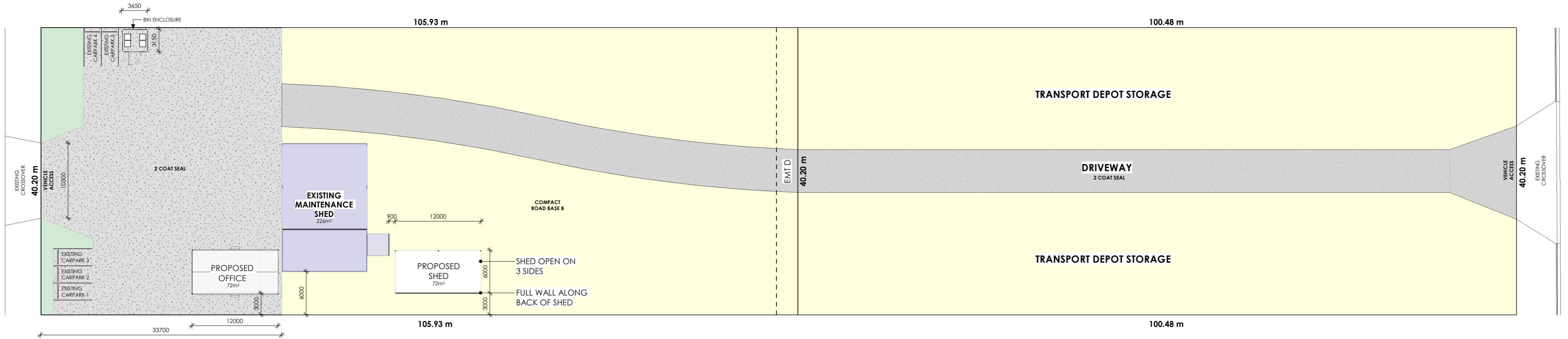
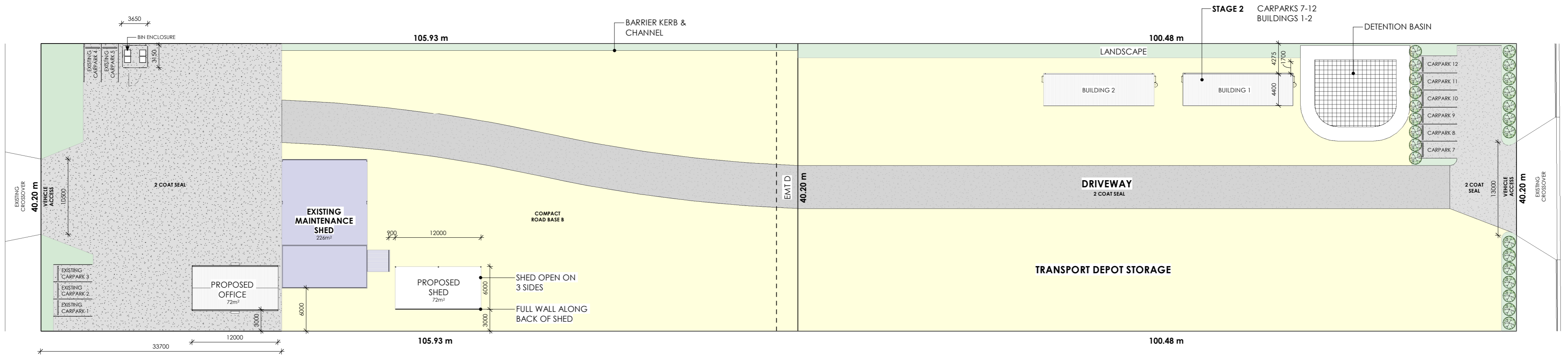


SOMERSET ROAD



1 MASTER PLAN - STAGE 1  
 SK 4.0 1 : 400

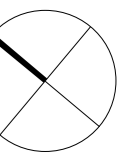
SOMERSET ROAD



2 MASTER PLAN - STAGE 2  
 SK 4.0 1 : 400

FOSTER STREET

FOSTER STREET

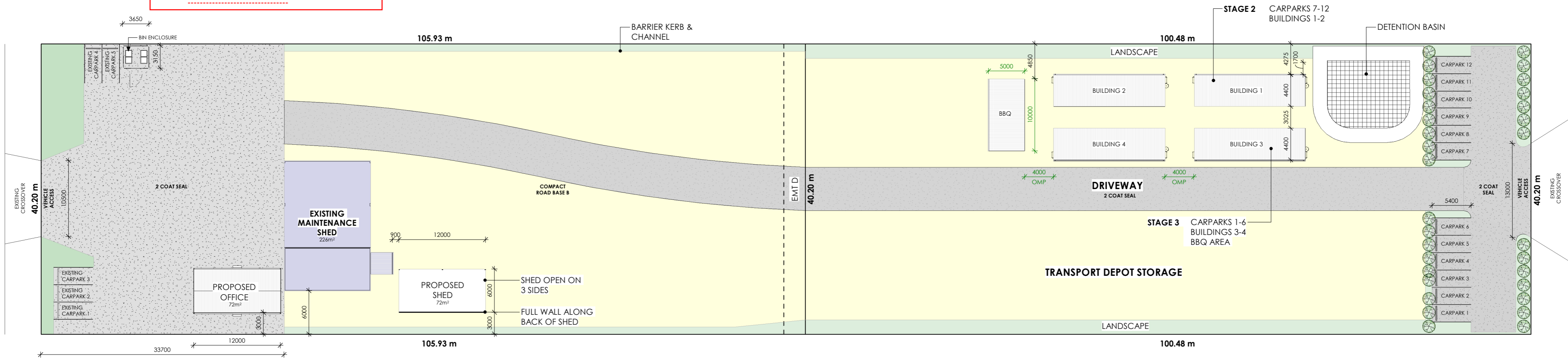


**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

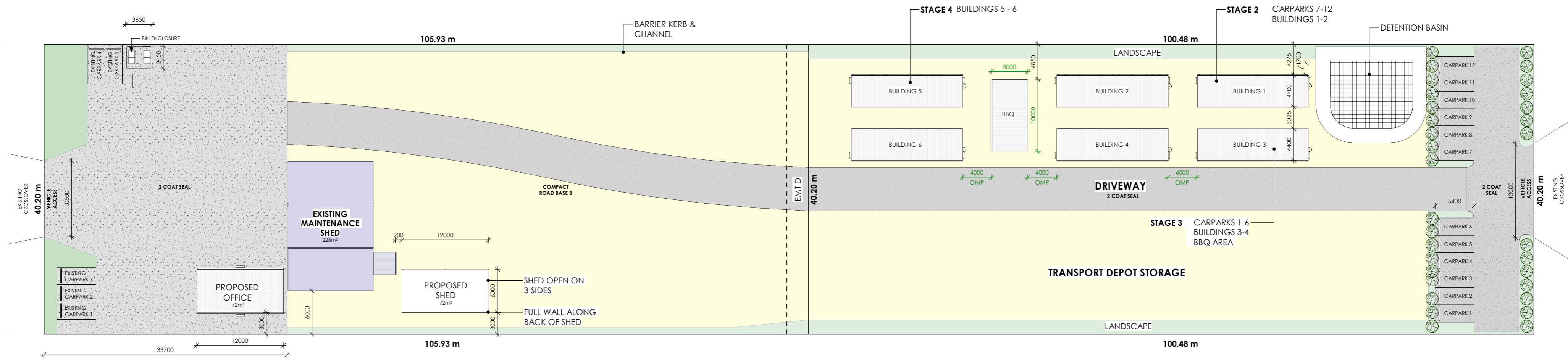
These plans are approved subject to the current conditions of approval associated with  
**Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**

SOMERSET ROAD



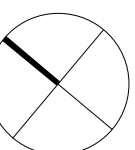
1 MASTER PLAN - STAGE 3  
 SK A.1 1 : 400

SOMERSET ROAD



2 MASTER PLAN - STAGE 4  
 SK A.1 1 : 400

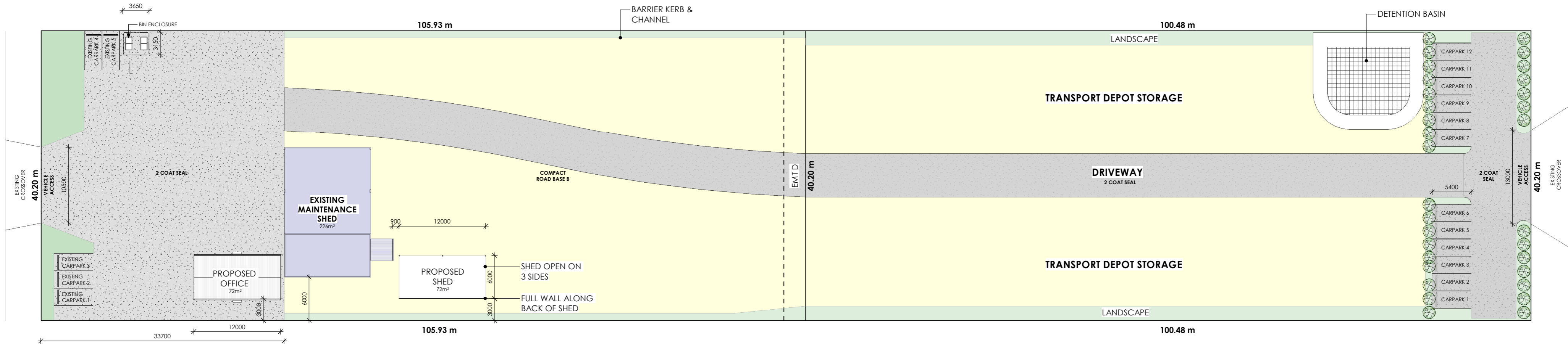
Site Cover	
Site Covered	890 m <sup>2</sup>
Site Open	7404 m <sup>2</sup>
<b>Total</b>	<b>8293 m<sup>2</sup></b>
	<b>12.02%</b>



**ROCKHAMPTON REGIONAL COUNCIL**  
**APPROVED PLANS**

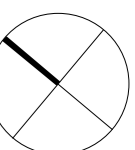
These plans are approved subject to the current conditions of approval associated with  
**Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**

SOMERSET ROAD



FOSTER STREET

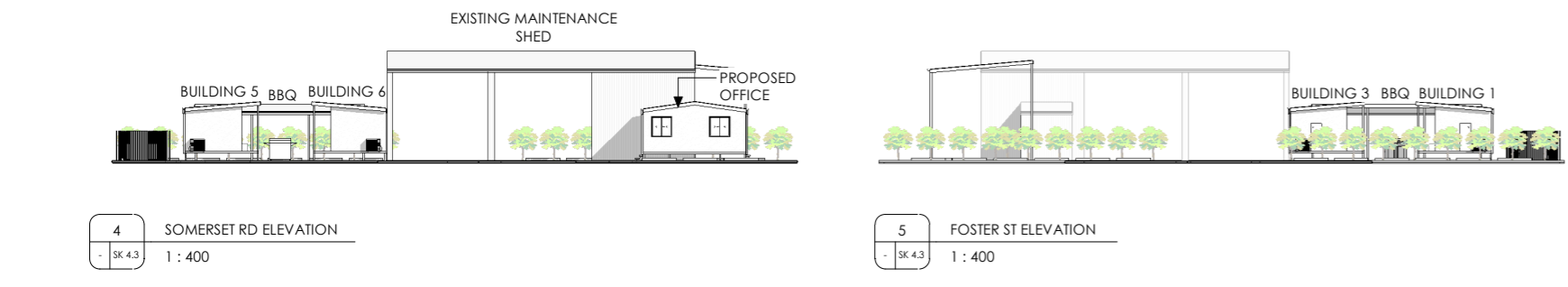
1 MASTER PLAN - STAGE 5  
 SK 4.2 1 : 400



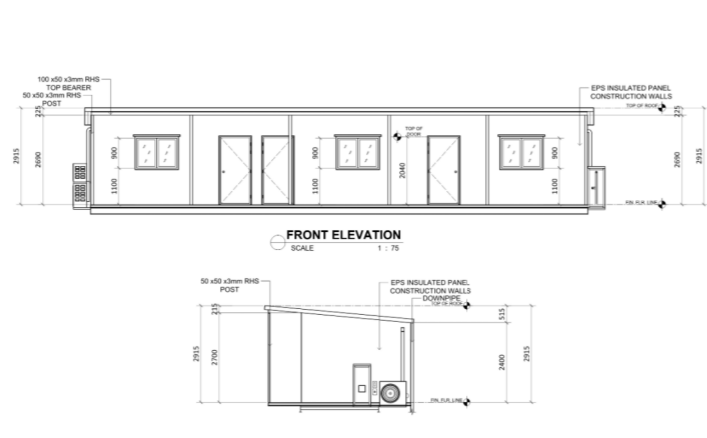
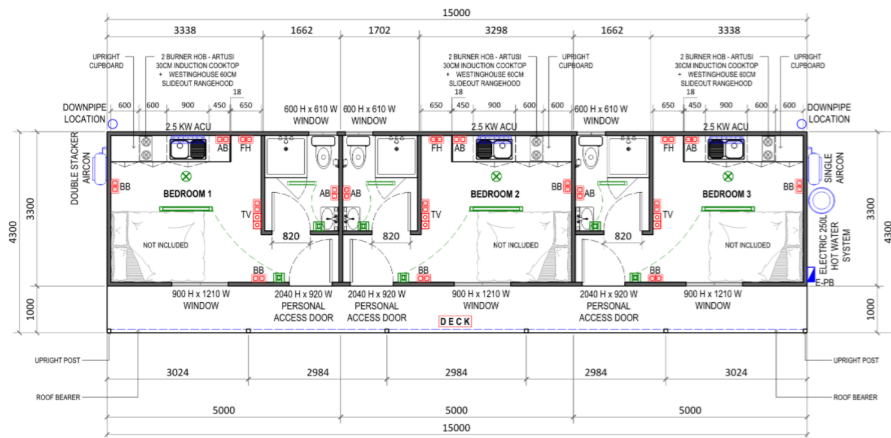
**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

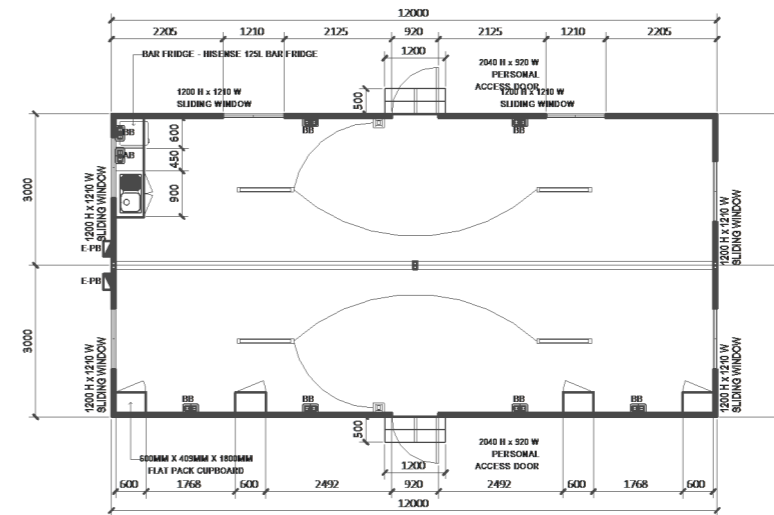
These plans are approved subject to the current conditions of approval associated with  
**Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**



