing of backfill material to be used for reinforced earth block to be in accordance with MRTS100. The minimum angle of internal friction is to be 30^0.
5. The following inspections will be required to be carried out by the Administrator during construction:
   a. HOLD POINT – prior to commencement of works on the reinforced slope the Contractor shall supply a Work Method Statement for the installation of the soil reinforcement and compaction, including plant to be used. This will require approval prior to the commencement of works.
   b. HOLD POINT – for approval of foundation, testing will be as follows:
   - DCP's at 5 m centres along the base excavation level
   - Proof roll full length of footing if practical
   - Witness inspection and approval of testing results by the Administrator.
   - Review retaining wall geometry at 10 m centres.
6. Witness inspection for placing of blocks including the connection of the reinforcing grid and placement of fill levels.
7. Placement of the fill in the reinforced block shall be Level 1 controlled fill as defined in AS3798–2007.
8. Stability of the temporary cut and requirements of temporary slope support measures to be assessed by the Contractor.

DRAINAGE

1. Existing road drainage pit invert level and location of 300 mm RCP outlet to be confirmed prior to commencement of works HOLD POINT.
2. Field inlet pit to be in accordance with TMR Std Drg 1310, apron levels to tie into concrete lined drain.
3. Drainage outlets to be provided within the concrete batter protection at locations as shown on the drainage plan. 100 dia PVC at 3 m centres and fitted with a flap valve.
4. Access chamber shall be in accordance with TMR Std Drg 1307 unless noted otherwise.
5. All pipes and culverts shall have a 50 year design life. The exposure classification for RCP shall be normal.
6. All concrete pipes shall be installed with type HS3 support for concrete pipes in accordance with TMR Std Drg 1359 as appropriate unless noted otherwise.
7. All stormwater pipes shall be minimum Class 3 RCP or approved equivalent unless noted otherwise. All pipes to be flush or butt joint types unless noted otherwise.
8. Pipe class shown on the drawings allow the following mandatory minimum construction load cases in accordance with MRTS25.
   a) Truck and dog trailer with minimum height of compacted fill of 0.5 m over the top of the pipe. Load is defined in MRTS25 Figure 5.7.1(a).
   b) 25.9 tonne excavation and 580 mm compaction wheel acting separately with a minimum height of compacted fill of 1.0 m over the top of the pipe. Load is defined in MRTS25 Figure 5.7.1(b).
9. The Contractor shall ensure construction loads on pipes and culverts shall not exceed those identified in MRTS25.
10. Pipes shall be connected to pits such that the pipe is centred on the pit face unless otherwise noted.
11. Existing stormwater pipe to be removed unless noted otherwise.

ROCK PROTECTION

1. Rockfill protection to batters (riprap) shall comply with the requirements of MRTS03 with a D50 of 500 mm u.n.o.
2. The geotextile separation layer shall be in accordance with TMR Standard drawing 2242 for heavy duty non–woven geotextile.

FENCING

1. Pedestrian fencing shall be in accordance with Webforge Monowills to match the existing fencing.

CONCRETE BATTER PROTECTION

1. All concrete exposure classification shall be B2.
2. Concrete batters shall be in accordance with MRTS03.
3. Concrete batter protection shall be S32/20/80.
4. Concrete batter expansion joints at 8.0 m centres, perpendicular to the wall centre line unless noted otherwise.

ABBREVIATIONS

1. Abbreviations used are in accordance with AS1100.101 1992 and TMR 'Drafting and Design Presentation Standardss Manual'.
2. Additional abbreviations used throughout the set are as follows:

AHD	–	Australian Height Datum
CIP	–	Cast in place
CJ	–	Construction Joint
CRS	–	Centres
DN	–	Nominal Diameter
DWS	–	Deck wearing surface
EGL	–	Approximate existing ground level
EJ	–	Expansion Joint
FSL	–	Finished surface level
HDG	–	Hot dip galvanised
Ht	–	Height or reduced levels to Australian Height Datum
MRTS	–	Queensland Government Department of Transport and Main Roads Technical Standard
MRSD	–	Queensland Government Department of Transport and Main Roads Standard Drawing
OAE	–	Or approved equivalent
R	–	Radius
RC	–	Reinforced Concrete
SOP	–	Setout Point
SS	–	Stainless Steel
TMR	–	Queensland Government Department of Transport and Main Roads
TYP	–	Typical
UG	–	Underground
UNO	–	Unless Noted Otherwise
VC	–	Vertical Curve

SURVEY AND GENERAL ARRANGEMENT LEGEND

- Concrete Batter Protection
- Rock Scour Protection
- Property Boundary
- Fence
- Control Line and Chainages (100 80 60)
- Top of Batter
- Existing Electricity O/H (E)
- Existing Gas U/G (G)
- Existing Telecomms U/G (T)
- Existing Water Main (W)
- Existing Sewer Rising Main (SRM)
- Existing Stormwater (D)
- Existing Features
- Existing Batter
- Existing Kerb
- Existing Sign – Single
- Existing Sign – Double
- Existing Tree
- Existing Drainage Flow Path
- Existing Fence

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:41 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data: Horiz. Datum GDA2020; Horiz. Grid MGA 56; Height Datum AHD; Survey Books 200418 001 200418

Scales: NTS

Dimensions shown in millimiters except where shown otherwise

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Through Chainage from

DMTR EVENT 22A
GENERAL NOTES AND LEGEND
SHEET 1

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GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953831 3
Series Number	NL–01 of 03

CAD FILES | AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–03001–NL

Last Modified :- Jul 30, 2024 – 1:41PM

AECOM

CONCRETE NOTES

1. Concrete to be in accordance with MRTS70 Concrete.
2. Exposure classification shall be B2 as per AS5100.5
3. Concrete to be used in each element of the work shall be as follows:

ELEMENT	CLASS
Blinding Concrete	N20/20
Cast-in-place Piles	S40/20
Pile Caps	S40/20
Concrete foundation (Wall Type B)	S40/20

The class designation specifies the required Class and Grade to AS 1379-2007 and the nominal maximum aggregate size (mm).

4. All exposed edges having a contained angle of less than 120° to have 20 x 20 chamfers unless shown otherwise.
5. Construction joints shall be used only as shown on the drawings. No construction joint shown on the drawings shall be omitted without the written approval of the designer.

REINFORCING STEEL NOTES

1. Reinforcing steel to be in accordance with AS/NZS 4671-2019 and MRTS71 Reinforcing Steel.
2. Deformed bars Grade D500N.
3. All carbon reinforcing steel to be Australasian Certification Authority for Reinforcing and Structural Steels ACRS certified.
4. Reinforcing steel bar shapes shall be as detailed on MRSD 1043. Standard reinforcement abbreviations used on these drawings:

ABR	–	Alternate Bar Reversed	LV	–	Length Varies
ADD	–	Additional	NF	–	Near Face
ALT	–	Alternative	NSOE	–	Not shown on Elevation
B	–	Bottom face	NSOP	–	Not shown on plan
EF	–	Each face	T	–	Top face
ES	–	Equally spaced	STAG	–	Staggered
FF	–	Far face	EW	–	Each way
BW	–	Both ways	T&B	–	Top and Bottom

5. A bar designated on the drawings as 8-16A5 at 300 means 8 of, 16 dia, A shape, bar number 5 in the schedule, Grade D500N and spaced at 300 centres.
6. Minimum cover to reinforcing steel in each element shall be as follows:

ELEMENT	COVER
Cast-in-place Piles	65
Pile Caps	45

7. Spacing of stirrups in pile caps may be altered slightly, if necessary, to clear pile starter bars.
8. Laps and other splices in reinforcing steel shall only be made at the positions shown on the drawings unless alternative or extra locations are approved in writing by the Administrator
9. Minimum development and splice lengths to AS 5100.5-2017 are as follows:

Bar Size	N12	N16	N20	N24	N28	N32	N36	N40
Development Length	400	550	750	900	1100	1300	1500	1750
Splice Length	500	700	900	1100	1350	1600	1850	2150

Development and splice lengths are based on:
- Minimum 40 MPa concrete characteristic compressive strength
- Minimum clear distance of 40 mm between reinforcement bars (incl. at splice locations).
- Maximum number of bars in a bundle: 2

The calculated lap lengths include a 1.25 factor in accordance with AS5100.5 Cl13.2.2. For horizontal bars with more than 300 mm of concrete cast below the bar the splice lengths shall be 1.3 times the values shown in the above table.

10. Reinforcement is shown diagrammatically on these drawings and therefore does not depict the precise positions of bars.
11. Welding of any reinforcement steel bars is NOT permitted.

DESIGN NOTES

1. Retaining walls designed in accordance with:-

a) AS 5100-2017; AS 4678-2002.
b) Queensland Department of Transport and Main Roads – Structures: Design Criteria For Bridges and Other Structures Dated Feb. 2024.
c) Queensland Department of Transport and Main Roads – Geotechnical Design Standard – Minimum Requirements Dated Dec 2020.

DESIGN LOADS

a) Concrete unit weight: 24 kN/m³ (in-situ) including steel reinforcement
b) Earth pressure: Unit weight of soil = 18 kN/m³ Soil internal friction angle = 30°
c) Live load surcharge: 5 kPa
d) Unfactored structural design loads corresponding to the critical cross section and groundwater conditions are shown in the table below.

Design Case	Max. Bending Moment (kNm)	Max. Shear Force (kN)	Max. Axial load (kN)
Unfactored (RDD)	-125	60	-175

e) Factored loads are shown in the table below

TOP OF PILES ULS DESIGN LOADS			
Design Case	Design Resultant Axial Compression (kN)	Design Resultant Moment (kN)	Design Resultant Shear (kN)
Factored	263	221	90

DIMENSION/HEIGHT NOTES

1. Heights, Chainages and Co-ordinates are all in metres unless noted otherwise on the design drawings.
2. All other dimensions are in millimetres, UNO.
3. All Heights are to Australian Height Datum.
4. All co-ordinates are to GDA20.
5. Dimensions shall not be scaled from drawings.

SECANT PILE WALL (WALL TYPE 2A)

1. **All necessary construction methods and steps shall be used to maintain the integrity of the primary piles during drilling and installation of the secondary piles.**
2. **The reinforcing steel grade is D500 which is hot rolled deformed bars with a Yield Stress of 500 MPa**
3. **The minimum lap lengths shall comply with AS3600 section 13.1**
4. **The setting out and verticality of all piles shall be well controlled to ensure a minimum overlapping of 25 mm at any depth.**
5. **All concrete works shall comply with AS 3600 and piling in accordance with AS2159;**

- **Concrete Characteristic Strength F'c to be 25 MPa for the primary piles and 40 MPa for the secondary piles.**
- **For secondary piles which are the only piles to have reinforcing steel the concrete cover is 75 mm.**
- **The Contractor shall only constructs the secondary piles once the primary piles have attained and F'c of 20 MPa minimum, or an age at which the constructor considers it is acceptable to drill secondary piles without compromising the structural integrity or verticality requirements.**
- **Design Exposure condition is moderate in accordance with AS2159-2009.**

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:41 pm, 21/10/2024

2	100% Design Issue		19.07.2024
1	85% Design Review		07.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos
Auxiliary Drg Nos

Survey Data

Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
GENERAL NOTES AND LEGEND
STRUCTURAL NOTES

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953832 | 2
Series Number	NL-02 of 03

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-03002-NL

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CONSTRUCTION NOTES

1. An adequate site surface must be provided as a safe working platform for piling equipment.
2. Piles must be constructed in accordance with the installation procedure for non–displacement piles in AS 2159 and MRTS63A.
3. The Contractor shall confirm the use in piling of temporary construction liners for this project.
4. Piles shall be installed using appropriate boring and installation equipment capable of producing the required outcome. All necessary installation equipment shall be available on site prior to commencement of piling.
5. The Contractor's attention is drawn to the varied nature of the foundation material as indicated by the borehole log geotechnical report and the potential to intersect ground water during the installation of the piles.
6. Where relevant, the methods of transport, handling and storage of materials and equipment shall be such as to prevent any damage to the steel pile casings, such as the result of impact, deflection or the application of load.
7. All piles shall be set out in accordance with design requirements and appropriate procedures shall be taken to protect adjacent services, structures, and piles.
8. Check the horizontal position and verticality/batter angle of the piling / drilling rig prior to the construction of each pile.
9. The piling Contractor shall sequence the works in such a way as to provide sufficient distance between piles to ensure that adjacent piles are not damaged during drilling and construction of subsequent piles.
10. Locate construction equipment at sufficient distance from the pile being drilled and from recently constructed piles to avoid any displacement of the concrete column caused by the load of the equipment.
11. Confirm set out of all piles before commencing installation.

CLEANING AND INSPECTION OF BOREHOLE

1. All pile construction works shall be carried out in accordance with MRTS63A. The Contractor shall submit written procedures for all construction processes and testing for review prior to commencement. The Lot Size for testing shall be 100% for integrity testing & 1 in 3 of secondary piles for load testing.
2. The tops of piles shall be constructed to elevations indicated on the design drawings prior to construction of the pile capping beam. All contaminated and weak concrete and laitance must be removed to expose sound concrete over the full cross sectional area of the pile prior to capping beam construction commencement.
3. Pile construction and verification to conform with the requirements of MRTS63A piles for ancillary structures.
4. Upon completion of boring, the pile holes shall be cleaned of all loose, disturbed soil and sediment soil to expose a sound base of undisturbed material using a suitable and effective method to be approved by the Designer or the delegated authority.
5. Where practicable, (and where temporary liners are not used) all boreholes shall be inspected for their full length prior to concreting to ensure the cleaning has been properly carried out; the sides are able to remain stable during subsequent installation of reinforcement cage and concreting operations; and the verticality and position of the boreholes meet the specified tolerances.
6. The Piling Contractor shall provide all necessary apparatus for the inspection to be carried out safely.
7. The construction of cast–in–place piles shall be logged, inspected and certified by Geotechnical Assessor (GA) in accordance with MRTS63A.

BORING AND EXCAVATION NOTES

1. The piling rig must be capable of installing piles to the depth and to alignment within the secant drilling operations, all as shown on the approved drawings with provision for contingencies.
2. Boring and excavation shall be such as to keep over–break to a minimum.
3. The side of all boreholes shall be kept intact and no loose material shall be permitted to fall into the bottom of the boreholes.
4. The borehole may be filled with drilling fluid to a level to sufficiently stabilise the borehole. If drilling fluid alone is not sufficient to prevent the ground water from intrusion or the borehole side walls from collapse, a steel casing of appropriate size and length shall be used in conjunction with the drilling fluid to support the side of the borehole.
5. If a temporary casing is required to stabilise the borehole, it shall be extended beyond the unstable strata for one meter or more to prevent the inflow of soil and the formation of cavities in the surrounding ground.
6. If a temporary casing is damaged during installation in a manner which prevents the proper formation of the pile, such a casing shall be withdrawn from the borehole and repaired if necessary, or other measure to be taken to the approval of the Principal or the delegated authority to continue the construction of the pile.
7. The pile toe shall be founded at the levels shown on the Drawings and shall be witnessed by the administrator.
8. During the installation process, if the ground condition varies from that assumed at design stage or as shown in borehole logs completed during geotechnical investigation, the Designer or the delegated authority shall determine the need for further deepening of the pile shaft.
9. The Administrator's Geotechnical Assesor shall decide when the founding level is satisfactory, and the pile shaft can be prepared for concreting.

PLACEMENT OF REINFORCEMENT

1. Reinforcement shall comply with MRTS71.
2. The reinforcement cage shall be free from oil, rust or debris and straight. It shall not be placed until inspected and accepted by the Administrator.
3. Reinforcement must be carefully aligned as shown on the drawings to allow the satisfactory construction of the pile caps.
4. Spacer skids with contact width of not less than 35mm must be used for the installation of reinforcement to ensure maintenance of cover requirements as specified on the drawings. Not less than 4 spacer skids shall be provided evenly around the perimeter of the pile at a vertical spacing of not less than 2 meters.
5. Reinforcement cages and spacers shall be sufficiently robust to withstand the forces during lifting, placing of the concrete and extraction of temporary casings.
6. The cage shall be kept vertical or at the required batter angle (if applicable) during installation.
7. Welding of reinforcing bars is NOT permitted and any reinforcing steel that has been welded shall be replaced.
8. If the reinforcement cage cannot be placed to the specified depth, the cage must be removed and the pile re–drilled.

CONCRETING

1. Concrete works shall comply with the requirements of MRTS70.
2. Placing and compaction of concrete shall be in accordance with the MRTS70.
3. Concreting must be continuous to achieve monolith from the top to the base of the pile, without segregation and free of entrapped debris.
4. Concreting shall be continued to 300 mm above the designed pile cut off level to ensure any contaminated concrete is removed. A temporary casing may be required to achieve the concreting level.
5. Any ground water must be displaced during concreting operations.
6. The volume of concrete used in the pile shall be determined to an accuracy of 5% and recorded. The measured volume of concrete placed in any pile shall be not less than 105% of the nominal volume of the pile.
7. If the recorded volume of the concrete placed in the borehole indicates a possible necking, the Piling Contractor shall propose and carry out appropriate tests and measures to demonstrate the adequacy of the pile, or appropriate remedy work to the approval of the Designer or delegated authority.

CASING EXTRACTION

1. Not withstanding other clauses within this section casing extraction shall comply with the requirements of MRTS63A.
2. Withdraw of any temporary casing shall be carried out whilst the concrete still fluid and has a slump close to that while concreting so that no concrete is lifted.
3. If temporary liners are utilised, full details of their removal shall be provided. Any space between pile and ground shall be completely backfilled using flowable fill or other approved material.

TOLERANCE ON PILES

1. Tolerance on piles shall be in accordance with MRTS63 to be confirmed based on constructability for the pile length.
2. The pile diameter shall not be less than shown on the drawings. The pile diameter may generally be larger than shown on the drawings, providing that the minimum distance from the outside of any pile to the edge of a concrete pile cap/pier/abutment as shown on the drawings is satisfied after taking into account construction tolerances.

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:41 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES: AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–03003–NL

Associated Job Nos:
Auxiliary Drg Nos:

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
GENERAL NOTES AND LEGEND
SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

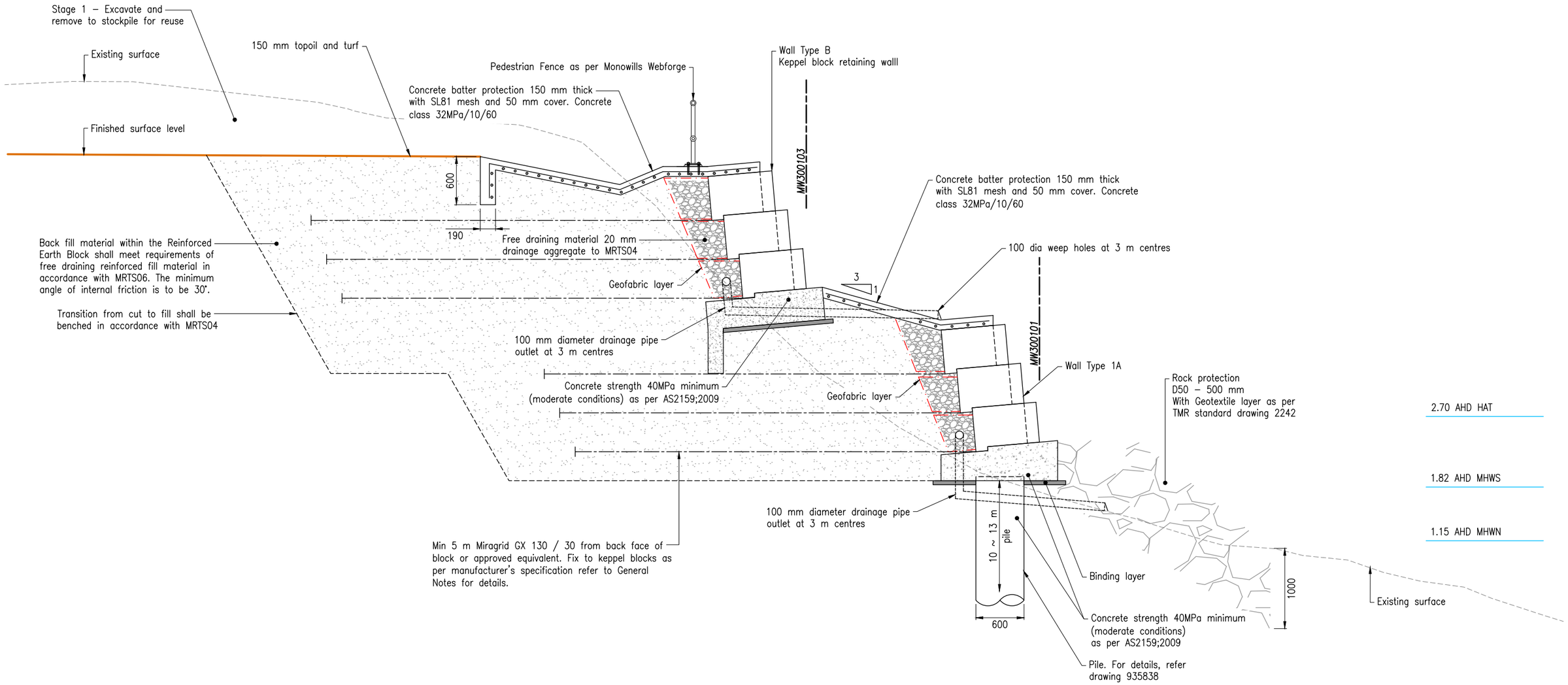
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953833 | 3
Series Number	NL–03 of 03

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM



KEPPEL BLOCK REINFORCED SLOPE TYPICAL SECTION

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:41 pm, 21/10/2024

NOTES

1. Refer to drawings 935831 to 935833 for general notes

4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12001-TC

Last Modified :- Jul 30, 2024 – 1:42PM

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
		Horiz. Grid	MGA 56
Auxiliary Drg Nos		Height Datum	AHD
		Survey Books	200418 001 200418

Scales
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Dimensions shown in millimiters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

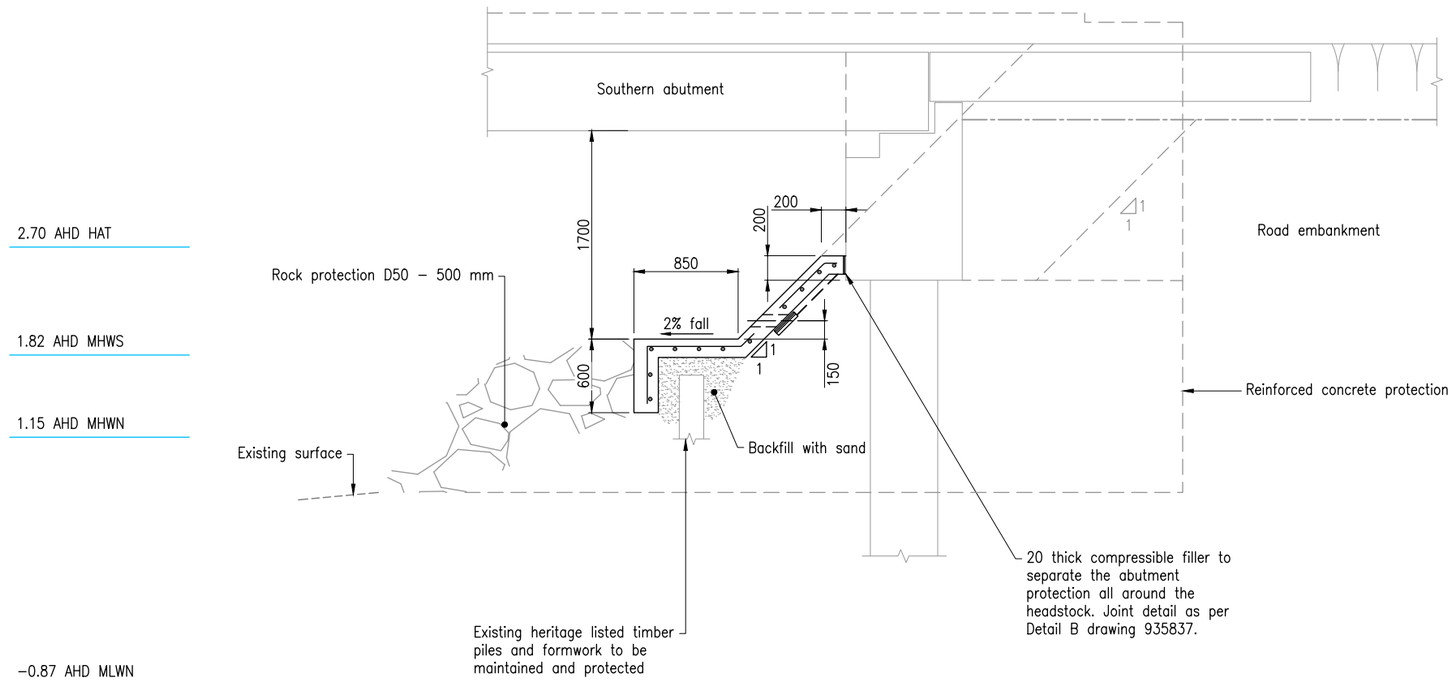
DMTR EVENT 22A
TYPICAL SECTION
SHEET 1

ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953834 | 4
Series Number	TC–01 of 02

AECOM



REINFORCED CONCRETE SPILLTHROUGH PROTECTION

SCLAE 1:25

NOTES

1. Construction of abutment protection shall be in accordance with MRTS03 and read in conjunction with TMR Standard Drawing 2235.
2. Concrete shall be in accordance with MRTS70. Design life 50 years.
3. Reinforcing steel shall be read in conjunction with TMR Standard Drawing 1044, shall be in accordance with MRTS71 and to AS/NZS 4671, and ACRS certified.
4. Special care shall be taken as to not disturb or damage the existing heritage timber piles and formwork.
5. Contractor to document and record locations of heritage items prior to placement of concrete batter protection.
6. Sand backfill shall be placed and compacted around the heritage listed items identified to be protected.

