

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2022/1315

Date: 28 April 2023



4653-4691 MOUNT LINDESAY HIGHWAY, NORTH MACLEAN QLD 4280

ENGINEERING SERVICES REPORT

13 MARCH 2023

Incorporating



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NORTH MACLEAN QLD 4280

Engineering Services Report

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Report No EA0001-30109050-AAR-05

Date 13/03/2023

Revision Text 06

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
01	8/07/2022	Draft Issue for Review	ND/EP	GE
02	18/07/2022	Issue for Approval	EP	GE
03	22/07/2022	Revised Services Plan & Section	EP	GE
04	28/10/2022	Draft Response to EDQ IR	ND	BK
05	25/01/2023	Response to EDQ IR	ND	BK
06	13/03/2023	Revised Lot Layout	TF	BK

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1 EXECUTIVE SUMMARY

Arcadis has been engaged by Maclean Estates Pty Ltd to prepare an engineering services report to provide supporting information for the Reconfiguration of Lot (ROL) application for the proposed development located at 4653-4691 Mount Lindesay Highway, North Maclean QLD 4280. The site is located in Economic Development Queensland's (EDQ) Greater Flagstone Priority Development Area (PDA) and within the Logan City Council local government area.

This report deals with the engineering services component of the development and the engineering planning issues associated with the ROL application. The purpose of this report is to supply information relating specifically to the civil engineering opportunities and constraints of infrastructure services including:

- Earthworks;
- Stormwater management;
- Potable water service;
- Wastewater;
- Electrical and Communications; and
- Site vehicular access.

This report demonstrates that the proposed development can be adequately serviced with potable water, sewerage reticulation, stormwater drainage, electricity, telecommunications and vehicular access.

1.1 Revision 04

Revision 04 was prepared in response to Items 1 and 5 of the Further Issues letter received from EDQ on 20 September 2022. In response to these items updated bulk earthworks, roadworks and services plans were produced. Further changes were also made relating to stormwater and flooding.

1.2 Revision 05

In addition to the below report, it is important to note the reasons for some noticeable changes to the flood modelling results and the reasons behind how these changes have occurred.

The most significant changes have resulted from additional survey obtained to ground truth the LIDAR previously used, additional survey incorporating filling works to the allotments directly south of the subject site and the inclusion of culverts further south of the site traversing the Mt. Lindesay Highway (approx. location, Wearing Road). A comparison of the LIDAR to the surveyed levels demonstrates that the LIDAR is very accurate and provide a good representation for the previously modelled results. However, earthworks to the southern lots have had a noticeable change to the conveyance and direction of flow for what has previously been modelled. We refer EDQ to figure 1.0 (Flood depth for the 100AEP) to demonstrate the new resultant flow paths indicatively.

It can be clearly seen that Lot 3 (and lots south of Lot 3) impacts on the previously shown flow path through this area. This has the effect of both moving more water in a southerly direction but also directs flow through an existing narrow channel (orange arrows) which then reports to existing culverts constructed within Lot 3 which in turn, direct flow onto proposed Lot 1.

Now that these changes have been incorporated into our current flood model, we have been able to adjust the area required to convey water through the subject site.

In addition to the above, the Hydraulic Impact Assessment revealed that the previously proposed combined detention and bioretention basin proposed for the western catchment caused adverse flood impacts upstream and downstream of the proposed development.

As such, new modelling proposes that the western basin on proposed Lot 1 will no longer contain bioretention filter media, therefore increasing the storage capacity of the detention basin and providing addition flow width for conveyance of flows around the western boundary of the site. Stormwater quality treatment will instead be provided by incorporating a proprietary treatment system for water quality purposes within the future development footprint.

This has resulted in updates to the existing earthworks plan and the developable footprint of the site. These changes are supported by revised ESR, SMP and HIA reports. Copies of these documents are provided within our submission, most notably please refer to the amendments within Arcadis' Site Based Stormwater Management Plan (Report Ref. EAG003-30139050-AAR) and Hydraulic Impact Assessment (Report Ref. EAG002-30139050-AAR).



Figure 1.0 – Flood Depth 100AEP – Indicative new flows paths due to Lot 3 fill

1.3 Revision 06

The proposed layout has been amended to reflect the two proposed lots with an easement, road reserve and service road resumption. The ESR has been updated accordingly.

2 INTRODUCTION

Arcadis has been engaged by Maclean Estates Pty Ltd to prepare an engineering services report to provide supporting information for the Reconfiguration of Lot (ROL) application for the proposed development located at 4653-4691 Mount Lindesay Highway, North Maclean QLD 4280. Refer to Figure 2-1 below for site locality.

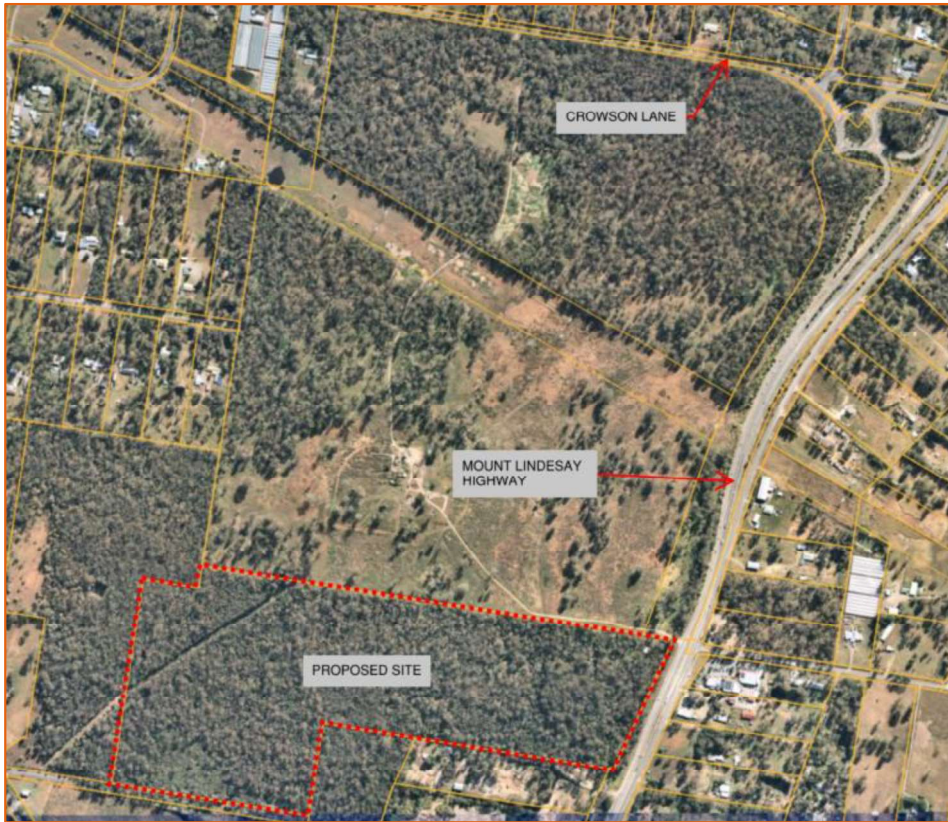


Figure 2-1 – Site Locality Plan

The site is located in the EDQ Greater Flagstone PDA. The subject site is located in a rural residential/industrial area.

The following report demonstrates the proposed development will be constructed and operated in accordance with the EDQ's Development Guidelines, Logan Planning Scheme (2015) (where required), the Queensland State Planning Policy (SPP), the Queensland Development Code, the Queensland Urban Drainage Manual (QUDM) and the Environmental Protection (Water) Policy (2009). Refer to Appendix A for the preliminary layout and engineering plans which have been produced to support this application.

3 SITE CHARACTERISTICS

3.1 Site Description

The subject site is located at 4653-4691 Mount Lindesay Highway, North MacLean QLD 4280 and is formally described as Lot 1 on RP113251. The site has a total area of approximately 36.38ha. The site is generally bounded by the following co-ordinates (GDA94 / MGA zone 56)

- North-West: 500713, 6928697
- South-East: 501553, 6928285

The proposed development involves the reconfiguration of the existing lot into two lots:

- Proposed Lot 1: 17.438ha with an 'Industry' land use;
- Proposed Lot 2: 16.592ha with an 'Environment and Conservation' use.

An additional 1.4015ha land strip along the eastern site boundary is to be dedicated to the Department of Transport and Main Roads (DTMR) / Council for the widening of Mount Lindsay Highway / extension of the service road. This has been referred to as the "Service Road Resumption".

A second 0.553ha land strip situated between Proposed Lot 1 and the Service Road Resumption is to be dedicated as road reserve.

Finally, a third 0.470ha land strip along the south-east of Proposed Lot 1 forms an easement.

The proposed lot reconfiguration is shown in Figure 3-1 below. We also provide an A3 version of the ROL Plan on Arcadis title block within Appendix A.

It is noted that the proposed developable area may change where integration with adjoining developments may facilitate mutual design benefits that might take into account flood conveyance and storage, for example. In addition to this, a revised detention basin location has been provided within Lot 1. This is discussed and detailed further in Arcadis' Site Based Stormwater Management Plan (Report Ref. EAG003-30139050-AAR dated January 2023) and Hydraulic Impact Assessment (Report Ref. EAG002-30139050-AAR dated January 2023).

Detailed Survey and Lidar have been included within Appendix B.

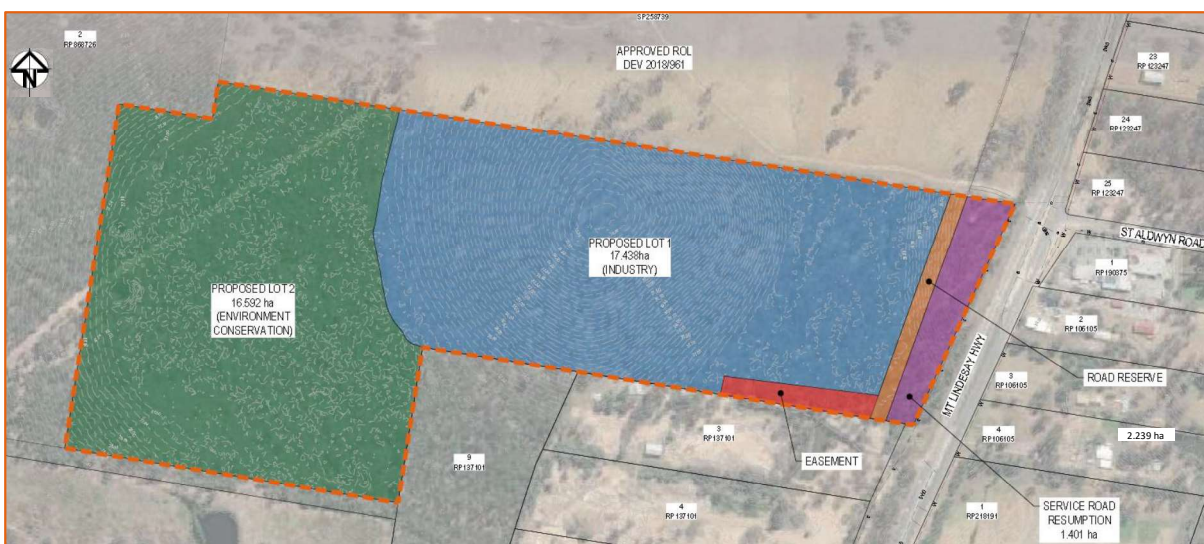


Figure 3-1 - Proposed ROL Plan

3.2 Existing Land Usage

The subject site is currently occupied by trees and grassed open areas and adjoins 4499-4651 Mount Lindesay Highway to the north which has an approved ROL decision (DEV 2018/961). The site currently has direct property frontage to Mount Lindesay Highway to the east and predominantly cleared land to the west. An operational works approval for earthworks has been obtained for the land to the south and is currently underway.

A MEDQ Approved context plan published 10 September 2021 includes the subject site. The site is approved for specific land use “*Industry and Business Zone*” with overlay for indicative future bio-diversity corridor. An existing High Voltage electrical easement has been identified running through the site into the existing rural residential dwelling to the north. It is understood that as part of the adjacent approval to the north, this electrical easement is set to undergo works and the electricity supply will be temporarily switched off. Figure 3- below shows the site locality plan in relation to the discussed items above.