**DETAILED BUILDING PLANS - SUPPLIED BY AFFORDABLE MODULAR BUILDINGS**



**DETAILED OFFICE PLAN**



**Site Cover**

Site Covered	890 m <sup>2</sup>
Site Open	7404 m <sup>2</sup>
<b>Total</b>	<b>8293 m<sup>2</sup></b>

**12.02%**

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.:** D/99-2025

**Dated:** 6 March 2026



C O N S U L T I N G

# Stormwater Management Plan

23 Somerset Road\_161 Foster Street, Gracemere, QLD

Prepared for KJ Cooke Pty Ltd and CR & KM Baird Pty Ltd

By Planit Consulting Pty Ltd

Rev D – 11 December 2025

Job No: J8292

## Company Details

<b>Name</b>	Planit Consulting Pty Ltd
<b>ABN</b>	20 099 261 711
<b>Address</b>	Level 1, 2247 Gold Coast Hwy, Nobby Beach QLD 4218
<b>Mailing Address</b>	PO Box 206, Nobby Beach QLD 4218
<b>Telephone</b>	(07) 5526 1500
<b>Email</b>	<a href="mailto:administration@planitconsulting.com.au">administration@planitconsulting.com.au</a>
<b>Website</b>	<a href="http://www.planitconsulting.com.au">www.planitconsulting.com.au</a>

## Document Control


<b>Document</b>	J8292 - 23 Somerset Rd-SWMP01-RevD.docx
<b>Project Name</b>	23 Somerset Road_161 Foster Street, Gracemere, QLD
<b>Client</b>	KJ Cooke Pty Ltd and CR & KM Baird Pty Ltd
<b>Planit Reference</b>	J8292
<b>Revision Number</b>	Rev D

## Revision History

Revision	Date	Prepared By	Reviewed By	Approved By
Rev A	29/01/2025	Akul Singh	Jake Bentley	Jake Bentley
Rev B	28/02/2025	Akul Singh	Jake Bentley	Jake Bentley
Rev C	26/06/2025	Akul Singh	Jake Bentley	Jake Bentley
Rev D	11/12/2025	Chris Mclean	Jake Bentley	Cesar Giraldo

## Approval Details

<b>Approved By</b>	Cesar Giraldo (NER/RPEQ)
<b>Signature</b>	CESAR GIRALDO MIEAust; NER: 3544003 RPEQ: 31110

  
11/12/2025

## Stormwater Management Plan

J8292 - 23 Somerset Road\_161 Foster Street, Gracemere, QLD

KJ Cooke Pty Ltd and CR & KM Baird Pty Ltd

[www.planitconsulting.com.au](http://www.planitconsulting.com.au)



---

### Disclaimer

The information within this document is and shall remain the property of Planit Consulting Pty Ltd ("Planit"), including drawings, plans and figures.

This document must be read as a whole and cannot be read or reproduced except in its entirety. The document supersedes all previous draft or interim documents, whether written or presented orally, before the date of this report. Any subsequent reports must be read in conjunction with this document.

This document has been prepared for the sole use of our client, KJ Cooke Pty Ltd and CR & KM Baird Pty Ltd, for the particular brief and on the terms and conditions agreed. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or context without prior written agreement from Planit.

No unauthorised third party is entitled to use or rely on this document whatsoever. Planit accept no liability if any of the advice is used or relied on by the Client for any unauthorised purpose or by any unauthorised third party.

## Contents

<b>1</b>	<b>Executive Summary</b> .....	<b>5</b>
<b>2</b>	<b>Introduction</b> .....	<b>6</b>
2.1	Project Background.....	6
2.2	Project Scope.....	7
<b>3</b>	<b>Civil Site Assessment</b> .....	<b>8</b>
3.1	Existing Site Description.....	8
3.2	Proposed Site Description.....	8
3.3	Existing Services.....	10
<b>4</b>	<b>Stormwater Management</b> .....	<b>11</b>
4.1	Stormwater Conveyance.....	11
4.2	Stormwater Quantity.....	13
4.2.1	Model Hydrology.....	13
4.2.2	Hydraulic Assessment.....	14
4.2.3	Model Results.....	14
4.3	Stormwater Quality.....	16
4.3.1	Stormwater Objectives.....	16
4.3.2	Quality Assessment.....	17
4.3.3	Results.....	18
<b>5</b>	<b>Sediment and Erosion Control</b> .....	<b>19</b>
<b>6</b>	<b>Conclusion/Recommendations</b> .....	<b>20</b>

## Appendices

<b>Appendix A – Layout Plan</b> .....	<b>21</b>
<b>Appendix B – DBYD</b> .....	<b>22</b>
<b>Appendix C – Civil Plans</b> .....	<b>23</b>

## List of Tables

Table 1: Site Details Summary .....	6
Table 2: Catchment Breakdown.....	11
Table 3: Rainfall Data (AEP Depths (mm)) .....	13
Table 4: DRAINS Peak Flow Results.....	15
Table 5: Stormwater quality requirement.....	16
Table 6: MUSIC Results.....	18

## List of Figures

Figure 1: Site Location (Adapted from OpenStreetMaps and Rockhampton Planning Scheme).....	6
Figure 2: Existing Conditions.....	8
Figure 3: Proposed Subdivision.....	9
Figure 4: Proposed Drainage.....	12
Figure 5: DRAINS Model Layout.....	14
Figure 6: 20% AEP DRAINS Model Results .....	15
Figure 7: 1% AEP DRAINS Model Results.....	16
Figure 8: MUSIC Model Layout.....	18

---

# 1 Executive Summary

---

This Stormwater Management Plan has been prepared in support of the proposed Non-Resident Workforce Accommodation at Transport Depot located at 23 Somerset Road and 161 Foster Street, Gracemere, QLD and falls within the Rockhampton Regional Council (RRC) Local Government Area (LGA). Planit has been engaged by KJ Cooke and CR & BM Baird Pty Ltd to assess and report on the stormwater management associated with this development.

The subject site is located in an industrial zone in Gracemere and is rectangular in shape with a plan area of 8,297m<sup>2</sup>. The site currently includes an existing maintenance shed and existing car parking spaces.

The proposed development involves the construction of an office building, an additional shed, modifications to the existing shed, 6 modular habitable buildings (constructed over 2 stages), recreational structure (BBQ area), driveway and parking areas.

The general strategy is to discharge runoff from 23 Somerset St to the interallotment drainage system and 161 Foster St to the street drainage network in Foster St. However, to ensure appropriate treatment and detention is achieved prior to discharge, a splitter pit proposed at the property boundary of 23 Somerset St and 161 Foster St draining minor events to the treatment and detention system and major events to the inter allotment drainage system.

Results from the hydraulic model indicated that a detention basin with a detention volume of 42m<sup>3</sup> is sufficient to detain flows equivalent to those of the existing site for stormwater events ranging from the 20% AEP to the 1% AEP.

MUSIC modelling demonstrated that an underground proprietary stormwater treatment system is suitable to treat runoff prior to discharge.

During construction, appropriate sediment and erosion control is to be implemented to minimise the risk of potential impacts to the receiving system.

Based on the assessment it was determined that the proposed development can appropriately manage stormwater prior to discharge offsite.

## 2 Introduction

### 2.1 Project Background

This Stormwater Management Plan (SWMP) has been prepared in support of the proposed Non-Resident Workforce Accommodation at Transport Depot Located at 23 Somerset Rd and 161 Foster St, Gracemere, QLD and falls within Rockhampton Regional Council (RRC) Local Government Area (LGA).

Planit has been engaged by KJ Cooke Pty Ltd and CR & BM Baird Pty Ltd to assess and report on the stormwater management associated with the proposed development. The proposed development involves the construction of Office, Shed, BBQ, Buildings and Car parking spaces. Refer to Table 1 for the proposed development and Figure 1 for the sites location.

Table 1: Site Details Summary

Component	Details
<b>Applicant</b>	KJ Cooke and CR & BM Baird Pty Ltd
<b>Street Address</b>	23 Somerset Rd and 161 Foster St, Gracemere, 4702 QLD
<b>Local Government Area</b>	Rockhampton Regional Council (RRC)
<b>Zoning</b>	Rural Residential
<b>Proposed Development Type</b>	Non-Resident Workforce Accommodations
<b>Site Area</b>	8,297m <sup>2</sup>

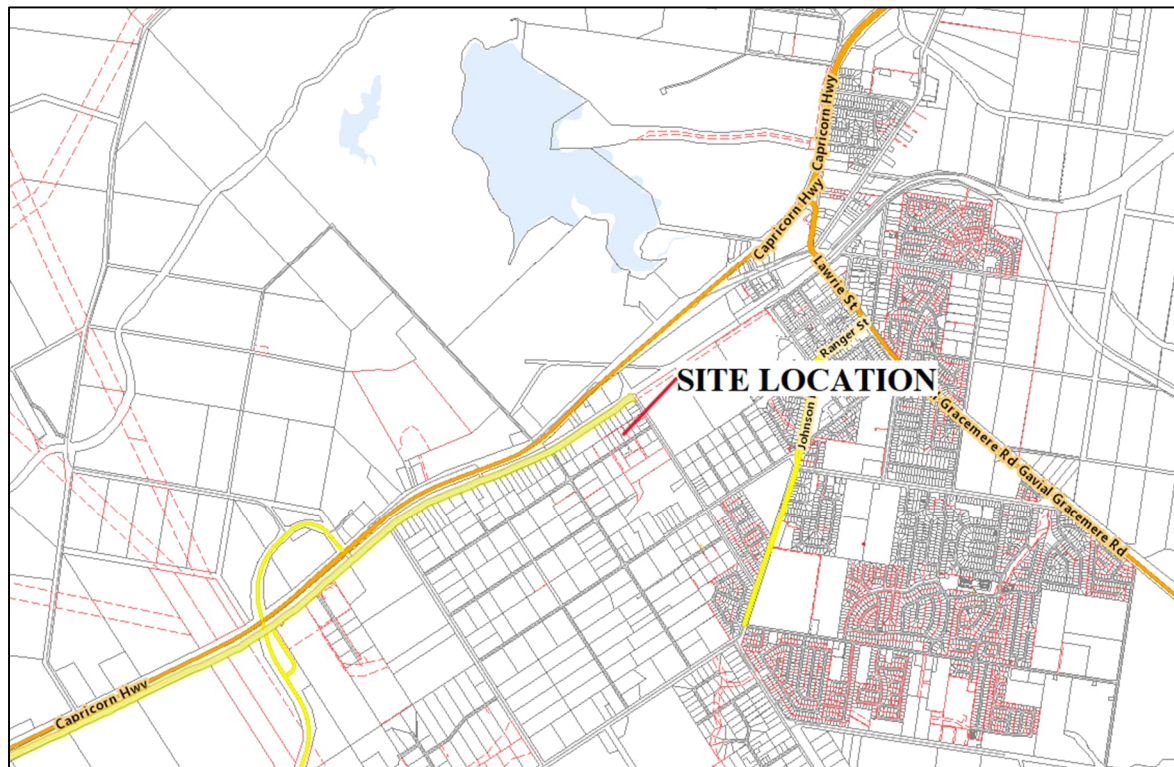


Figure 1: Site Location (Adapted from OpenStreetMaps and Rockhampton Planning Scheme)

---

## 2.2 Project Scope

This report presents the results of an assessment of:

- The subject site including:
  - Locality.
  - Existing stormwater services.
  - Legislation.
  - Topography.
  - Site flood information.
  - Soil characteristics.
- Stormwater management including:
  - Catchment analyses of the pre and post development site to identify existing stormwater catchments and determine the ultimate treatment/detention area required for each proposed catchment.
  - Hydrological and Hydraulic modelling to estimate peak flow rates in the existing and proposed scenario and size conveyance/detention infrastructure appropriately (DRAINS modelling).
  - Stormwater quality assessment to identify stormwater treatment provisions (MUSIC modelling).
  - Identify advantages & disadvantages of stormwater management options presented in the report and final recommendations for the preferred stormwater management strategy.
- Providing conclusions/recommendations with regard to stormwater management of the site.

To accompany this report and provide further detail, the proposed design stormwater plans are presented in Appendix C.

## 3 Civil Site Assessment

### 3.1 Existing Site Description

The subject site is located in an industrial zone in Gracemere and has rectangular shape, covering an area of 8,297m<sup>2</sup>. Currently, the site features a maintenance shed and parking spaces, with the majority of the area consisting of compacted road base. Refer to Figure 2 for a visual of the subject site in its existing conditions.

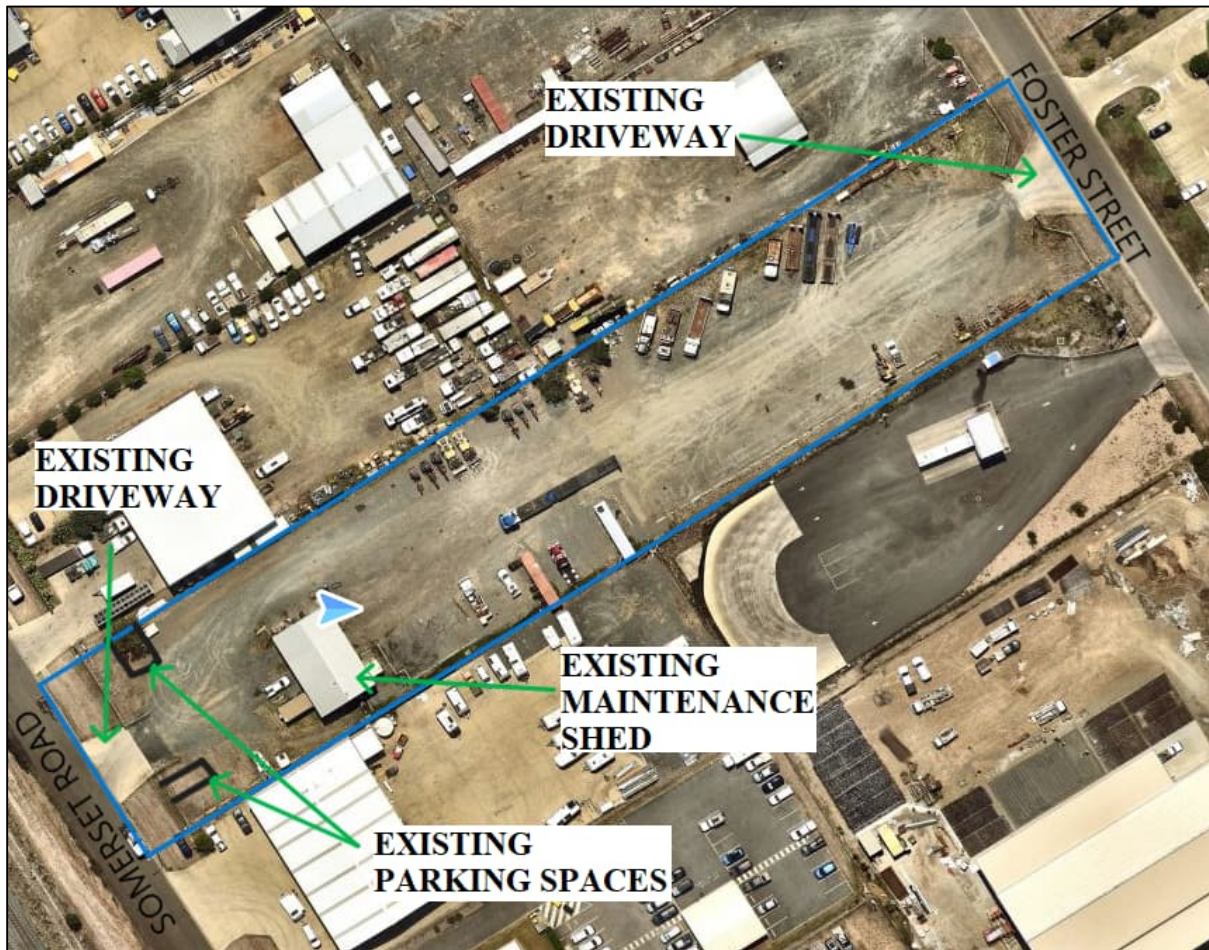


Figure 2: Existing Conditions

### 3.2 Proposed Site Description

The proposed development involves the construction of an office building, an additional shed, modifications to the existing shed, 6 modular habitable buildings (constructed over 2 stages), recreational structure (BBQ area) and driveway and parking areas. The proposed layout of the development is shown in Figure 3.