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:42 pm, 21/10/2024

	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date
4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
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Dimensions shown in millimiters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
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CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
TYPICAL SECTION
SHEET 2

ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953835 | 4
Series Number	TC–02 of 02

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12002-TC

Last Modified :- Jul 30, 2024 - 1:42PM

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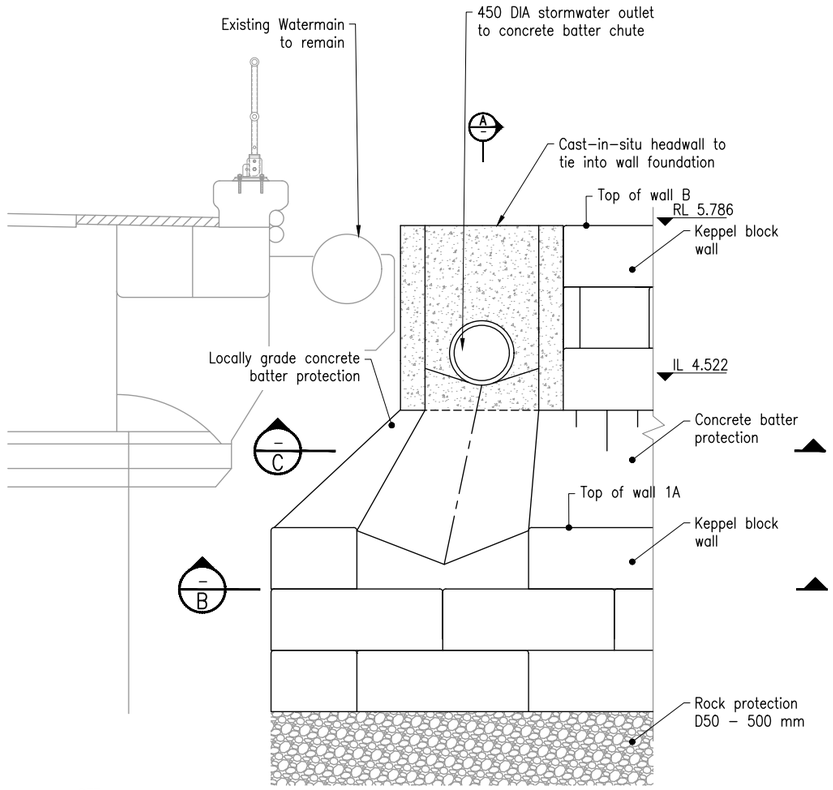
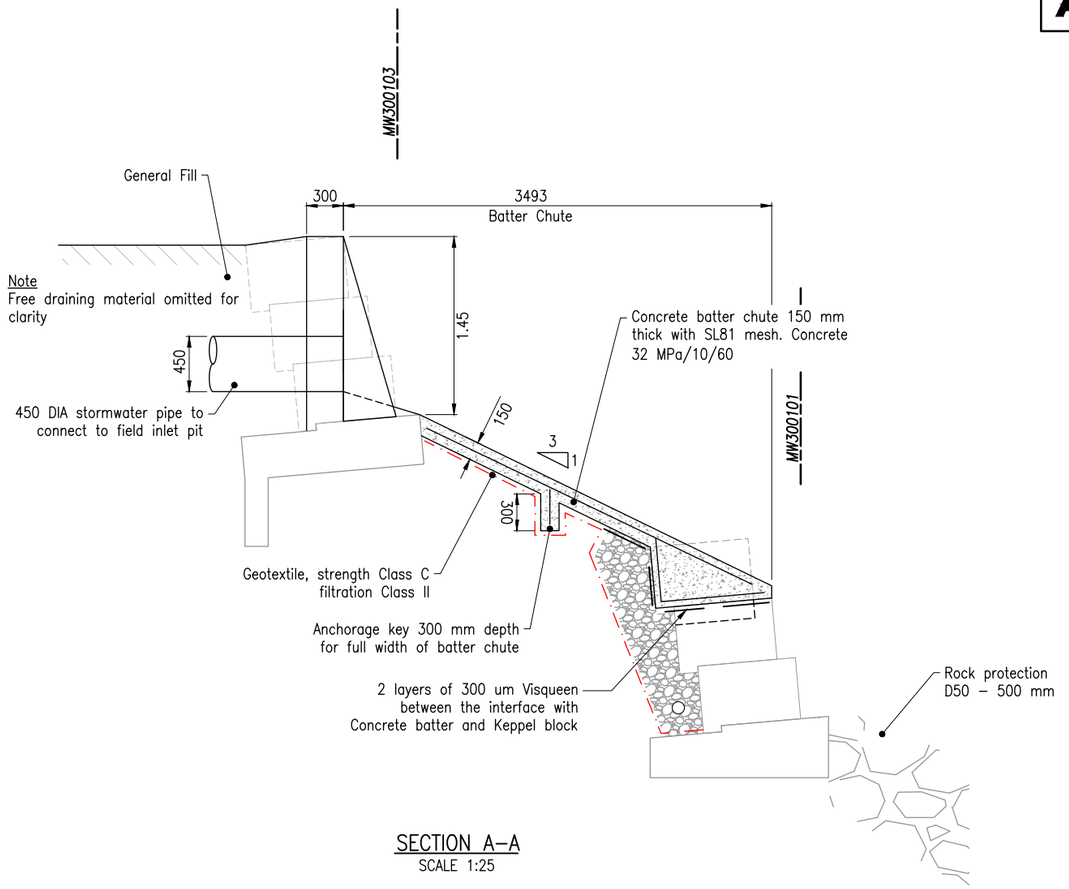


NOTE
Wall foundation omitted for clarity

BATTER CHUTE DETAIL
SCALE 1:25



SECTION A–A
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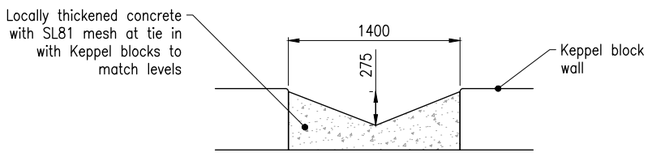

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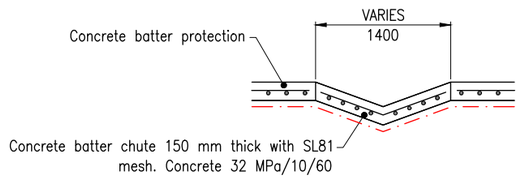

SECTION C–C
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NOTES:
1. Refer to drawings 935831 to 935833 for general notes.
2. Refer to drawing 935831 for drainage details.

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12003-GD

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales
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Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
GENERAL DETAILS
SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:42 pm, 21/10/2024

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Job No.	2835872
Contract No.	CN-21784
Drawing No.	953836 | 3
Series Number	GD–01 of 02

Last Modified :- Jul 30, 2024 - 1:42PM

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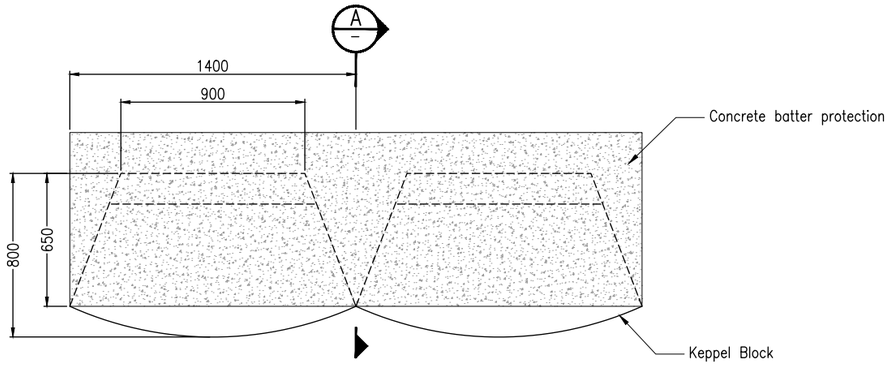
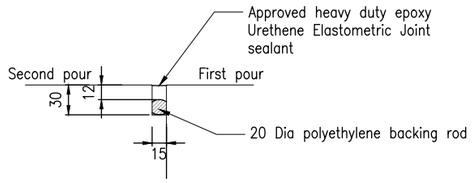
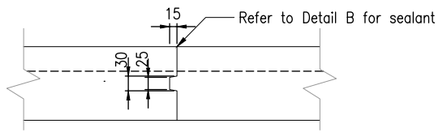


PLAN – CONCRETE BATTER PROTECTION TIE IN WITH KEPPEL BLOCK
SCALE 1:15



DETAIL B – SEALANT DETAIL
SCALE NTS



KEYED CONSTRUCTION JOINT (KJ)
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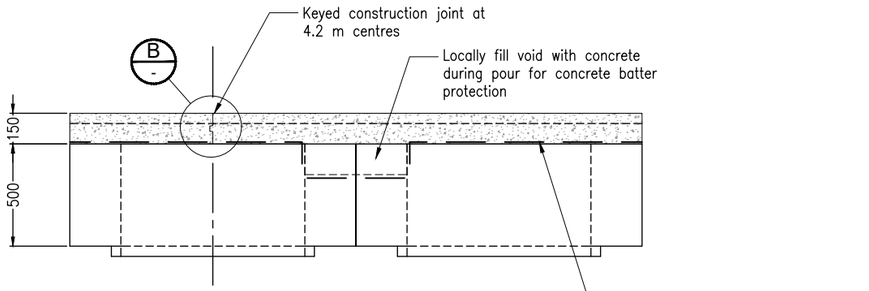
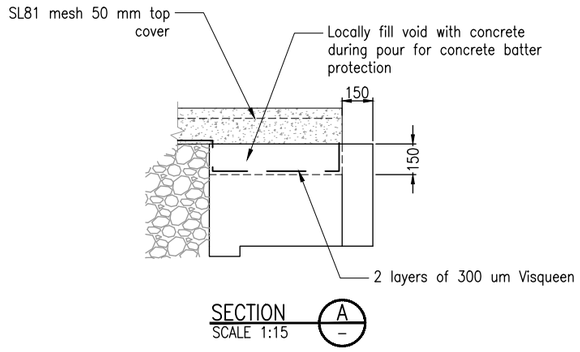
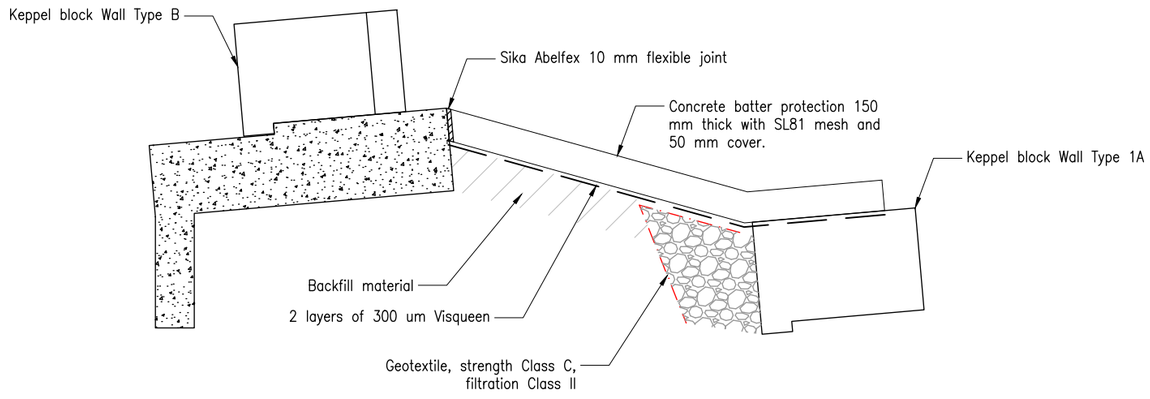


LONGITUDINAL ELEVATION – KEPPEL BLOCK
SCALE 1:15



SECTION A
SCALE 1:15



CONCRETE BATTER PROTECTION
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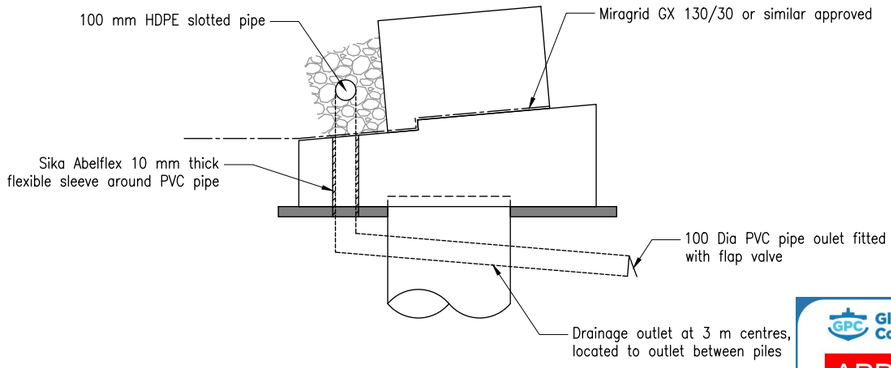

KEPPEL BLOCK WALL DRAINAGE OUTLET
SCALE 1:15

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:39 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
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Dimensions shown in millimiters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
GENERAL DETAILS
SHEET 2

ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953837 3
Series Number	GD–02 of 02

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12004-GD

Last Modified :- Jul 30, 2024 - 1:42PM

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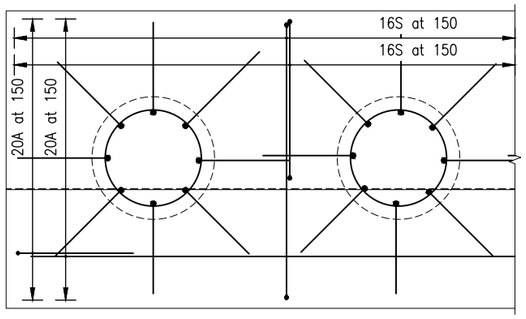
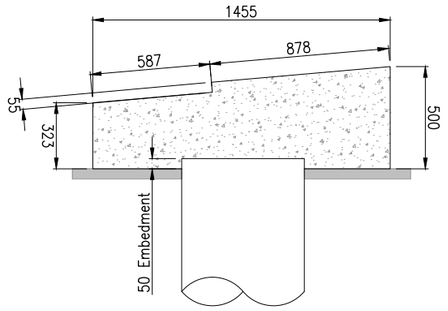
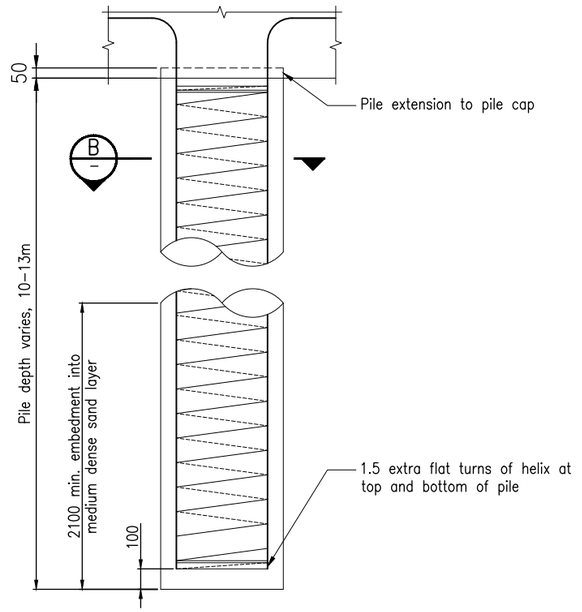


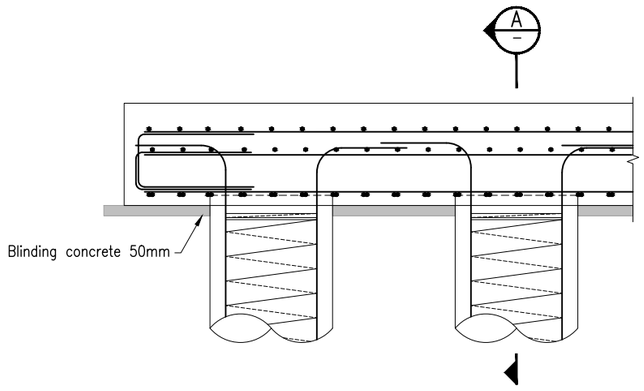
PLAN – WALL 1A PILE CAP
SCALE A



TYPICAL CROSS SECTION – TYPE 1A WALL
SCALE A



LONGITUDINAL ELEVATION – PILE
SCALE A



LONGITUDINAL ELEVATION – PILE CAP
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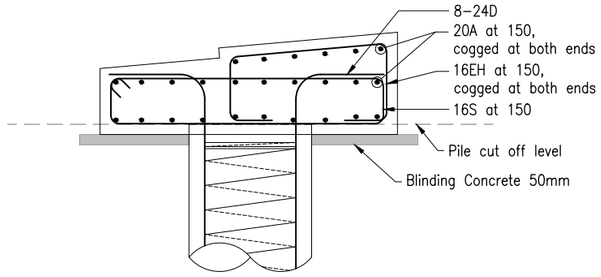
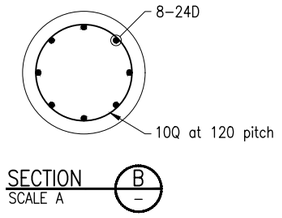


SECTION A
SCALE A



SECTION B
SCALE A

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:42 pm, 21/10/2024

NOTES
1. Refer to drawings 935831 to 935833 for General notes
2. Refer to drawing 935831 for Drainage details
3. Refer to drawing 935841 for Pile schedule
4. Concrete shall be placed in one operation between construction joints.

4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12501-SD

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
Auxiliary Drg Nos		Horiz. Grid	MGA 56
		Height Datum	AHD
		Survey Books	200418 001 200418

Scales: A 0 150 300 450 600mm
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
STRUCTURAL DETAILS – WALL 1A
SHEET 1

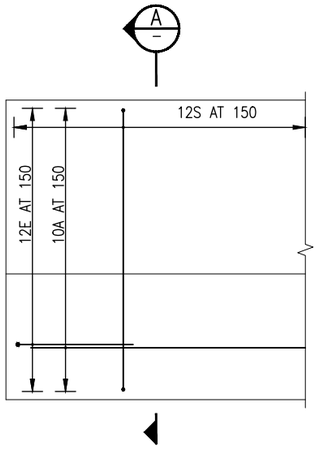
ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

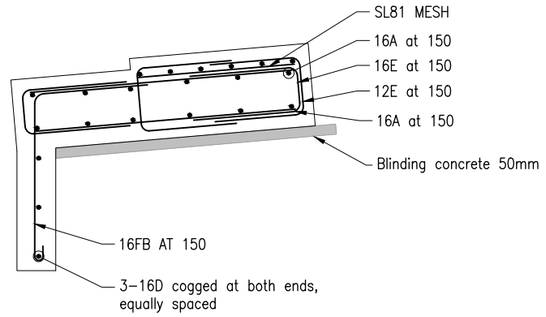
Job No.	2835872
Contract No.	CN–21784
Drawing No.	953838 | 4
Series Number	SD–01 of 03

Last Modified :- Jul 30, 2024 - 1:42PM

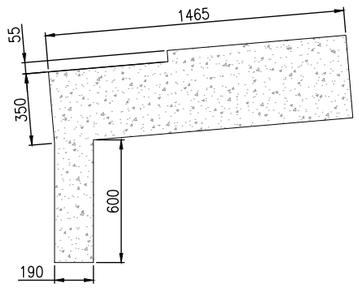
AECOM



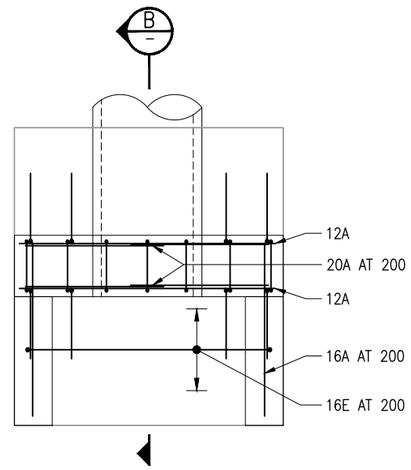
PLAN – WALL TYPE B
SCALE A



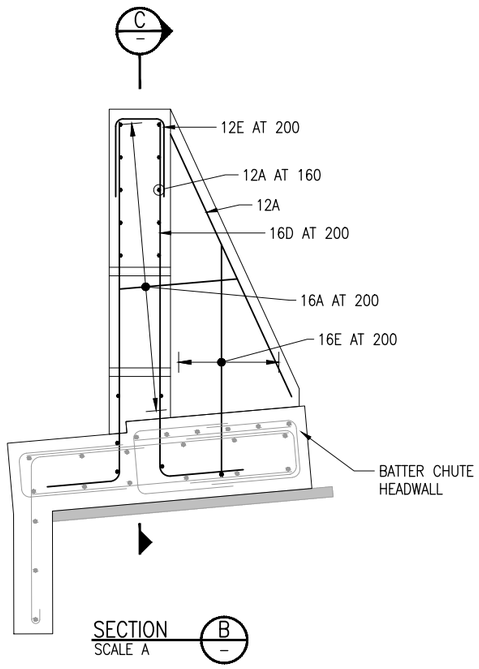
SECTION A
SCALE A



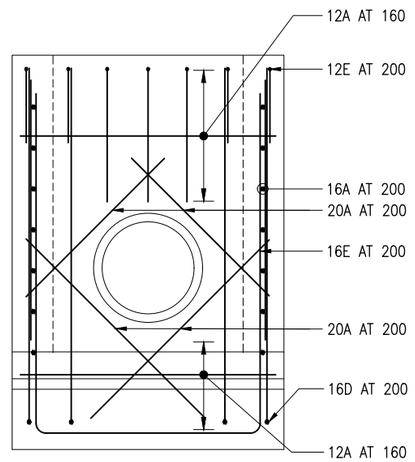
TYPICAL CROSS SECTION – TYPE B WALL
SCALE A



PLAN – BATTER CHUTE HEADWALL
SCALE A



SECTION B
SCALE A



SECTION C
SCALE A

NOTES:
1. Refer to drawings 935831 to 935833 for General notes
2. Refer to drawing 935831 for Drainage details
3. Refer to drawing 935836 for Batter chute details

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:43 pm, 21/10/2024

Last Modified :- Jul 30, 2024 – 1:42PM

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos		Survey Data	
		Horiz. Datum	GDA2020
Auxiliary Drg Nos		Horiz. Grid	MGA 56
		Height Datum	AHD
		Survey Books	200418 001 200418