Figure 3-2- Development Locality Plan (Source: NearMap, June 2022)

3.3 Neighbouring Approval (NM1)

As indicated in Figure 3-3 there the land parcel directly north of the proposed development has received EDQ ROL Approval (DEV 2018/961). The approved site is described as 4499-4651 Mount Lindesay Highway, North Maclean, with a real property description of Lot 39 on RP25373. From here on this adjacent development will be referred to as NM1. It is understood that this approval is for a PDA Development Permit for a reconfiguring a lot – 1 lot into 4 lots with associated roads and open space. As part of this approval Operational Works Approvals have been awarded, these works include:

- Construction of a new Service Road along the western side of the Mount Lindesay Highway, accessed via the existing Crowson Lane/Mount Lindesay Highway off ramp roundabout and the new development;
- Connection to existing potable water mains along Crowson Lane and Mount Lindesay Highway to provide new trunk watermains through the development and continuing south within the Service Road;
- Construction of new gravity reticulation sewer mains to service the development, connecting to the new Sub-Regional Pump Station proposed on the site;
- Proposed stormwater infrastructure including a bio-detention basin and a detention basin;
- Construction of internal roads and infrastructure; and

- Connection to existing underground electrical and telecommunication services along Crowson Lane and Mount Lindesay Highway to provide new electrical and telecommunication services to service the development.

Further details on the works associated with the adjacent approval can be found within the relevant Decision Notice attached within Appendix D.

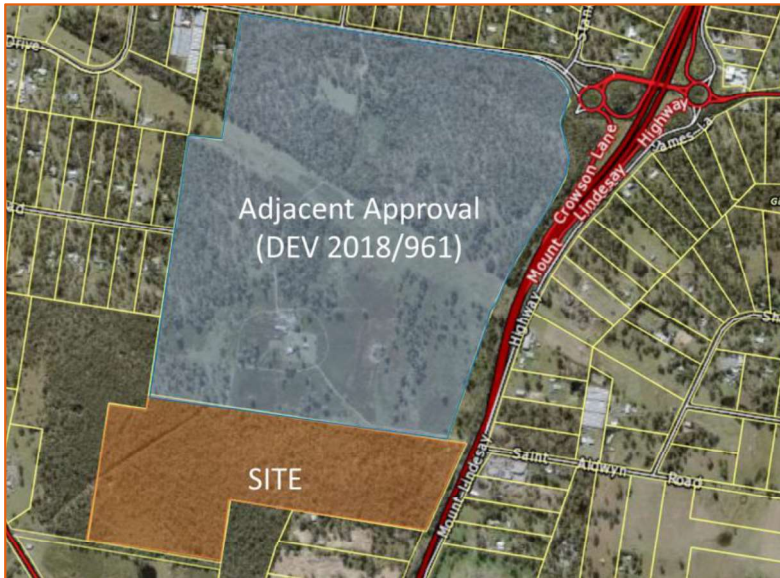


Figure 3-3 – Location of Neighbouring Approval

3.4 Existing Topography and Site Drainage

Based on the available LiDAR information (refer to Appendix B), the site generally grades radially from an existing highpoint located within the centre of the site (approximately RL36m) to the property boundaries. To the east side there is a grade of approximately 5.34% to RL26m where there is a large flat section of land (overland flow path). From here moving further east, the site grades back up to RL30m at the boundary, at approximately 3.77%. The topography follows a similar pattern from the highpoint to the western boundary. Initially there is a grade of approximately 4.28% to RL27m where there is another flat section of land (overland flow path). From here moving further west the site grades back up to maximum RL30m at the boundary, at approximately 2.7%. An extract of the existing contours can be seen in Figure 3-3 below.

The existing LiDAR data was also reviewed at a wider development area. This has identified a total of 4 external catchments which grade towards the site. This is discussed further in Arcadis' Site Based Stormwater Management Plan (Report Ref. EAG003-30139050-AAR) and Hydraulic Impact Assessment (Report Ref. EAG002-30139050-AAR).



Figure 3-4 - Existing Site Contours (LiDAR)

3.5 Flooding

The site is subject to flooding under existing conditions. Refer to Arcadis' Hydraulic Impact Assessment for further information (Report Ref. EAG002-30139050-AAR).

4 CIVIL PLANNING CONSIDERATIONS

4.1 EDQ DCOP – Trunk Infrastructure

As part of the planning for the Greater Flagstone PDA, EDQ have developed a Development Charges and Offset Plan (DCOP). This document sets out the required charges levied to Developers to contribute towards funding the delivery of required trunk infrastructure for the area. As part of the DCOP there are two main aspects which affect the proposed site:

- 2 lane ultimate trunk connector road (known as the Service Road in this report) running from the Mount Lindesay Highway off-ramp/roundabout at Crowson Lane to the south (future Willowbrook Road); and
- 300mm diameter potable watermain running within the above-mentioned Service Road to the south (future Willowbrook Road).

Further to this, the DCOP references new Sub-Regional Sewer Infrastructure which is also required to service the development. This consists of:

- Sewerage Pump Station located within the lot to the north; and
- Sewer rising main to convey flows from the abovementioned Pump Station, travelling within the Service Road, returning along the southern boundary of the adjacent site and across the existing electricity easement within the subject site to future Willowbrook Road.

It is understood that detailed design is currently underway for the Pump Station and rising main components. This includes progress in relation to any land resumptions required to facilitate the rising main and pump station construction and delivery.

A technical note has been prepared by Arcadis (attached within Appendix E) demonstrating how the proposed development site (NM2) and adjacent site to the north (NM1) are to be served via this new sewer infrastructure. Refer to the Technical Memo (Report Ref. 20221026 Technical Memo - NM2 sewer) for further information

Extracts from the DCOP are shown below in Figures 4-1 to 4-3 for reference.

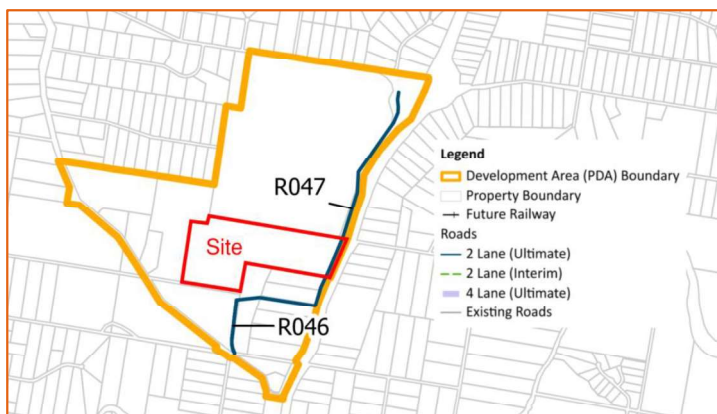


Figure 4-1 – Transport Trunk Infrastructure in DCOP

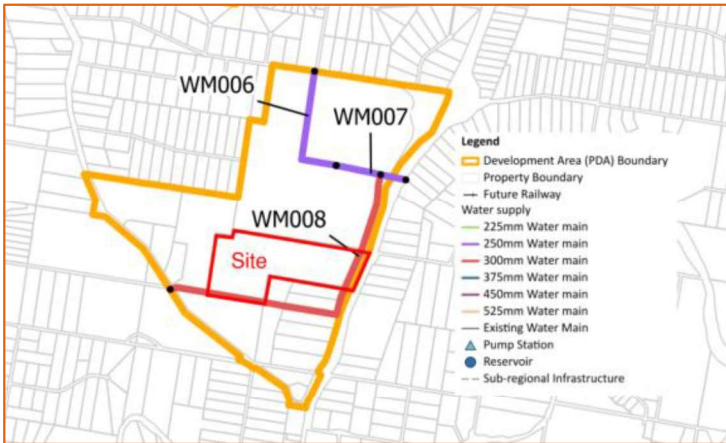


Figure 4-2 – Water Supply Trunk Infrastructure in DCOP

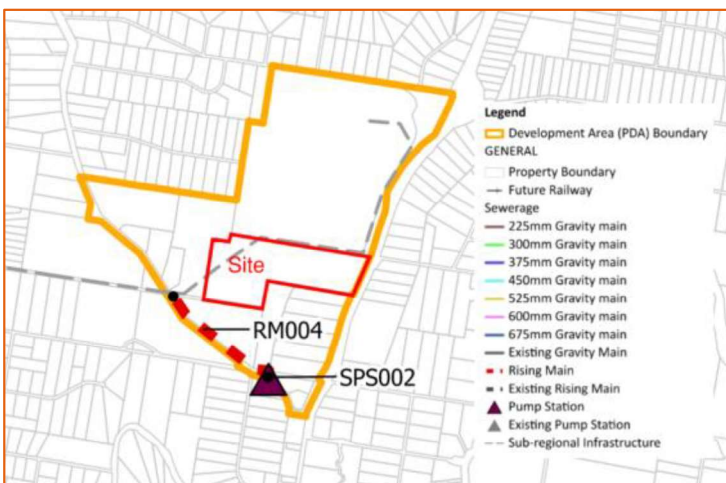


Figure 4-3 – Sewer Trunk Infrastructure in DCOP

As mentioned previously in this report, as the site to the north has already received ROL Approval it is anticipated that the Service Road and services (gravity sewer, potable water and electrical/telecommunications) may be in place when the subject site begins development. It is unclear whether the Service Road will be built to the northern boundary of the subject site, or stopped short as conditioned in the adjacent site approval. If this is the case, then as part of the subject development the Service Road and associated services will need to be extended through to the southern boundary (approximately 550m).

In the event that the development to the north has not constructed the Service Road then the subject site would be required to deliver the full extent of the Service Road and associated services from the Crowson Lane/Mount Lindesay Highway off ramp roundabout to the southern boundary (approximately 1,370m).

4.2 TMR Mount Lindesay Highway Upgrades

A review of TMR’s Development Assessment Mapping System was completed to identify any planned upgrades to the Mount Lindesay Highway. Although no official documents were available on this portal, it is understood that TMR are considering an initial duplication of Mount Lindesay Highway and following this an ultimate 6-laning of the highway adjacent to the site. Arcadis have been unable to obtain copies of planned alignments for both upgrades.

As mentioned previously in this report, a new Service Road is set to be provided along the western side of Mount Lindesay Highway within the State Controlled Road Corridor. It is understood that the interim and ultimate upgrades referred to above will not significantly affect the new Service Road alignment (eastern verge reprofiling only anticipated).

5 EXISTING & PROPOSED INFRASTRUCTURE SERVICES

To inform this section of the report Arcadis have conducted a Dial Before You Dig (DBYD) search to provide information on existing underground services in proximity to the development. Refer to Appendix C for search records.

5.1 STORMWATER DRAINAGE

5.1.1 Existing Stormwater Infrastructure

It appears that there is no existing stormwater quality or quantity infrastructure located on the site. There is some existing road drainage along Mount Lindesay Highway.

5.1.2 Proposed Stormwater Infrastructure

For information on the proposed stormwater infrastructure for the development please refer to the Arcadis' Site Based Stormwater Management Plan (Report Ref. EAG003-30139050-AAR).

5.2 WATER SUPPLY

5.2.1 Existing Water Supply

Logan Water operate the existing water infrastructure in the region. Based on the Logan Water Asset Location Data - GIS mapping, Figure 5-1 below shows the location of the site relative to the existing potable water network. The following infrastructure was identified:

- 200mm DIA watermain along the eastern verge of the Mount Lindsey Highway; and
- 200mm DIA mPVC main located along the northern verge of Crowson Lane.

Note: size and location of the existing assets is to be confirmed via detailed survey.

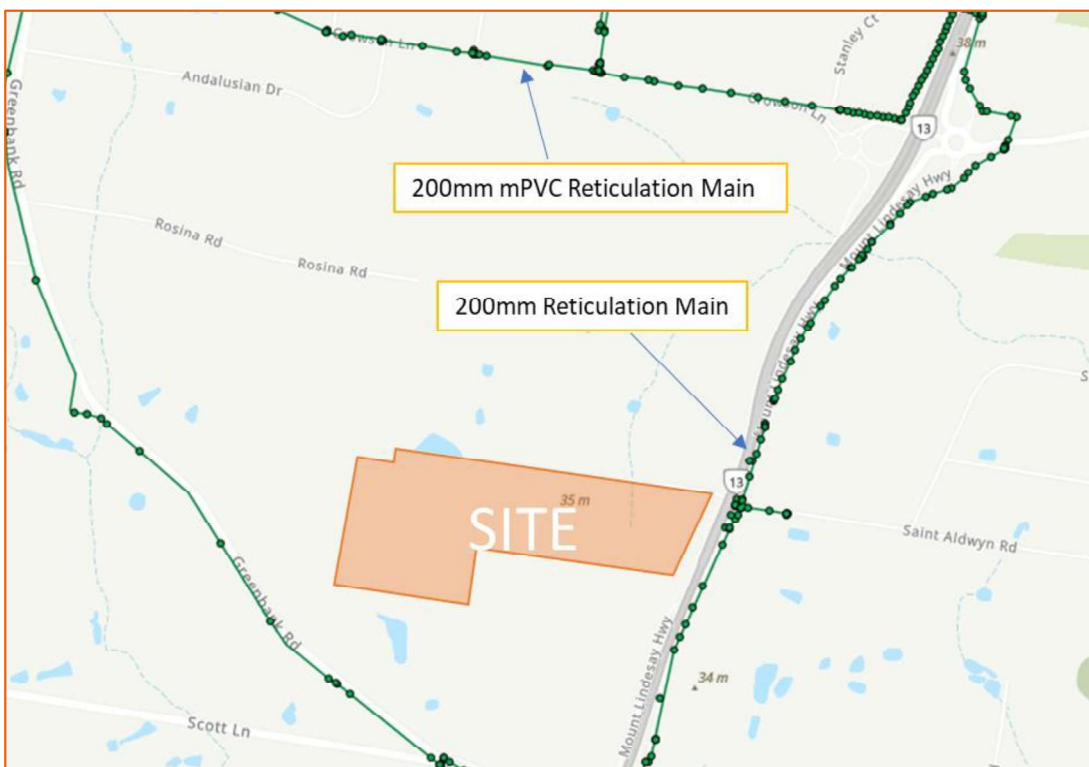


Figure 5-1 – Existing Potable Water Infrastructure

5.2.2 Proposed Water Supply Infrastructure

5.2.2.1 Proposed Water Supply Infrastructure

As described in Section 4.1, as part of the planned trunk infrastructure for the Greater Flagstone PDA a new 300mm diameter watermain is proposed within the new Service Road corridor.