---

### 3.3 Existing Services

To confirm existence of services, a 'Before You Dig Australia' (BYDA) search was carried out as well as using Council's available asset mapping to identify services within the area. Refer to Appendix B for responses obtained from BYDA.

Based on the desktop assessment, the following infrastructure was noted:

- Potable Water.
  - DN200 main is present in Somerset Road.
  - DN150 water main located within Foster Street.
- Sewer.
  - DN200 rising main located within Somerset Road.
  - DN150 interallotment gravity main central to the subject site.
  - DN150 gravity main within Foster St.
- Stormwater.
  - Interallotment Stormwater network central to the site.
  - Street drainage network including underground stormwater pipes within Foster St.

## 4 Stormwater Management

### 4.1 Stormwater Conveyance

The subject site has Gradual slope (approx. 1%) with runoff generally flowing in a sheet pattern toward the South-West of the site. No stormwater infrastructure currently exists onsite

It is proposed to maintain the stormwater discharge location in the developed scenario, however, due to an increase in impervious area, it is proposed to provide treatment and detention systems prior to discharge offsite.

The general strategy is to discharge runoff from 23 Somerset St to the interallotment drainage system and 161 Foster St to the street drainage network in Foster St. However, to ensure appropriate treatment and detention is achieved prior to discharge, a splitter pit proposed at the property boundary of 23 Somerset St and 161 Foster St draining minor events to the treatment and detention system and major events to the inter allotment drainage system.

From the stormwater conveyance assessment, it was determined that the Lawful Point of Discharge (LPOD) for both properties is the interallotment drainage system and Foster St drainage network.

The pre and post catchment breakdown presented in Table 2 and a visual of the proposed catchment plan and drainage strategy is shown in Figure 4

Table 2: Catchment Breakdown

Catchment	Area (Ha)	Roof (Ha)	*Driveway (Ha)	Landscape (Ha)	Total Impervious (Ha)	Impervious %
<b>Pre</b>						
<b>E1</b>	0.426	0.022	0.404	0	0.224	53%
<b>E2</b>	0.405	0	0.405	0	0.203	50%
<b>Total</b>	0.831	0.022	0.809	0	0.427	51%
<b>Post</b>						
<b>D1</b>	0.426	0.038	0.358	0.030	0.396	93%
<b>D1a</b>	0.345	0.048	0.249	0.048	0.297	86%
<b>D1b</b>	0.059	0.000	0.047	0.012	0.047	80%
<b>Total</b>	0.830	0.086	0.654	0.090	0.740	89%

\*Predevelopment driveway area is gravel and has been assigned with a 50% impervious value to estimate runoff.

\*All gravel areas for proposed development have been considered as 100% impervious.



## 4.2 Stormwater Quantity

The development proposed to increase the impervious area of the site and accordingly, stormwater quantity provisions are required. Hydraulic modelling has been carried out to determine a suitable system to comply with stormwater quantity objectives.

### 4.2.1 Model Hydrology

For the stormwater quantity assessment, DRAINS software has been utilised using ARR 2016 rainfall data. The design rainfall data has been collected from the ARR Data Hub for the following latitude and longitude:

- Latitude: -23.445
- Longitude: 150.441

Rainfall data depths used for this assessment are provided in Table 3 below for events ranging from the 63.2% AEP up to and including the 1% AEP event, for durations of up to 3 hours.

Table 3: Rainfall Data (AEP Depths (mm))

Duration	63.20%	50%	20%	10%	5%	2%	1%
1 min	2.61	2.9	3.83	4.48	5.13	6.02	6.72
2 min	4.38	4.86	6.45	7.54	8.59	10	11.1
3 min	6.2	6.88	9.12	10.7	12.2	14.2	15.8
4 min	7.91	8.79	11.6	13.6	15.5	18.1	20.2
5 min	9.51	10.6	14	16.3	18.6	21.8	24.3
10 min	15.8	17.6	23.2	27.1	31.1	36.4	40.7
15 min	20.3	22.6	29.7	34.8	39.9	46.8	52.3
20 min	23.7	26.3	34.6	40.5	46.5	54.6	61
25 min	26.3	29.2	38.6	45.2	51.8	60.9	68
30 min	28.5	31.7	41.8	49	56.2	66.1	73.9
45 min	33.3	37	49.1	57.6	66.1	77.8	87.1
1 hour	36.7	40.8	54.3	63.7	73.3	86.4	96.8
1.5 hour	41.4	46.1	61.8	72.8	83.9	99.3	112
2 hour	44.7	50	67.4	79.7	92.2	109	123
3 hour	49.7	55.9	76.1	90.6	105	126	143

DRAINS Horton's (ILSAX) model has been utilised to carry out the site drainage assessment assigning parameters as per below:

- Paved (Impervious) area depression storage – 1mm.
- Supplementary area depression storage – 1mm.
- Grassed area depression storage – 5mm.
- ILSAX Soil Type – 3

## 4.2.2 Hydraulic Assessment

Based on the site layout and the proposed drainage strategy, the DRAINS hydraulic model was prepared as per Figure 5 with catchments assigned as per Table 2 above.

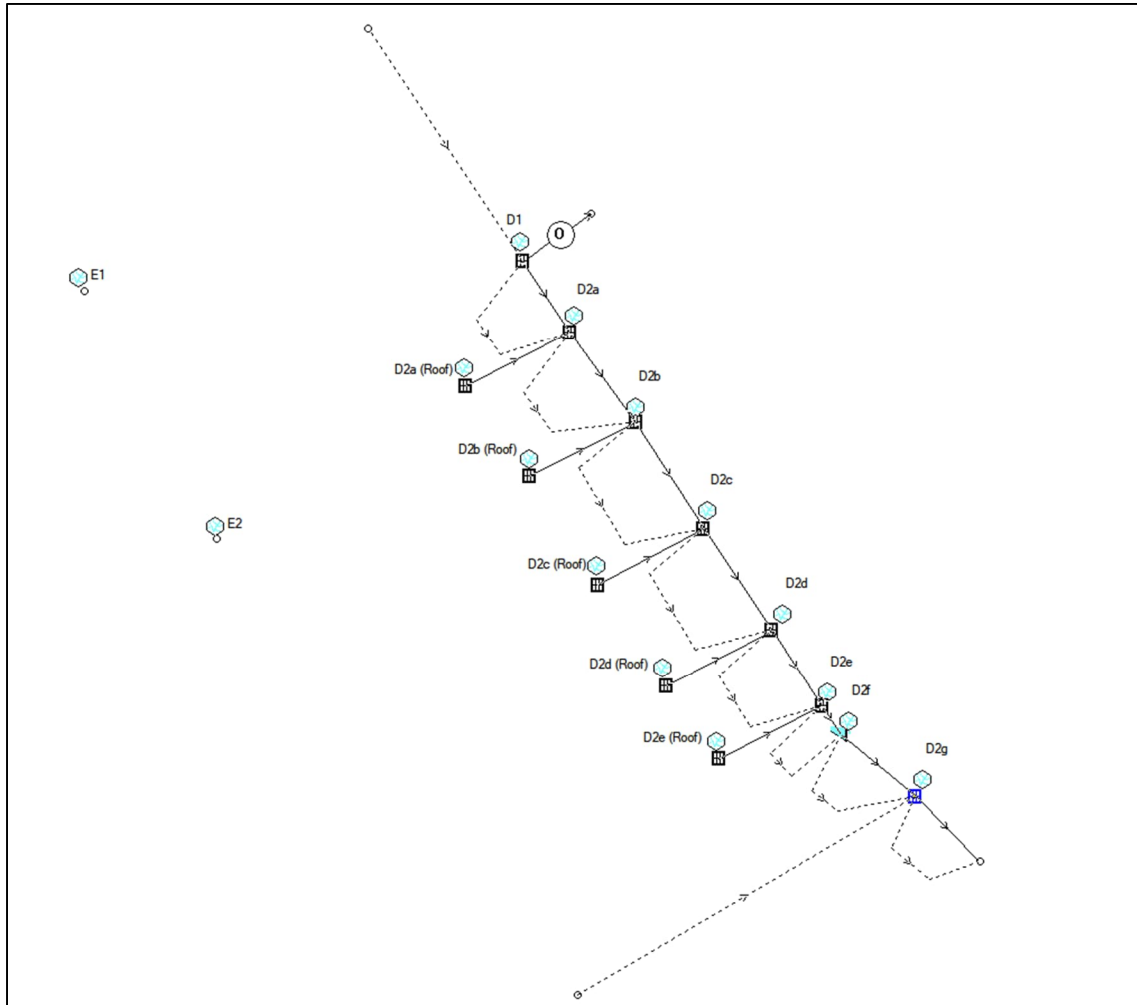


Figure 5: DRAINS Model Layout

Trial and error methodology was carried out to identify the required detention volumes and a suitable network to drain the site appropriately.

## 4.2.3 Model Results

Results from the hydraulic model indicated that a detention basin with a detention volume of  $42\text{m}^3$  is sufficient to detain flows to that of the existing site for equivalent stormwater events from the 20% AEP Event to the 1% AEP event.

Table 4 below presents the hydraulic model results for the above mentioned events comparing peak runoff in the existing and developed scenario's.

In addition, refer to Figure 6 and Figure 7 below for a comparison of the pre and post development flow rates as visualised in DRAINS for the following events.

- 20% AEP Event (Minor event).
- 1% AEP Event (Major event).

DRAINS model files can be submitted on request.

Table 4: DRAINS Peak Flow Results

Scenario	20% AEP (m <sup>3</sup> /s)	10% AEP (m <sup>3</sup> /s)	5% AEP (m <sup>3</sup> /s)	2% AEP (m <sup>3</sup> /s)	1% AEP (m <sup>3</sup> /s)
<b>Interallotment Network</b>					
<b>Existing</b>	0.151	0.187	0.221	0.259	0.293
<b>Proposed</b>	0.065	0.107	0.149	0.196	0.237
<b>Impact</b>	-0.086	-0.080	-0.072	-0.063	-0.056
<b>Street Network</b>					
<b>Existing</b>	0.143	0.178	0.211	0.247	0.279
<b>Proposed</b>	0.216	0.226	0.235	0.244	0.251
<b>Impact</b>	0.073	0.048	0.024	-0.003	-0.028
<b>Total</b>					
<b>Existing</b>	0.294	0.365	0.432	0.506	0.572
<b>Proposed</b>	0.281	0.333	0.384	0.440	0.488
<b>Impact</b>	-0.013	-0.032	-0.048	-0.066	-0.084

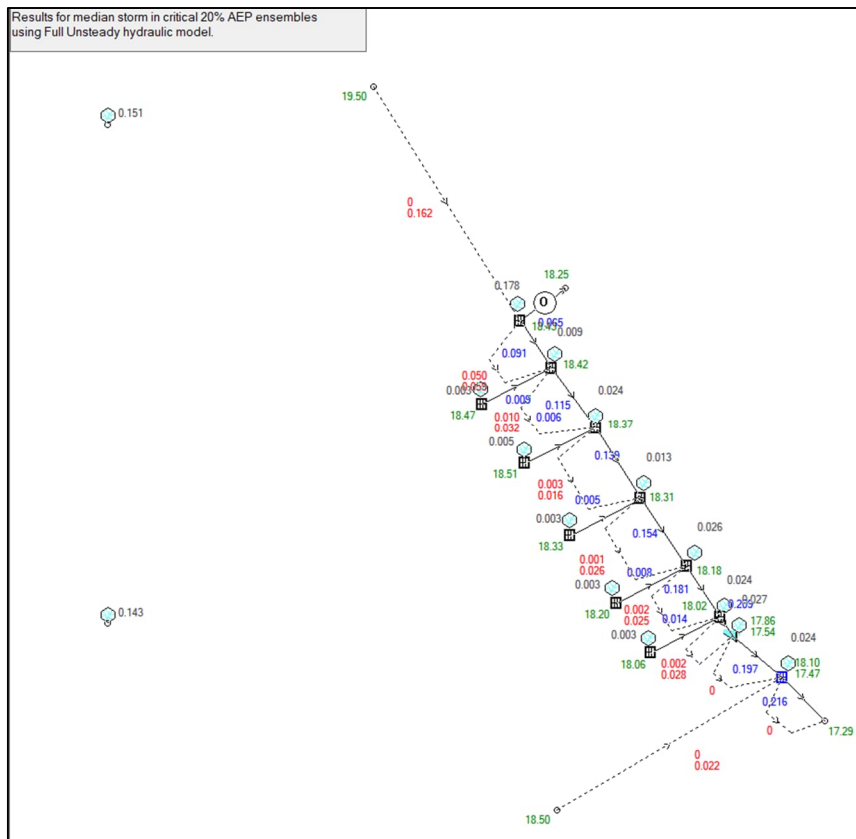


Figure 6: 20% AEP DRAINS Model Results



### 4.3.2 Quality Assessment

To demonstrate compliance with stormwater quality objectives, MUSIC software has been utilised. The model has generally been set up in accordance with WaterByDesign's MUSIC Modelling Guidelines, 2018. Refer below for the assigned model parameters.