Scales
A 0 150 300 450 600mm
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE *2824 – 2905*

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
STRUCTURAL DETAILS– WALL B
SHEET 2

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953839 | 3
Series Number	SD–02 of 03

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-12502-SD

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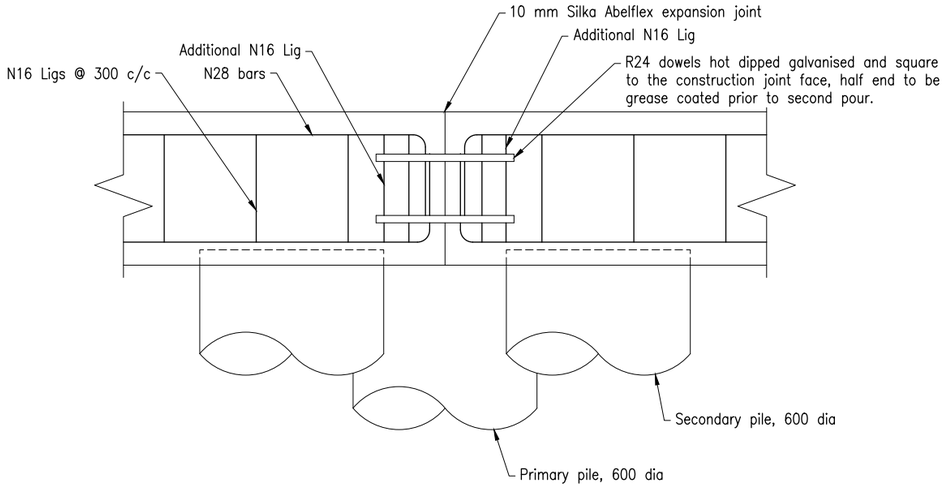
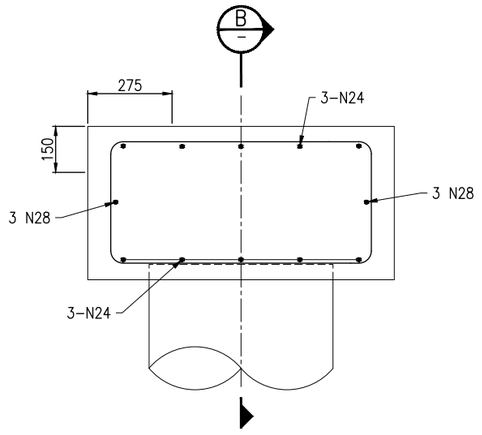
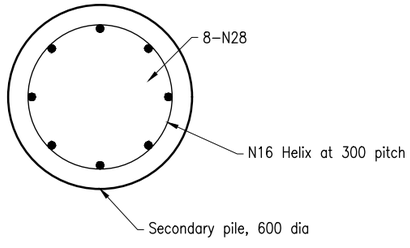


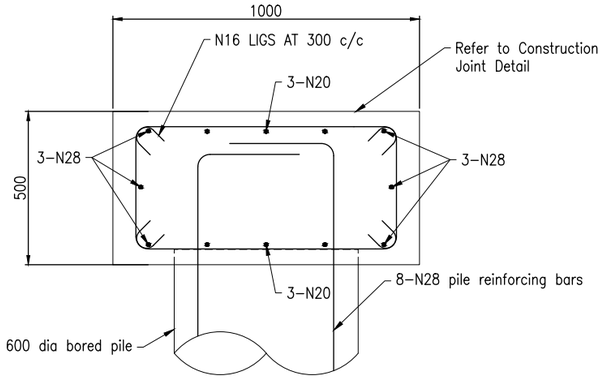
CONSTRUCTION JOINT B
Scale B



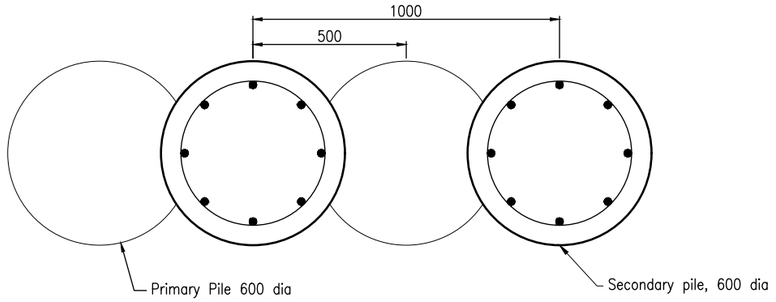
CONSTRUCTION JOINT
SCALE B



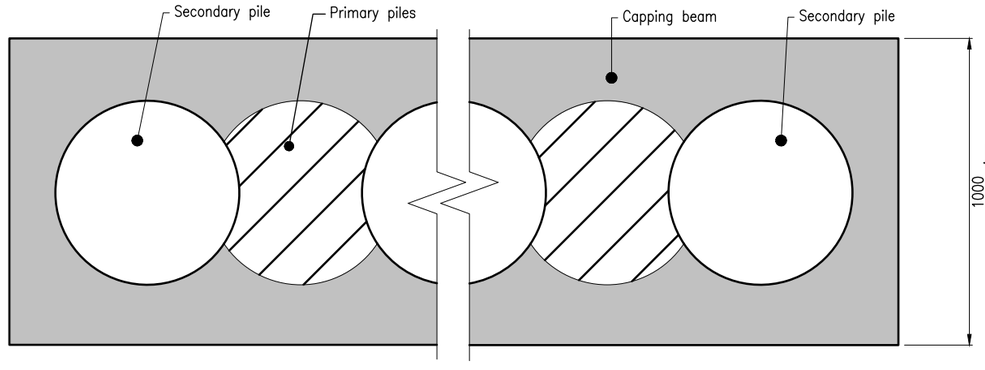
SECONDARY PILE CROSS SECTION A
Scale B



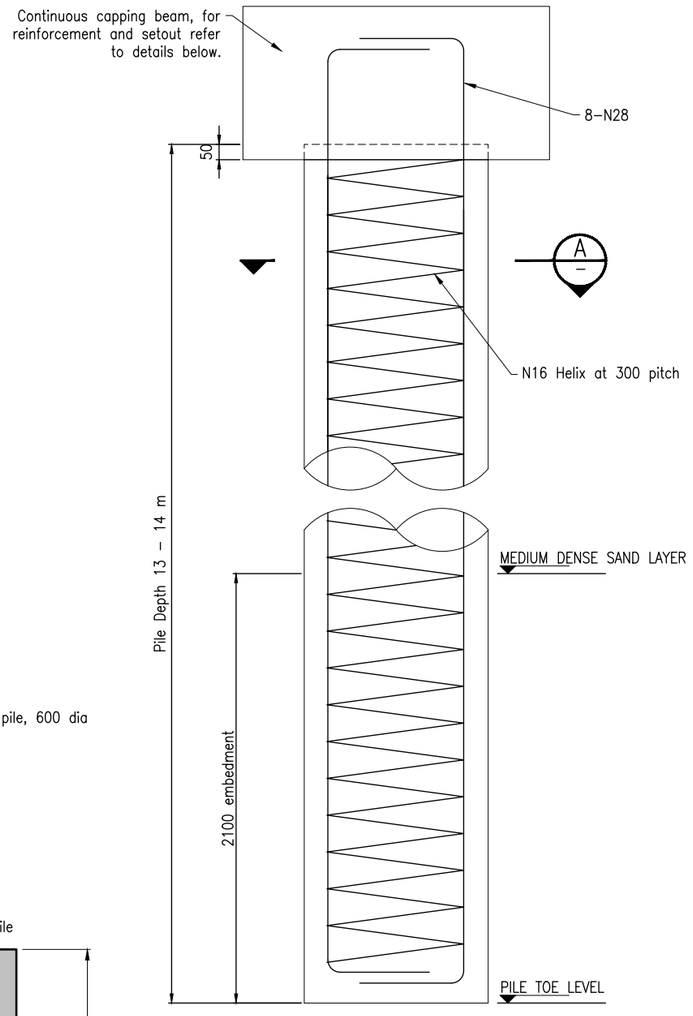
CAPPING BEAM
SCALE B



WALL 2A SECANT PILE ARRANGEMENT
SCALE B



DETAIL A
SCALE B



LONGITUDINAL ELEVATION – WALL 2A SECONDARY PILE
SCALE B

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:43 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

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Last Modified :- Jul 30, 2024 – 1:42PM

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
		Horiz. Grid	MGA 56
Auxiliary Drg Nos		Height Datum	AHD
		Survey Books	200418 001 200418

Scales
A 0 500 1000mm
B 0 150 300 450 600mm
Dimensions shown in millimiters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
STRUCTURAL DETAILS – WALL 1B
SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

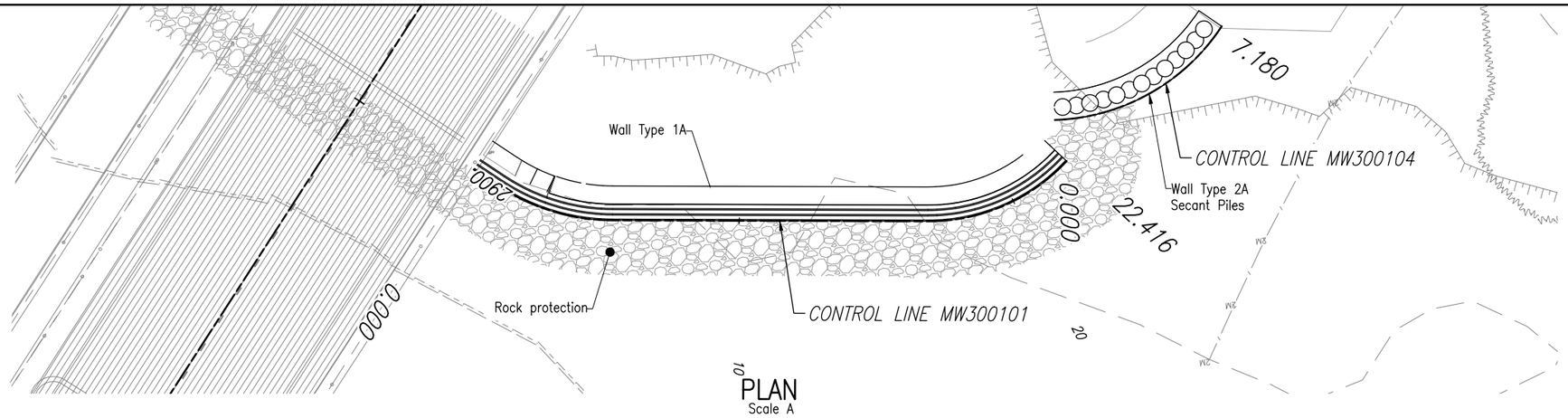
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

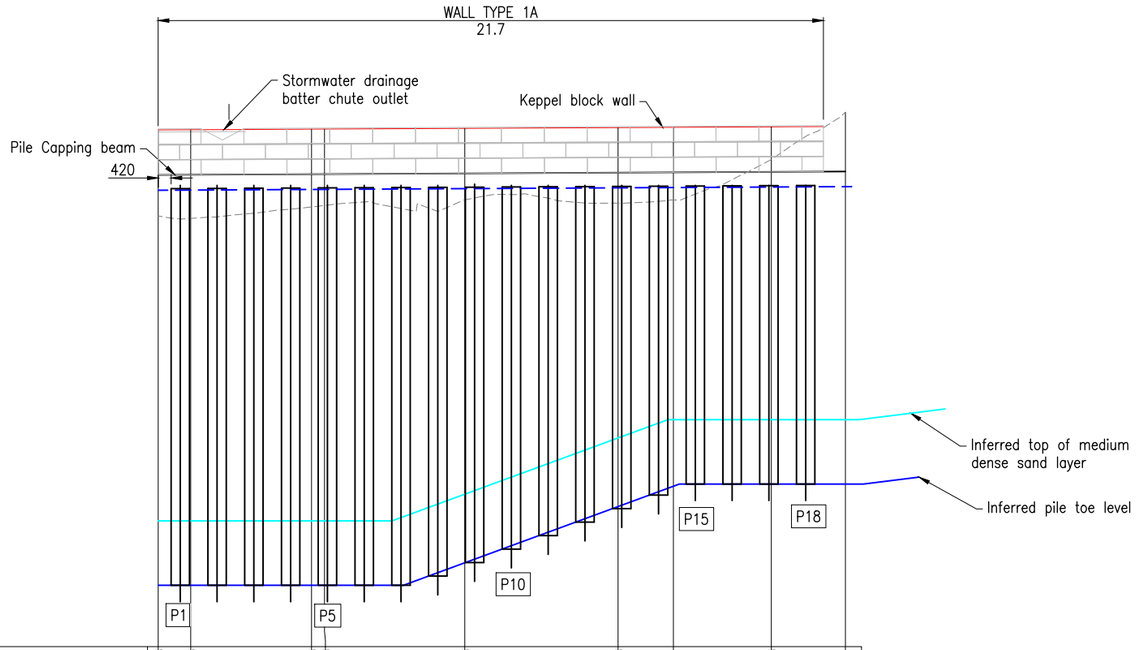
Job No.	2835872
Contract No.	CN–21784
Drawing No.	953840 3
Series Number	SD–03 of 03

AECOM

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:43 pm, 21/10/2024



PLAN
Scale A



DATUM −13																		
WALL HEIGHT	1.468	1.468			1.468	1.468			1.468			1.468			1.468			
UPPER LEVEL (B)	3.848	3.853			3.873	3.875			3.898		3.923	3.932			3.948			
LOWER LEVEL (A)	2.380	2.385			2.405	2.407			2.430		2.455	2.464			2.480			2.492
BOTTOM OF CAPPING BEAM	1.880	1.905			1.925	1.927			1.950		1.975				1.980			1.992
TOP OF PILE	1.950	1.955			1.975	1.977			2.000		2.025				2.050			2.142
EXISTING LEVELS	1.044	0.961			1.335	1.384			1.565		1.461	1.562			2.879			4.424
DISTANCE	0.000	1.059			5.000	5.425			10.000		15.000	16.806			20.000			22.416

WALL ELEVATION −> MW300101
Scale A

NOTES:
1. Refer to drawings 931831 to 931833 for general notes.
2. Refer Geotechnical Design report and Geotechnical investigation report for the details of inferred embedment layer

WALL TYPE 2A −SECANT PILE TABLE					
PILE No	CHAINAGE	EASTING	NORTHING	TOP OF PILE (RL)	PILE LENGTH (m)#
P19	0.45	468511.893	7174655.816	5.404	13.104
P20	0.95	468511.393	7174655.821	5.446	13.146
P21	1.45	468510.894	7174655.789	5.486	13.186
P22	1.95	468510.398	7174655.722	5.528	13.228
P23	2.45	468509.909	7174655.621	5.569	13.269
P24	2.95	468509.428	7174655.484	5.608	13.308
P25	3.45	468508.958	7174655.313	5.647	13.347
P26	3.95	468508.501	7174655.110	5.686	13.386
P27	4.45	468508.060	7174654.874	5.727	13.427
P28	4.95	468507.637	7174654.608	5.769	13.469
P29	5.45	468507.234	7174654.311	5.809	13.509
P30	5.95	468506.853	7174653.987	5.850	13.550
P31	6.45	468506.496	7174653.637	5.891	13.591

NOTES:
− Piles shall be extended to RL−7.7 m AHD as a minimum in addition to meeting the embedment requirements.

WALL TYPE 1A − PILE SETOUT TABLE					
PILE No	CHAINAGE	EASTING	NORTHING	TOP OF PILE (RL)	PILE LENGTH (m)#
P1	0.72	468532.379	7174655.617	1.954	12.95
P2	1.92	468531.432	7174656.353	1.960	12.96
P3	3.12	468530.376	7174656.924	1.966	12.97
P4	4.32	468529.238	7174657.306	1.973	12.97
P5	5.52	468528.054	7174657.499	1.979	12.98
P6	6.72	468526.863	7174657.645	1.985	12.99
P7	7.92	468525.672	7174657.792	1.991	12.99
P8	9.12	468524.481	7174657.938	1.997	12.70
P9	10.32	468523.290	7174658.084	2.003	12.26
P10	11.52	468522.099	7174658.230	2.009	11.83
P11	12.72	468520.908	7174658.376	2.015	11.40
P12	13.92	468519.717	7174658.523	2.021	10.96
P13	15.12	468518.526	7174658.669	2.027	10.53
P14	16.32	468517.335	7174658.815	2.033	10.09
P15	17.52	468516.136	7174658.881	2.039	9.739
P16	18.72	468514.947	7174658.723	2.046	9.745
P17	19.92	468513.809	7174658.341	2.053	9.751
P18	21.12	468512.764	7174657.751	2.059	9.757

NOTES:
− Piles shall be extended to RL−7.7 m AHD as a minimum in addition to meeting the embedment requirements.

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: − RPEQ Full Name, Eng. Area and RPEQ No. or − Full Name and Position Title	Date

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
Scale A 0 1 2 3 4m
Scale B 0 0.1 0.2 0.3 0.4m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE − GYMPIE ROAD
CTL CHGE 2824 − 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
PILE ELEVATION
CONTROL LINE MW300101

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN−21784
Drawing No.	953841 3
Series Number	MD−01 of 01

CAD FILES | AECOM_DS13_AU\Documents\60701625−TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625−ACM−3001−910−300−DRG−13001−MD

Last Modified :- Jul 30, 2024 - 1:42PM

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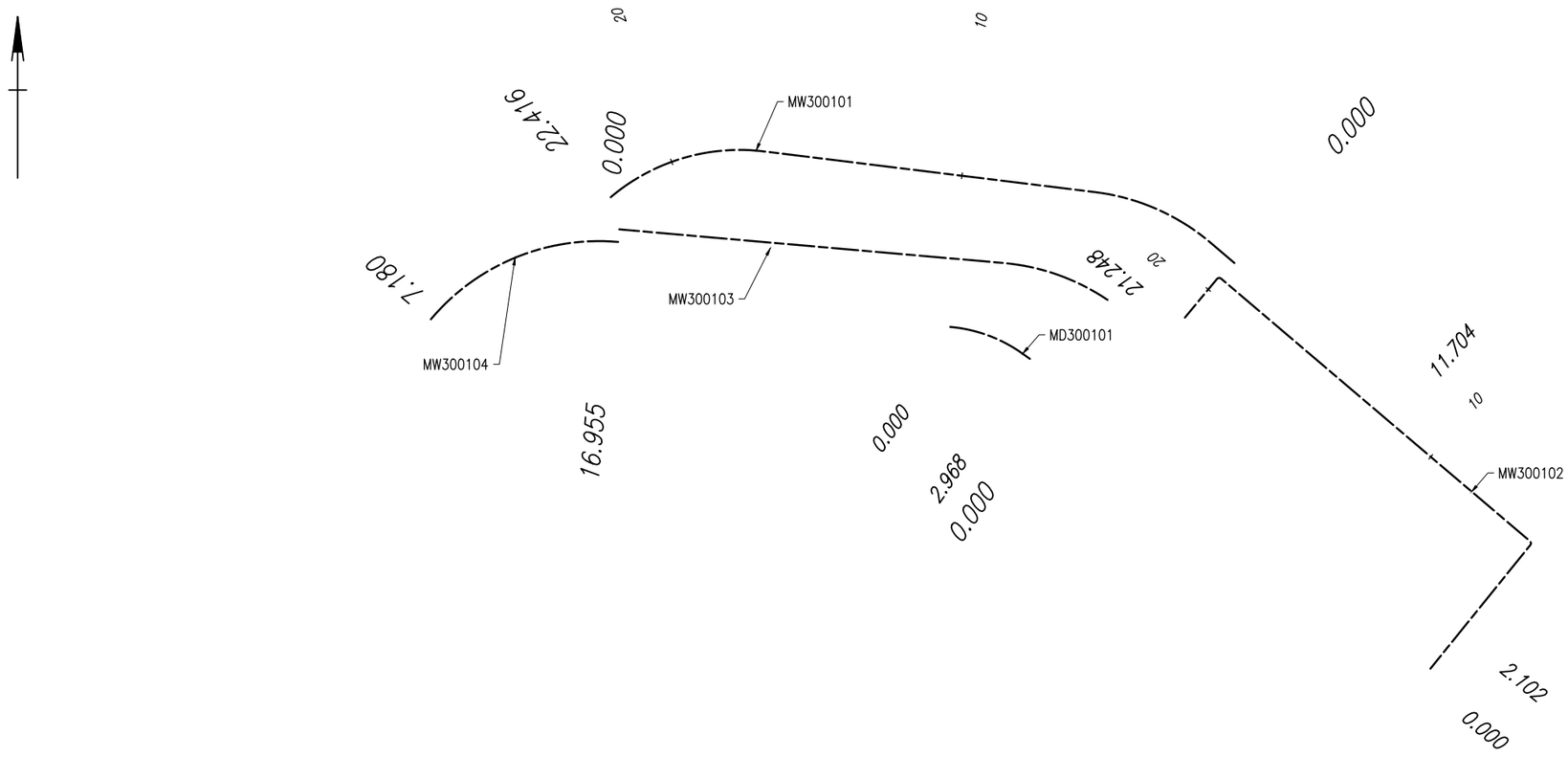

MODEL : CONTROL 3001 RDW WALL – STRING : MW300101

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG	DEP.RAD	DEP.LEN
Start	0.000	468533.247	7174655.527	2.380	310°21'14.33"	LINE		
TC	1.059	468532.440	7174656.213	2.385	310°21'14.33"	ARC	−7.500	4.366
	5.000	468528.918	7174657.877	2.405	280°14'50.74"		−7.500	
CT	5.425	468528.498	7174657.941	2.407	277°00'00.00"	LINE		11.381
	10.000	468523.957	7174658.499	2.430	277°00'00.00"			
	15.000	468518.995	7174659.108	2.455	277°00'00.00"			
TC	16.806	468517.202	7174659.328	2.464	277°00'00.00"	ARC	−6.800	5.610
	20.000	468514.057	7174658.972	2.480	250°05'15.80"		−6.800	
End	22.416	468511.978	7174657.767	2.492	229°43'51.61"			

MODEL : CONTROL 3001 RDW WALL – STRING : MW300103

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG	DEP.LEN
Start	0.000	468528.919	7174654.270	4.317	304°01'43.72"	ARC	
CT	3.800	468525.376	7174655.526	4.336	275°00'00.00"	LINE	13.156
	5.000	468524.180	7174655.631	4.342	275°00'00.00"		
	10.000	468519.199	7174656.067	4.367	275°00'00.00"		
	15.000	468514.218	7174656.502	4.392	275°00'00.00"		
End	16.955	468512.270	7174656.673	4.402	275°00'00.00"		

MODEL : CONTROL 3001 RDW SPILLTHROUGH – STRING : MW300102

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG	DEP.RAD	DEP.LEN
Start	0.000	468539.930	7174641.706	5.419	38°57'50.98"	LINE		
Point	2.102	468541.251	7174643.341	4.770	38°57'47.70"	LINE		3.311
	5.000	468543.074	7174645.594	3.230	38°57'47.70"			
TC	5.413	468543.334	7174645.915	2.817	38°57'47.70"	ARC	−0.100	0.155
CT	5.568	468543.321	7174646.054	2.662	310°19'04.68"	LINE		6.136
	10.000	468539.941	7174648.922	2.662	310°19'04.68"			
Point	11.704	468538.642	7174650.025	2.662	310°21'14.33"	LINE		7.674
	15.000	468536.130	7174652.159	2.662	310°21'14.33"			
TC	19.378	468532.794	7174654.993	2.662	310°21'14.33"	ARC	−0.100	0.158
CT	19.536	468532.653	7174654.981	2.679	219°48'34.63"	LINE		1.712
	20.000	468532.355	7174654.625	3.019	219°48'34.63"			
End	21.248	468531.557	7174653.666	3.934	219°48'34.63"			

MODEL : CONTROL 3001 RDW DRAINAGE – STRING : MD300101

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG	DEP.RAD	DEP.LEN
Start	0.000	468526.273	7174652.261	5.623	305°33'05.48"	LINE		
TC	0.302	468526.027	7174652.436	5.625	305°33'05.48"	ARC	−5.000	2.666
End	2.968	468523.556	7174653.350	5.642	275°00'00.00"			