On the basis that the Service Road and associated services has been constructed with the site to the north, it is proposed to extend the 300mm diameter watermain to the southern boundary of the proposed development as part of the continuation of the Service Road.

It is proposed that the new development will then connect directly to this trunk watermain (in accordance with SEQ Code requirements). A water network analysis completed by Logan water has confirmed the proposed 300mm main provided along the service road will have sufficient capacity to service both the proposed site and the adjacent site to the north.

Conversely, where referenced water supply infrastructure is not available then alternate connection will be investigated for supply to Lot 1 via the service road and connection with existing infrastructure in Mount Lindsey Highway. Importantly, such alternate water supply configuration will remain generally consistent with overall trunk water planning outcomes.

Figure 5-2 summarises the proposed connection options.

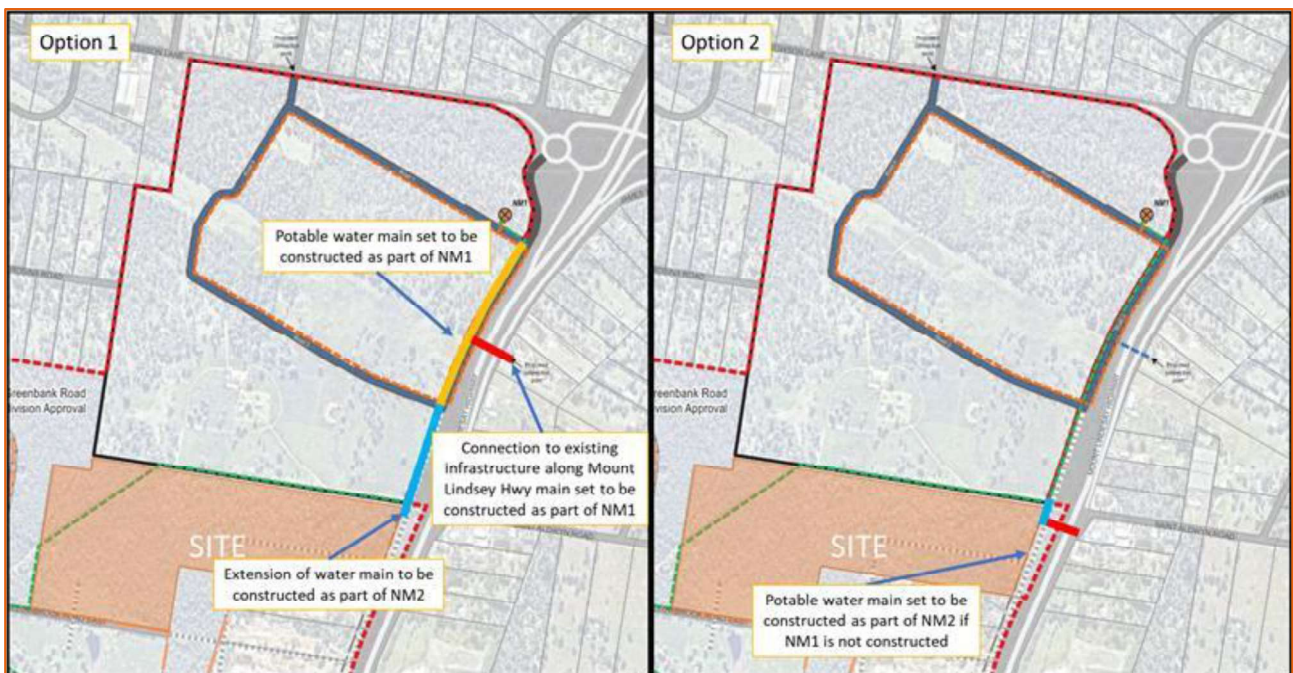


Figure 5-2 – Proposed Water Connection Options

Refer to Appendix A for preliminary engineering layouts.

5.2.2.2 Design Parameters

All potable water infrastructure should be designed in accordance with the SEQ Water Supply and Sewerage Design Construction code. Table 5-1 below summarises the desired service standards required by Logan Water for an industrial development located within their service area.

Table 5-1 Logan Water Desired Standard of Service for Water Supply

Service Pressure	
Minimum Operating Pressure	Min. 22 m at the property boundary
Maximum Operating Pressure	Max. 55m
Fire Fighting	
Commercial / Industrial Fire Flow Demand	30L/s for 4 hours
Background Demand Commercial/ Industrial	PH demand (single fire event only)
Pipeline	
Pipeline Capacity Requirements	Trunk system: MDMM in 24hrs
	Reticulation Mains: Maintain pressure for PH and fire flow performance
Maximum Velocity	2.5m/s

5.2.2.3 Potable Water Demand

In line with the DCOP provisions it is assumed that the 300mm dia trunk watermain has sufficient capacity to service the proposed development.

Table 5-2 below lists the estimated water supply demand generated by the proposed development (Lot 1 only). This has been calculated in accordance with the SEQ Water Supply and Sewer Design and Construction Code Design Criteria (2020) and the Logan City Council Planning Scheme.

Table 5-2 Potable Water Demand Estimate (Lot 1)

Total EP*	AD (230 L/EP/d) (L/d)	Estimated Non-Revenue Water (30 L/EP/d) (L/d)	MDMM (Peaking Factor 1.5) (L/d)	PD (Peaking Factor 2) (L/d)	PH (Peaking Factor 2.8) (L/hr)
	301	69,230	9,030	112,875	147,490

*EP calculated in accordance with Table SC3.1.3 of Logan City Council Planning Scheme, based on Average EP for Light/Heavy/General Industry Development Type = 17.22 EP/net dev area

5.3 SEWER

5.3.1 Existing Sewer Infrastructure

Logan Water operate the existing sewer infrastructure in the region. Based on the Logan Water Asset Location Data - GIS mapping, there is no existing sewer infrastructure within close vicinity to the site.

5.3.2 Proposed Sewerage Infrastructure

5.3.2.1 Sub-Regional Infrastructure Strategy

As outlined in Section 4, as part of the Sub-Regional Planning, a Wastewater Servicing Strategy has been prepared and endorsed by LCC and EDQ for the North Maclean catchment. As seen in Figure 5-3, a new Pump Station is proposed within the adjacent land parcel to the north (NM1). This Pump Station will receive flows from the development to the north and also the subject development.

From the Pump Station a sewerage rising main will convey flows south within the new Service Road towards the proposed development site. This main will be DN280. From the Service Road the rising main will return

and head west along the southern boundary of the adjacent development. From here the rising main will travel down the existing electrical easement within the subject site to future Willowbrook Road. From Willowbrook Road the rising main will travel further west and ultimately to the Sewerage Treatment Works at Greenbank (subject to detailed design).

The detailed design is underway for the Pump Station and rising main components of this infrastructure. This includes progress in relation to any land resumptions required to facilitate the rising main construction.

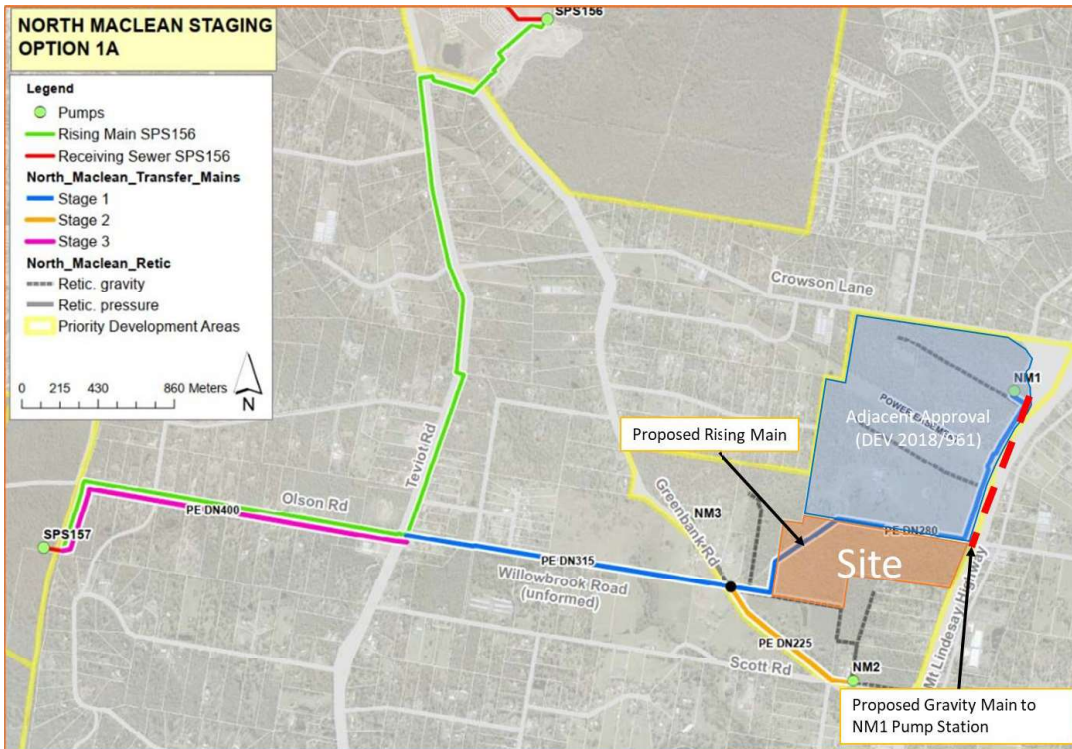


Figure 5-3 – Greater Flagstone PDA Wastewater Servicing Strategy

It should be noted that as part of the sewer rising main construction the existing electrical supply will need to be made redundant and removed. This will need to be coordinated with the relevant electrical supplier and other relevant stakeholders.

In addition to the above information, a recent tech note (attached within Appendix E) has been prepared for the site demonstrating how the proposed development site (NM2) and adjacent site to the north (NM1) are to be served by gravity reticulation mains. Refer to the Technical Memo prepared by Arcadis for further information (Report Ref. 20221026 Technical Memo - NM2 sewer servicing). In addition to the above, the tech note also discusses the following key items in further detail:

- Earthworks Finished Surface Levels for NM1, NM2, & SPS, and Mt Lindesay Hwy verge.
- Equivalent Person Loadings (EP's) for NM2
- Gravity pipe diameter and material

5.3.2.2 Proposed Sewer Infrastructure

To convey sewerage flows from the development to the Pump Station a new DN 150 gravity main will be required within the Service Road. Capacity assessments completed as part of the attached sewer technical note have confirmed the proposed DN 150 pipe has sufficient capacity to convey the sites sewer loading. It is understood that this will be included within the scope of works to be constructed by the development to the north. As mentioned previously in this report, at a minimum the subject development will be required to extend this gravity main along with the Service Road extension up to the point of connection. Figure 5-4 below shows the proposed arrangement with NM1 as detailed within the attached Technical note.