#### Rainfall Data

Rockhampton's 6min rainfall data has been used.

#### Rainfall Runoff Parameters

Rainfall around parameters have been assigned as per WaterByDesign's MUSIC Modelling Guidelines, 2018 Table A 1.2 for commercial and industrial sites.

#### Catchment Input

A Lumped catchment approach has been taken assigned an industrial catchment equivalent to the total site catchment as per Table 3 of this document.

#### Pollutant Loading

Pollutant loadings have been assigned as per WaterByDesign's MUSIC Modelling Guidelines, 2018 Table 3.9 assigning pollutant loading parameters relative to the catchment surface type.

#### Treatment System Parameters

Treatment nodes have been included in the model to treat runoff prior to discharge to Council's stormwater network. Treatment nodes include:

- Detention basin with a surface area of 100m<sup>2</sup> and a depth of 0.5m.
- Atlan Vortceptor Model SVI055. MUSIC node has been obtained from Atlan and is the SQIDEP Verified Node (Typical detail of this system has been included in Appendix C).

The MUSIC Model developed for this assessment is shown in Figure 8.

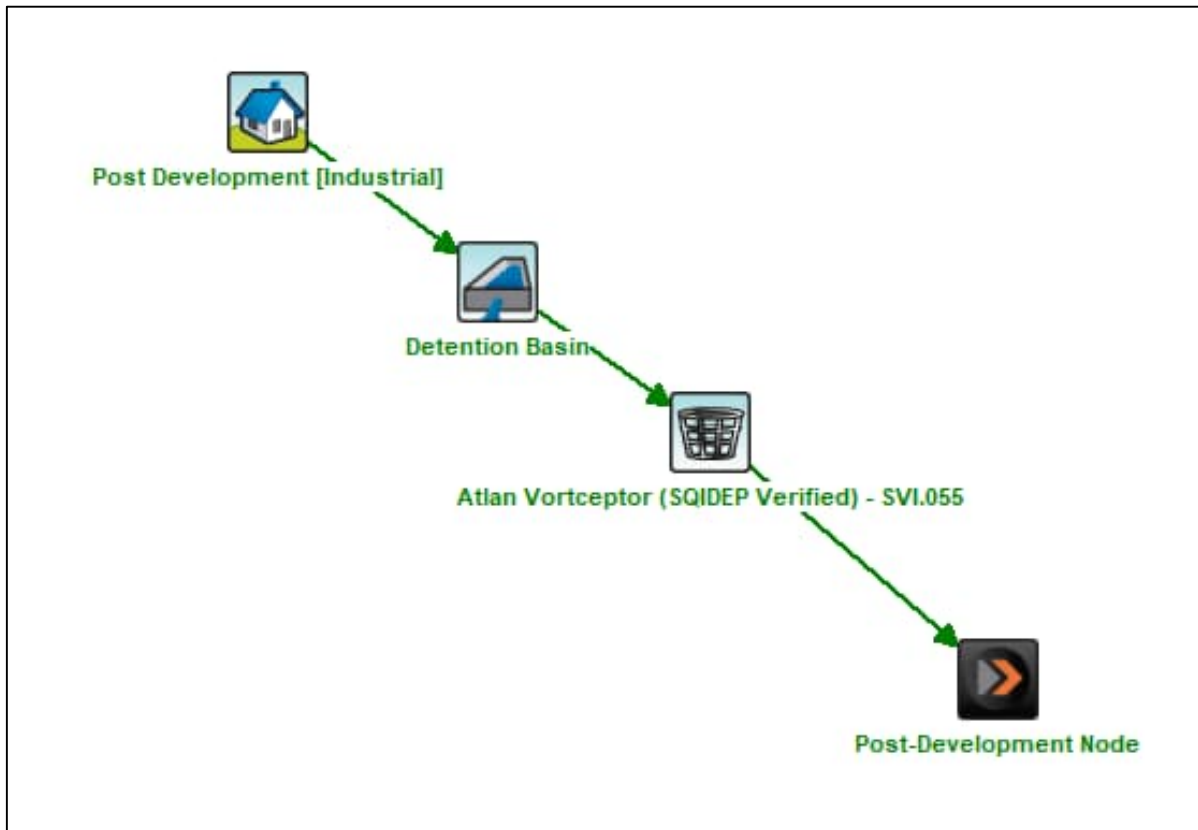


Figure 8: MUSIC Model Layout

It should be noted that while an Atlan Vortceptor has been used for this assessment, alternative proprietary stormwater treatment products can be used, provided it is demonstrated that the system is capable of achieving appropriate stormwater treatment prior to discharge.

### 4.3.3 Results

The MUSIC model results revealed that, with the implementation of the above-mentioned treatment infrastructure, runoff from the development site can be appropriately treated prior to discharge offsite. Results from the model are presented in Table 6.

Table 6: MUSIC Results

Pollutant	Source (kg/yr)	Residual load (kg/yr)	% Reduction	Compliance (Y/N)
<b>Total Suspended Solids</b>	988	49.4	95	✓
<b>Total Phosphorus</b>	1.6	0.186	88.4	✓
<b>Total Nitrogen</b>	11.8	5.91	50	✓
<b>Gross Pollutants</b>	137	0	100	✓

---

## 5 Sediment and Erosion Control

---

The objective of the proposed sediment and erosion control measures is to maintain the quality of stormwater and protect the environmental integrity of downstream receiving waters throughout both the construction and operational phases of the development. Effective implementation of the controls will ensure compliance with environmental regulations and help preserve local water quality and habitat health.

Stormwater quality control during construction activities must be achieved through the implementation of Erosion and Sediment Controls (ESC). These measures should be established prior to the start of any construction work and regularly inspected to ensure their effectiveness. Inspections must also be conducted after heavy rainfall events to confirm that the measures are fulfilling their intended purpose. The measures to be used on site include:

- Minimize the number of site access points (limit of one where possible) and provide stabilized site access.
- Stabilized site access to be provided at access to shake down all vehicles entering and leaving the site, minimizing the transport of sediment off-site.
- Installation of downstream sediment barriers prior to commencement of any works.
- Sediment fences are to be installed downstream of works and exposed soils to ensure contaminated runoff is filtered and sediment captured before it can make its way into the downstream receiving environment.
- Swale drains are to be formed at the top of batter slopes and will allow the discharge of water to be conveyed and directed to the most desirable points of discharge
- Stabilize and protect earthwork areas immediately once earthwork profiles are achieved.
- Stockpile materials should be placed in protected areas that are away from overland flow paths and enclosed by sediment fences. These stockpiles must be located on elevated, level ground, approximately 5 meters from any water bodies or channels. To manage runoff during rain, upslope protection measures such as sandbags or equivalent should be used to divert water, while sediment fences must be installed downstream of any stockpile prone to erosion. Stockpiles should be covered and secured at the end of each workday, or whenever rain or high winds are expected.
- Sediment fence to be used on low side of any areas of soil disturbance (e.g. road formation, house pad, soil stockpiles, etc).
- Rock filter dams and gypsum filled bags, flock blocks or equivalent placed on low side of check dam spillway, are to be provided in key locations to treat stormwater runoff from the works area.
- Site is to be watered during the construction phase to minimise the generation of dust. When wind speed reach 35km/h, all dust generating construction activities must cease onsite.

The following inspection program shall be established by the Site Contractor and monthly Check Sheet reports shall be submitted to the Supervising Engineer.

- Daily inspection of the site stabilized access points and amendments as necessary.
- Formal weekly inspection of erosion and sediment controls.
- Inspection after 10mm rainfall events in 24 hours.
- Testing of runoff after significant rainfall events to ensure a max. discharge of 50mg/L suspended solids. In addition to the inspection details, the following information will be recorded:
  - List frequency and method of removal of material from stabilized access point.
  - Volume of material removed in/around sediment controls.
  - Location of site where materials are disposed.
  - Any repair/additions as appropriate.

---

## 6 Conclusion/Recommendations

---

This Stormwater Management Plan has been prepared in support of the proposed development located at 11 Old Lismore Road, Murwillumbah. This stormwater management plan details the stormwater management requirements of the site to minimise the impacts of the proposed development both during its construction and operational phase. To achieve this the following is recommended:

- Provide new stormwater connection to street network.
- Provide an above ground detention basin
- Provide splitter pit to drain runoff from the site to 2 discharge points aiming to distribute flows to discharge points as per the predevelopment while also achieving appropriate detention and treatment.
- Provide an underground proprietary stormwater treatment device to treat runoff prior to discharge offsite.
- Provide sediment and erosion control during construction.

Based on the assessment undertaken, it is anticipated that the proposed development can manage stormwater appropriately.

# URBAN ADVISORY

# 23 SOMERSET & 161 FOSTER ST, GRACEMERE, ROCKHAMPTON

## CONCEPT CIVIL PLANS



C O N S U L T I N G

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/99-2025**

**Dated: 6 March 2026**

**DRAWING REGISTER**

DRAWING NUMBER	DRAWING TITLE	DRAWING REVISION
0001	COVER PAGE & LOCALITY PLAN	C
0100	SEDIMENT & EROSION CONTROL PLAN AND DETAILS	C
0300	CIVIL LAYOUT PLAN	C
0350	SWEPT PATH PLAN	C
0400	CATCHMENT PLAN	C

**NOTES**

- THIS DRAWING SET SHOULD BE READ IN CONJUNCTION WITH PLANITS STORMWATER MANAGEMENT PLAN.
- THE STORMWATER PLAN IS BASED ON BYDA DATA AND ARCHITECTURAL DRAWINGS (CASTLEWORTH) SUPPLIED TO PLANIT.
- THIS PLAN IS CONCEPT ONLY WITH THE PROPOSED SERVICE ALIGNMENTS AND NOMINATED LEVELS ARE INDICATIVE ONLY AND SHOULD BE CONFIRMED DURING DETAILED DESIGN.
- CONTOURS ON PLAN HAVE BEEN OBTAINED FROM LIDAR INFORMATION.
- HYDRAULIC/HYDROLOGICAL (DRAINS SOFTWARE) WAS UTILISED TO DEMONSTRATE COMPLIANCE WITH STORMWATER QUANTITY OBJECTIVES.
- HYDRAULIC/HYDROLOGICAL MODELLING (MUSIC SOFTWARE) WAS UTILISED TO DEMONSTRATE COMPLIANCE WITH STORMWATER QUALITY OBJECTIVES.
- NO DETAILED INTERNAL HYDRAULIC MODELLING HAS BEEN COMPLETED.
- SERVICE LOCATIONS SHOWN ON THIS PLAN ARE INDICATIVE ONLY AND SHOULD BE CONFIRMED DURING DETAILED DESIGN.

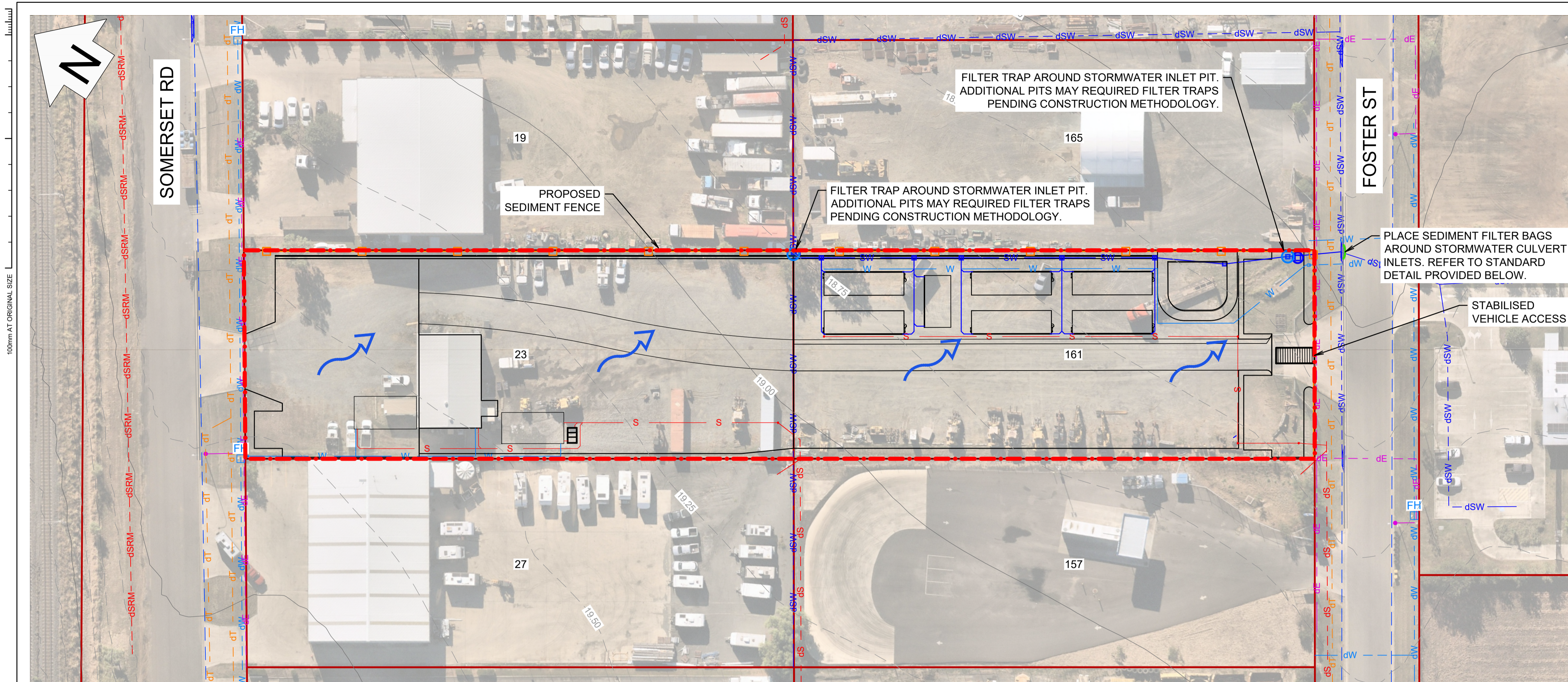


**LOCALITY PLAN**  
NOT TO SCALE

IMAGE SOURCE: NEARMAPS

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECK	APPROVED	SCALES:	Copyright in the drawings, information and data recorded in this document ("the information") is the property of Planit Consulting. This document and the information are solely for the use of the authorised recipient and this document may not be used, Copied or reproduced in whole or part for any purpose other than that for which it was supplied by Planit Consulting. Planit Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.	APPROVED BY:	PLANIT CONSULTING LEVEL 1, 2247 GOLD COAST HWY PO BOX 206 NOBBY BEACH QLD 4218 PH: 07 5526 1500 ABN: 20 099 261 711	CLIENT:	PROJECT:
A	PRELIMINARY ISSUE	31/01/25	A.S	A.S	J.B	J.B	NOT TO SCALE				URBAN ADVISORY	23 SOMERSET RD & 161 FOSTER RD
B	PRELIMINARY ISSUE	26/06/25	A.S	A.S	J.B	J.B						DRAWING TITLE: COVER PAGE & LOCALITY PLAN
C	PRELIMINARY ISSUE	05/12/25	C.M	C.M	J.B	C.G			DATE:		LOCAL GOVERNMENT AUTHORITY:	ORIGINAL SIZE: PLANIT JOB No.: DRAWING No.: REV:
							DO NOT SCALE FROM DRAWING		THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED	administration@planitconsulting.com.au	ROCKHAMPTON CITY COUNCIL	A1 J8292 0001 C