INSTRUMENT STATION SURVEY MARKS

PointNumber	XCoord	YCoord	ZCoord	VertexText
1	468480.826	7174561.682	11.397	ROSTN100 SIC
2	468541.577	7174644.857	5.658	ROSTN101 SIC
3	468580.748	7174613.652	2.812	FSSTN102
4	468502.158	7174643.736	8.393	ROSTN103 SPK
5	468465.107	7174586.628	11.184	FSSTN104 SKP

PERMANENT STATION SURVEY MARKS

XCoord	YCoord	ZCoord	VertexText
468653.016	7174799.084	106.058	PSM No 15677
468443.285	7174538.930	112.911	PSM No 44312

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:43 pm, 21/10/2024

2	100% Design Issue		19.07.2024
1	85% Design Review		07.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4m
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
CONTROL LINES LAYOUT
AND SETOUT TABLES

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953842 2
Series Number	CL-01 of 01

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-21001-CL

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:44 pm, 21/10/2024

1.82 AHD MHWS
1.15 AHD MHWN
−0.87 AHD MLWN
2.70 AHD HAT

Existing tree to remain
Existing unknown pipe impacted by the works to be removed and capped
Existing landscape area to be re-vegetated
Existing landscape area to be re-vegetated
Property boundary
Wall Type 2A 600 dia Secant pile wall. Piles to existing surface level
Wall to tie into existing embankment
CONTROL LINE MW300101
Concrete batter protection
Rock scour protection
Wall Type 1A – Keppel block retaining wall mounted on 600 dia piles at 1.2 m Centre to centre spacing
Wall Type B – Keppel block wall mounted on concrete footing
Pedestrian guiderail as per Webforge Monowills
Concrete lined drainage channel
CONTROL LINE MW300103
Drainage batter chute to outlet onto rock scour protection
Reinforced concrete spillthrough to TMR STD DRG 2235
Existing tree to remain
Existing pole to remain
Existing water valve and pit to remain
Existing road drainage pit
New field inlet pit
Rock scour protection

TO TINANA
TO MARYBOROUGH
FLOW MARY RIVER
GYMPIE ROAD
LAMINGTON BRIDGE

7.180
22.416
0.000
16.955
0.000
2.968
0.000
8.472
0:000
11.704
0.000
2.102
2820.000
2915.000

LEGEND

- Property Boundary
- Fence
- Control Line and Chainages (100, 80, 60)
- Top of Batter
- Existing Electricity O/H
- Existing Gas U/G
- Existing Telecomms U/G
- Existing Water Main
- Existing Sewer Rising Main
- Existing Stormwater
- Existing Features
- Batter
- Existing Kerb
- Existing Guardrail
- Sign – Single
- Sign – Double
- Tree
- Drainage Flow Path
- Fence

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A GENERAL ARRANGEMENT

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953843 | 3
Series Number	GA–01 of 01

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-31101-GA

Last Modified :- Jul 30, 2024 - 1:42PM

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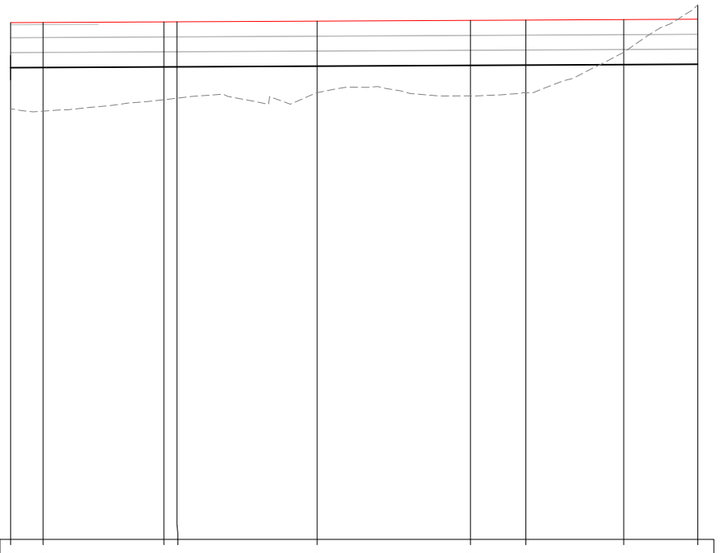

DATUM −13

UPPER LEVEL (B)	3.848	3.853	3.873 3.875	3.898	3.923	3.932	3.948		
LOWER LEVEL (A)	2.380	2.385	2.405 2.407	2.430	2.455	2.464	2.480	2.492	
EXISTING LEVELS	1.044	0.961	1.335 1.384	1.565	1.461	1.562	2.879	4.424	
DISTANCE	0.000	1.059	5.000 5.425	10.000	15.000	16.806	20.000	22.416	

WALL ELEVATION −> MW300101

Gladstone Ports Corporation

APPROVED

Name: Trudi Smith

Date: 12:44 pm, 21/10/2024

Last Modified :- Jul 30, 2024 - 1:42PM

4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024
	Revisions/Descriptions	Signatory: − RPEQ Full Name, Eng. Area and RPEQ No. or − Full Name and Position Title	Date

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales

0 1 2 3 4m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL

163 LAMINGTON BRIDGE − GYMPIE ROAD

CTL CHGE 2824 − 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A

LONGITUDINAL SECTIONS

CONTROL LINE MW300101

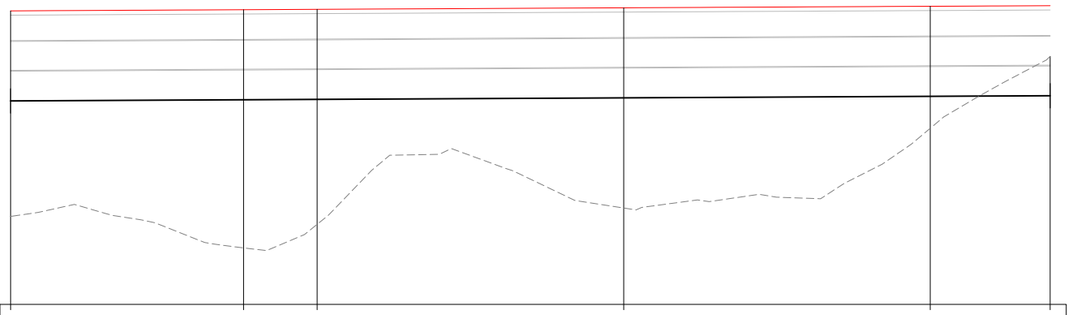
ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN−21784
Drawing No.	953844 4
Series Number	LS−01 of 04

AECOM



DATUM 1

UPPER LEVEL (B)	5.785	5.804	5.810	5.835	5.860	
LOWER LEVEL (A)	4.317	4.336	4.342	4.367	4.392	4.402
EXISTING LEVELS	2.434	1.920	2.306	2.571	3.871	5.043
DISTANCE	0.000	3.800	5.000	10.000	15.000	16.955

WALL ELEVATION –> MW300103

Gladstone Ports Corporation

APPROVED

Name: Trudi Smith

Date: 12:44 pm, 21/10/2024

4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales

0 1 2 3 4m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL

163 LAMINGTON BRIDGE – GYMPIE ROAD

CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A

LONGITUDINAL SECTIONS

CONTROL LINE MW300103

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953845 | 4
Series Number	LS–02 of 04

CAD FILES | AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–39103–LS

Last Modified :– Jul 30, 2024 – 1:42PM

AECOM

100 mm diameter weep holes at 3 m centres in concrete batter protection

Concrete lined drain

Outlets at 3 m centres to rock protection

100 mm diameter drainage pipe

100 mm diameter drainage pipe

FLOW

MARY RIVER

TO MARYBOROUGH

RC Headwall refer drawing 935836 for details.

Remove existing 300 RCP. Location is approximate.

0.000

New Access Chamber

Concrete batter chute to outlet onto rock scour protection

2.968

375ø

450ø

300ø

Existing 300 RCP to be cut and joined to new access chamber. Location of existing RCP is approximate and is to be confirmed prior to construction.

New field inlet pit

A 935836

Existing pit to be cleared

GYMPIE ROAD

LAMINGTON BRIDGE

NOTES:
1. Refer to drawings 953831 and 935832 for general notes
2. Refer to drawing 953847 for drainage long section.
3. Invert level of the existing pit is unknown and to be confirmed on site prior to commencement of works.
4. Drainage outlet pipes to be fitted with flap valve.

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:44 pm, 21/10/2024

2	100% Design Issue		19.07.2024
1	85% Design Review		07.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

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Associated Job Nos	Survey Data		
	Horiz. Datum	GDA2020	
Auxiliary Drg Nos	Horiz. Grid	MGA 56	
	Height Datum	AHD	
	Survey Books	200418 001 200418	

Scales
0 1.0 2.0m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
DRAINAGE LAYOUT

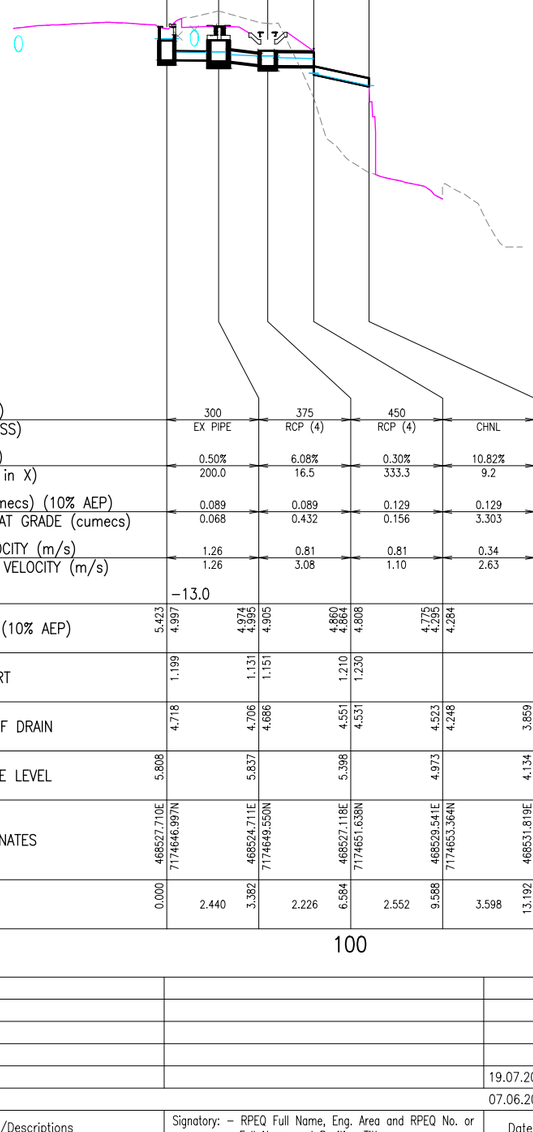
ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953846 | 2
Series Number	DD-LD-01 of 01

AECOM

STRUCTURE NAME	1/100	2/100	3/100	4/100	5/100
STRUCTURE DESCRIPTION	EXISTING GRATE INLET ON GRADE – GRATE ONLY	1050mm DIA. ACCESS CHAMBER REFER TMR DWG 1307	FIELD INLET TYPE 2 – SINGLE GULLY REFER TMR DWG 1310	CAST-IN-SITU HEADWALL Refer to Drawing 953839 for Headwall detail	SHOTCRETE CHANNEL Refer to Drawing 953836 for details



| | | |

AECOM

LANDSCAPE LEGEND – SOFTWORKS

M1 — MIX TYPE 1 (M1) – REVEGETATION PLANTING – SHRUBS (CONTAINERISED)

- AMELIORATE SUBSOIL – INCORPORATE AMELIORANT/S AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN
- ROUGHENING – 50mm DEEP (MINIMUM)
- CULTIVATION – 150mm DEEP (MINIMUM)
- TOPSOIL – 300mm AMELIORATED TOPSOIL (MINIMUM)
- MULCH – MULCH AS SPECIFIED
- FERTILISER – INCORPORATE FERTILISER AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN – CONSTRUCTION
- PLANTING – REFER TO PLANTING SCHEDULES FOR SPECIES AND DENSITIES
- DETAIL – REFER DTMR STANDARD DETAIL 1 & 2 ON DRAWING SD1653 (DATE 7/17, REV E)

M2 — MIX TYPE 2 (M2) – REVEGETATION PLANTING – GROUNDCOVERS (CONTAINERISED)

- AMELIORATE SUBSOIL – INCORPORATE AMELIORANT/S AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN
- ROUGHENING – 50mm DEEP (MINIMUM)
- CULTIVATION – 150mm DEEP (MINIMUM)
- TOPSOIL – 300mm AMELIORATED TOPSOIL (MINIMUM)
- MULCH – MULCH AS SPECIFIED
- FERTILISER – INCORPORATE FERTILISER AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN – CONSTRUCTION
- PLANTING – REFER TO PLANTING SCHEDULES FOR SPECIES AND DENSITIES
- DETAIL – REFER DTMR STANDARD DETAIL 1 & 2 ON DRAWING SD1653 (DATE 7/17, REV E)

T1 — TURF (T1) – GREEN COUCH (CYNODON DACTYLON)

- AMELIORATE SUBSOIL – INCORPORATE AMELIORANT/S AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN
- CULTIVATION – 150mm DEEP (MINIMUM)
- TOPSOIL – AMELIORATED TOPSOIL AS SPECIFIED
- FERTILISER – INCORPORATE FERTILISER AT RATES AS PER THE CONTRACTOR'S SOIL MANAGEMENT PLAN (CONSTRUCTION)
- TYPE – GREEN COUCH (CYNODON DACTYLON)
- DETAIL – REFER DTMR STANDARD DETAIL 1 & 2 ON DRAWING SD1650 (DATE 7/17, REV A)

TE — TIMBER EDGE (TE)

- DETAIL – REFER DTMR STANDARD DETAIL 1603 (DATE 7/21, REV C)

PROPOSED TREE (45L)

- DETAIL – REFER PLANT SCHEDULES AND DTMR STANDARD DETAILS DETAIL 1 & 2 ON DRAWING SD1645 (DATE 7/21, REV C)

SURVEY AND GENERAL ARRANGEMENT LEGEND

- CONCRETE BATTER PROTECTION
- ROCK SCOUR PROTECTION
- PROPERTY BOUNDARY
- FENCE
- CONTROL LINE AND CHAINAGES (100, 80, 60)
- TOP OF BATTER
- EXISTING ELECTRICITY O/H
- EXISTING GAS U/G
- EXISTING TELECOMMS U/G
- EXISTING WATER MAIN
- EXISTING SEWER RISING MAIN
- EXISTING STORMWATER
- EXISTING FEATURES
- EXISTING BATTER
- EXISTING KERB
- EXISTING SIGN – SINGLE
- EXISTING SIGN – DOUBLE
- EXISTING TREE
- EXISTING DRAINAGE FLOW PATH
- EXISTING FENCE
- EXISTING VEGETATION

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:44 pm, 21/10/2024

2	100% Design Issue		19.07.2024
1	85% Design Review		28.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES: AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-81011-LR-NL

Associated Job Nos	
Auxiliary Drg Nos	
Survey Data – Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LANDSCAPE NOTES AND LEGEND
SHEET 1 OF 2

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953848 | 2
Series Number	LR-NL-01 of 02

Last Modified :- Jul 30, 2024 – 1:27PM

AECOM

LANDSCAPE SETBACK AND CLEARANCES

NOTE: Refer to drawings 81404–81406 for Landscape setback and clearances schedule.

CLARIFICATION OF TERMS

1. SETBACK: Is measured from the outer edge of a design component, road element, object or carriageway line to the centre of the vegetation's (shrub or groundcover) trunk.
2. CLEARANCE: Is measured from the outer edge of a design component, road element, object or carriageway line to perimeter of the vegetation's (shrub or groundcover) mature canopy
3. NON–FRANGIBLE VEGETATION: Plants with stems larger than 100mm when measured from 300mm above the finished ground level. Shrubs species exceeding 3.5m in mature height and trees are considered non–frangible.
4. FRANGIBLE VEGETATION: Plants with stems or trunks equal to or less than 100mm when measured from 300mm above the finished ground level. Groundcovers and shrubs are all generally frangible except for large shrub species exceeding 3.5m in mature height. Trees are not considered frangible.
5. GENERALLY:

- Planting is only to occur where a min. width of 3.0m is available. Where 3.0m is not achievable the area shall be concrete capped/paved.
- Areas without road barriers: Frangible setback 1m from road pavement

6. CLEAR ZONE:

- The Clear Zone line (extent) is shown as the interface between frangible and non–frangible revegetation barrier system occurs.

DTMR STANDARD DRAWING REFERENCE

Unless otherwise specifically approved by DTMR, all landscape works shall conform to MRTS16 (Date 7/17) and DTMR technical standards.

1. SD1033_KERB AND CHANNEL – PROFILES (Date 7/20, Rev L)
2. SD1602_CHAINWIRE FENCES AND GATES (Date 6/02, Rev B)
3. SD1643_VEGETATION GROUND WORKS: Planting container stock kerbed medians and separators (Date 7/17, Rev E)
4. SD1644_VEGETATION GROUND WORKS: Hardstand abutments to turf and planting beds (Date 7/17, Rev E)
5. SD1650_VEGETATION WORKS: Turfing (Date 7/17, Rev A)
6. SD1653_VEGETATION WORKS: Planting container stock <25L container (Date 7/17, Rev E)
7. SD1654_VEGETATION WORKS: Planting container stock >25L container (Date 7/17, Rev E)

SETBACKS FROM SERVICES & UTILITIES

For all vegetation and clearance requirements for Public Utility Plant (PUPs), services, street lighting, surveillance and drainage items, refer to the Vegetation Setback and Clearances Schedule (Refer Drgs 81013–81015). To be read in conjunction with Ergon's Plant Smart guidelines https://www.ergon.com.au/network/safety/home–safety/trees–and–powerlines/plant–smart

Note: The Contractor is to verify location of all above and below ground services prior to planting. refer applicable PUP, ITS and Lighting and Electrical drawing packages for locations.

SIGNS GENERAL

VEGETATION SETBACKS AND CLEARANCES:

Approach and departure road

1. Signage mounted in accordance with the MUTCD.
2. Vegetation within sight lines to have maximum mature height of 500mm below bottom edge of sign. Vegetation shall not impeded sight from 100–150m from edge of sign.

Note: Setbacks and clearances to its signage is to be set–out on site by Contractor in accordance with DMRTS requirements and approved by Administrator (size of poles, cabinets and signage may vary).

VEGETATION PROTECTION NOTES

1. Clearing area shown on plans indicative only. All existing vegetation works which is to be retained is to be confirmed onsite with the Administrator. The Contractor is to minimise area of clearing and all clearing areas to be reinstated. All vegetation outside of the clearing and grubbing area is to be retained and protected in accordance with AS4970–2009.
2. All existing trees and landscape works to be retained are to be protected from impact during construction activities in accordance with AS4970–2009 Protection of Trees on Development Sites.
3. Existing vegetation that falls within sightlines, will be assessed on site and maintained as required.
4. Any tree protection fencing to be installed is to be installed as per AS4970–2009.
5. All works to be undertaken adjacent to existing vegetation is to be carried out in accordance with AS4970–2009 requirements. All excavation works within the TPZ (tree protection zones) are to be done by approved hand or vacuum methods. No stockpiling or storage of materials (including equipment) is allowed in TPZ.
6. Weed management is to be in accordance with MRTS16 (Date 7/17) & MRTS04 General Earthworks (Date 3/20)
7. Extent of clearing for site access and construction activities to be confirmed by Landscape Superintendent in relation to existing vegetation and habitat footprints being retained and protected. Works beyond the landscape treatments shown on plans to be confirmed and mitigated where possible.

LANDSCAPE EROSION CONTROL MEASURES

1. Biodegradable organic matting is to be used on the batters of the disturbed waterways (where required).
2. For all organic matting, including fixing and ground preparation (depth of soil, mulch, and planting), refer to DTMR standard drawing 1647 (Date 7/17, Rev E) and to follow the applicable manufacturer's specifications.
3. For all landscape earthworks, stabilisation and surface preparation guidance, refer to MRTS16 (Date 7/17).
4. All other erosion and sediment control measures to be in accordance with Construction Erosion and Sediment Control Plan (ESCP).

LANDSCAPE SOIL NOTES

1. The Contractor is to prepare a Soil Management Plan (Construction) for DTMR approval prior to clearing and grubbing operations as per MRTS16 (Date 7/17) Clause 5.2.2.
2. All subgrades to receive landscape treatments must be tested along with all topsoils used in the finished works in accordance with MRTS16 (Date 7/17) and ameliorated as determined in the Soil Management Plan by Contractor.
3. All planting treatment types will utilise site won or imported mulch. Revegetation zones will utilise site won mulch in accordance with MRTS16 (Date 7/17). To be determined on site.
4. Insitu testing of the stripped topsoil is to be undertaken to verify the amelioration requirements in accordance with the proposed landscape design (in accordance with the requirements of Form C & D of MRTS16 (Date 7/17)). Further testing on the embankment material and stripped topsoil is to confirm/verify these properties, to ensure establishment and maintenance of the landscaping design is achievable and sustainable past the maintenance period.

LANDSCAPE NOTES

1. All plans and details are to be read in conjunction with the legend, schedules and notes provided within the landscape package.
2. All plans and details are to be read in conjunction with relevant engineering and environmental design documentation packages.
3. Landscape works to be undertaken in accordance with Department of Transport and Main Roads Specification MRTS16 Landscape and Revegetation Works, associated Annexures and standard drawings (landscape and revegetation).
4. All existing and retained elements are shown indicatively only. The location of these elements are based on survey information supplied by the Client, all works are to be setout and confirmed onsite prior to construction works.
5. All underground services are to be confirmed by the contractor to ensure infrastructure is not damaged or interrupted by works. The Contractor is to liaise with service providers to gain all approvals/permits.
6. Potential services conflicts, protection and/or relocation with initial works shall be determined prior to construction using current "dial before you dig" information, pot–holing and consultation with relevant services authorities.
7. Do not scale directly from drawings. all other disciplinary elements are shown indicatively. Refer to the relevant package for the information
8. The Contractor shall be responsible for the engagement of a registered surveyor for the setout of all project work.
9. Clearing and grubbing shall be in accordance with MRTS04 General Earthworks (Date 3/20), MRTS16 Landscape and Revegetation Works (Date 7/17), MRTS51 Environmental Management (Date 11/19) and MRTS52 Erosion and Sediment Control (Date 7/18). Any additional conflicts shall be identified and resolved onsite with the Administrator.
10. The works shall be constructed in accordance with the Contractor's approved work method where required.
11. The Contractor shall remove all weeds during the establishment and maintenance periods in accordance with the Contractor's weed management plan and MRTS16 (Date 7/17) requirements.
12. The Contractor shall provide and install temporary fencing to adequately define and secure the landscape works where required.
13. Treatments are to remain within the road reserve and not extend into private property.
14. Areas left blank (white space) are to be retained as existing and are generally characterised by low value grass cover within the corridor. Areas disturbed by the construction works shown to the extent of works shall be re–instated and receive a suitable landscape treatment determined by the Administrator, generally to match the treatment closest to the affected area.

REFERENCE SPECIFICATIONS

1. For Landscape and Revegetation, refer to Annexure MRTS16.1 Landscape and Revegetation Works (Date 7/17)
2. For Anti–graffiti coatings to structures, refer to Annexure MRTS83.1 Anti–Graffiti Protection (Date 11/19)
3. For painting treatments to structures, refer to Annexure MRTS88.1 Protective Coating for New Work (Date 7/17)
4. For General Earthworks, refer to Annexure MRTS04 – General Earthworks (Date 3/20)
5. For Environmental Management, refer to Annexure MRST51 Environmental Management (Date 11/19)
6. For Erosion and Sediment Control, refer to Annexure MRTS52 Erosion and Sediment Control (Date 7/18)

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:45 pm, 21/10/2024

Last Modified :- Jul 30, 2024 - 1:53PM

2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–81012–LR–NL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LANDSCAPE NOTES AND LEGEND
SHEET 2 OF 2

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953849 | 2
Series Number	LR–NL–02 of 02

AECOM

Road Landscape Manual (extract)
Appendix 4 – Vegetation Setbacks and Clearances

MINIMUM VEGETATION SETBACK AND CLEARANCES SCHEDULE

Setbacks and clearances relate to horizontal distances only. Where related to vertical distances, these are noted otherwise.