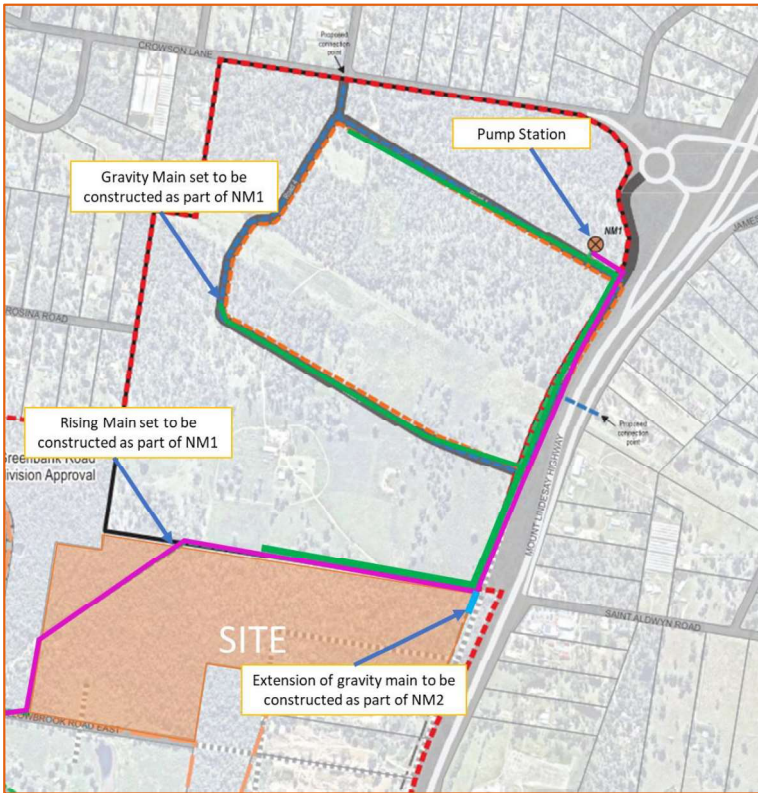


Figure 5-4 – NM2 proposed Sewer Strategy

It should be noted that in the situation where the pump station, rising main, and the downstream gravity main are not constructed and commissioned as part of the adjacent development to the north (NM1), the proposed development will have to construct this infrastructure.

Detailed engineering drawings showing the proposed Sewer extension and alignment have been included within Appendix A.

5.3.2.3 Design Parameters

All sewer infrastructure should be designed in accordance with the SEQ Water Supply and Sewerage Design Construction code.

5.3.2.4 Sewer Demand

Table 5-3, below, lists the estimated sewer demand generated by the proposed development (Lot 1 only), calculated in accordance with the SEQ Water Supply, Sewer Design and Construction Code Design Criteria (2020) and the Logan City Council Planning Scheme.

Table 5-3 Sewer Demand Estimate (Lot 1)

Total EP	ADWF 200L/EP/d (L/s)	PDWF (L/s)	PWWF (L/s)
660	1.53	3.63	7.64

*The EP loadings are based on direction from Logan City Council to adopt 37.8 Ep/ha. Refer to the Technical Memo prepared by Arcadis for further information (Report Ref. 20221026 Technical Memo - NM2 sewer servicing dated).

5.4 ELECTRICAL AND TELECOMMUNICATIONS SERVICES

5.4.1 Existing Electrical Services

Energex is the electrical service provider for the area. From a review of the asset records and Look Up and Live, it appears the subject site is currently not supplied with electricity. Figure 5-5 below shows the existing electrical infrastructure surrounding the subject site. The following infrastructure was identified:

- High voltage and low voltage overhead powerlines located along the eastern verge of the Mount Lindesay Highway;
- High voltage Infrastructure (275kV) north of the site, running through the adjacent lot; and
- High voltage power running through the north west corner of the development site, connecting with services along Greenbank Road, south west of the site.

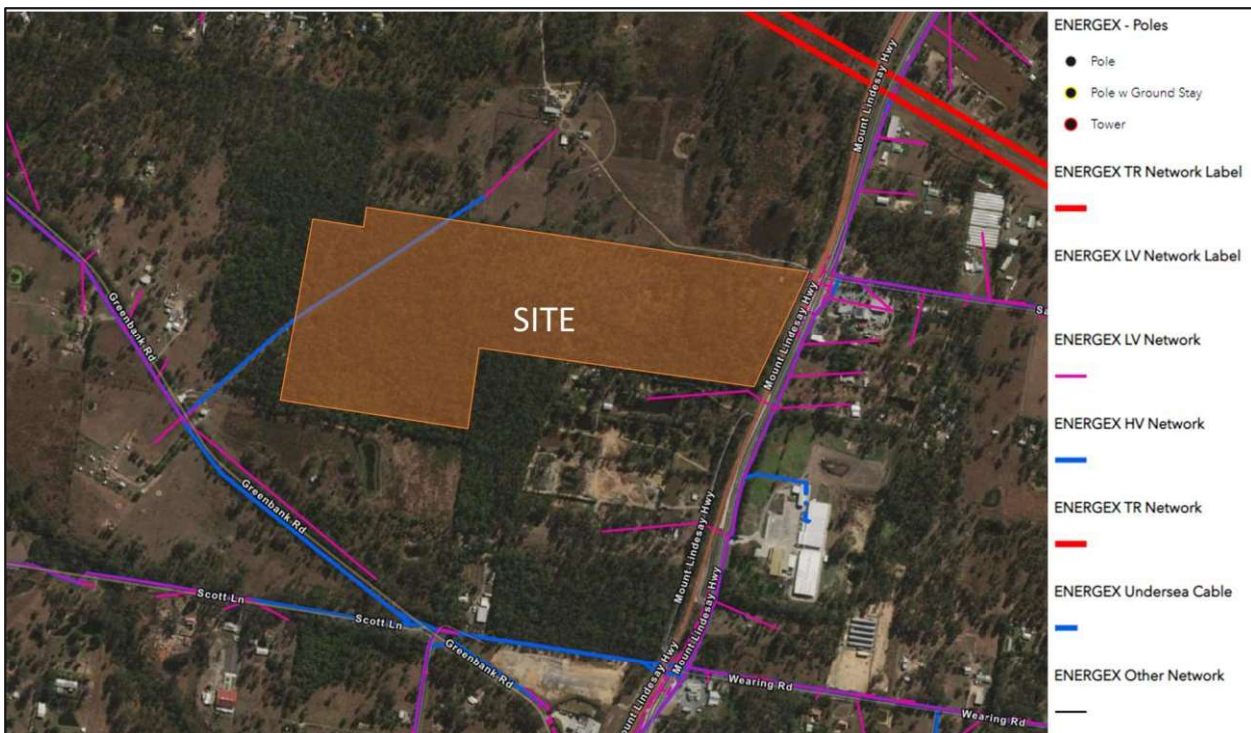


Figure 5-5 – Existing Electrical Infrastructure (Look Up and Live, June 2022)

5.4.2 Proposed Electrical Services

As part of the Service Road construction to the east of the site, electrical infrastructure will be installed within the corridor. It is understood that this will connect to the existing electrical supply within Crowson Lane however it is recommended that an electrical engineer be engaged to review available network capacity and coordinate with Energex regarding a new connection and connection location.

5.4.3 Existing Telecommunications Services

The DBYD search found both NBN and Optus service cables within the eastern verge of the Mount Lindesay Highway. Existing Telstra services are also available along the Mount Lindesay Highway frontage of the site. Currently there is no connection to this existing infrastructure.

5.4.4 Proposed Telecommunications Services

Depending on the development's telecommunication requirements, the site could connect to the existing telecommunication services along the Mount Lindesay Highway. Any future connections to telecommunication

infrastructure will need to be designed by a specialist telecommunications consultant in accordance with EDQ, Council and Asset Owner requirements.

5.5 GAS

5.5.1 Existing Gas Services

Based on the DBYD search it is understood that there is no existing gas infrastructure within close vicinity to the site.

5.5.2 Proposed Gas Services

It is understood that the site will not require gas infrastructure. Should this be required it is recommended to engage a Gas consultant to facilitate a new connection and required infrastructure to introduce this service to the area.

6 EARTHWORKS

6.1 Internal

Bulk earthworks are proposed to be undertaken across the site to create suitable finished surface levels for the proposed development. Adjacent to the site boundaries, retaining walls have been incorporated to create a pad. The western portion of the pad is proposed to fall southwest towards the proposed detention basin with the eastern portion grading southeast. Refer to Appendix A for the preliminary engineering plans and the Stormwater Management Plan (Report Ref. EAG003-30139050-AAR) for details on site drainage.

Preliminary earthworks volumes to be completed within the future site boundary are as follows (not including bulking):

Cut = -175,477 m³

Fill = 226,728 m³

Balance = 51,248 m³ (import)

The above quantities have been calculated from the existing surface to the design Finished Surface Level. The fill material will be processed cut material from bulk earthworks operations. It is proposed that the excess material will either be exported off site or used for fill operations for other development sites in the local area (where possible).

6.2 External

Due to the existing flooding conditions, and to ensure there are no impacts created by the development (upstream or downstream), any required flood plain storage has been included within the Lot 1 footprint. There is also an open channel to convey flows from the southern storage to the north, resulting in bulk earthworks outside of the property boundary. Refer to Appendix A for the preliminary engineering plans and the Stormwater Management Plan (Report Ref. EAG003-30139050-AAR) for details on site drainage.

Preliminary earthworks volumes proposed outside of the future site boundary are as follows (not including bulking):

Cut = -24,761 m³

Fill = 1,097 m³

Balance = -23,665 m³ (export)

Figure 6-1 below shows the full extent of the proposed earthworks proposed

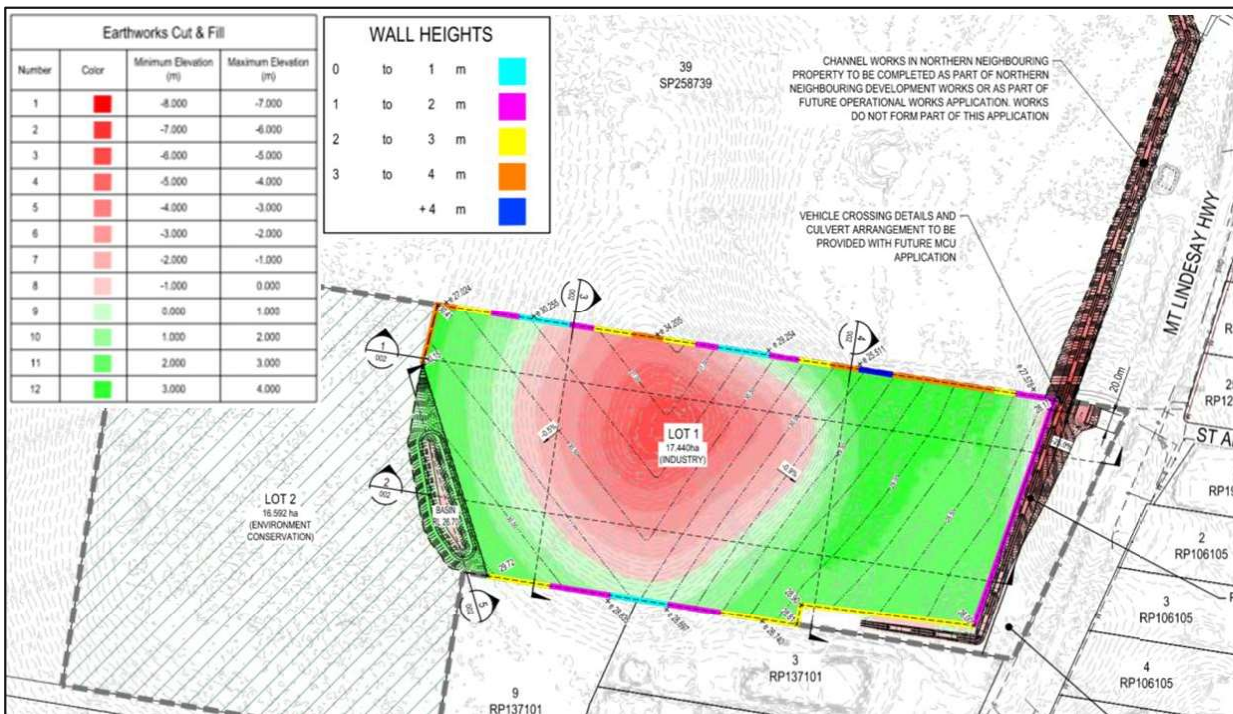


Figure 6-1 – Preliminary Earthworks Plan

The current topsoil depth on site is unknown. Geotechnical investigations will be required to determine this depth and whether this is required to be exported offsite or can be reused in the development.

It is noted that the site is located within Fire Ant Biosecurity Zone 2, meaning any material moved offsite is required to follow the procedures outlined in the Biosecurity Regulation 2016 prior to commencement of operations.

7 ACCESS AND ROADWORKS

7.1 Mount Lindsay Highway – Service Road

As outlined in Section 4.1, a new Service Road will be constructed along the western side of the Mount Lindsay Highway. The proposed service road will gain access to the external road network via a fourth leg at the existing Crowson Lane/Mount Lindsay Highway off ramp roundabout. Figure 7-1 shows the extent of Service Road understood as planned to be delivered with the development to the north.