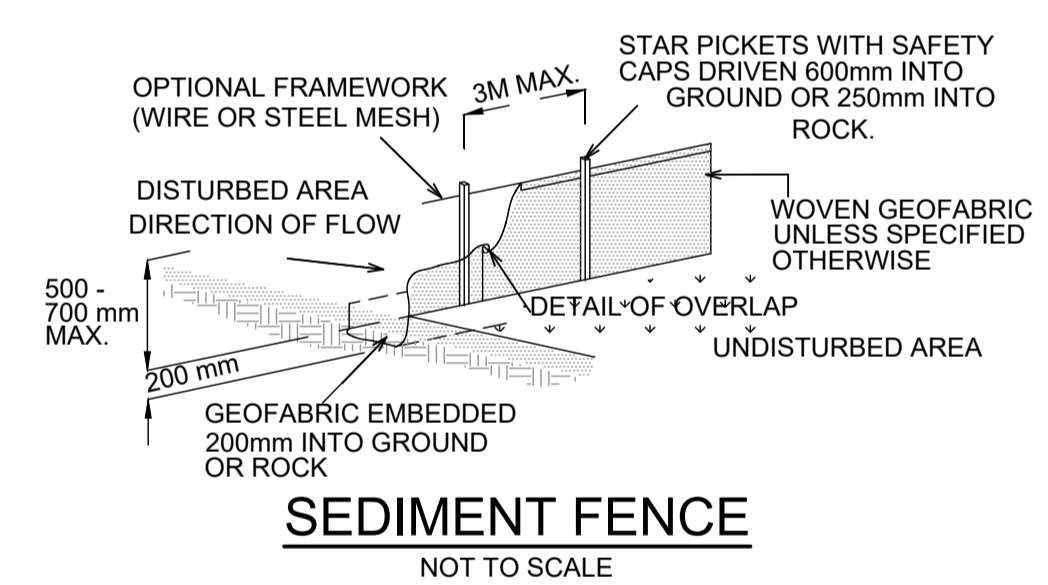


- LEGEND - EXISTING SERVICES BYDA**
- dT EXISTING TELECOMMUNICATIONS (BYDA)
  - dE EXISTING UNDERGROUND ELECTRICAL (BYDA)
  - dS EXISTING SEWER (BYDA)
  - dW EXISTING WATERMAIN (BYDA)
  - dSW EXISTING STORMWATER (BYDA)
  - PROPERTY BOUNDARY

- LEGEND - PROPOSED**
- SUBJECT SITE
  - W WATER PIPE
  - S SEWER PIPE
  - SW STORMWATER PIPE
  - STABILISED VEHICLE ACCESS
  - SEDIMENT TRAP
  - FILTER BAG
  - SEDIMENT FENCE
  - OVERLAND FLOW DIRECTION

**EROSION & SEDIMENT CONTROL PLAN**  
SCALE 1:500m

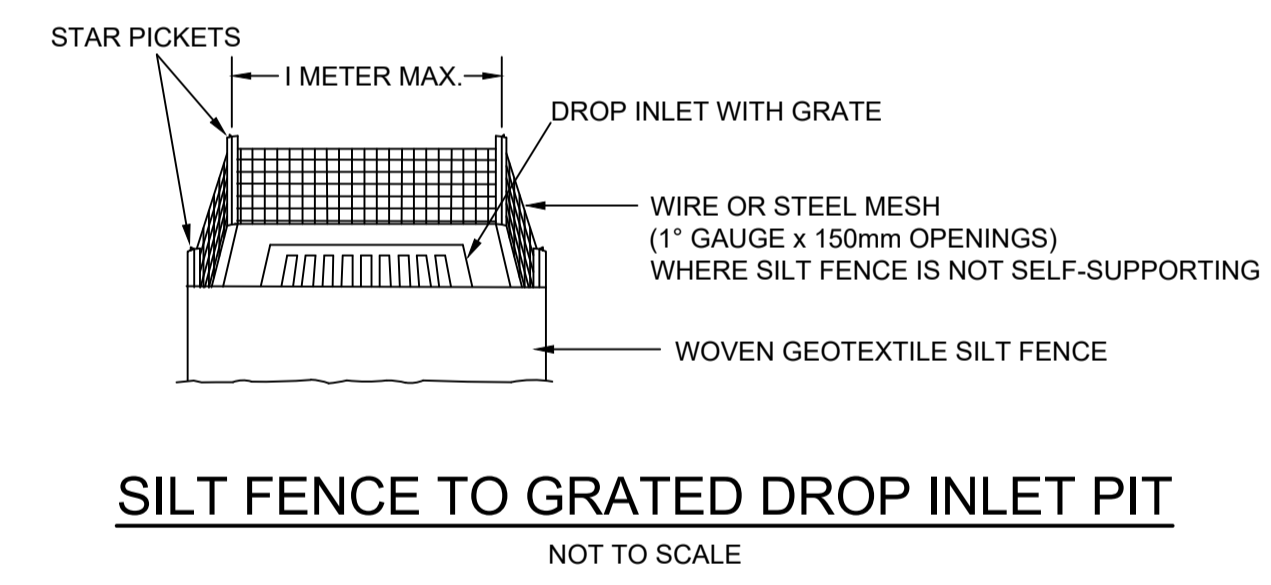
**ROCKHAMPTON REGIONAL COUNCIL**  
**APPROVED PLANS**  
These plans are approved subject to the current conditions of approval associated with **Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**



**SEDIMENT FENCE**  
NOT TO SCALE

**CONSTRUCTION NOTES**

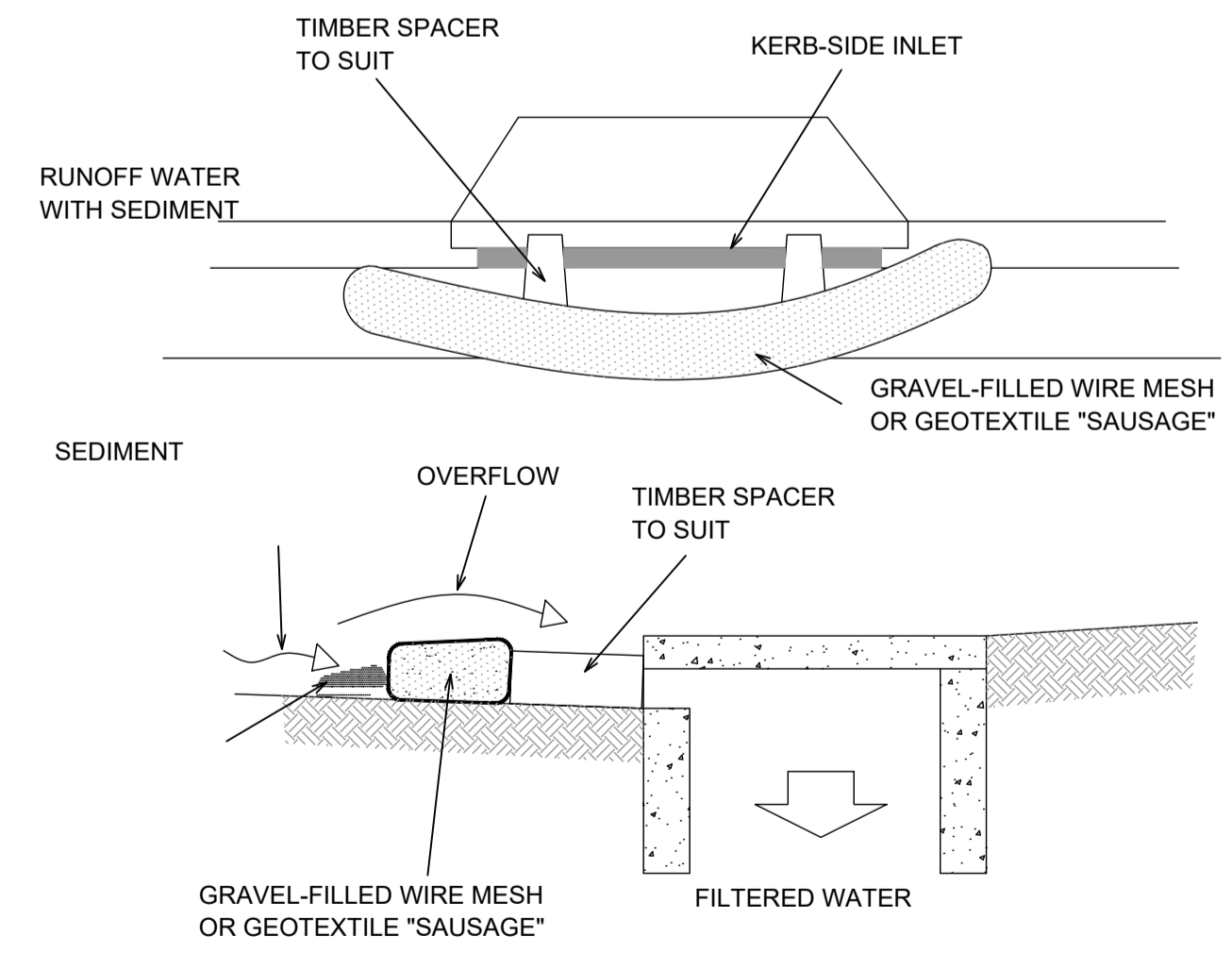
1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT.
2. FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL.
3. FROM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING OF THE KERB INLET OR FIELD INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY.
5. MAINTAIN THE OPENING WITH SPACER BLOCKS.
6. FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER.
7. FIT TO ALL KERB INLETS AND FIELD INLET PITS AT SAG POINTS.



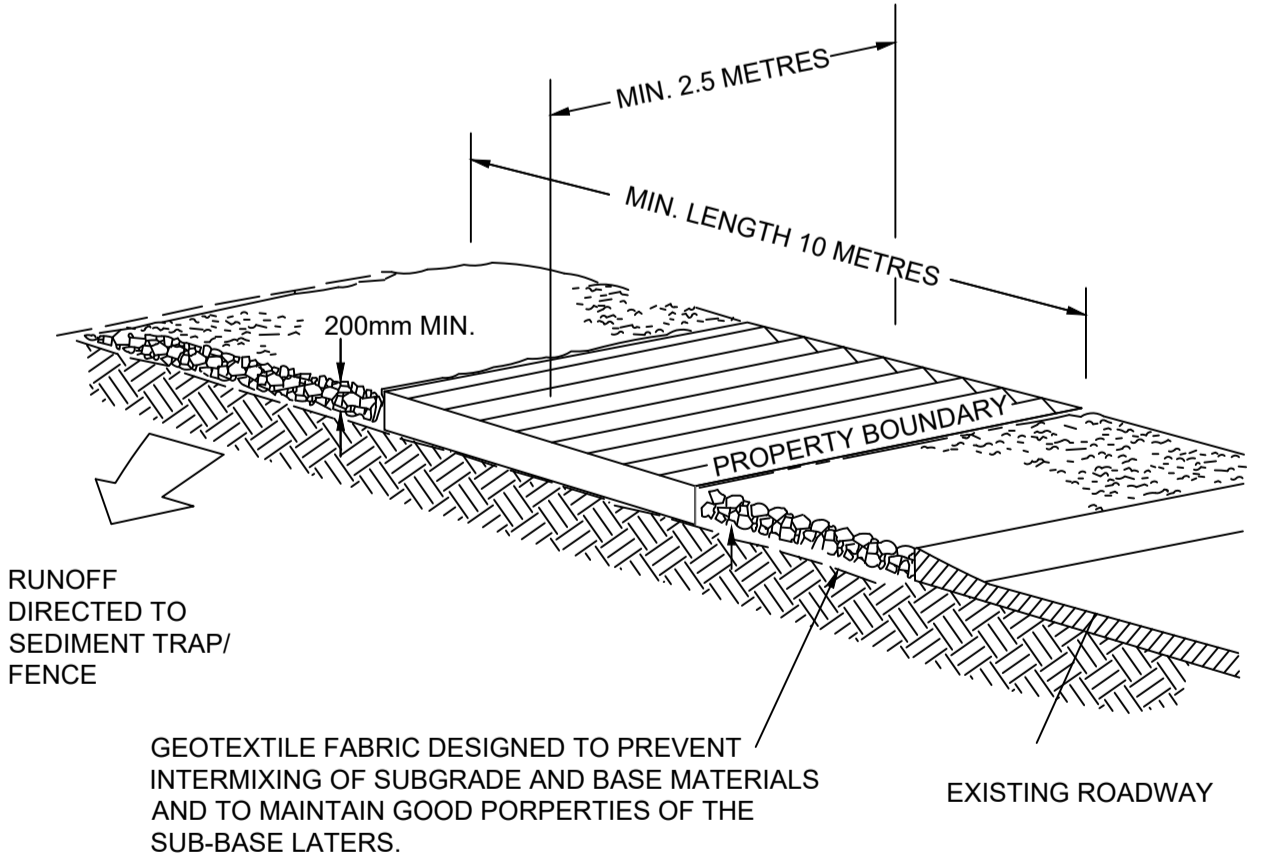
**SILT FENCE TO GRATED DROP INLET PIT**  
NOT TO SCALE

**CONSTRUCTION NOTES**

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES
2. SUPPORT GEOTEXTILE WITH MESH TIED TO POSTS AT 1 METRE CENTRES.
3. DO NOT COVER INLET WITH GEOTEXTILE



**FILTER BAG TO SAG SIDE ENTRY PIT**  
NOT TO SCALE



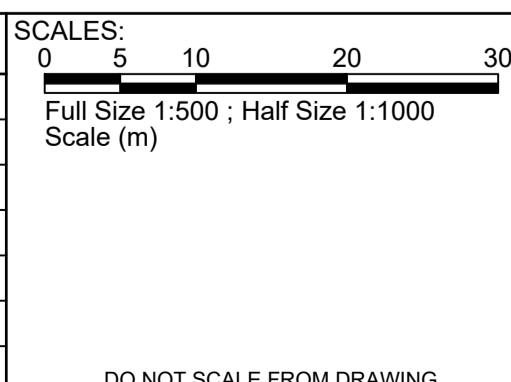
**SHAKE DOWN AREA**  
NOT TO SCALE

**CONSTRUCTION NOTES**

1. COMPACT SUBGRADE
2. OVER WITH NEEDLE PUNCHED GEOTEXTILE.
3. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROADBASE OR 30mm AGGREGATE. MINIMUM LENGTH OF 10m AND MINIMUM WIDTH OF 2.5m. GEOTEXTILE MAY BE A WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) of 2500 N.
4. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP.