Parameter	Description: Non–frangible verse frangible vegetation	Setback	Clearances	Value	Rationale
Roadside areas without barriers	All non–frangible vegetation; measured from carriageway edge line to clear zone	✓		As per RPDM	RPDM (in conjuntion with Austroads) is a higher order document.
Roadside areas with barriers	Non–frangible vegetation; Concrete barriers	✓		1.5m	Provides maintenance free treatment to rear of barrier.
	Frangible vegetation; Concrete barriers	✓		0.5m or ½ Dia*	
	Non–frangible vegetation; Wire rope barriers	✓		2.0m	Allows for deflection/movement of the barrier when impacted.
	Frangible vegetation; Wire rope barriers	✓		0.5m or ½ Dia*	
	Non–frangible vegetation; W–beam & TRS Beam barriers (also includes a 'hazard free zone', which typically extends 6m behind the back of the guardrail and for 22.5m from each end)	✓		1.0m	
	Frangible vegetation; Steel barriers (also includes a 'hazard free zone', which typically extends 6m behind the back of the guardrail and for 22.5m from each end)	✓		1.0.m	
Roadside general	Non–frangible vegetation (general); from road pavement edge	✓		2.5m **A	Setback required mitigating potential tree root damage and resulting reduction of life to road pavement. Greater offsets are required for species with known invasive root systems (eg., Ficus and Melaleuca species).
	Non–frangible vegetation (general); from road pavement edge		✓	7.0m	The projected/anticipated canopy line of trees should not encroach beyond the outer carriageway line or be capable of providing a canopy within the minimum 7m clearance adjacent to trafficked lanes in the future.
	Non–frangible vegetation (>15m in mature height known to have a reputation of limb drop and/or large seed drop during high wind/storm events); from road pavement edge	✓		10.0m	To mitigate the risk of trees, limbs, branches and large seeds falling and impacting the roadway (eg. Eucalyptus species).
	Frangible vegetation		✓	0.5m or ½ Dia*	To prevent planting overhanging roadway; reducing potential for safety obstructions and increased maintenance requirements.
Roadside structures and furniture	Non–frangible vegetation; tree canopy from fauna fence (relative to rear/ fauna side of fence)		✓	3.0m **B	Eliminates the risk of fauna (koalas in particular) dropping into the fenced road corridor which may be difficult/ impossible for the fauna to escape
	Non–frangible vegetation; from outer parapet/ rails and piers of bridges	✓		5.0m	Minimises the likelihood of the bridge being impacted by trees; both structurally and from a maintenance perspective (protects from strike). Also reduces likelihood of vegetation encroaching sightlines. NOTE – greater setbacks may be required in those parts of Queensland where intense storms/ cyclones are a regular occurrence.
	Non–frangible vegetation; either side of retaining structures as per RPEQ's determination		✓	As per RPEQ	Requirements of walls vary depending on type and site conditions. RPEQ to ensure trees do not compromise walls integrity, over its required design life.
	Frangible vegetation (general); includes but not limited to fencing, retaining walls, kerbs, garden edging, drainage channels**C		✓	0.5m or ½ Dia*	Maintenance minimisation; retains structure/ furniture function and reduces the likelihood of conflict between the vegetation and adjoining structure or edge.
	Frangible vegetation; from fauna fence (relative to rear/ fauna side of fence)	✓		1.0m (ground covers) and 1.5m shrubs	Applies to wide corridors only; that is, where space permits for maintenance access. Narrow corridors which lack of space behind fauna fence do not apply as an additional setback will further reduce vegetation coverage, compromising corridor effectiveness and habitat connectivity. Similarly, corridors where there is a guard rail absent do not apply as have sufficient space available to front/ road side of fence for maintenance access through clear zone and setback requirements and results in no further need for maintenance access on other rear/ fauna side of fence.
Maintenance access paths/ tracks	Non–frangible vegetation	✓		1.0m	Allows for maintenance track to remain operational. NOTE – crown lifting may be required to facilitate.
	Frangible vegetation		✓	0.5m or ½ Dia*	Maintenance minimisation and reduces conflicts with safety hazards for operational staff
Noise barriers (where maintenance access is required)	Non–frangible vegetation		✓	1.5m	Also allows for maintenance access. Clearance eliminates conflict between tree and wall and beyond.
	Frangible vegetation		✓	1.0m	Allows for maintenance access
Road Signage	Approach side 1. Vegetation within sightline triangle – clearance as indicated 2. Vegetation within sightline triangle having maximum mature height of 500mm below bottom edge of sign – No requirements necessary. 3. In addition to notes 1 & 2 all vegetation to comply with RP & D manual and/or clear zone and sight visibility requirements where present..	✓		•Ensure sight distance triangles across road landscapes (with horizontal curvature) are achieved so that the driver has time to recognise and react to the sign. •Vegetation that will block sightline, longitudinal sight distance triangle start point to be minimum of 1.4V m in advance of the sign (where V is the 85th percentile speed) and sighted to far outside edge of sign. Eye measurement to be taken to centre of traffic lane. •For sight–distance calculations refer to RP & D manual •For sign location/placement refer to MUTCD	Ensures sign is not obstructed by any vegetation enabling drivers to have sufficient time to observe, read, and react accordingly also minimising maintenance and ensuring sightlines are retained**D

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Name: Trudi Smith
Date: 12:45 pm, 21/10/2024

	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date
2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: NTS
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
SETBACK AND CLEARANCES SCHEDULE
SHEET 1 OF 3

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953850 2
Series Number	LR–NL–03 of 03

CAD FILES | AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–81013–LR–NL

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Road Landscape Manual (extract)
Appendix 4 – Vegetation Setbacks and Clearances

MINIMUM VEGETATION SETBACK AND CLEARANCES SCHEDULE

Setbacks and clearances relate to horizontal distances only. Where related to vertical distances, these are noted otherwise.

Parameter	Description: Non–frangible verse frangible vegetation	Setback	Clearances	Value	Rationale
	Departure side 1. Single–sided signs with frangible vegetation – maintenance area requirements apply as indicated. 2. Double–sided signs need to comply with notes 1 & 2 for approach situations. 3. In addition to notes 1 & 2 all vegetation to comply with RP & D manual and/or clear zone and sight visibility requirements where present.	✓ ✓ ✓ ✓		Single–sided signs:– 10.0m (Min) • Double–sided signs • As per approach side above	Ensures sign is not obstructed by any vegetation and assists with maintenance operations. Sightlines are retained **D
Sight Distance	Vegetation sight distance triangle; Plantings in these zones should provide a clear visibility both horizontally and vertically when the eye height and the target height are considered.		✓	• Sight distance as per RPDM • Proposed mature plantings and landform combination heights should be at least 100mm outside the vertical limits of the sight triangle	RPDM (in conjunction with Austroads) is a higher order document. Ensures sight distance is not obstructed by vegetation enabling drivers to have sufficient time to observe and react accordingly, also minimising maintenance and ensuring sightlines are retained
Pedestrian and Cyclist Environments	Non–frangible vegetation (general); from pavement edge – pathway, cycleway or other	✓		1.0m	Setback ensures trees will provide shade to pedestrian/ cyclist areas and nodes**E
	Non–frangible vegetation (>15m in mature height known to fall or have a reputation of limb drop and/or large seed drop during high wind/storm events; or plants with aggressive/ spreading root system); from pavement edge – pathway, cycleway or other	✓		10.0m	To mitigate the risk of trees, limbs, branches and large seeds falling and impacting on pedestrian/ cyclist areas and nodes (eg. Eucalyptus species). To mitigate potential tree root damage and resulting reduction of life to pavement surface, for species with known invasive root systems (eg., Ficus and Melaleuca species).
	Frangible vegetation		✓	0.5m or ½ Dia*	To prevent planting overhanging pathways, cycleways or other; reducing potential for safety obstructions and increased maintenance requirements
Lighting (Roadway 3 10.0m Indicative only**F Lighting only) – For Street Lighting/ Public Lighting; refer directly to Local Authority requirements	Non–frangible vegetation and Frangible vegetation (greater than 4m in height)	✓		10.0m	Indicative Only **F
	Frangible vegetation (all other)	✓		1.0m	To retain a clear surround for maintenance access.
CCTV view–shed	Vegetation below view–shed		✓	Maximum mature height of 1.0m below bottom edge of view–shed	To prevent planting encroaching view–shed; reducing potential for obstructions and maintenance requirements
	Vegetation beside view–shed	✓		½ mature diameter	
Above ground Electrical Services (relative to Energex, Ergon Energy and Energy Australia requirements ONLY) – For Powerlink (High Voltage Transmission Lines) setbacks and clearances; refer directly to Powerlink requirements	≤33kV (low voltage line) – Below powerlines: Frangible vegetation or 'Energex's Safe Tree plants' (3.5m maximum mature height for min. 7.0m either side of alignment – Refer further to below requirement)			n/a – mature height will be below actual line	To ensure conflict does not occur between vegetation and power infrastructure (lines, conductors, poles and so on) and minimise potential ongoing maintenance required to retain clearances as per PUP owners' requirements.
	≤ 33kV (low voltage line) – Near powerlines, including poles: Non–frangible vegetation (45° rule; as per 'Energex's Safe Tree Program').		✓	To equal at least mautre height or min 7.0m (that which is greater)	
	> 33kV (high voltage line) – Below powerlines: Frangible vegetation or 'Energex's Safe Tree plants' (3.5m maximum mature height for min. 10.0m either side of alignment – Refer further to below requirement)		✓	4.0m	
	>33kV (high voltage line) – Near powerlines, including poles: Non–frangible vegetation (45° rule; as per 'Energex's Vegetation management Standard').			n/a mature height will be below actual line	
	> 33kV (high voltage line) – Around poles: Frangible vegetation		✓	To equal at least mature height, or min 10.0m (that which is greater)	
	Substations, tower structures and any other facilities (generally 2.0m standard however often by negotiation with owner): Frangible		✓	6.0m	
Underground water (including drainage and sewerage), electrical or any other underground services; telecommunications and fibre optics**G	All vegetation with mature height ≤3.5m	✓		2.0m	To allow future access and minimise impacts to underground services from root systems
	All vegetation with a mature height >2,5m (general underground services and piping	✓		As per arborist advice or min 4.0m (that which is greater)	To ensure tree roots do not impact on underground infrastructure – setback will vary with species characteristics; that is, greater setbacks required for species with vigorous or known to be invasive root systems.
	All vegetation with a mature height >3.5m (drainage sump)	✓		As per arborist advice or min. 6.0m (that which is greater)	

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Name: Trudi Smith
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2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

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Last Modified :- Jul 30, 2024 – 1:53PM

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
Auxiliary Drg Nos		Horiz. Grid	MGA 56
		Height Datum	AHD
		Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
SETBACK AND CLEARANCES SCHEDULE
SHEET 2 OF 3

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953851 | 2
Series Number	LR–NL–04 of 03

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Road Landscape Manual (extract)
Appendix 4 – Vegetation Setbacks and Clearances

MINIMUM VEGETATION SETBACK AND CLEARANCES SCHEDULE

Setbacks and clearances relate to horizontal distances only. Where related to vertical distances, these are noted otherwise.

Parameter	Description: Non–frangible verse frangible vegetation	Setback	Clearances	Value	Rationale
Gas Services	All vegetation with a mature height ≤ 3.5m			2.0m	To allow future access and minimise impacts from root systems.
	All vegetation with a mature height > 3.5m			As per arborist advice or min 3.5m (that which is greater)	To ensure tree roots do not impact on underground infrastructure – setback will vary with species characteristics; that is, greater setbacks required for species with vigorous or known to be invasive root systems.
Service pits and inspection points **G	All vegetation with a mature height ≤3.5m			1.0m	To ensure maintenance access to pits and inspection points.

NOTE:
A setback is measured from the outer edge of a design component, road element, object or carriageway line to the centre of the vegetation's (tree, shrub or groundcover) trunk.

A clearance is measured from the outer edge of a design component, road element, object or carriageway line to the perimeter of the vegetation's (tree, shrub or groundcover) mature canopy.

Setbacks and Clearances from PUPs are measured form the outer most point of object, line or pipe.

'Non–Frangible' vegetation – plants with stems larger than 100mm when measured from 300mm above the finished ground level. Shrubs species exceeding 3.5m in mature height and trees are considered non–frangible.

'Frangible' vegetation – plants with stems equal to or less than 100mm when measured from 300mm above the finished ground level. Groundcovers and shrubs are all generally frangible except for large shrub species exceeding 3.5m in mature height. Trees are not considered frangible.

*0.5m or ½ mature Diameter – whichever is greatest.

REFERENCES:
**A = Where it is proposed that tree species be used within 2.5m of the road pavement edge (appropriate crash barrier system required), mitigation measures (that is, root barrier system) must be implemented that guarantee pavement life and that services will not be impacted in the future.

**B = Birds such as cassowaries will not cross fence through tree canopies into roadway. However, koalas may drop out of tree canopies over a fence. In these cases, 3.0m applies (guide only – Refer further to FSRD).

**C = Requires coordination with Civil, Structural and/or Drainage Engineer requirements.

**D = Horizontal setback – triangle measured from a single point on carriageway line, perpendicular to sign, to the value on the relevant side, to the outermost point of sign. Vertical clearance – where low planting is proposed to approach (front) side of sign, mature height needs to be less than the height of the base of the sign (that is, where meets sign post – if applicable) to ensure signage is not obscured by vegetation, maintaining sight visibility and safety.

**E = Tree species selection is to be of a type that accommodates a minimum 2.4m vertical clearance at maturity over the full pathway width (2.7m where cyclists also use facility) and does not have large seeds, fruit, blooms or excessive foliage fall that may impact on pathway/ cycleway user safety or become a slip/ trip hazard (particularly in wet weather). Non–frangible trees known to exhibit invasive root system should not be planted this close to pathways/ cycleways; greater setbacks are required.

**F = Requires coordination with Lighting/ Electrical Engineer requirements. Illumination zone will be the determinant for the setback requirements since will vary depending on light post dimensions. Final setbacks need to ensure that trees do not interfere with the lighting illumination requirements.

**G = Grass, tufting grasses or low groundcovers/ spreading shrubs with shallow root systems only are to be utilised over underground service corridors.

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Name: Trudi Smith
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	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date
2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024

CAD FILES: AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–81015–LR–NL

Associated Job Nos
Auxiliary Drg Nos

Survey Data
Horiz. Datum: GDA2020
Horiz. Grid: MGA 56
Height Datum: AHD
Survey Books: 200418 001 200418

Scales: NTS
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
SETBACK AND CLEARANCES SCHEDULE
SHEET 3 OF 3

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No. 2835872
Contract No. CN–21784
Drawing No. 953852 2
Series Number LR–NL–05 of 03

Last Modified :– Jul 30, 2024 – 1:54PM

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PLANTING SCHEDULES:

TURF TYPE 1 (T1) - GREEN COUCH (CYNODON DACTYLON)		
AREA (m^2)	=	1226

MIX TYPE A TREES - SHADE TREES (CONTAINERISED PLANTING)							
CODE	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	DENSITY	MATURE HEIGHT (m)	MATURE SPREAD (m)	QTY
EUC ter	*Eucalyptus tereticornis*	Queensland Blue Gum	45L	As Shown	30	12	5
TOTAL						=	5

MIX TYPE 1 (M1) - REVEGETATION PLANTING - LARGE SHRUBS (CONTAINERISED)							
					AREA (m^2)	=	51
CODE	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	DENSITY (per m2)	MATURE HEIGHT (m)	MATURE SPREAD (m)	QTY
TREE SPECIES							
ACA dis	*Acacia disparrima*	Hickory Wattle	140mm	3	5	4	26
ACA mai	*Acacia maidenii*	Maidens Wattle	140mm		10	5	26
BAN spi	*Banksia spinulosa*	Hairspin Banksia	140mm		3	2	26
ELO obo	*Elaeocarpus obovatus*	Blueberry Ash	140mm		8	4	26
MEL lin	*Melaleuca linariifolia*	Narrow Leaved Paperbark	140mm		7	3	26
MEL vim	*Melaleuca viminalis*	Weeping Bottlebrush	140mm		4	3	26
TOTAL						=	153

MIX TYPE 2 (M2) - REVEGETATION PLANTING - GRASSES (CONTAINERISED)							
					AREA (m^2)	=	35
CODE	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	DENSITY (per m2)	MATURE HEIGHT (m)	MATURE SPREAD (m)	QTY
GAH asp	*Gahnia aspera*	Rough Saw-Sedge	140mm	4	1.5	1.5	35
LOM hys	*Lomandra hystrix*	Green Matrush	140mm		1	1	35
LOM lon	*Lomandra longifolia*	Long-Leaf Matrush	140mm		1.2	1.2	35
THE tri	*Themeda triandra*	Kangaroo Grass	140mm		1.5	0.3	35
TOTAL						=	140

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2	100% Design issue		19.07.2024
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	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

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Associated Job Nos:
Auxiliary Drg Nos:

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: NTS

Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LANDSCAPE SCHEDULE
SHEET 1 OF 1

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953853 2
Series Number	LR-NL-06 of 01

Last Modified :- Jul 30, 2024 - 1:54PM

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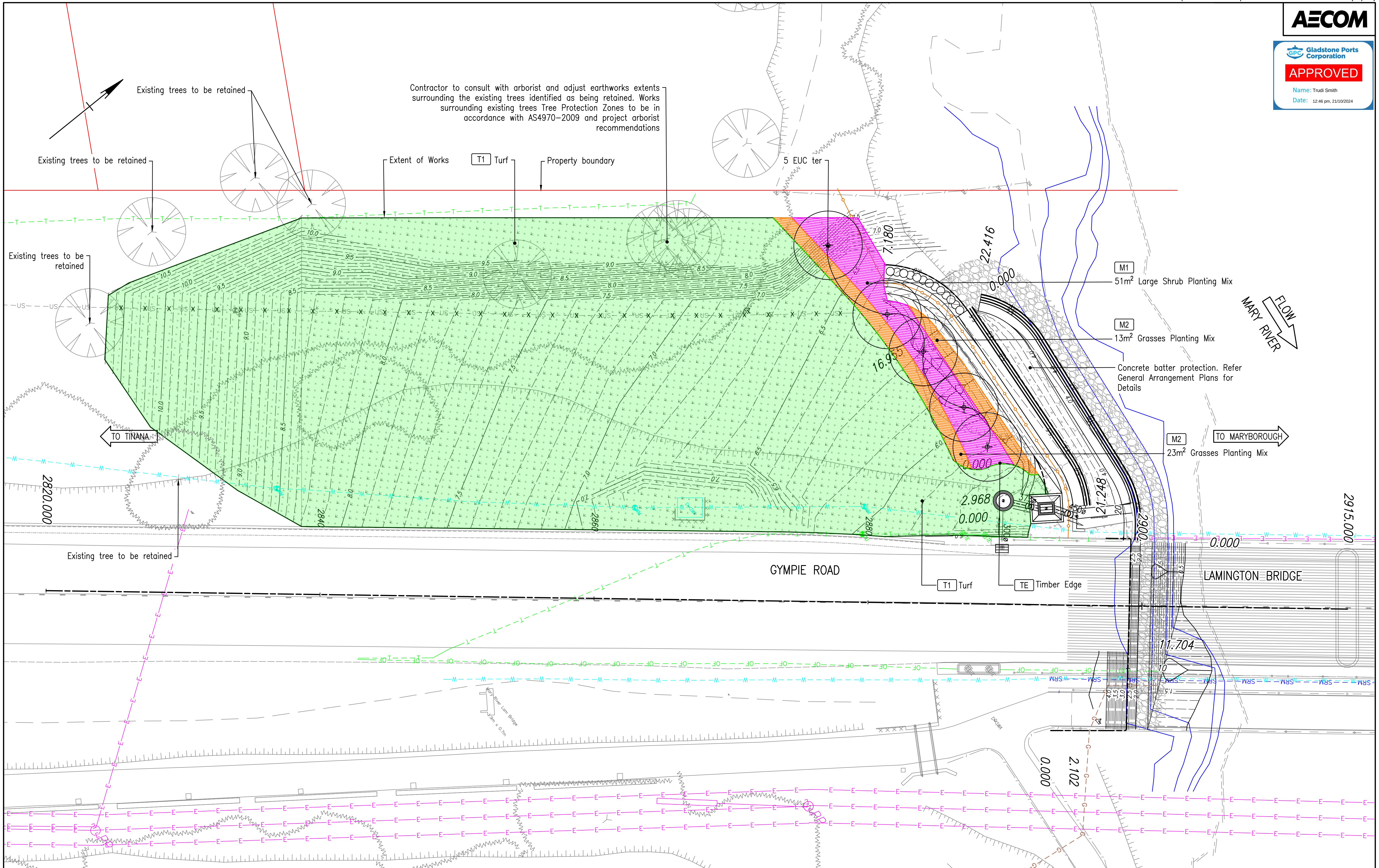
Name: Trudi Smith
Date: 12:46 pm, 21/10/2024



2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-81101-LR-LD

Last Modified :- Jul 30, 2024 - 1:42PM

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales

0 1 2 3 4 5m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL

163 LAMINGTON BRIDGE – GYMPIE ROAD

CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LANDSCAPE LAYOUT
SHEET 1 OF 1

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953854 2
Series Number	LR–LD–01 of 01

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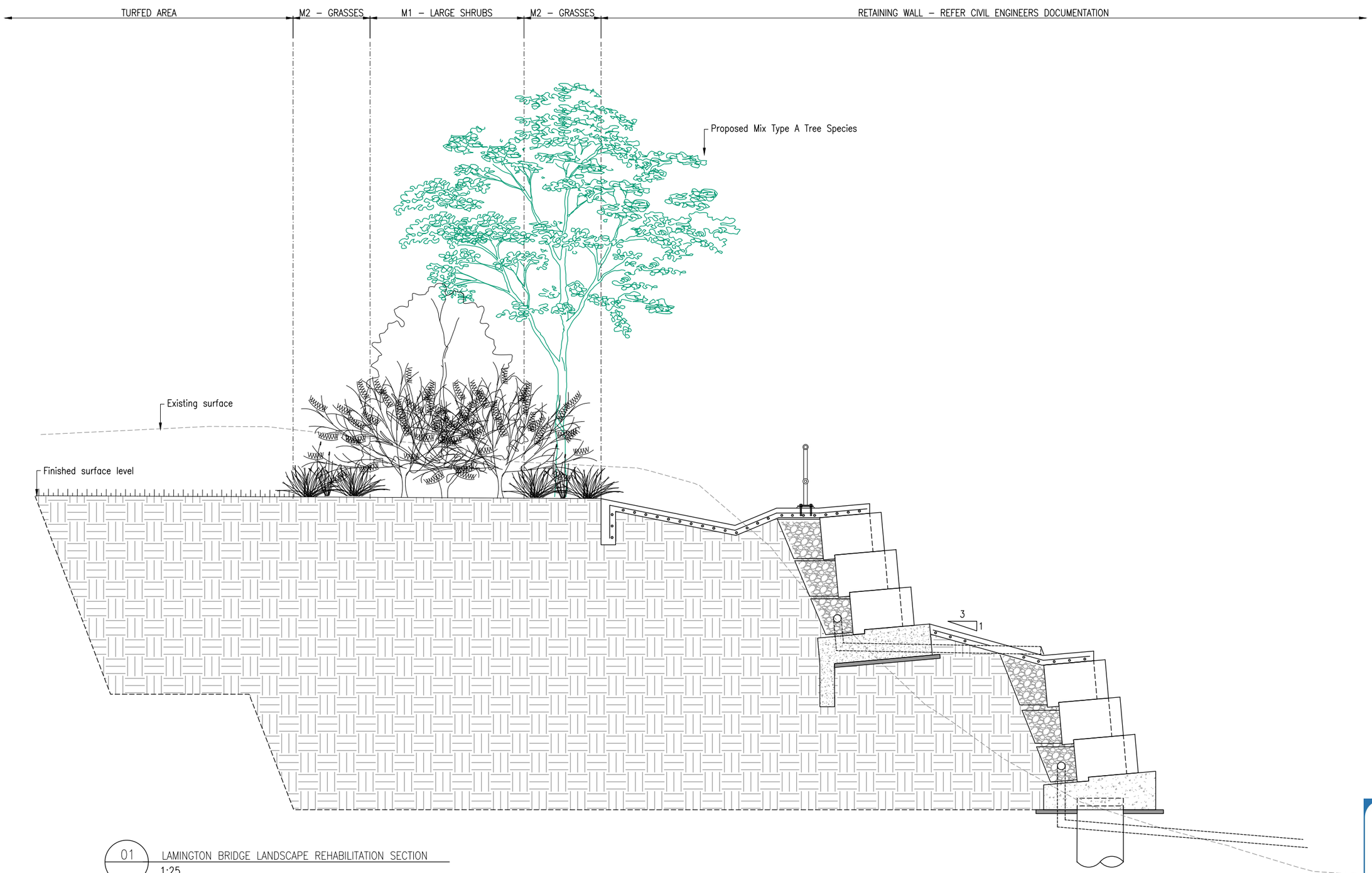