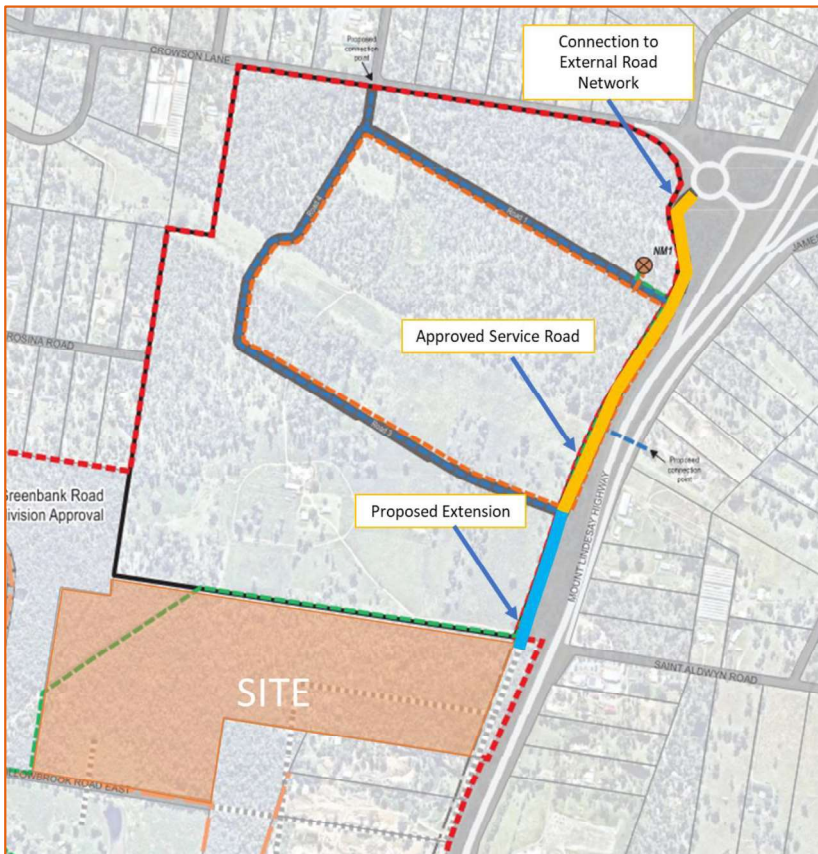


Figure 7-1 – Proposed Road Extension

As part of the proposed development, this Service Road is required to be extended into the subject site to facilitate vehicle access. Figure 7-1 shows the indicative extent of this proposed extension. The cross section for this proposed Service Road is currently being resolved between EDQ, LCC & TMR as it is understood that the road will ultimately become a LCC asset. An indicative road cross section can be seen in Figure 7-2 with a detailed drawing attached in Appendix A.

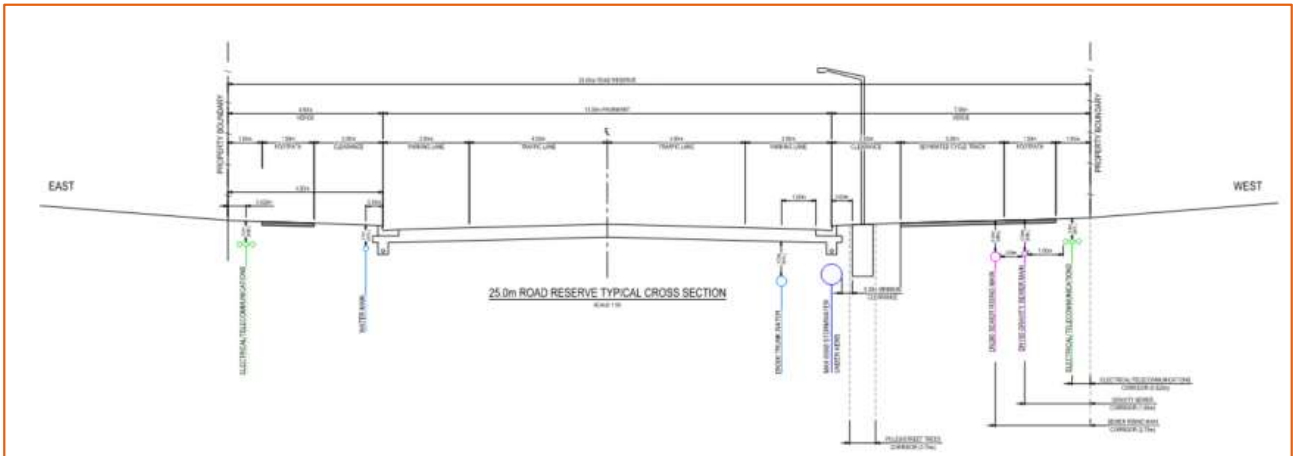


Figure 7-2 – Indicative Service Road Cross Section

7.2 Internal Access

As mentioned in Section 6, due to the existing flooding conditions, and to ensure there are no impacts created by the development (upstream or downstream), flood plain storage has been incorporated within the Lot 1 footprint. This includes an open channel to convey flows from the southern storage to the north.

It is planned that vehicle access is provided from the eastern side of the site to the western side, via culvert crossings. It is anticipated that there will be two crossings (one each way) however this will be confirmed during detailed design and as part of a future MCU Application. For more detail on the proposed service road and flooding refer to the technical note (30139050-GGC-01 - Flood Technical note (002)) prepared by Arcadis dated January 2022.

No internal road connections have been proposed within Lot 1 at this stage. Refer to Appendix A for the preliminary layout plan and engineering drawings.

8 CONCLUSION

This report has discussed the engineering services component of the 4653-4691 Mount Lindesay Highway, North Maclean development and the engineering planning issues associated with the Reconfiguration of Lot (ROL) application. The proposed development is in the Greater Flagstone Priority Development Area and is located within the Logan City Council local government area.

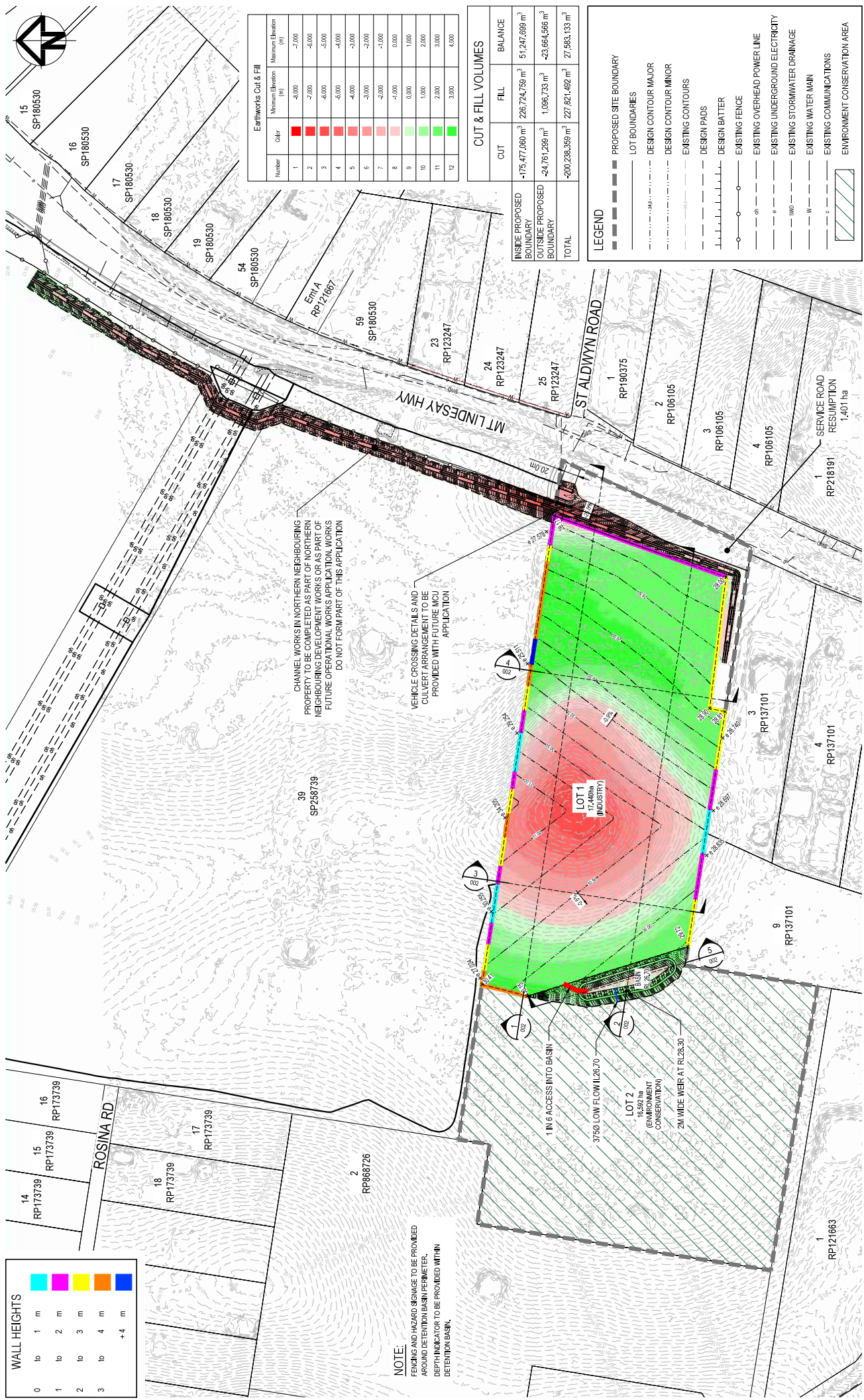
It has been demonstrated that the proposed site can be adequately provided with the following engineering services: water supply, sewerage reticulation, stormwater drainage, electricity and telecommunications.

APPENDIX A

PRELIMINARY LAYOUT & ENGINEERING PLANS

WALL HEIGHTS

0	to	1	m
1	to	2	m
2	to	3	m
3	to	4	m
			+4 m



Earthworks Cut & Fill

Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-6.000	-2.000
2	Red	-7.000	-6.000
3	Red	-6.000	-5.000
4	Red	-6.000	-4.000
5	Red	-4.000	-3.000
6	Red	-3.000	-2.000
7	Red	-2.000	-1.000
8	Red	0.000	1.000
9	Green	1.000	2.000
10	Green	2.000	3.000
11	Green	3.000	4.000
12	Green	4.000	5.000

CUT & FILL VOLUMES

	CUT	FILL	BALANCE
INSIDE PROPOSED BOUNDARY	-175,477.000 m ³	226,724,750 m ³	51,247,690 m ³
OUTSIDE PROPOSED BOUNDARY	-24,761,299 m ³	1,096,733 m ³	-23,664,566 m ³
TOTAL	-200,238,299 m ³	227,821,482 m ³	27,583,183 m ³

LEGEND

- PROPOSED SITE BOUNDARY
- LOT BOUNDARIES
- DESIGN CONTOUR MAJOR
- DESIGN CONTOUR MINOR
- EXISTING CONTOURS
- DESIGN PADS
- DESIGN BATTER
- EXISTING FENCE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND ELECTRICITY
- EXISTING STORMWATER DRAINAGE
- EXISTING WATER MAIN
- EXISTING COMMUNICATIONS
- ENVIRONMENT CONSERVATION AREA

CHANNEL WORKS IN NORTHERN NEIGHBOURING PROPERTY TO BE COMPLETED AS PART OF NORTHERN NEIGHBOURING DEVELOPMENT WORKS OR AS PART OF FUTURE OPERATIONAL WORKS APPLICATION. WORKS DO NOT FORM PART OF THIS APPLICATION.

VEHICLE CROSSING DETAILS AND CULVERT ARRANGEMENT TO BE PROVIDED WITH FUTURE MCU APPLICATION.