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	PRELIMINARY ISSUE	31/01/25	A.S	A.S	J.B	J.B
B	PRELIMINARY ISSUE	26/06/25	A.S	A.S	J.B	J.B
C	PRELIMINARY ISSUE	05/12/25	C.M	C.M	J.B	C.G



Copyright in the drawings, information and data recorded in this document ("the information") is the property of Planit Consulting. This document and the information are solely for the use of the authorised recipient and this document may not be used, Copied or reproduced in whole or part for any purpose other than that for which it was supplied by Planit Consulting. Planit Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

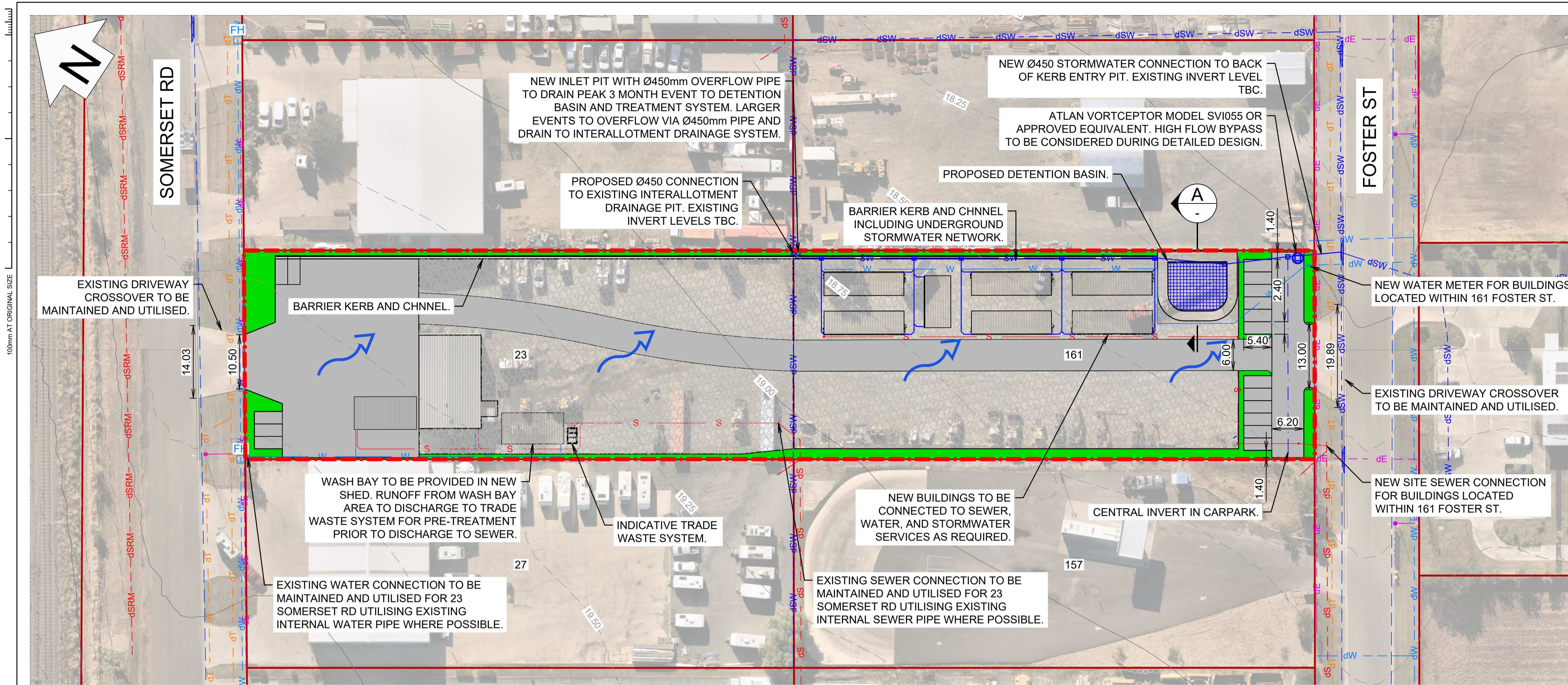
APPROVED BY:  
  
DATE:  
  
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED

PLANIT CONSULTING  
LEVEL 1, 2247 GOLD COAST HWY  
PO BOX 206  
NOBBY BEACH QLD 4218  
PH: 07 5526 1500  
ABN: 20 099 261 711

CLIENT:  
**URBAN ADVISORY**

LOCAL GOVERNMENT AUTHORITY:  
**ROCKHAMPTON CITY COUNCIL**

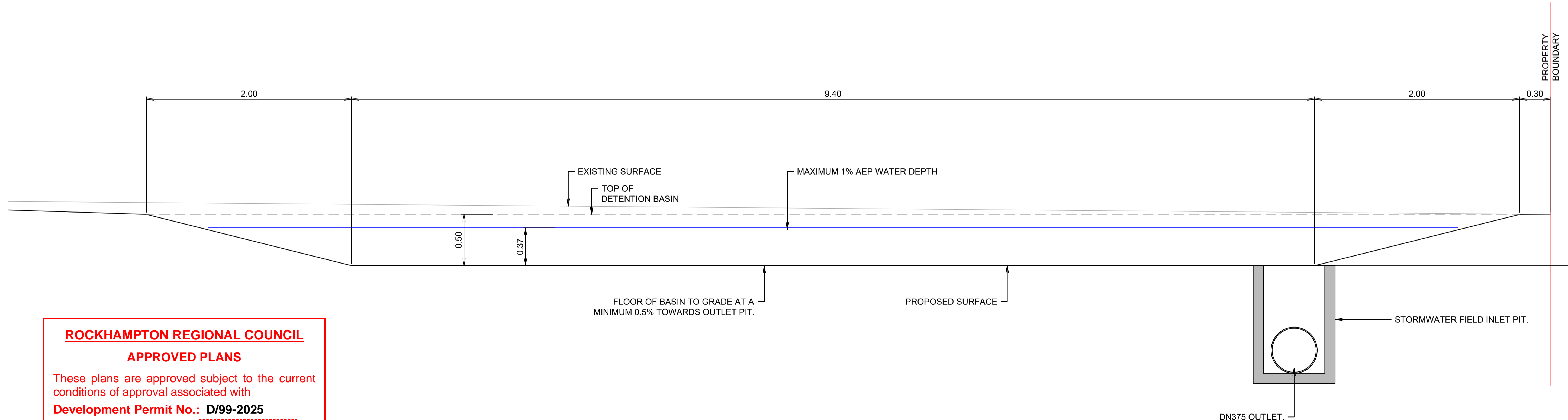
PROJECT: <b>23 SOMERSET RD &amp; 161 FOSTER RD</b>			
DRAWING TITLE: <b>SEDIMENT &amp; EROSION CONTROL PLAN AND DETAILS</b>			
ORIGINAL SIZE: <b>A1</b>	PLANIT JOB No.: <b>J8292</b>	DRAWING No.: <b>0100</b>	REV: <b>C</b>



- LEGEND - EXISTING SERVICES BYDA**
- dT- EXISTING TELECOMMUNICATIONS (BYDA)
  - dE- EXISTING UNDERGROUND ELECTRICAL (BYDA)
  - dS- EXISTING SEWER (BYDA)
  - dW- EXISTING WATERMAIN (BYDA)
  - dSW- EXISTING STORMWATER (BYDA)
  - - - PROPERTY BOUNDARY

- LEGEND - PROPOSED**
- - - SUBJECT SITE
  - W- WATER PIPE
  - S- SEWER PIPE
  - SW- STORMWATER PIPE
  - SEALLED PAVEMENT
  - GRAVEL PAVEMENT
  - ROOF
  - LANDSCAPE
  - OVERLAND FLOW DIRECTION
  - DETENTION BASIN

**CIVIL LAYOUT PLAN**  
SCALE 1:500m



**SECTION A: DETENTION BASIN**  
SCALE 1:20m

**ROCKHAMPTON REGIONAL COUNCIL**  
**APPROVED PLANS**  
These plans are approved subject to the current conditions of approval associated with **Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	PRELIMINARY ISSUE	31/01/25	A.S	A.S	J.B	J.B
B	PRELIMINARY ISSUE	26/06/25	A.S	A.S	J.B	J.B
C	PRELIMINARY ISSUE	05/12/25	C.M	C.M	J.B	C.G

SCALES:

0 5 10 20 30

Full Size 1:500 ; Half Size 1:1000

Scale (m)

0 0.2 0.4 0.8 1.2

Full Size 1:20 ; Half Size 1:40

Scale (m)

DO NOT SCALE FROM DRAWING

Copyright in the drawings, information and data recorded in this document ("the information") is the property of Planit Consulting. This document and the information are solely for the use of the authorised recipient and this document may not be used, Copied or reproduced in whole or part for any purpose other than that for which it was supplied by Planit Consulting. Planit Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

APPROVED BY:

DATE:

THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED

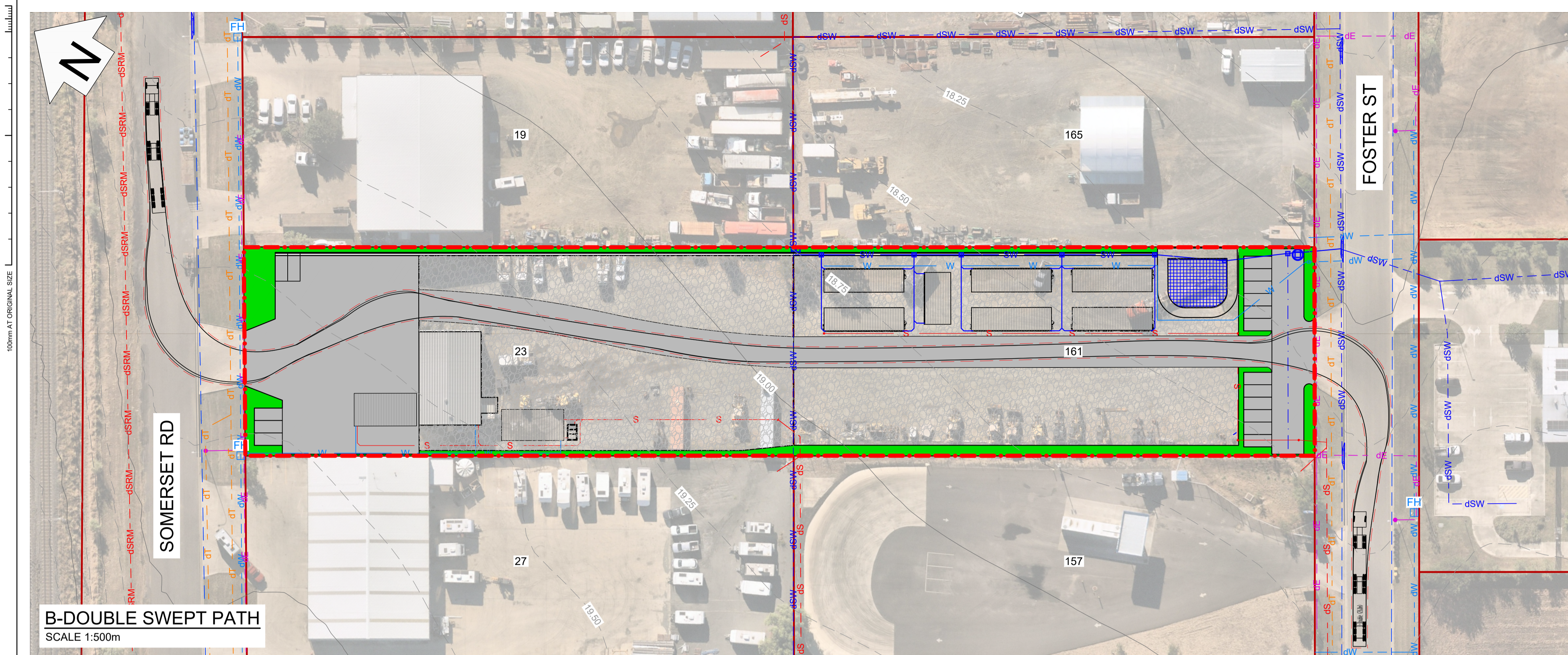
PLANIT CONSULTING  
LEVEL 1, 2247 GOLD COAST HWY  
PO BOX 206  
NOBBY BEACH QLD 4218  
PH: 07 5526 1500  
ABN: 20 099 261 711

**PLANIT**  
CONSULTING

CLIENT:  
**URBAN ADVISORY**

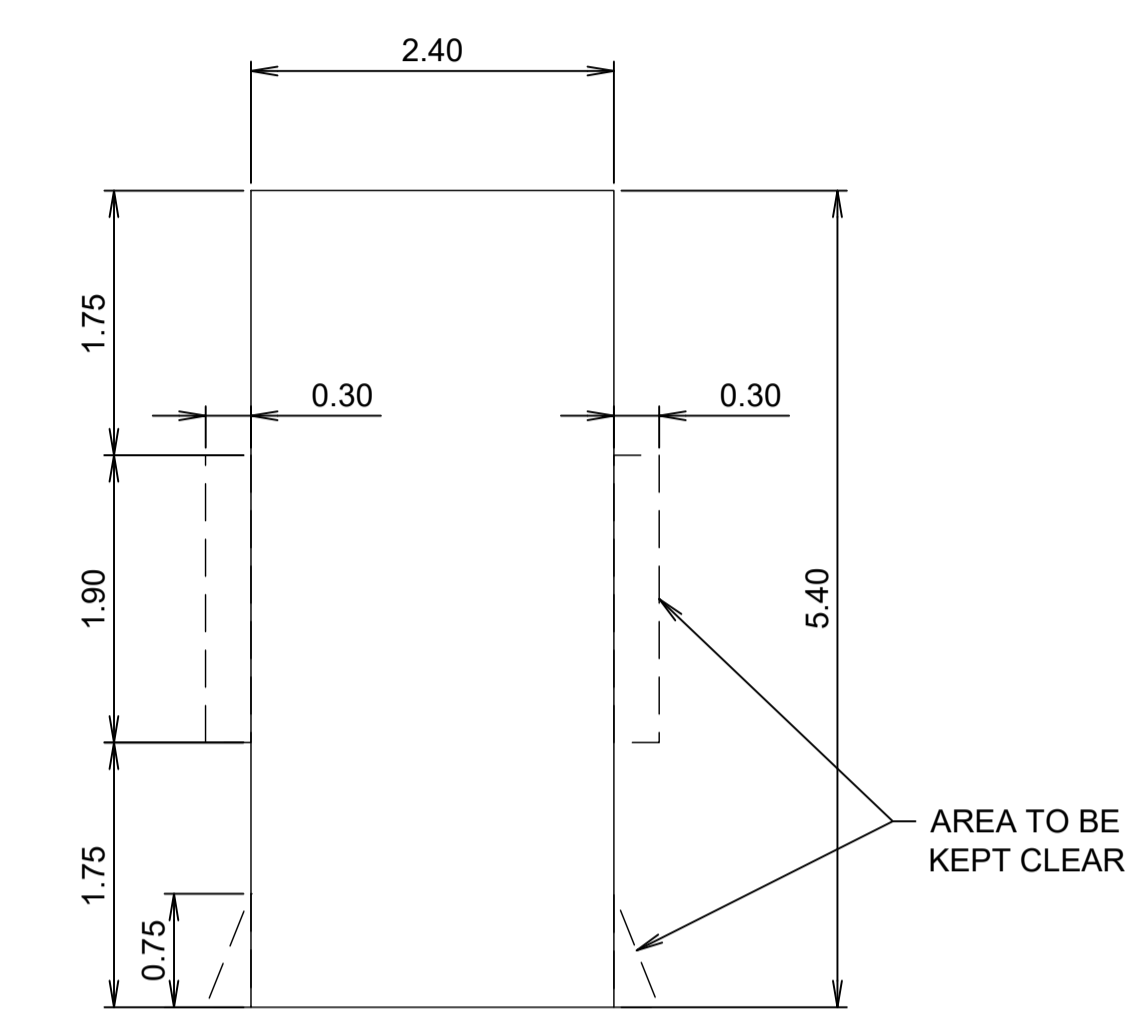
LOCAL GOVERNMENT AUTHORITY:  
**ROCKHAMPTON CITY COUNCIL**

PROJECT: <b>23 SOMERSET RD &amp; 161 FOSTER RD</b>			
DRAWING TITLE: <b>CIVIL LAYOUT PLAN</b>			
ORIGINAL SIZE: <b>A1</b>	PLANIT JOB No.: <b>J8292</b>	DRAWING No.: <b>0300</b>	REV: <b>C</b>