01 LAMINGTON BRIDGE LANDSCAPE REHABILITATION SECTION
1:25

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:46 pm, 21/10/2024

2	100% Design issue		19.07.2024
1	85% Design Review		28.06.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES: AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-81501-LR-GD

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales
0 500 1000mm
Dimensions shown in millimeters except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE *2824 – 2905*

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LANDSCAPE SECTION
SHEET 1 OF 1

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953855 2
Series Number	LR-GD-01 of 01

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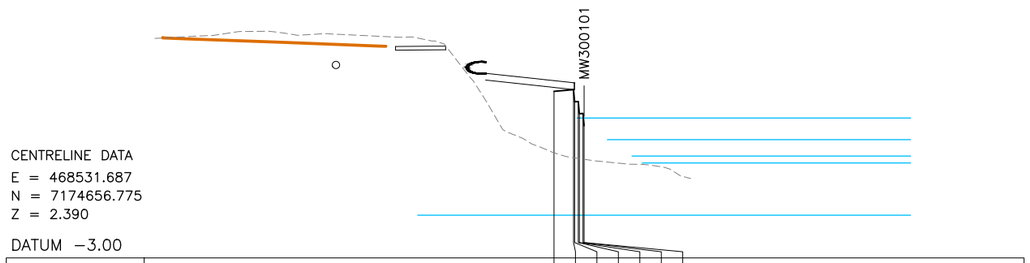
LEGEND
- Existing Surface
- Earthworks Cut
- Design
- Tide Levels



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N = 7174656.775
Z = 2.390

DATUM −3.00

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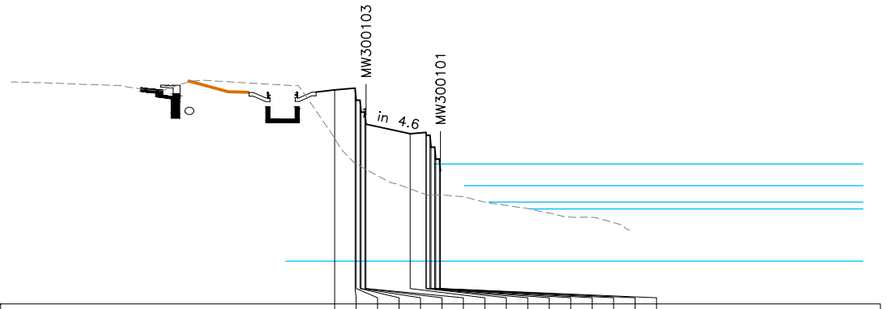
OFFSETS	−1.227	−0.430	−0.386	−0.237	−0.193	−0.044	0.000	1.449

CHAINAGE 2.000

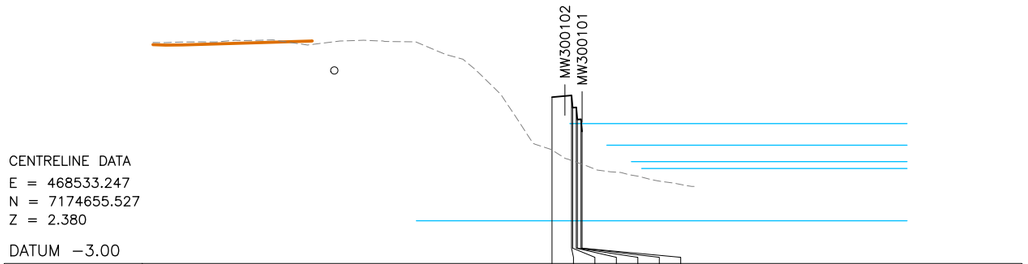


CENTRELINE DATA
E = 468527.927
N = 7174658.011
Z = 2.410

DATUM −3.00

DESIGN LEVELS	5.721	5.792	5.294	5.307	4.809	4.823	4.325	3.933	3.989	3.865	3.878	3.380	3.393	2.895	2.908	2.410
EXISTING SURFACE	3.745	2.737	2.710	2.620	2.593	2.503	2.476	1.689	1.454	1.450	1.442	1.443	1.445	1.446	1.448	1.449
OFFSETS	−4.317	−3.482	−3.437	−3.282	−3.236	−3.081	−3.036	−1.238	−0.590	−0.579	−0.430	−0.386	−0.237	−0.193	−0.044	0.000

CHAINAGE 6.000

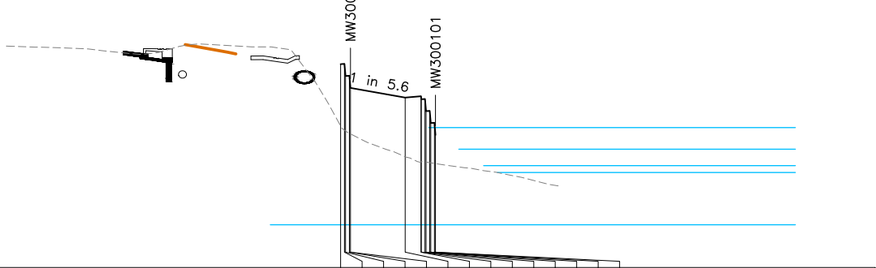


CENTRELINE DATA
E = 468533.247
N = 7174655.527
Z = 2.380

DATUM −3.00

DESIGN LEVELS	3.778	3.848	3.350	3.363	2.865	2.878	2.380	
EXISTING SURFACE	1.625	1.194	1.176	1.125	1.110	1.059	1.044	
OFFSETS	−1.227	−0.430	−0.386	−0.237	−0.193	−0.044	0.000	1.449

CHAINAGE 0.000



CENTRELINE DATA
E = 468529.888
N = 7174657.635
Z = 2.400

DATUM −3.00

DESIGN LEVELS	5.287	5.300	4.802	4.816	4.318	3.923	3.979	3.855	3.868	3.370	3.383	2.885	2.898	2.400		
EXISTING SURFACE	2.764	2.596	2.563	2.467	2.444	1.514	1.303	1.309	1.300	1.294	1.270	1.263	1.240	1.233		
OFFSETS	−3.868	−3.714	−3.668	−3.513	−3.468	−1.238	−0.590	−0.579	−0.430	−0.386	−0.237	−0.193	−0.044	0.000	1.449	

CHAINAGE 4.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:46 pm, 21/10/2024

4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 2 4 6 8m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MW300101 – SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

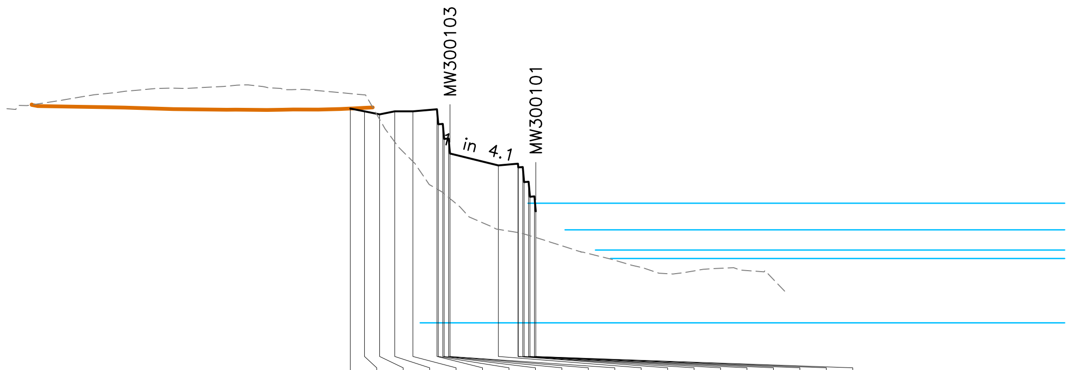
Job No.	2835872
Contract No.	CN-21784
Drawing No.	953856 | 4
Series Number	XS–01 of 11

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3001-910-300-DRG-91101-XS

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM

LEGEND
- Existing Surface
- Earthworks Cut
- Design
- Tide Levels

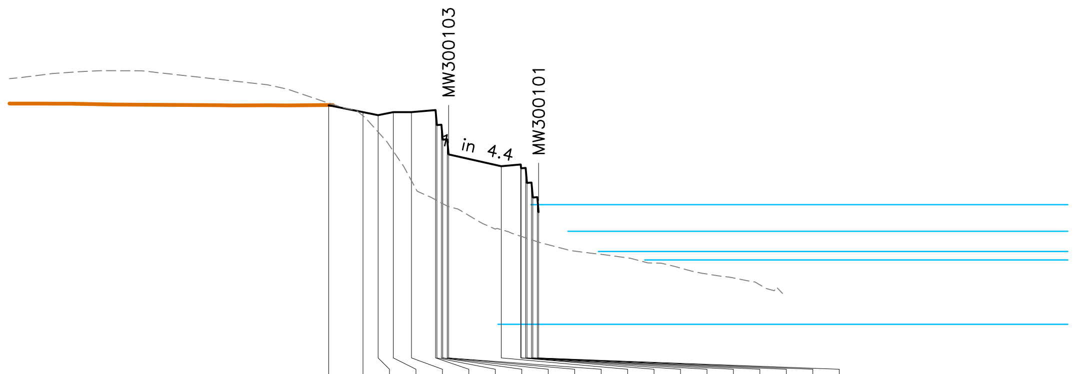


CENTRELINE DATA
E = 468523.957
N = 7174658.499
Z = 2.430

DATUM −3.00

OFFSETS	DESIGN LEVELS	EXISTING SURFACE
−6.136	5.837	6.331
−5.668	5.743	6.288
−5.168	5.643	5.479
−4.667	5.743	4.731
−4.067	5.743	4.083
−3.270	5.813	3.171
−3.226	5.315	3.145
−3.076	5.328	3.052
−3.032	4.830	3.015
−2.883	4.843	2.892
−2.839	4.345	2.855
−1.238	3.953	1.835
−0.590	4.009	1.729
−0.579	3.885	1.727
−0.430	3.898	1.696
−0.386	3.400	1.683
−0.237	3.413	1.637
−0.193	2.915	1.624
−0.044	2.928	1.578
0.000	2.430	1.565

CHAINAGE 10.000

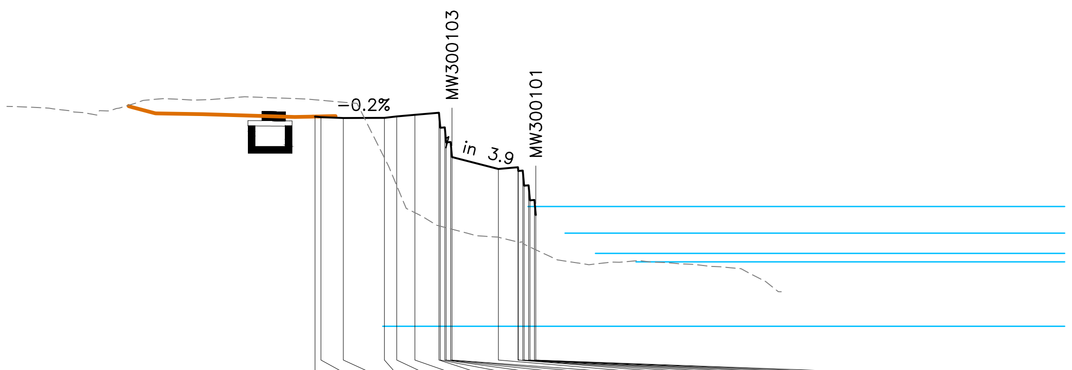


CENTRELINE DATA
E = 468519.987
N = 7174658.986
Z = 2.450

DATUM −3.00

OFFSETS	DESIGN LEVELS	EXISTING SURFACE
−6.945	5.991	6.066
−5.808	5.763	5.642
−5.307	5.663	5.106
−4.807	5.763	4.472
−4.207	5.763	3.494
−3.409	5.833	2.861
−3.365	5.335	2.837
−3.216	5.348	2.757
−3.172	4.850	2.733
−3.023	4.863	2.652
−2.979	4.365	2.637
−1.238	3.973	1.873
−0.590	4.029	1.654
−0.579	3.905	1.651
−0.430	3.918	1.601
−0.386	3.420	1.587
−0.237	3.433	1.537
−0.193	2.935	1.523
−0.044	2.948	1.474
0.000	2.450	1.459

CHAINAGE 14.000

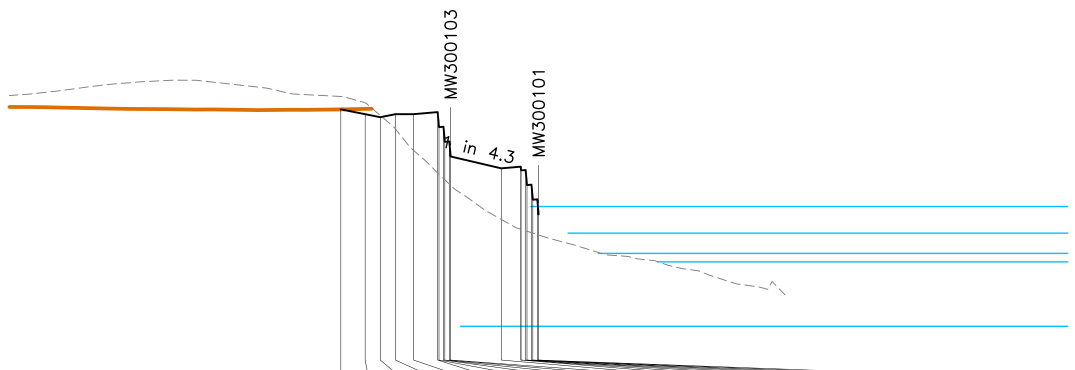


CENTRELINE DATA
E = 468525.942
N = 7174658.255
Z = 2.420

DATUM −3.00

OFFSETS	DESIGN LEVELS	EXISTING SURFACE
−7.304	5.676	6.231
−7.109	5.656	6.214
−6.367	5.628	6.149
−5.008	5.631	4.309
−4.601	5.680	3.391
−4.000	5.733	2.497
−3.203	5.803	2.062
−3.159	5.305	2.051
−3.010	5.318	2.011
−2.966	4.820	1.999
−2.817	4.833	1.960
−2.773	4.335	1.949
−1.238	3.943	1.684
−0.590	3.999	1.529
−0.579	3.875	1.527
−0.430	3.888	1.515
−0.386	3.390	1.452
−0.237	3.403	1.381
−0.193	2.905	1.361
−0.044	2.918	1.291
0.000	2.420	1.270

CHAINAGE 8.000



CENTRELINE DATA
E = 468521.972
N = 7174658.742
Z = 2.440

DATUM −3.00

OFFSETS	DESIGN LEVELS	EXISTING SURFACE
−6.542	5.914	6.340
−5.738	5.753	6.128
−5.238	5.653	5.713
−4.737	5.753	5.266
−4.137	5.753	4.555
−3.339	5.823	3.809
−3.295	5.325	3.767
−3.146	5.338	3.625
−3.102	4.840	3.584
−2.953	4.853	3.442
−2.909	4.355	3.400
−1.238	3.963	2.275
−0.590	4.019	1.949
−0.579	3.895	1.946
−0.430	3.908	1.897
−0.386	3.410	1.883
−0.237	3.423	1.835
−0.193	2.925	1.821
−0.044	2.938	1.773
0.000	2.440	1.759

CHAINAGE 12.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:46 pm, 21/10/2024

	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date
4	100% Design Issue		19.07.2024
3	85% Design Review		07.06.2024
2	50% Design Review		17.05.2024
1	30% Design Review		04.03.2024

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 2 4 6 8m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MW300101 – SHEET 2

ENGINEERING CERTIFICATION (RPEQ)			
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

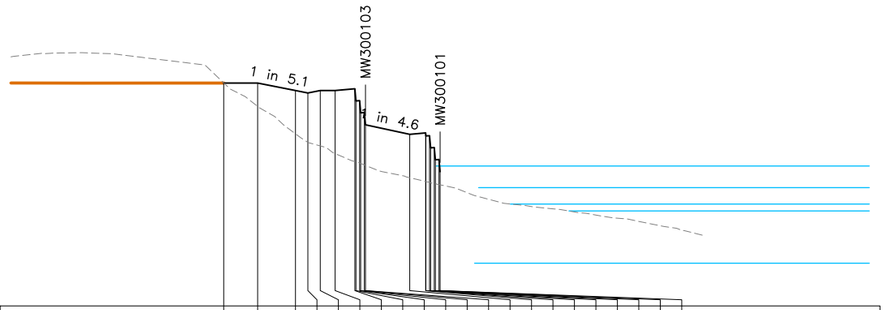
Job No.	2835872
Contract No.	CN–21784
Drawing No.	953857 4
Series Number	XS–02 of 11

CAD FILES AECOM_DS13_AU\Documents\60701625–TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625–ACM–3001–910–300–DRG–91102–XS

Last Modified :– Jul 30, 2024 – 1:42PM

AECOM

LEGEND
- Existing Surface
- Earthworks Cut
- Design
- Tide Levels



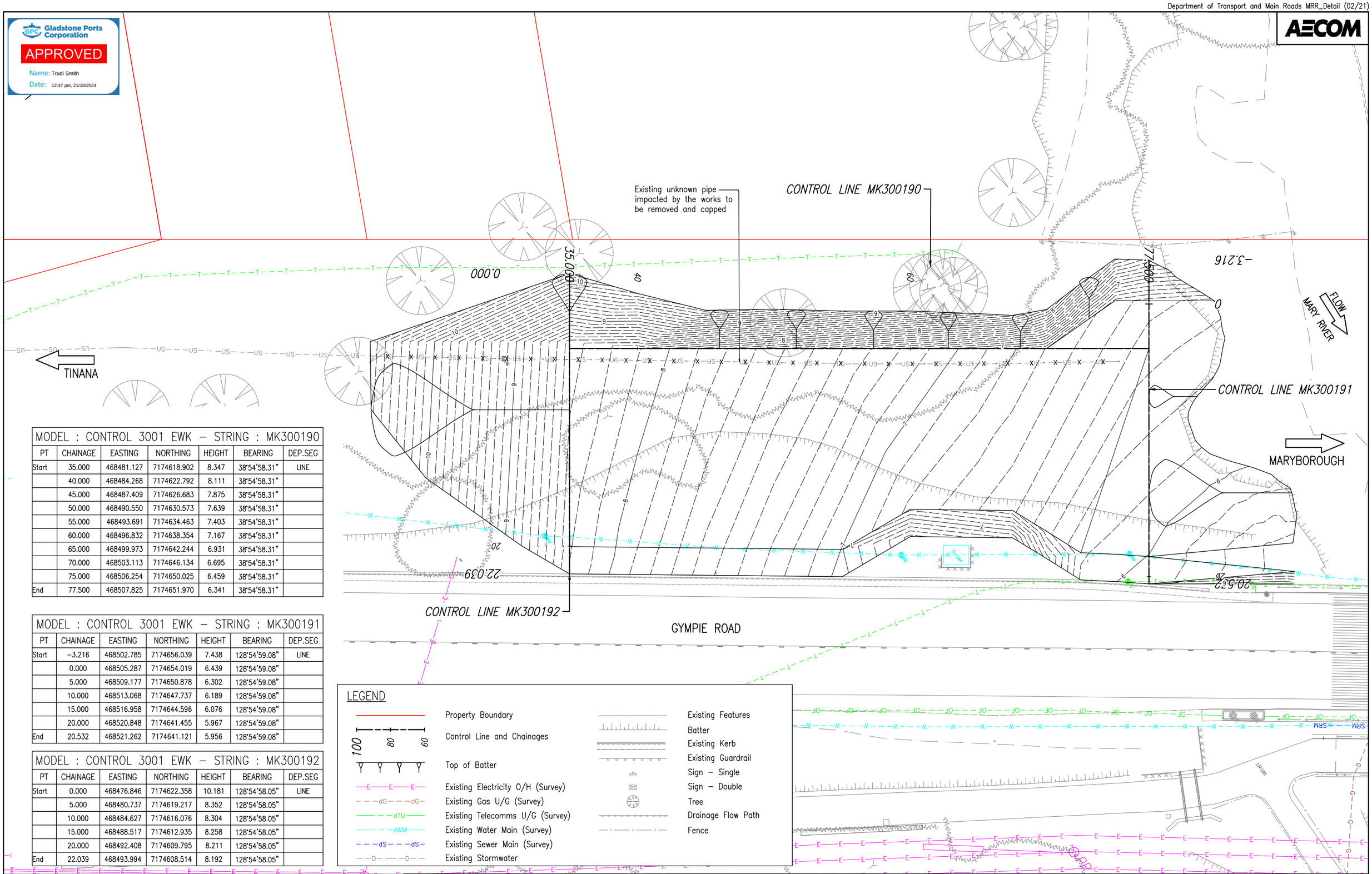
CENTRELINE DATA
E = 468516.010
N = 7174659.369
Z = 2.470

DATUM −3.00

| | | |

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:47 pm, 21/10/2024

AECOM



MODEL : CONTROL 3001 EWK – STRING : MK300190

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG
Start	35.000	468481.127	7174618.902	8.347	38°54'58.31"	LINE
	40.000	468484.268	7174622.792	8.111	38°54'58.31"	
	45.000	468487.409	7174626.683	7.875	38°54'58.31"	
	50.000	468490.550	7174630.573	7.639	38°54'58.31"	
	55.000	468493.691	7174634.463	7.403	38°54'58.31"	
	60.000	468496.832	7174638.354	7.167	38°54'58.31"	
	65.000	468499.973	7174642.244	6.931	38°54'58.31"	
	70.000	468503.113	7174646.134	6.695	38°54'58.31"	
	75.000	468506.254	7174650.025	6.459	38°54'58.31"	
End	77.500	468507.825	7174651.970	6.341	38°54'58.31"	

MODEL : CONTROL 3001 EWK – STRING : MK300191

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG
Start	-3.216	468502.785	7174656.039	7.438	128°54'59.08"	LINE
	0.000	468505.287	7174654.019	6.439	128°54'59.08"	
	5.000	468509.177	7174650.878	6.302	128°54'59.08"	
	10.000	468513.068	7174647.737	6.189	128°54'59.08"	
	15.000	468516.958	7174644.596	6.076	128°54'59.08"	
	20.000	468520.848	7174641.455	5.967	128°54'59.08"	
End	20.532	468521.262	7174641.121	5.956	128°54'59.08"	

MODEL : CONTROL 3001 EWK – STRING : MK300192

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	DEP.SEG
Start	0.000	468476.846	7174622.358	10.181	128°54'58.05"	LINE
	5.000	468480.737	7174619.217	8.352	128°54'58.05"	
	10.000	468484.627	7174616.076	8.304	128°54'58.05"	
	15.000	468488.517	7174612.935	8.258	128°54'58.05"	
	20.000	468492.408	7174609.795	8.211	128°54'58.05"	
End	22.039	468493.994	7174608.514	8.192	128°54'58.05"	