MACLEAN ESTATES PTY LTD

WOLTER consulting group

ARCADIS

ARCADIS Australia Pacific Pty Limited
 2500 Pacific Highway
 SYDNEY NSW 2000
 ABN 76 104 485 289
 www.arcadis.com.au

Project: 4653-4691 MOUNT LINDESAY HIGHWAY, NORTH MACLEAN

Client: MACLEAN ESTATES PTY LTD

Scale: 1:2500

Drawn: J.GRIEBLER
 Checked: J.GRIEBLER
 Project Manager: G.ELLIS
 Verified: G.ELLIS

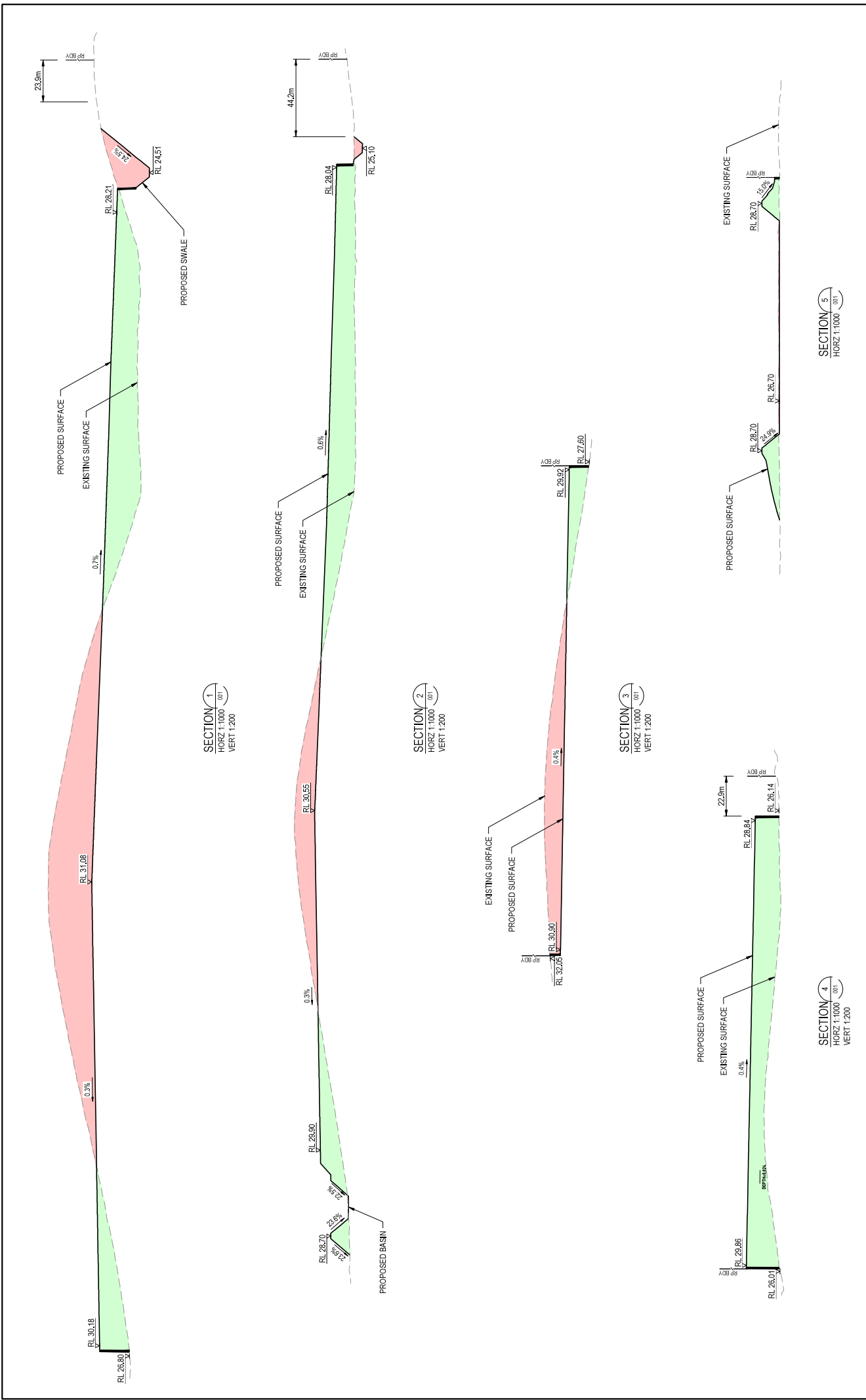
Original Issue Signatures: J.GRIEBLER
 Original Size: A1
 Original Date: AHD

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NOT TO BE USED FOR CONSTRUCTION

DATE: 18 Mar 2024

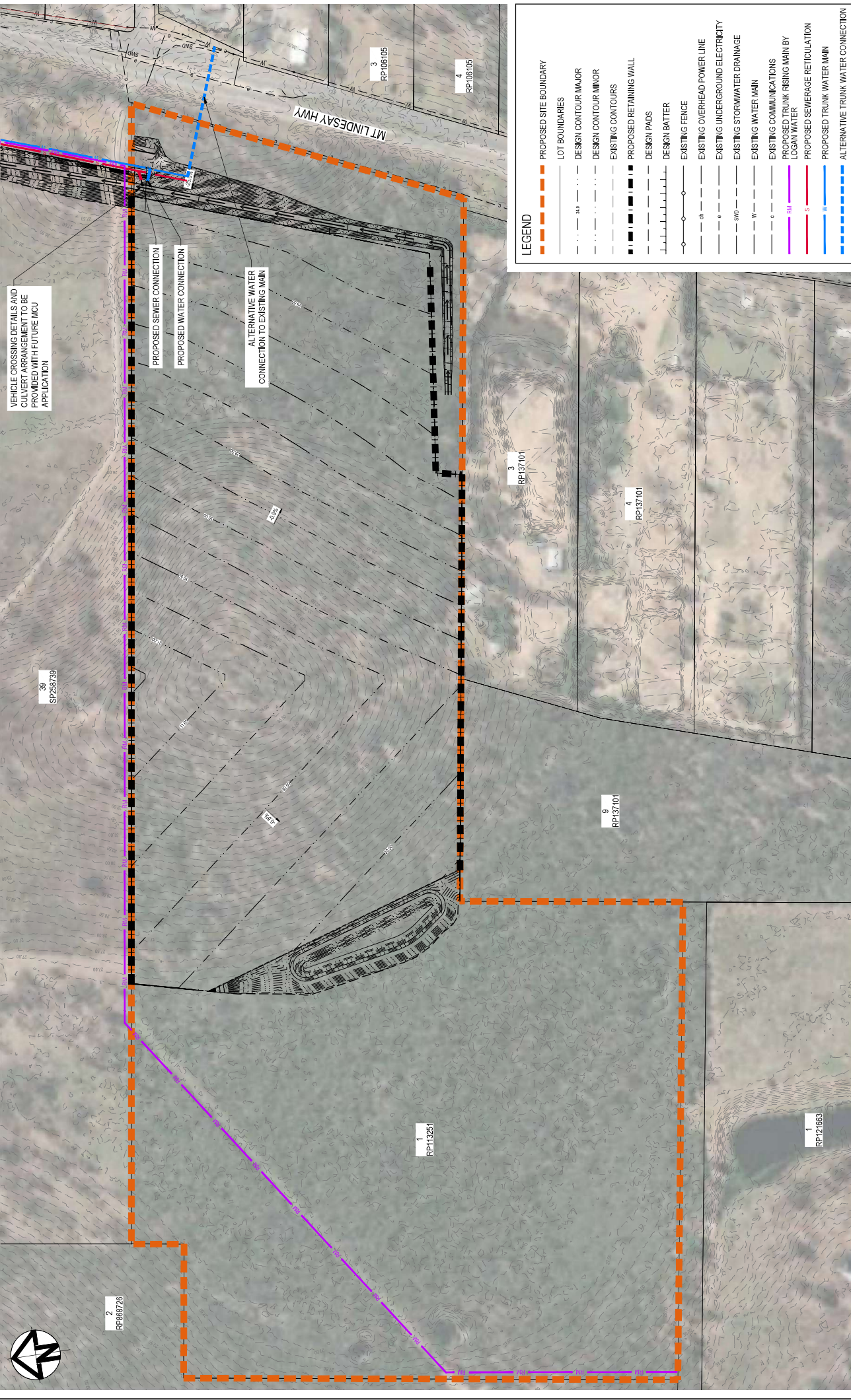
Project No: 30139050 - AAP - W6500P - CV - SKT - 001 - 06



Issue	Description	DR	CH	VE	Date
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03	DESIGN UPDATES	JG	OE	OE	21.12.22
02	DESIGN UPDATES	JG	OE	OE	09.11.22
01	ORIGINAL ISSUE	JG	PC	OE	26.02.22

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Surveyor	 WOLTER consulting group <small>Planning • Urban Design • Landscape • Environment • Engineering</small>																		
Client	MACLEAN ESTATES PTY LTD																		
Status	CONCEPT DESIGN ONLY NOT TO BE USED FOR CONSTRUCTION																		
© Copyright reserved																			
Original Issue Signatures	<table border="1"> <tr> <td>Drawn</td> <td>J. JARIBELER</td> <td>Original Size</td> <td>A1</td> </tr> <tr> <td>Designed</td> <td>J. JARIBELER</td> <td>Printed</td> <td>AHD</td> </tr> <tr> <td>Project Manager</td> <td>G. ELLIS</td> <td>Grid</td> <td></td> </tr> <tr> <td>Verified</td> <td>G. ELLIS</td> <td>Grid</td> <td></td> </tr> </table>			Drawn	J. JARIBELER	Original Size	A1	Designed	J. JARIBELER	Printed	AHD	Project Manager	G. ELLIS	Grid		Verified	G. ELLIS	Grid	
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Verified	G. ELLIS	Grid																	
Project	4653-4691 MOUNT LINDSEY HIGHWAY, NORTH MACLEAN																		
File	BULK EARTHWORKS SECTIONS																		

 Arcadis Australia Pacific Pty Limited 57/59 St James Street SYDNEY NSW 2008 Tel No: +61 2 8977 9000 www.arcadis.com.au		Project No: 30139050 - AAP - WS000P - CY - SKT - 002 - 04 Drawing No: 30139050-002-04 Drawing Title: Bulk Earthworks Sections
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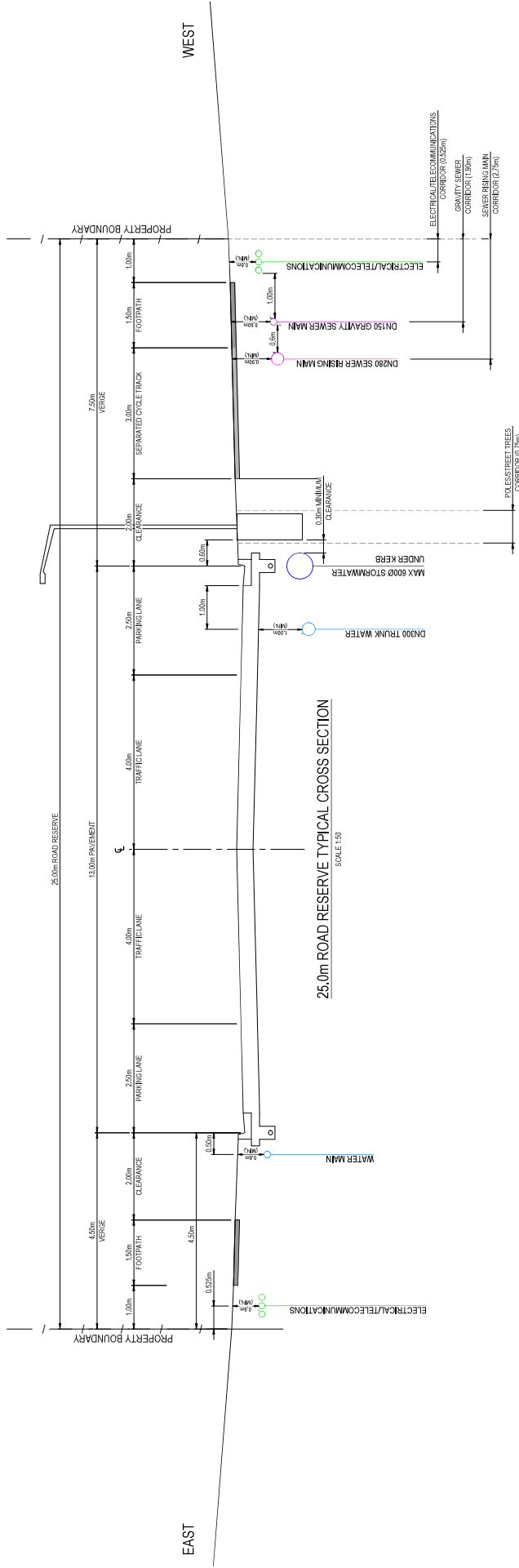
VEHICLE CROSSING DETAILS AND
CULVERT ARRANGEMENT TO BE
PROVIDED WITH FUTURE MCU
APPLICATION

PROPOSED SEWER CONNECTION
PROPOSED WATER CONNECTION

ALTERNATIVE WATER
CONNECTION TO EXISTING MAIN

LEGEND	
	PROPOSED SITE BOUNDARY
	LOT BOUNDARIES
	DESIGN CONTOUR MAJOR
	DESIGN CONTOUR MINOR
	EXISTING CONTOURS
	PROPOSED RETAINING WALL
	DESIGN PADS
	DESIGN BATTER
	EXISTING FENCE
	EXISTING OVERHEAD POWER LINE
	EXISTING UNDERGROUND ELECTRICITY
	EXISTING STORMWATER DRAINAGE
	EXISTING WATER MAIN
	EXISTING COMMUNICATIONS
	PROPOSED TRUNK RISING MAIN BY LOGAN WATER
	PROPOSED SEWERAGE RETICULATION
	PROPOSED TRUNK WATER MAIN
	ALTERNATIVE TRUNK WATER CONNECTION