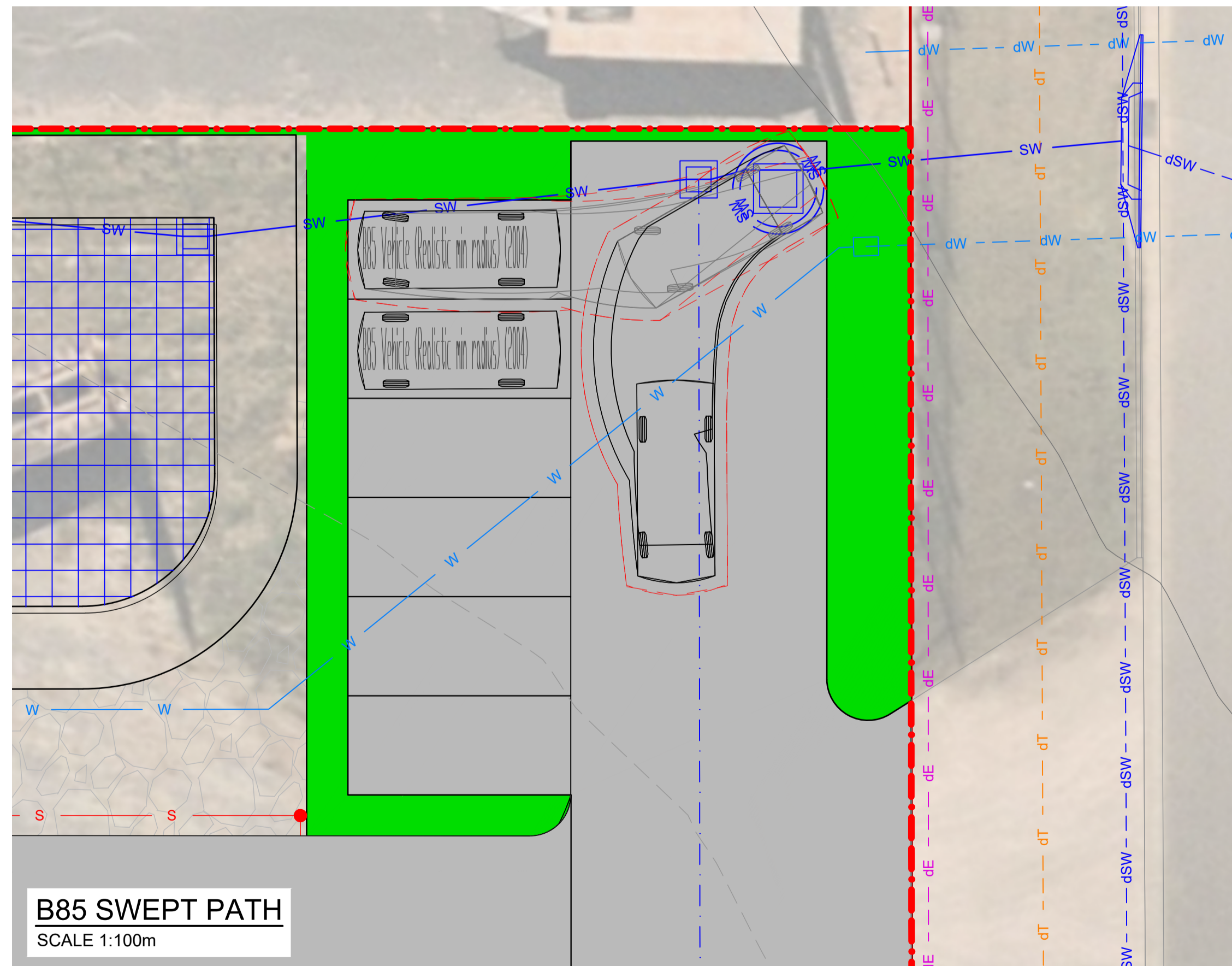


**B-DOUBLE SWEEP PATH**  
SCALE 1:500m

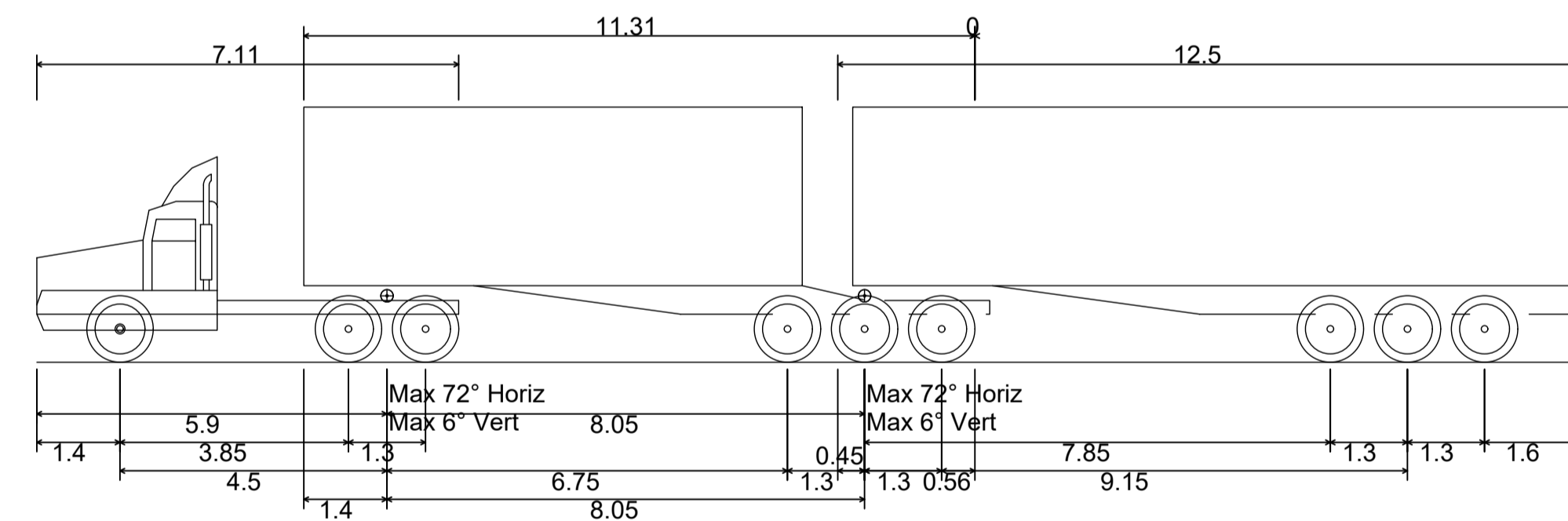
- LEGEND**
- VEHICLE WHEEL SWEEP PATH
  - VEHICLE BODY SWEEP PATH
  - 300mm CLEARANCE OFF BODY SWEEP PATH



**CARPARK DIMENSIONS**  
SCALE 1:50 @ A1



**B85 SWEEP PATH**  
SCALE 1:100m



- B-Double (26.0m)**  
 Overall Length 26.000m  
 Overall Width 2.500m  
 Overall Body Height 4.300m  
 Min Body Ground Clearance 0.540m  
 Track Width 2.500m  
 Lock-to-lock time 6.00s  
 Curb to Curb Turning Radius 15.000m

**B-DOUBLE SWEEP PATH TEMPLATE DETAILS**  
SCALE 1:100m

**B85 SWEEP PATH TEMPLATE DETAILS**  
SCALE 1:100m

**ROCKHAMPTON REGIONAL COUNCIL**  
**APPROVED PLANS**  
These plans are approved subject to the current conditions of approval associated with **Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	PRELIMINARY ISSUE	31/01/25	A.S	A.S	J.B	J.B
B	PRELIMINARY ISSUE	26/06/25	A.S	A.S	J.B	J.B
C	PRELIMINARY ISSUE	05/12/25	C.M	C.M	J.B	C.G

SCALES:

0	5	10	20	30
---	---	----	----	----

Full Size 1:500; Half Size 1:1000  
Scale (m)

0	1	2	4	6
---	---	---	---	---

Full Size 1:100; Half Size 1:200  
Scale (m)

0	0.5	1	2	3
---	-----	---	---	---

Full Size 1:50; Half Size 1:100  
Scale (m)

DO NOT SCALE FROM DRAWING

Copyright in the drawings, information and data recorded in this document ("the information") is the property of Planit Consulting. This document and the information are solely for the use of the authorised recipient and this document may not be used, Copied or reproduced in whole or part for any purpose other than that for which it was supplied by Planit Consulting. Planit Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

APPROVED BY:

DATE:

THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED

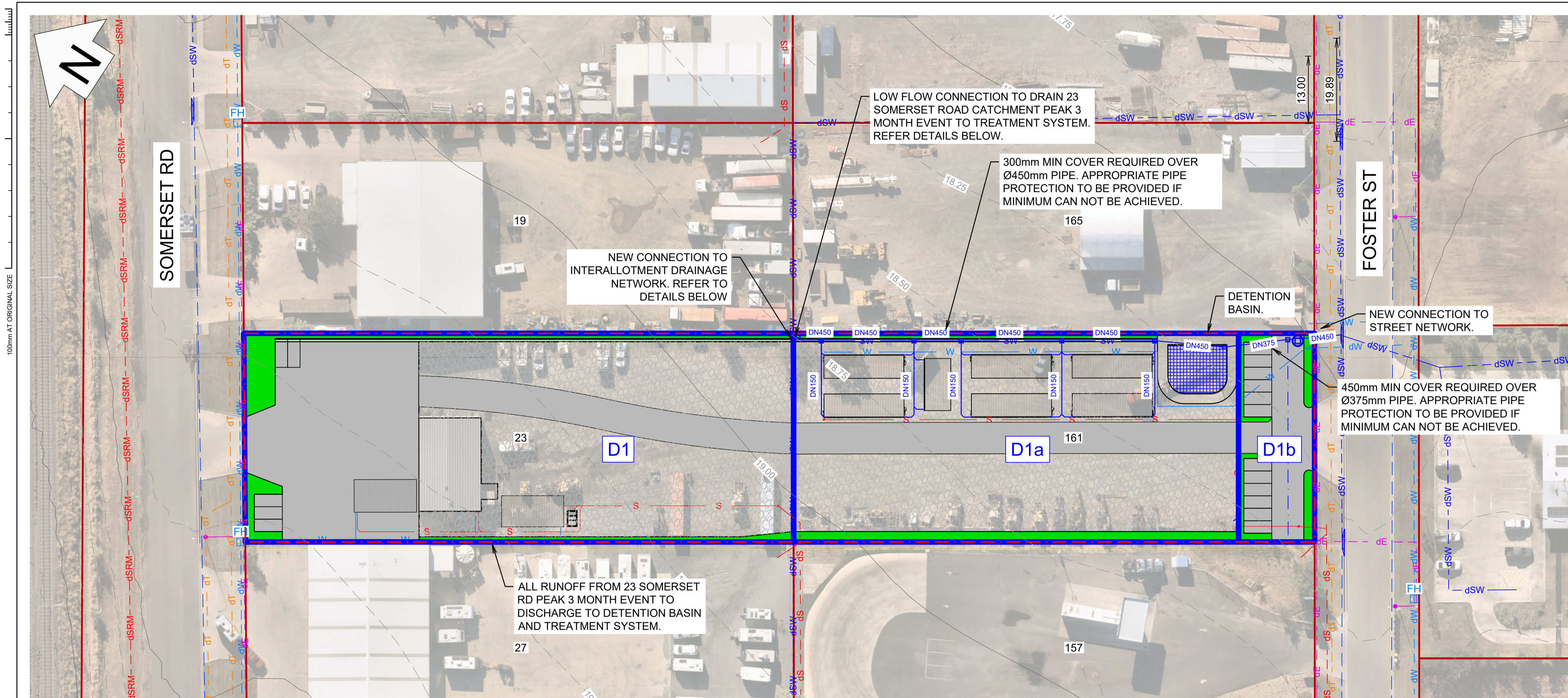
PLANIT CONSULTING  
LEVEL 1, 2247 GOLD COAST HWY  
PO BOX 206  
NOBBY BEACH QLD 4218  
PH: 07 5526 1500  
ABN: 20 099 261 711

**PLANIT**  
CONSULTING

CLIENT:  
**URBAN ADVISORY**

LOCAL GOVERNMENT AUTHORITY:  
**ROCKHAMPTON CITY COUNCIL**

PROJECT: <b>23 SOMERSET RD &amp; 161 FOSTER RD</b>	ORIGINAL SIZE: <b>A1</b>	PLANIT JOB No.: <b>J8292</b>	DRAWING No.: <b>0350</b>	REV: <b>C</b>
---	-----------------------------	---------------------------------	-----------------------------	------------------



- LEGEND - EXISTING SERVICES BYDA**
- dT EXISTING TELECOMMUNICATIONS (BYDA)
  - dE EXISTING UNDERGROUND ELECTRICAL (BYDA)
  - dS EXISTING SEWER (BYDA)
  - dW EXISTING WATERMAIN (BYDA)
  - dSW EXISTING STORMWATER (BYDA)
  - PROPERTY BOUNDARY
- LEGEND - PROPOSED**
- SUBJECT SITE
  - W WATER PIPE
  - S SEWER PIPE
  - SW STORMWATER PIPE
  - SEALED PAVEMENT
  - GRAVEL PAVEMENT
  - ROOF
  - LANDSCAPE
  - ~> OVERLAND FLOW DIRECTION
  - DETENTION BASIN
  - CATCHMENT BOUNDARY