LEGEND

- Property Boundary
- Control Line and Chainages (100 80 60)
- Top of Batter
- Existing Electricity O/H (Survey)
- Existing Gas U/G (Survey)
- Existing Telecomms U/G (Survey)
- Existing Water Main (Survey)
- Existing Sewer Main (Survey)
- Existing Stormwater
- Existing Features
- Batter
- Existing Kerb
- Existing Guardrail
- Sign – Single
- Sign – Double
- Tree
- Drainage Flow Path
- Fence

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Last Modified :- Jul 30, 2024 - 1:42PM

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3002-910-300-DRG-25101-EW

Associated Job Nos
Auxiliary Drg Nos

Survey Data

Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
EARTHWORKS LAYOUT

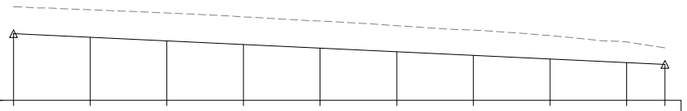
ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953859 | 3
Series Number	EW-LD-01 of 01

AECOM



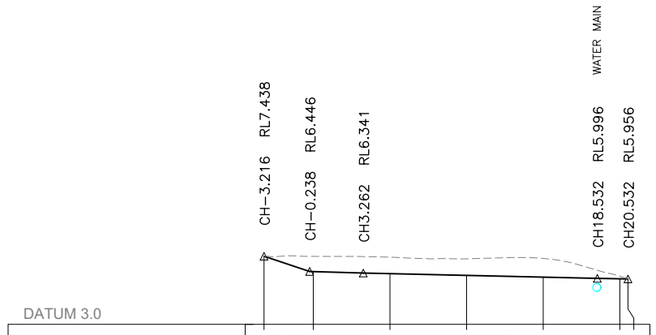
DATUM 4.0

VERTICAL DETAILS	−4.719% MATCH NATURAL SURFACE									
HORIZONTAL DETAILS	L=42.500									
DESIGN LEVELS	8.347	8.111	7.875	7.639	7.403	7.167	6.931	6.695	6.459	6.341
EXISTING LEVELS	10.095	9.905	9.694	9.431	9.170	8.865	8.578	8.219	7.802	7.417
LEVEL DIFFERENCE	1.748	1.794	1.820	1.793	1.767	1.698	1.647	1.524	1.343	1.076
CHAINAGES	35.000	40.000	45.000	50.000	55.000	60.000	65.000	70.000	75.000	77.500

CONTROL LINE MK300190

HORIZONTAL - 1 : 200

VERTICAL - 1 : 200



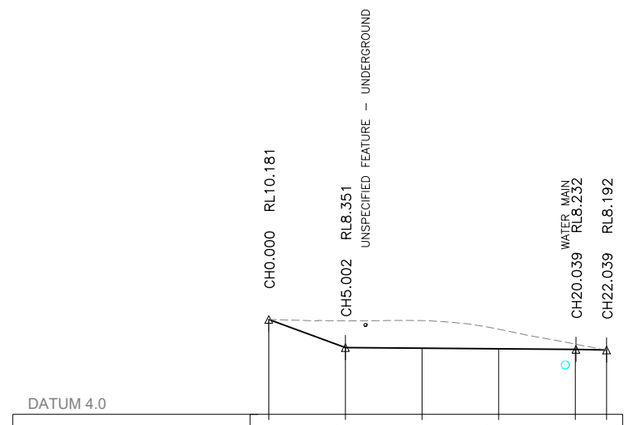
DATUM 3.0

VERTICAL DETAILS	−33.333%	−2.986%	−2.260%	−2.036%		
HORIZONTAL DETAILS	L=23.747					
DESIGN LEVELS	7.438	6.439	6.302	6.189	6.076	5.967 5.956
EXISTING LEVELS	7.438	7.428	7.376	7.271	7.297	6.133 5.956
LEVEL DIFFERENCE	0.000	0.989	1.074	1.082	1.221	0.167 0.001
CHAINAGES	−3.216	0.000	5.000	10.000	15.000	20.000 20.532

CONTROL LINE MK300191

HORIZONTAL - 1 : 200

VERTICAL - 1 : 200



DATUM 4.0

VERTICAL DETAILS	−36.583%	−0.793%	−2.000%			
HORIZONTAL DETAILS	L=22.039					
DESIGN LEVELS	10.181	8.352	8.312	8.272	8.232	8.192
EXISTING LEVELS	10.180	10.096	10.110	9.546	8.576	8.192
LEVEL DIFFERENCE	−0.000	1.744	1.798	1.274	0.344	0.000
CHAINAGES	0.000	5.000	10.000	15.000	20.000	22.039

CONTROL LINE MK300192

HORIZONTAL - 1 : 200

VERTICAL - 1 : 200

Gladstone Ports Corporation

APPROVED

Name: Trudi Smith

Date: 12:47 pm, 21/10/2024

Last Modified :- Jul 30, 2024 - 1:42PM

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3002-910-300-DRG-39101-LS

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA2020
Auxiliary Drg Nos	Horiz. Grid	MGA 56
	Height Datum	AHD
	Survey Books	200418 001 200418

Scales

0 1 2 3 4m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL

163 LAMINGTON BRIDGE – GYMPIE ROAD

CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A

LONGITUDINAL SECTIONS

CONTROL LINE MK300190, 191 & 192

ENGINEERING CERTIFICATION (RPEQ)

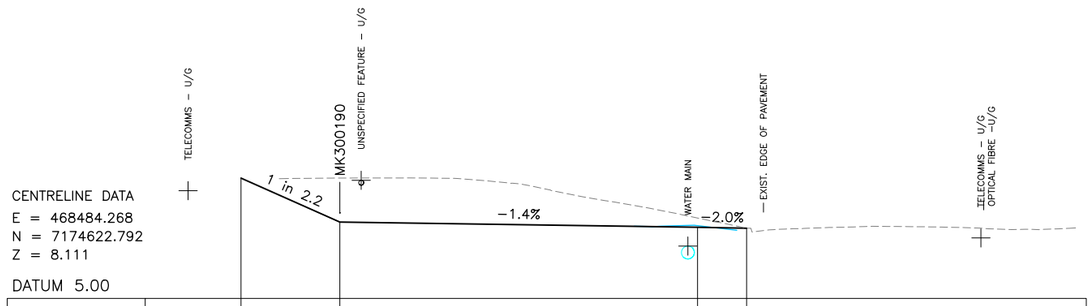
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953860 3
Series Number	LS-03 of 04

AECOM

LEGEND
- Existing Surface
- Design
- Temporary Access Track

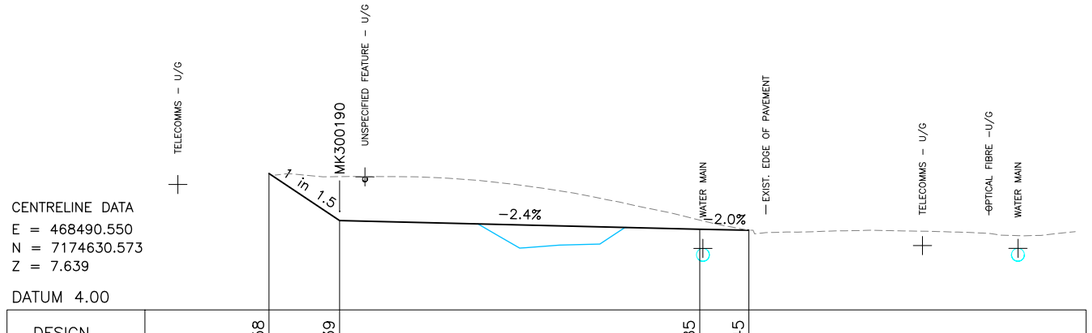


CENTRELINE DATA
E = 468484.268
N = 7174622.792
Z = 8.111

DATUM 5.00

DESIGN LEVELS	9.902	8.111		7.900	7.860	
EXISTING LIDAR	9.902	9.905		8.276	7.860	
EXISTING SURFACE		9.905		8.276	7.860	
OFFSETS	–4.030	0.000		14.586	16.586	

CHAINAGE 40.000

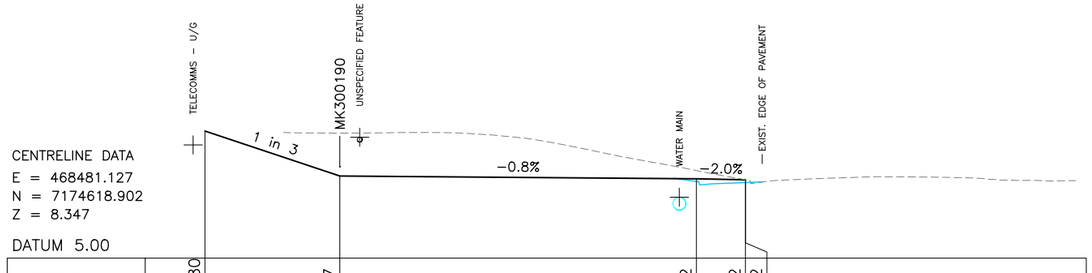


CENTRELINE DATA
E = 468490.550
N = 7174630.573
Z = 7.639

DATUM 4.00

DESIGN LEVELS	9.558	7.639		7.285	7.245	
EXISTING LIDAR	9.558	9.431		7.657	7.245	
EXISTING SURFACE		9.431		7.657	7.245	
OFFSETS	–2.879	0.000		14.688	16.688	

CHAINAGE 50.000

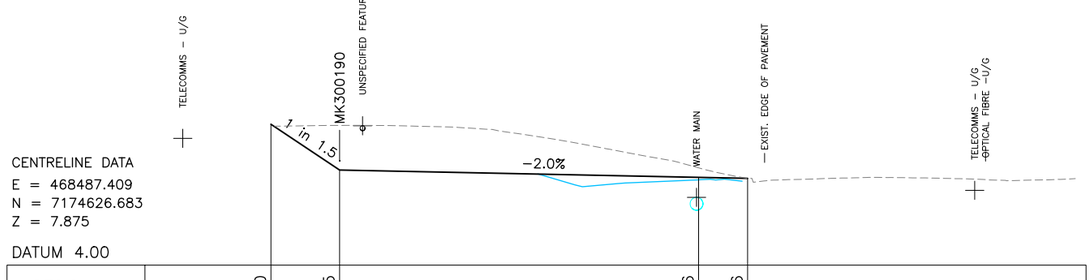


CENTRELINE DATA
E = 468481.127
N = 7174618.902
Z = 8.347

DATUM 5.00

DESIGN LEVELS	10.180	8.347		8.232	8.192	8.192
EXISTING LIDAR	10.180	10.095		8.568	8.192	8.192
EXISTING SURFACE		10.095		8.568	8.192	8.192
OFFSETS	–5.502	0.000		14.537	16.537	16.537

CHAINAGE 35.000



CENTRELINE DATA
E = 468487.409
N = 7174626.683
Z = 7.875

DATUM 4.00

DESIGN LEVELS	9.740	7.875		7.576	7.536	
EXISTING LIDAR	9.740	9.694		7.965	7.536	
EXISTING SURFACE		9.694		7.965	7.536	
OFFSETS	–2.798	0.000		14.639	16.639	

CHAINAGE 45.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:47 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3002-910-300-DRG-91101-XS

Last Modified :- Jul 30, 2024 – 1:42PM

Associated Job Nos	
Auxiliary Drg Nos	

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MK300190 – SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

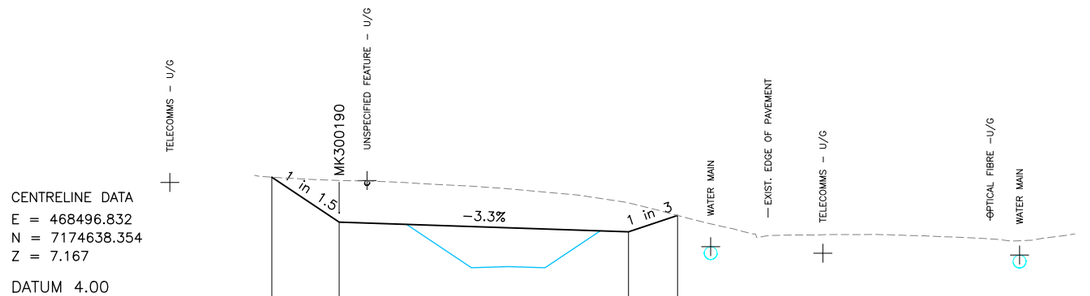
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953861 | 3
Series Number	XS–04 of 11

AECOM

LEGEND
- Existing Surface
- Design
- Temporary Access Track



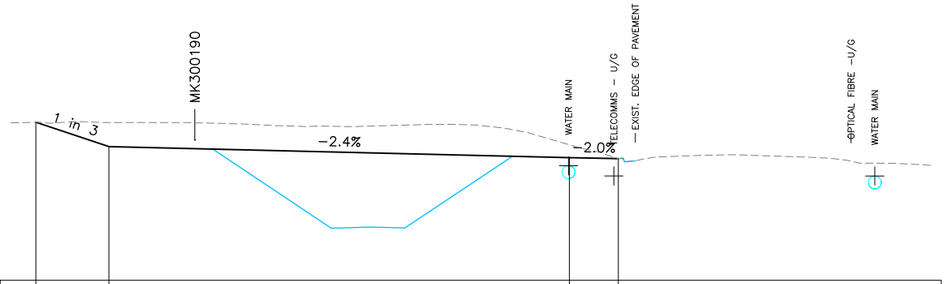
CENTRELINE DATA
E = 468496.832
N = 7174638.354
Z = 7.167

DATUM 4.00

| | | |

AECOM

LEGEND
- Existing Surface
- Design
- Temporary Access Track

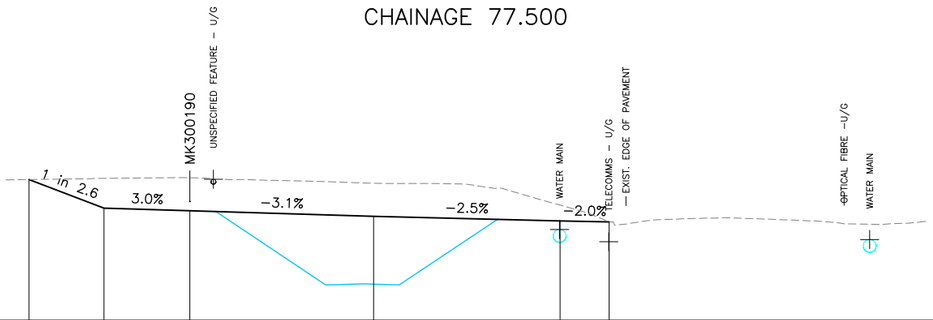


CENTRELINE DATA
E = 468507.825
N = 7174651.970
Z = 6.362

DATUM 1.00

DESIGN LEVELS	7.438	6.446	5.996	5.957	
EXISTING LIDAR	7.438	7.428	6.523	5.957	
EXISTING SURFACE	7.438	7.428	6.523	5.957	
OFFSETS	−6.477	−3.500	15.270	17.269	

CHAINAGE 77.500



CENTRELINE DATA
E = 468506.254
N = 7174650.025
Z = 6.459

DATUM 2.00

DESIGN LEVELS	7.730	6.564	6.459	6.230	6.043	6.003
EXISTING LIDAR	7.730	7.778	7.802	7.577	6.690	6.003
EXISTING SURFACE	7.730	7.778	7.802	7.577	6.690	6.003
OFFSETS	−6.562	−3.500	0.000	7.493	15.096	17.096

CHAINAGE 75.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:47 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: − RPEQ Full Name, Eng. Area and RPEQ No. or − Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE − GYMPIE ROAD
CTL CHGE 2824 − 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MK300190 − SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

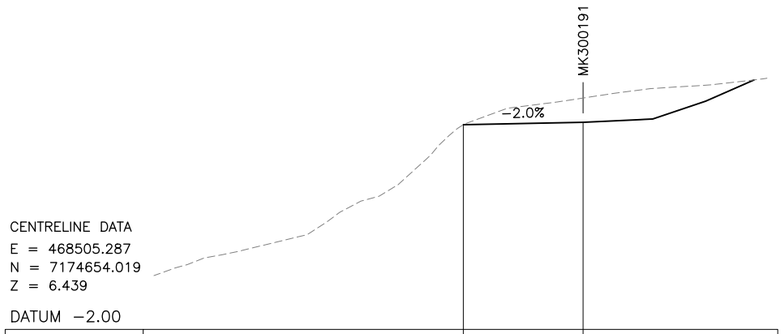
Queensland Government

Job No.	2835872
Contract No.	CN−21784
Drawing No.	953863 3
Series Number	XS−06 of 11

CAD FILES | AECOM_DS13_AU\Documents\60701625−TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625−ACM−3002−910−300−DRG−91103−XS

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM

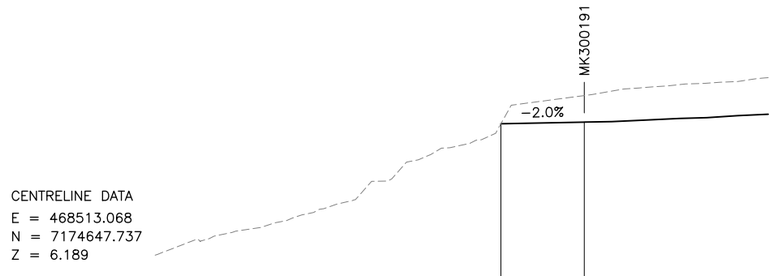


CENTRELINE DATA
E = 468505.287
N = 7174654.019
Z = 6.439

DATUM −2.00

DESIGN LEVELS	6.341	6.439	
EXISTING SURFACE	6.341	7.428	
OFFSETS	−4.884	0.000	

CHAINAGE 0.000

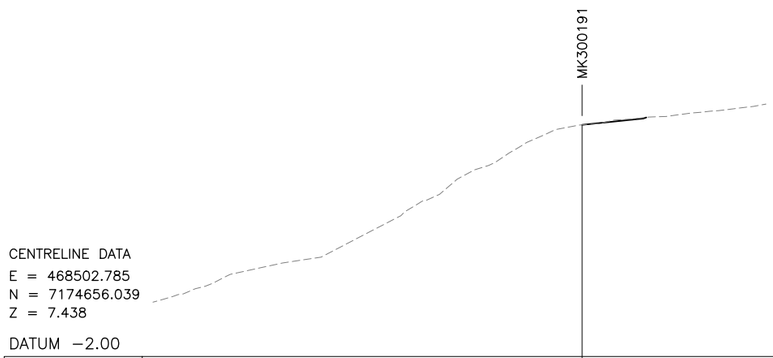


CENTRELINE DATA
E = 468513.068
N = 7174647.737
Z = 6.189

DATUM −1.00

DESIGN LEVELS	6.121	6.189	
EXISTING SURFACE	6.121	7.271	
OFFSETS	−3.399	0.000	

CHAINAGE 10.000

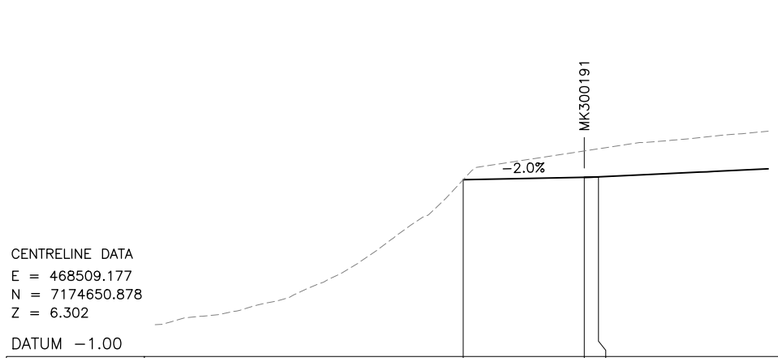


CENTRELINE DATA
E = 468502.785
N = 7174656.039
Z = 7.438

DATUM −2.00

DESIGN LEVELS	7.438		
EXISTING SURFACE	7.438		
OFFSETS	0.000		

CHAINAGE −3.216

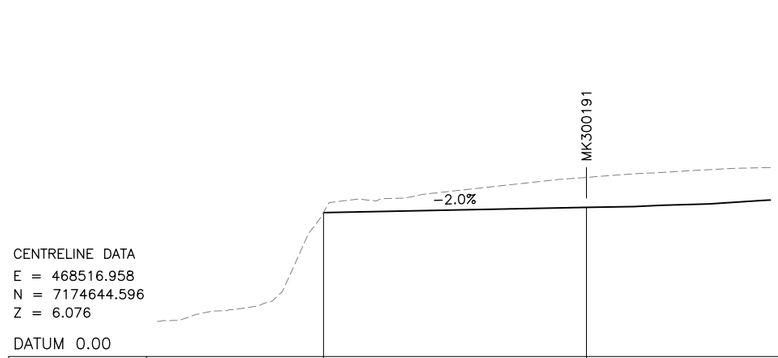


CENTRELINE DATA
E = 468509.177
N = 7174650.878
Z = 6.302

DATUM −1.00

DESIGN LEVELS	6.203	6.302	6.316
EXISTING SURFACE	6.203	7.376	7.464
OFFSETS	−4.936	0.000	0.580

CHAINAGE 5.000



CENTRELINE DATA
E = 468516.958
N = 7174644.596
Z = 6.076

DATUM 0.00

DESIGN LEVELS	5.862	6.076	
EXISTING SURFACE	5.862	7.297	
OFFSETS	−10.725	0.000	

CHAINAGE 15.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024

Last Modified :- Jul 30, 2024 - 1:42PM

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES: AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3002-910-300-DRG-91111-XS

Associated Job Nos:
Auxiliary Drg Nos:

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MK300191

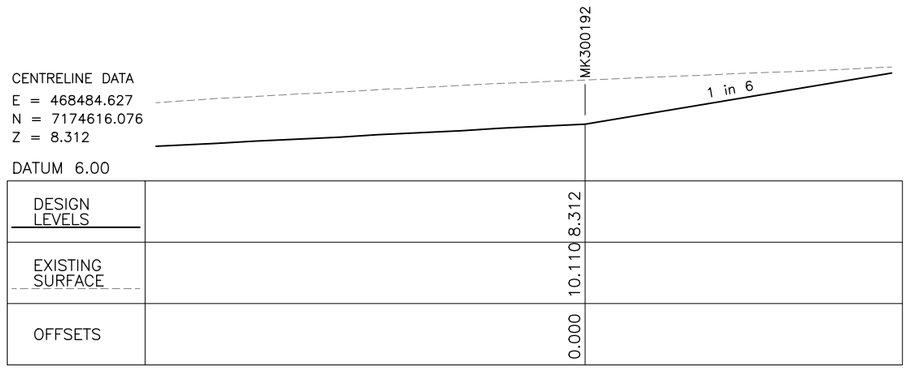
ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

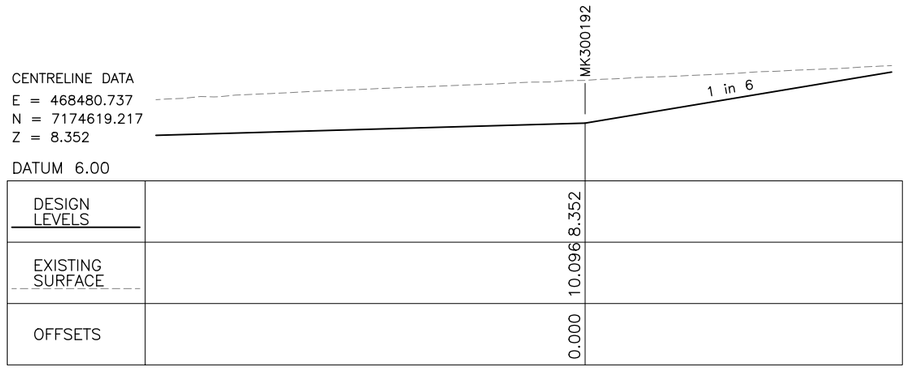
Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953864 3
Series Number	XS-07 of 11