<p>ARCADIS Arcadis Australasia Pacific Pty Limited Sydney NSW 2000 Tel No: +61 2 8977 9000 www.arcadis.com.au</p>		<p>Project 4653-4691 MOUNT LINDESAY HIGHWAY, NORTH MACLEAN</p>		<p>Services 30139050 - AAP - WSO00P - CV - SKT - 003 - 05</p>	
<p>Shells CONCEPT DESIGN ONLY NOT TO BE USED FOR CONSTRUCTION</p>		<p>Client MACLEAN ESTATES PTY LTD</p>		<p>Survivor </p>	
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<p>Description</p>					
<p>DR CH VE</p>					
<p>Date</p>					
<p>16/07/22</p>					



25.0m ROAD RESERVE TYPICAL CROSS SECTION
SCALE 1:50

<p>ARCADIS Arcadis Australia Pacific Pty Limited Level 10, 100 Spring Street SYDNEY NSW 2000 Tel No: +61 2 8977 9000 www.arcadis.com.au</p>		<p>Project 4499-4651 MOUNT LINDSAY HIGHWAY, NORTH MACLEAN</p>																															
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Verified	G. ELLIS	RP.P.C. No.	17942																														
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<p>Surveyor</p>		<p>Architect</p>																															
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02	UTILITIES UPDATED	JG	EP	GE	12/08/22																												
01	ORIGINAL ISSUE	JG	EP	GE	26/07/22																												

APPENDIX B

EXISTING LIDAR



LEGEND	
	PROPOSED SITE BOUNDARY
	LOT BOUNDARIES
	EXISTING CONTOURS
	EXISTING FENCE
	EXISTING OVERHEAD POWER LINE
	EXISTING UNDERGROUND ELECTRICITY
	EXISTING STORMWATER DRAINAGE
	EXISTING WATER MAIN
	EXISTING COMMUNICATIONS

<p>ARCADIS Arcadis Australia Pacific Pty Limited 100 Spring Street SYDNEY NSW 2000 Tel No: +61 2 807 9000 www.arcadis.com.au</p>		<p>Project 4653-4691 MOUNT LINDSEY HIGHWAY, NORTH MACLEAN</p>		<p>File EXISTING SURVEY SKETCH PLAN</p>	
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<p>Project Manager E. PECK</p>		<p>Verified G. ELLIS</p>		<p>Date 18 Jan 2023 - 14:07:07</p>	
<p>Client MACLEAN ESTATES PTY LTD</p>		<p>Surveyor WOLTER consulting group</p>		<p>Architect</p>	
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<p>Issue Description</p>		<p>Issue Description</p>		<p>Date</p>	

APPENDIX C

DBYD SEARCH RESULTS

All underground cables shall be treated as being energised. Where a cable is located that is not represented on the ENERGEX DBYD map, then ENERGEX shall be contacted immediately.

For Emergency Situations please call 13 19 62



DBYD

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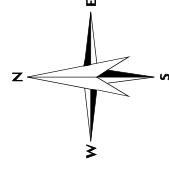
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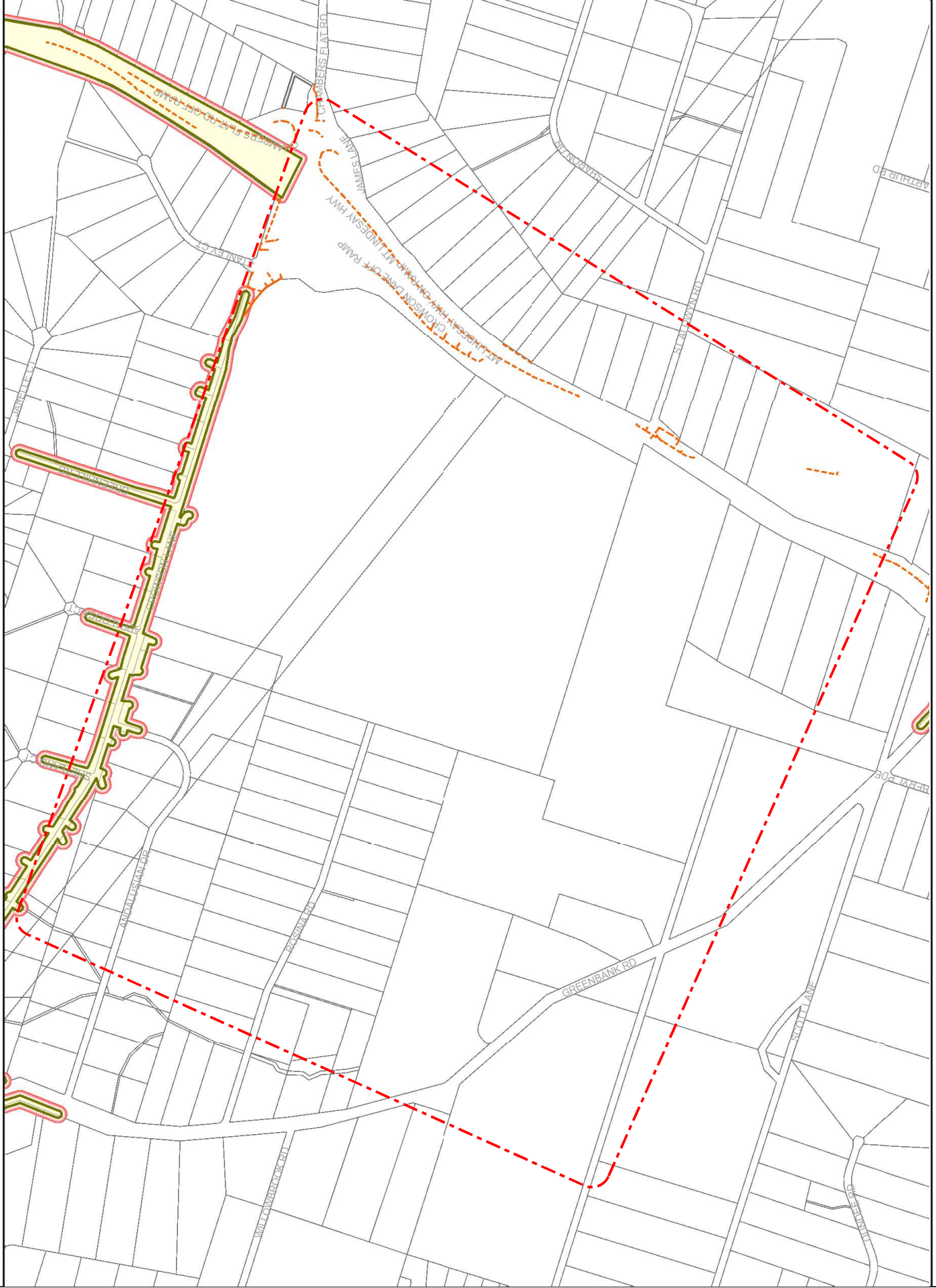
OVERVIEW

For a full list of Map Symbols, please refer to the supplied DBYD Symbology Legend page

AS5488 Category "D" Plan



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This output provides details of the ENERGEX electrical network. As variations may exist no responsibility is incurred by ENERGEX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed on site.

Dial Before You Dig (DBYD)

Asset Location Response



PO Box 3226 Logan City DC QLD 4114 • 150 Wembley Road, Logan Central
p (07) 3412 3412 • e council@logan.qld.gov.au • www.logan.qld.gov.au • ABN 21-627-796 435



Arcadis - Nicholas Djelovic
Level 4,260 Queen Street
Brisbane City QLD 4000
nicholas.djelovic@arcadis.com

Logan City Council has been advised that you have placed an enquiry through the Dial Before You Dig service. Our records indicate the enquiry with the following details are affecting Logan City Council asset(s).

Enquiry Details	
Sequence Number	213415298
Enquiry Date	08/07/2022 09:22
Response	AFFECTED
Address	4653-4691 Mount Lindesay Highway North Maclean
Location in Road	Road,Nature Strip,Footpath
Activity	Manual Excavation

Please review plans attached and contact Logan City Council prior to commencing works:

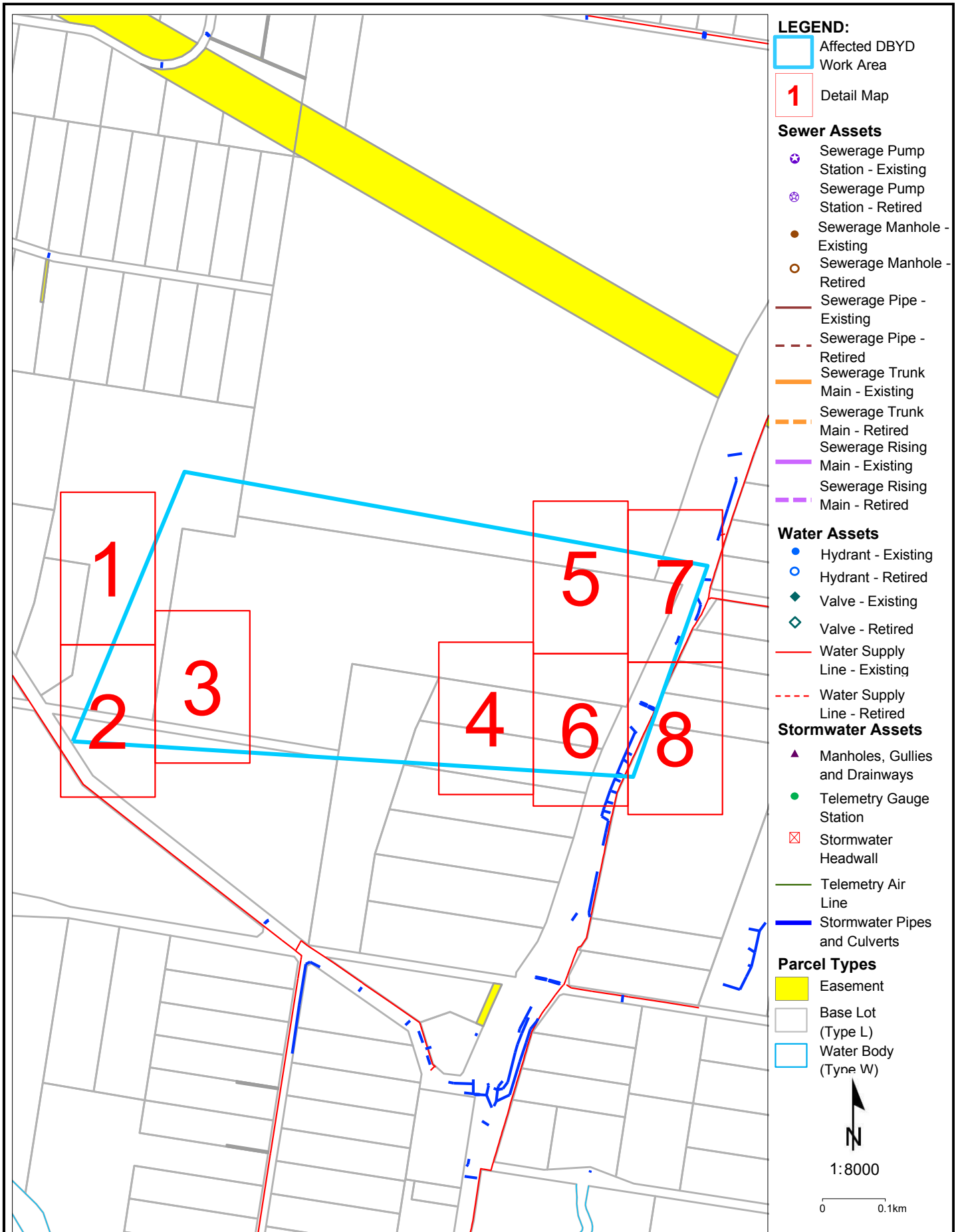
Logan City Council now provides a limited amount of As-Constructed and Drainage Plans on-line, click on the [Logan City As-Constructed Plans](#) link and type in the property address you are seeking. Unfortunately, not all properties will have plan records accessible on-line. The following options are available to customers should a record not be available:

- For **As Constructed Private Sewer/Roofwater (Inside Properties)**
Contact *Development Assessment, Building & Plumbing*
p: (07) 3412 5269
Alternatively visit our Website *Link to the relevant PS1 or PS2 forms:*
[Logan City As-Constructed Plans](#)
- For **As Constructed Private Sewer/Water/Stormwater (Outside Properties)**
Contact *Road Infrastructure Planning*
p: (07) 3412 5282
Alternatively visit our Website *Link for PS3 forms:*
[Logan City As-Constructed Plans](#)

If you need more assistance please call us on 07 3412 3412 or email us at council@logan.qld.gov.au.