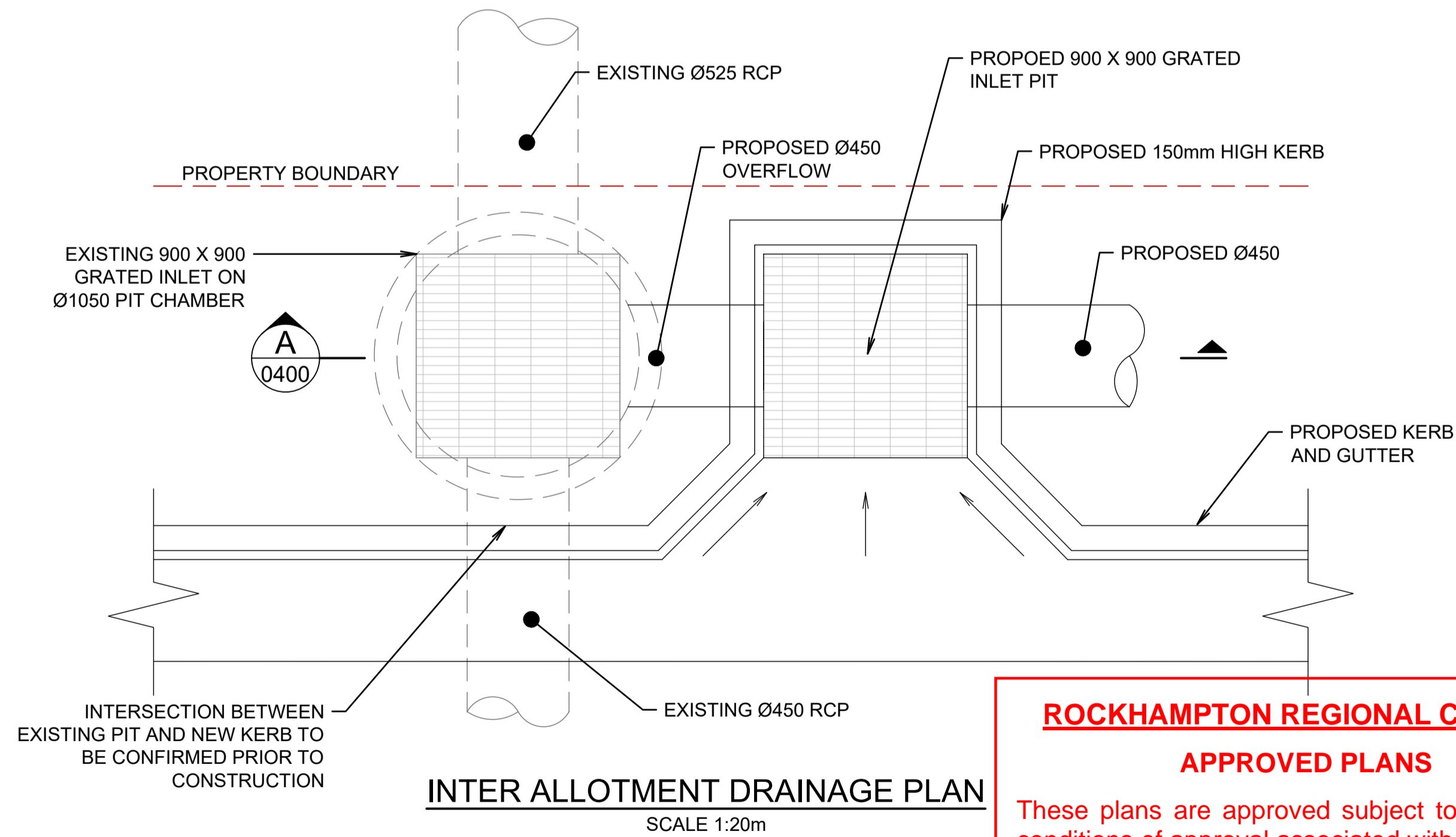
**CATCHMENT PLAN**  
SCALE 1:500m

**NOTES:**

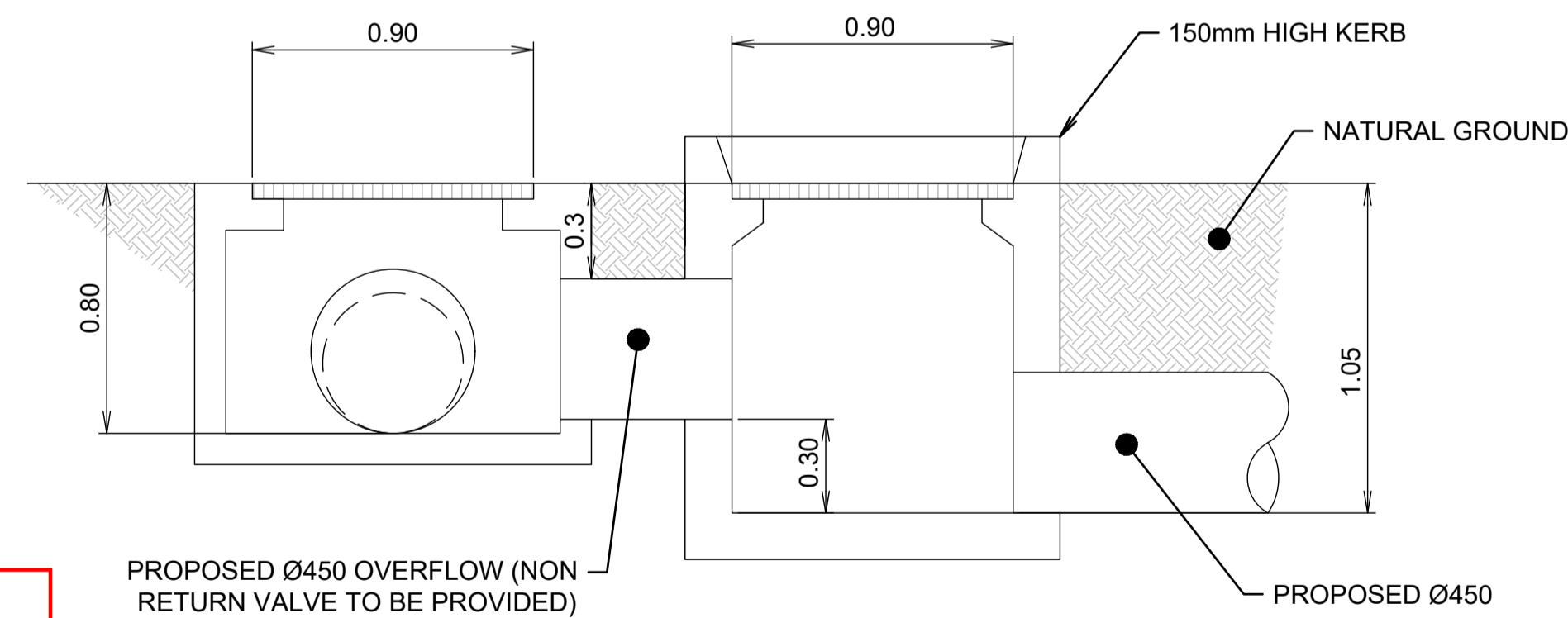
- THESE DETAILS ARE INDICATIVE ONLY AND CAN CHANGE IF APPROVED BY APPROPRIATELY QUALIFIED PERSON AND IT CAN BE DEMONSTRATED THAT APPROPRIATE FLOW MITIGATION AND PIPE SIZING IS ACHIEVED / PROVIDED.



**EXISTING INTERALLOTMENT PIT**  
NTS



**INTER ALLOTMENT DRAINAGE PLAN**  
SCALE 1:20m



**SECTION A - INTER ALLOTMENT DRAINAGE ELEVATION**  
SCALE 1:20m

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with **Development Permit No.: D/99-2025**  
**Dated: 6 March 2026**

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	PRELIMINARY ISSUE	31/01/25	A.S	A.S	J.B	J.B
B	PRELIMINARY ISSUE	26/06/25	A.S	A.S	J.B	J.B
C	PRELIMINARY ISSUE	05/12/25	C.M	C.M	J.B	C.G

SCALES:  
0 5 10 20 30  
Full Size 1:500; Half Size 1:1000  
Scale (m)

Copyright in the drawings, information and data recorded in this document ("the information") is the property of Planit Consulting. This document and the information are solely for the use of the authorised recipient and this document may not be used, Copied or reproduced in whole or part for any purpose other than that for which it was supplied by Planit Consulting. Planit Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

APPROVED BY:  
  
DATE:  
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED

PLANIT CONSULTING  
LEVEL 1, 2247 GOLD COAST HWY  
PO BOX 206  
NOBBY BEACH QLD 4218  
PH: 07 5526 1500  
ABN: 20 099 261 711

**PLANIT**  
CONSULTING

CLIENT:  
**URBAN ADVISORY**

LOCAL GOVERNMENT AUTHORITY:  
**ROCKHAMPTON CITY COUNCIL**

PROJECT: <b>23 SOMERSET RD &amp; 161 FOSTER RD</b>			
DRAWING TITLE: <b>CATCHMENT PLAN</b>			
ORIGINAL SIZE: <b>A1</b>	PLANIT JOB No.: <b>J8292</b>	DRAWING No.: <b>0400</b>	REV: <b>C</b>

**NOT FOR CONSTRUCTION**



NEARMAP DATED: 06/11/24

- 1** LARGE TREE  
Large canopied rounded tree species to provide shade over the frontage, provide visual amenity & landscape softening of the proposed buildings; Refer Proposed Planting Schedule (ie: *Cupaniopsis anacardioides*, *Lophostemon confertus*)
- 2** SCREEN TREE  
Tree planting to assist in providing vertical softening of the proposed building to adjoining property; Refer Proposed Planting Schedule (ie: *Acronychia imperforata*, *Buckinghamia celsissima*, *Syzygium australe*, *Tristaniopsis laurina*)
- 3** SCREEN PLANTING  
Planting to provide visual amenity and privacy screening; Refer Proposed Planting Schedule (ie: *Syzygium australe* Resilience)
- 4** SHRUBS AND GRASSES  
Mass planting to large areas to assist in building presentation to the streetscape and to provide visual amenity; Refer Proposed Planting Schedule
- 5** BIO-DETENTION BASIN  
To be planted with appropriate species as per Water by Design Water Sensitive Urban Design (WSUD) bio-retention plant list; Refer Proposed Planting Schedule

- LEGEND**
- PROPERTY BOUNDARY  
As taken from Survey drawings
  - /- PROPOSED FENCE  
2100mm high chainwire PVC coated black fence
  - PROPOSED GARDEN EDGE  
To future detail

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/99-2025**

**Dated: 6 March 2026**



CODE	SPECIES	COMMON NAME	SIZE*	SPACING(m)**	HEIGHT(m)	WIDTH (m)
<b>PROPOSED LARGE TREES</b>						
1.1	<i>Cupaniopsis anacardioides</i>	Tuckeroo	300mm	7	15	10
1.2	<i>Lophostemon confertus</i>	Brush Box	300mm	7	20	10
1.3	<i>Xanthostemon chrysanthus</i>	Golden Penda	140mm	4	12	8
<b>PROPOSED SCREEN TREES</b>						
2.1	<i>Acronychia imperforata</i>	Fraser Island Apple	140mm	4	8	6
2.2	<i>Buckinghamia celsissima</i>	Ivory Curl	140mm	4	8	5
2.3	<i>Elaeocarpus reticulatus</i>	Blueberry Ash	140mm	4	10	5
2.4	<i>Syzygium australe</i>	Lillypilly	140mm	4	8	6
2.5	<i>Tristaniopsis laurina</i>	Water Gum	140mm	4	15	6

**\*PLANT CONTAINER SIZE:**

300mm 300mm dia minimum pot size  
 140mm 140mm dia minimum pot size

**\*\*PLANT SPACING:**

The proposed densities of plants will be derived as a compromise between growth rate, anticipated size, and the ability to provide a good vegetative cover within a reasonable space of time.

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/99-2025**

**Dated: 6 March 2026**



CODE	SPECIES	COMMON NAME	SIZE*	SPACING(m)**	HEIGHT(m)	WIDTH (m)
<b>PROPOSED SCREEN PLANTING</b>						
3.1	<i>Callistemon viminalis</i> Wilderness White	Bottlebrush	140mm	1.5	2.5	2
3.2	<i>Callistemon viminalis</i> Wildfire	Bottlebrush	140mm	1.5	4	2
3.3	<i>Grevillea</i> Honey Gem	Grevillea	140mm	1.5	5	3
3.4	<i>Grevillea</i> Moonlight	Grevillea	140mm	1.5	5	3
3.5	<i>Melaleuca linariifolia</i> Snow in Summer	Bottlebrush	140mm	1.5	6	4
3.6	<i>Syzygium australe</i> Hinterland Gold	Lillypilly	140mm	1.5	4	2
3.7	<i>Westringia</i> Wynyabbie Gem	Native Rosemary	140mm	1.5	2	1.5

<b>PROPOSED SHRUBS AND GRASSES</b>						
4.1	<i>Callistemon viminalis</i> Captain Cook	Bottlebrush	140mm	1	2	1.5
4.2	<i>Grevillea</i> Superb	Grevillea	140mm	1	1.5	1.5
4.3	<i>Leptospermum flavescens</i> Cardwell	Tea Tree Cardwell	140mm	1	2	2
4.4	<i>Lomandra hystrix</i>	Mat Rush	Tube	1	1.8	1.5
4.5	<i>Melaleuca linariifolia</i> Claret Tops	Bottlebrush	140mm	1	1.5	1
4.6	<i>Melaleuca linariifolia</i> Snowstorm	Snowstorm Paperbark	140mm	1	1.5	1.5

**PROPOSED BIO-DETENTION BASIN**

Proposed species taken from Water by Design WSUD plant list <https://waterbydesign.com.au/wetland-plants> <https://waterbydesign.com.au/wsud-plant-database/bioretenion-plants>

<i>Gahnia siberiana</i>	Red-fruited Sword Sedge	Tube
<i>Myoporum parvifolium</i>	Creeping Boobialla	Tube
<i>Juncus kraussii</i>	Sea Rush	Tube
<i>Themeda triandra</i>	Kangaroo grass	Tube
<i>Lomandra hystrix</i>	River mat-rush	Tube
<i>Lomandra longifolia</i>	Spiny-headed Mat Rush	Tube
<i>Carex appressa</i>	Tall Sedge	Tube

**\*PLANT CONTAINER SIZE:**

140mm 140mm dia minimum pot size  
 Tube 50x50x125mm deep tubestock

**\*\*PLANT SPACING:**

The proposed densities of plants will be derived as a compromise between growth rate, anticipated size, and the ability to provide a good vegetative cover within a reasonable space of time.

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/99-2025**

**Dated: 6 March 2026**