AECOM



CHAINAGE 10.000



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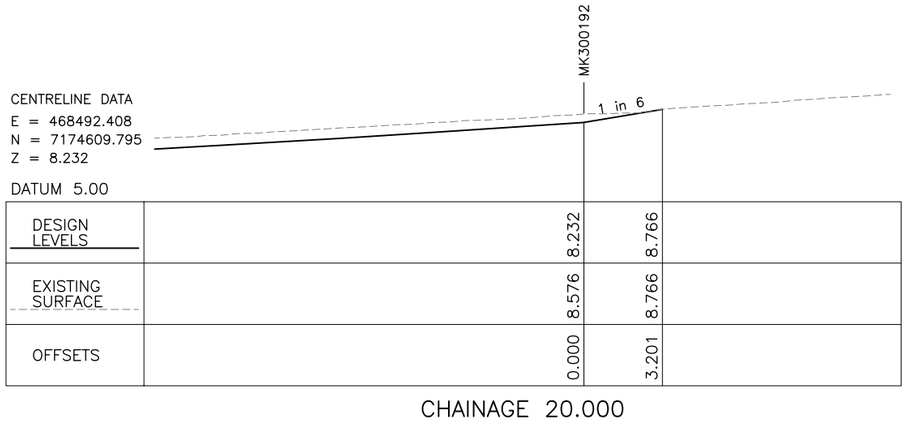
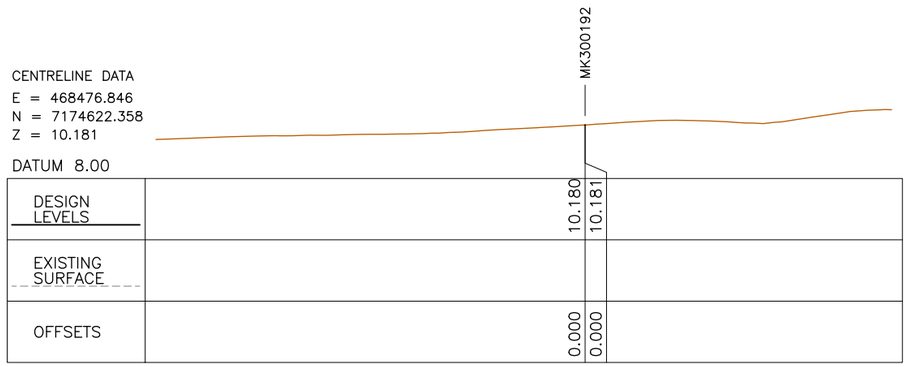
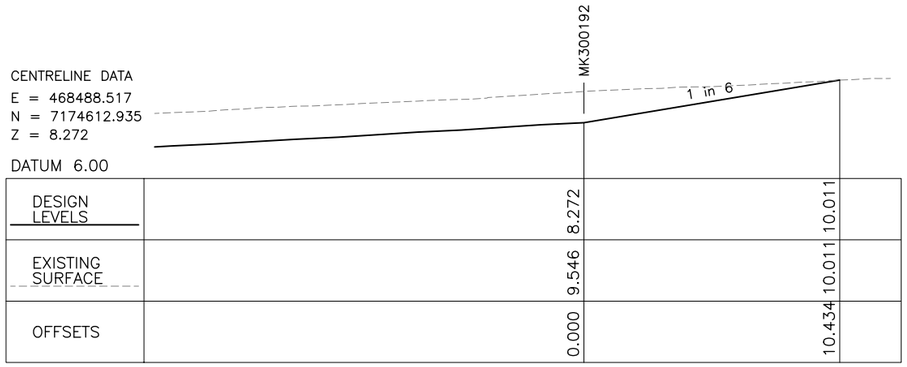


CHAINAGE 20.000



CHAINAGE 0.000



CHAINAGE 15.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MK300192

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

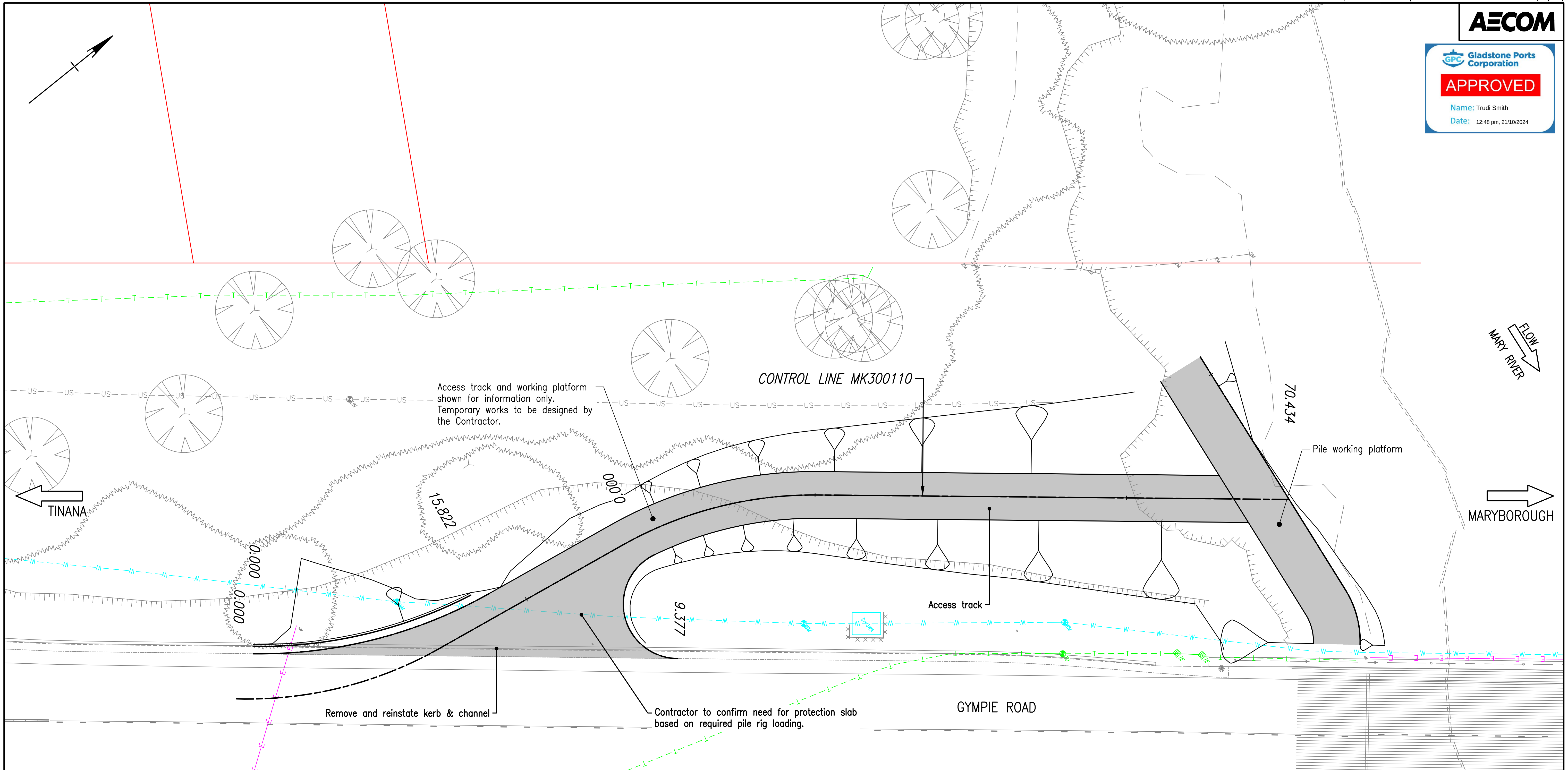
Job No.	2835872
Contract No.	CN-21784
Drawing No.	953865 | 3
Series Number	XS–08 of 11

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3002-910-300-DRG-91121-XS

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024



LEGEND

Property Boundary	Existing Features
Control Line and Chainages (100, 80, 60)	Batter
Top of Batter	Existing Kerb
Existing Electricity O/H (Survey)	Existing Guardrail
Existing Gas U/G (Survey)	Sign – Single
Existing Telecomms U/G (Survey)	Sign – Double
Existing Water Main (Survey)	Tree
Existing Sewer Main (Survey)	Drainage Flow Path
Existing Stormwater	Fence

Rev	Revisions/Descriptions	Date
3	100% Design Issue	19.07.2024
2	85% Design Review	07.06.2024
1	50% Design Review	17.05.2024

Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales: 0 1 2 3 4 5m

Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
TEMPORARY ACCESS TRACK LAYOUT

ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

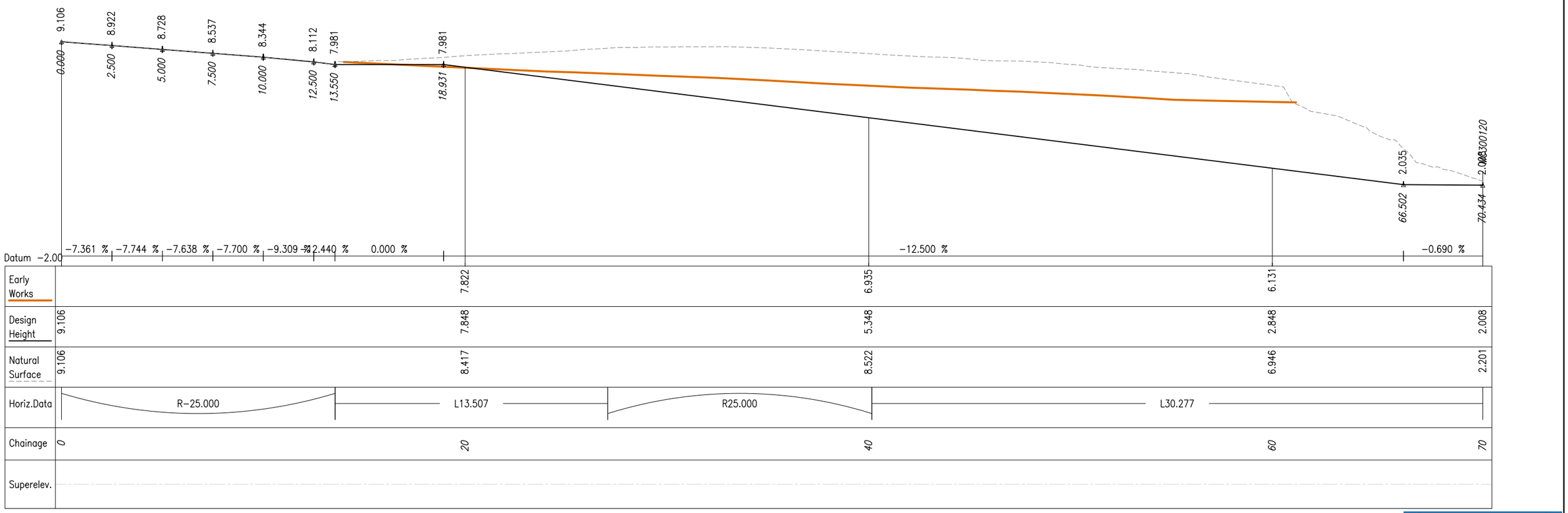
Queensland Government

Job No.	2835872
Contract No.	CN–21784
Drawing No.	953866 3
Series Number	CS–LD–01 of 01

CAD FILES AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3003-910-300-DRG-28101-CS

Last Modified :- Jul 30, 2024 - 1:42PM

AECOM



CONTROL LINE MC300110

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

Last Modified :- Jul 30, 2024 - 1:42PM

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3003-910-300-DRG-39101-LS

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
Auxiliary Drg Nos		Horiz. Grid	MGA 56
		Height Datum	AHD
		Survey Books	200418 001 200418

Scales
0 1 2 3 4m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
LONGITUDINAL SECTIONS
CONTROL LINE MC300110

ENGINEERING CERTIFICATION (RPEQ)

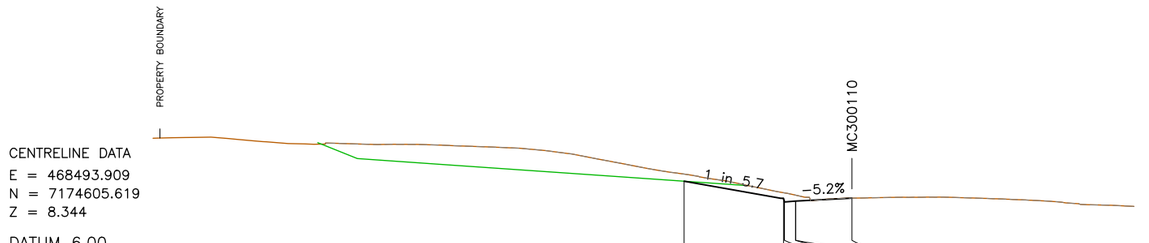
ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953867 3
Series Number	LS-04 of 04

AECOM

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024

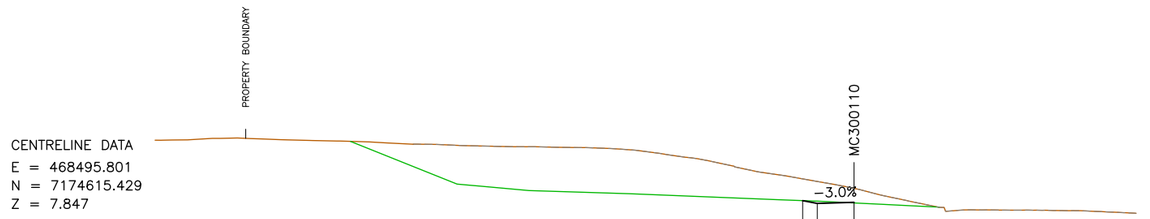


CENTRELINE DATA
E = 468493.909
N = 7174605.619
Z = 8.344

DATUM 6.00

DESIGN LEVELS	9.034	8.338	8.188	8.224	8.224	8.344	
STAGE 1 EARTHWORKS	9.034						
EXISTING SURFACE	9.325	8.566	8.559	8.467	8.467	8.344	
OFFSETS	-6.843	-2.790	-2.750	-2.297	-2.297	0.000	

CHAINAGE 10.000

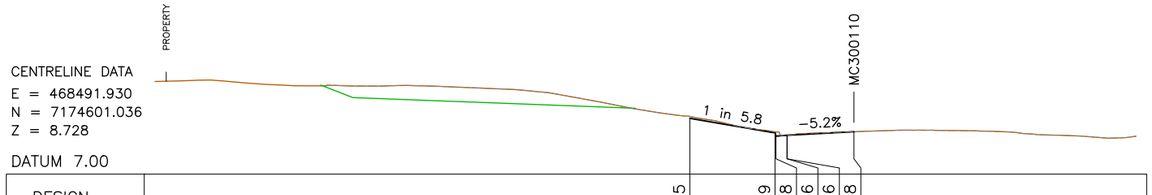


CENTRELINE DATA
E = 468495.801
N = 7174615.429
Z = 7.847

DATUM 6.00

DESIGN LEVELS	7.918	7.803	7.847	
STAGE 1 EARTHWORKS	7.918	7.897	7.822	
EXISTING SURFACE	8.803	8.697	8.417	
OFFSETS	-2.094	-1.500	0.000	

CHAINAGE 20.000

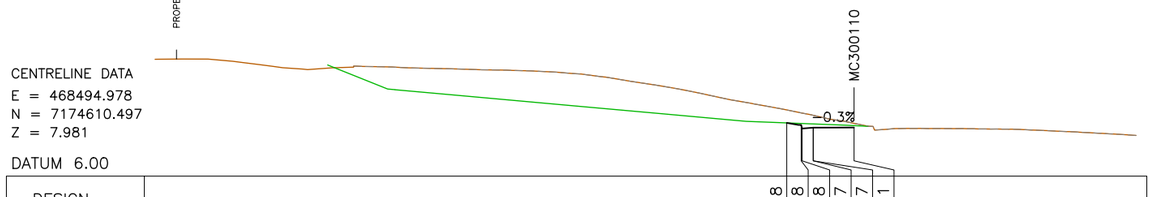


CENTRELINE DATA
E = 468491.930
N = 7174601.036
Z = 8.728

DATUM 7.00

DESIGN LEVELS	9.275	8.699	8.548	8.586	8.586	8.728	
STAGE 1 EARTHWORKS							
EXISTING SURFACE	9.352	8.721	8.721	8.588	8.588	8.728	
OFFSETS	-6.692	-3.219	-3.179	-2.728	-2.728	0.000	

CHAINAGE 5.000



CENTRELINE DATA
E = 468494.978
N = 7174610.497
Z = 7.981

DATUM 6.00

DESIGN LEVELS	8.168	8.088	7.938	7.977	7.977	7.981	
STAGE 1 EARTHWORKS	8.168	8.146	8.144	8.127	8.127	8.059	
EXISTING SURFACE	8.697	8.577	8.569	8.479	8.479	8.151	
OFFSETS	-2.743	-2.155	-2.115	-1.663	-1.663	0.000	

CHAINAGE 15.000

Last Modified :- Jul 30, 2024 - 1:42PM

	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date
3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3003-910-300-DRG-91101-XS

Associated Job Nos	Survey Data	Horiz. Datum	GDA2020
Auxiliary Drg Nos		Horiz. Grid	MGA 56
		Height Datum	AHD
		Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE *2824 – 2905*

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MC300110 – SHEET 1

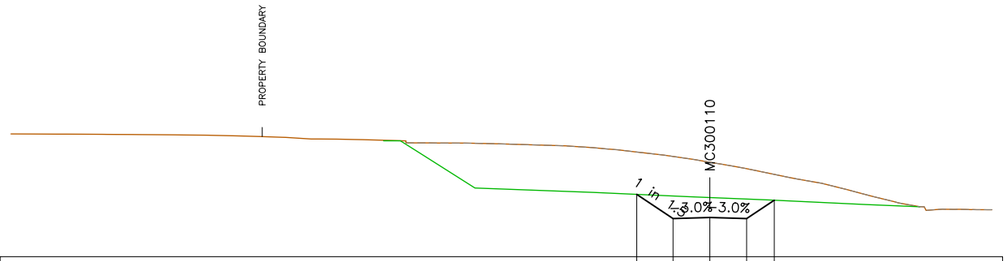
ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953868 | 3
Series Number	XS-09 of 11

AECOM



CENTRELINE DATA
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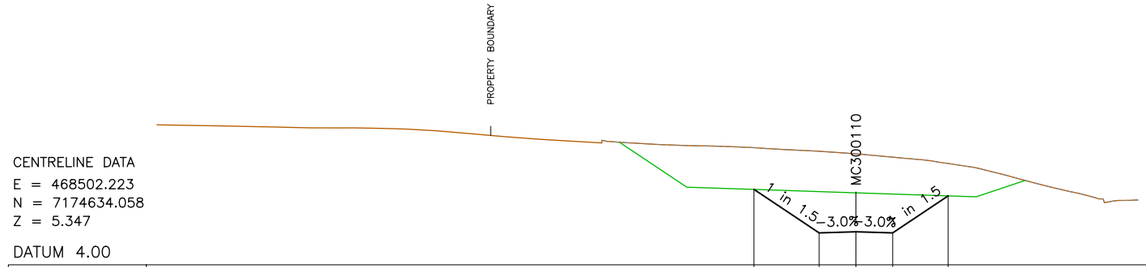
N = 7174625.258
Z = 6.597

DATUM 5.00

DESIGN LEVELS	7.542	6.553	6.597	6.552	7.304	
STAGE 1 EARTHWORKS	7.542	7.475	7.412	7.351	7.304	
EXISTING SURFACE	9.267	9.087	8.850	8.588	8.355	
OFFSETS	−2.984	−1.500	0.000	1.500	2.627	

CHAINAGE 30.000



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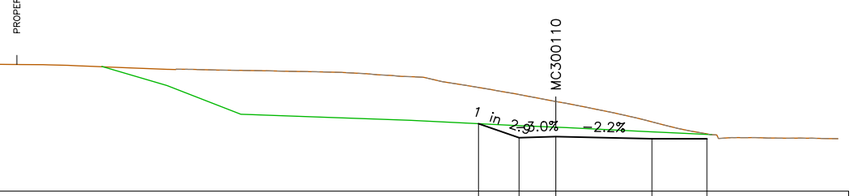
N = 7174634.058
Z = 5.347

DATUM 4.00

DESIGN LEVELS	7.073	5.303	5.347	5.302	6.810	
STAGE 1 EARTHWORKS	7.073	6.984	6.935	6.885	6.810	
EXISTING SURFACE	8.774	8.629	8.522	8.388	8.129	
OFFSETS	−4.155	−1.500	0.000	1.500	3.761	

CHAINAGE 40.000



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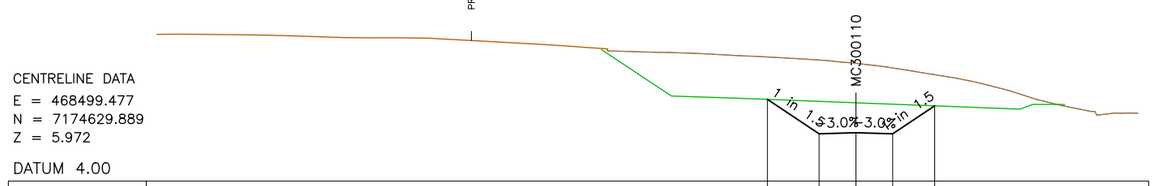
E = 468496.623
N = 7174620.361
Z = 7.222

DATUM 5.00

DESIGN LEVELS	7.748	7.178	7.222	7.134	7.133	
STAGE 1 EARTHWORKS	7.748	7.668	7.607	7.416	7.313	
EXISTING SURFACE	9.225	8.937	8.651	7.824	7.332	
OFFSETS	−3.155	−1.500	0.000	3.917	6.161	

CHAINAGE 25.000



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N = 7174629.889
Z = 5.972

DATUM 4.00

DESIGN LEVELS	7.333	5.928	5.972	5.927	7.069	
STAGE 1 EARTHWORKS	7.333	7.252	7.194	7.135	7.069	
EXISTING SURFACE	9.059	8.936	8.801	8.612	8.338	
OFFSETS	−3.608	−1.500	0.000	1.500	3.212	

CHAINAGE 35.000

Gladstone Ports Corporation
APPROVED
Name: Trudi Smith
Date: 12:48 pm, 21/10/2024

Last Modified :- Jul 30, 2024 - 1:42PM

3	100% Design Issue		19.07.2024
2	85% Design Review		07.06.2024
1	50% Design Review		17.05.2024
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. or – Full Name and Position Title	Date

CAD FILES | AECOM_DS13_AU\Documents\60701625-TMR WBB REPA\900_CAD_GIS\910_CAD\20_Sheets\Civil\60701625-ACM-3003-910-300-DRG-91102-XS

Associated Job Nos
Auxiliary Drg Nos

Survey Data

Horiz. Datum	GDA2020
Horiz. Grid	MGA 56
Height Datum	AHD
Survey Books	200418 001 200418

Scales
0 1 2 3 4 5m
Dimensions shown in metres except where shown otherwise

228 FRASER COAST REGIONAL COUNCIL
163 LAMINGTON BRIDGE – GYMPIE ROAD
CTL CHGE 2824 – 2905

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP
PSM 44312	0.07	0.08	0.18	PSM 15677

Through Chainage from

DMTR EVENT 22A
ANNOTATED CROSS SECTIONS
CONTROL LINE MC300110 – SHEET 2

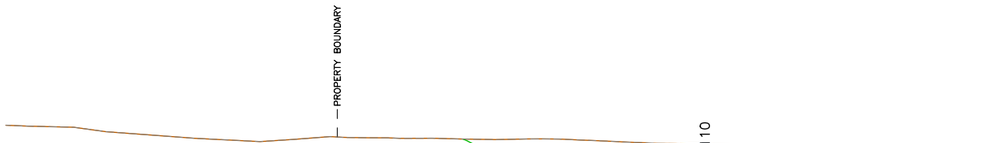
ENGINEERING CERTIFICATION (RPEQ)

ENG. AREA	SIGNATORY FULL NAME	No.	DATE
GEOTECH	GEMMA THOMAS	32011	JULY 2024
CIVIL	MATT HAMILTON	16194	JULY 2024

Queensland Government

Job No.	2835872
Contract No.	CN-21784
Drawing No.	953869 3
Series Number	XS-10 of 11

AECOM



CENTRELINE DATA
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N = 7174641.778
Z = 4.097

DATUM 2.00

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