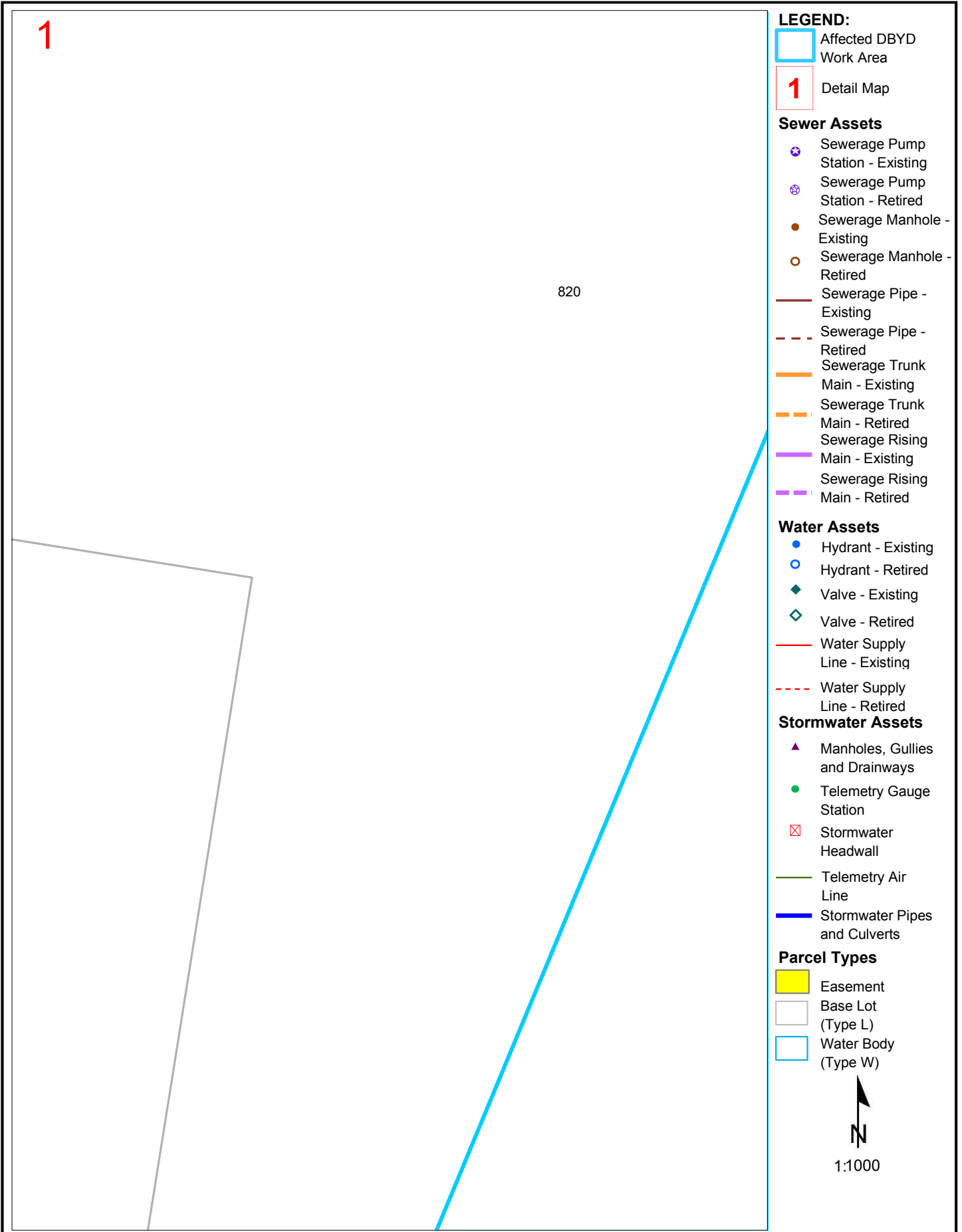
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Logan City Council's infrastructure dates back over many years and may include manufactured materials containing asbestos. You are solely responsible for ensuring that appropriate care is taken at all times and that you comply with all mandatory requirements relating to such matters, including but not limited to "workplace health and safety".





Disclaimer: The plans are indicative only and while all reasonable care has been taken in producing this information, Logan City Council does not warrant the accuracy, completeness or currency of this information and accepts no responsibility for, or in connection with any loss or damage suffered as a result of any inaccuracies, errors or omissions or your reliance on this information. Base material reproduced with permission of the Director-General, Department of Natural Resources and Mines. The State of Queensland (Department of Natural Resources and Mines).

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






LEGEND:







 Affected DBYD Work Area

 Detail Map






Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired




Water Assets

-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

Parcel Types

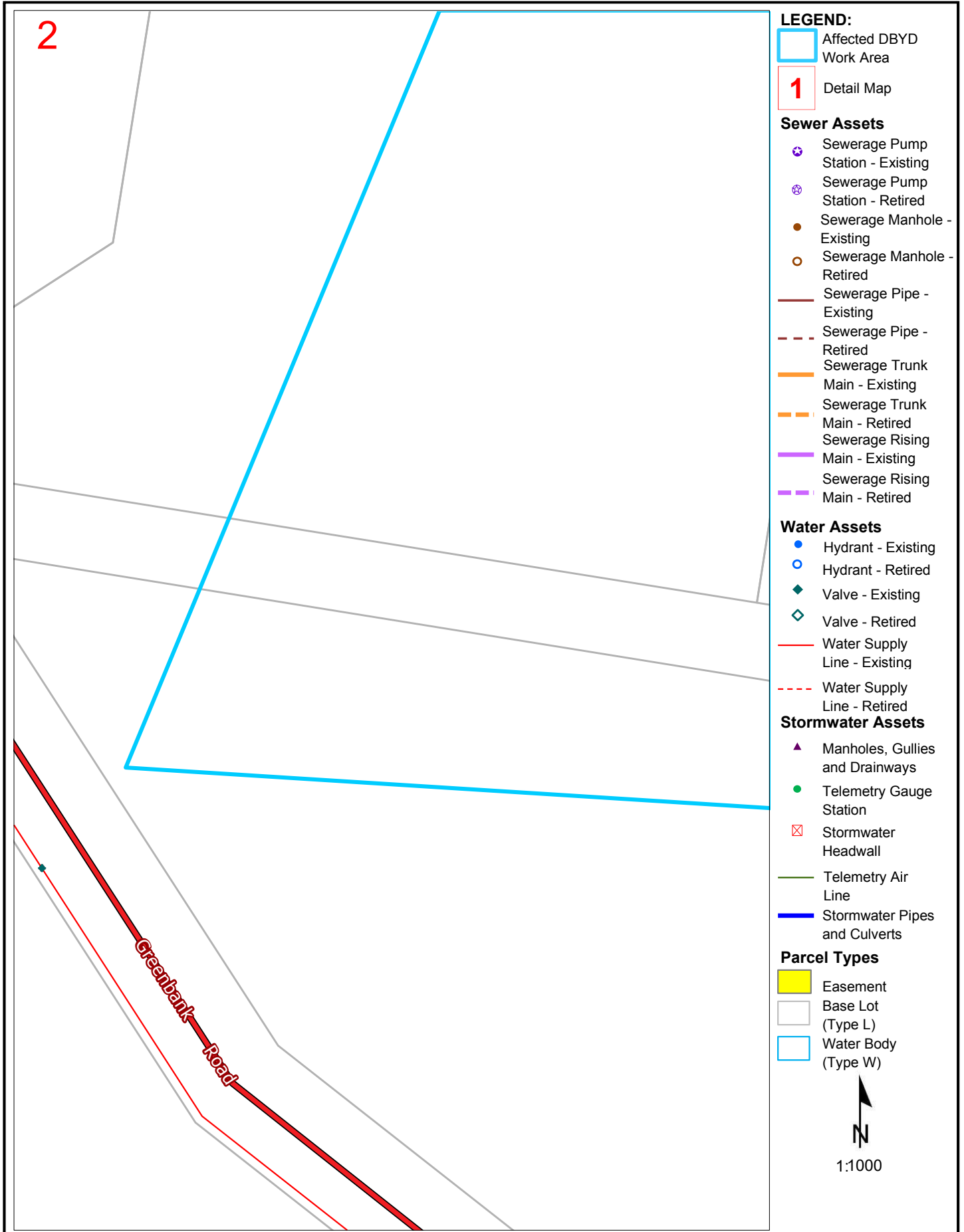
-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)



1:1000

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LEGEND:

Affected DBYD Work Area

Detail Map

Sewer Assets

- Sewerage Pump Station - Existing
- Sewerage Pump Station - Retired
- Sewerage Manhole - Existing
- Sewerage Manhole - Retired
- Sewerage Pipe - Existing
- Sewerage Pipe - Retired
- Sewerage Trunk Main - Existing
- Sewerage Trunk Main - Retired
- Sewerage Rising Main - Existing
- Sewerage Rising Main - Retired

Water Assets

- Hydrant - Existing
- Hydrant - Retired
- Valve - Existing
- Valve - Retired
- Water Supply Line - Existing
- Water Supply Line - Retired

Stormwater Assets

- Manholes, Gullies and Drainways
- Telemetry Gauge Station
- Stormwater Headwall
- Telemetry Air Line
- Stormwater Pipes and Culverts

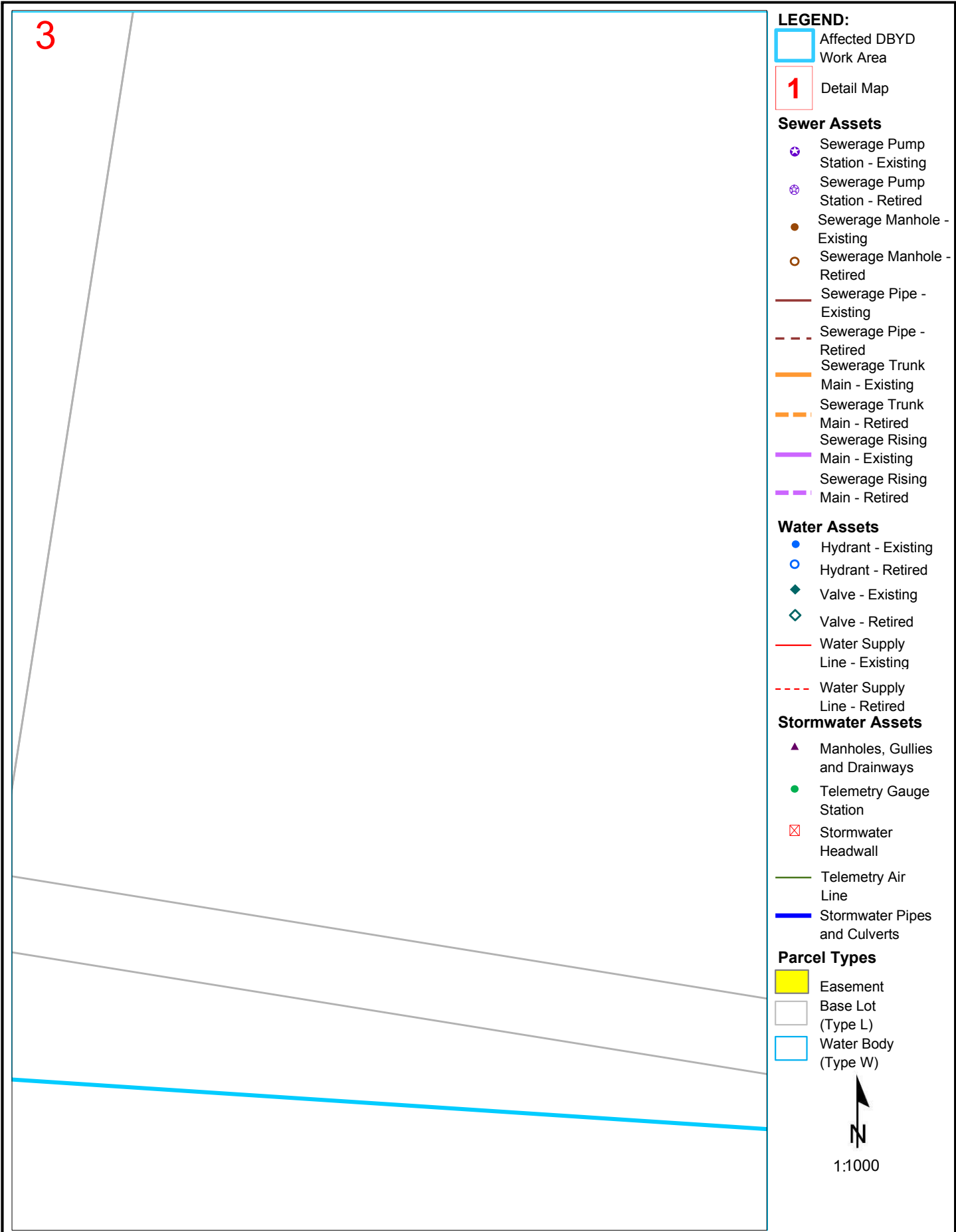
Parcel Types

- Easement
- Base Lot (Type L)
- Water Body (Type W)




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LEGEND:







 Affected DBYD Work Area

 Detail Map






Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired




Water Assets

-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

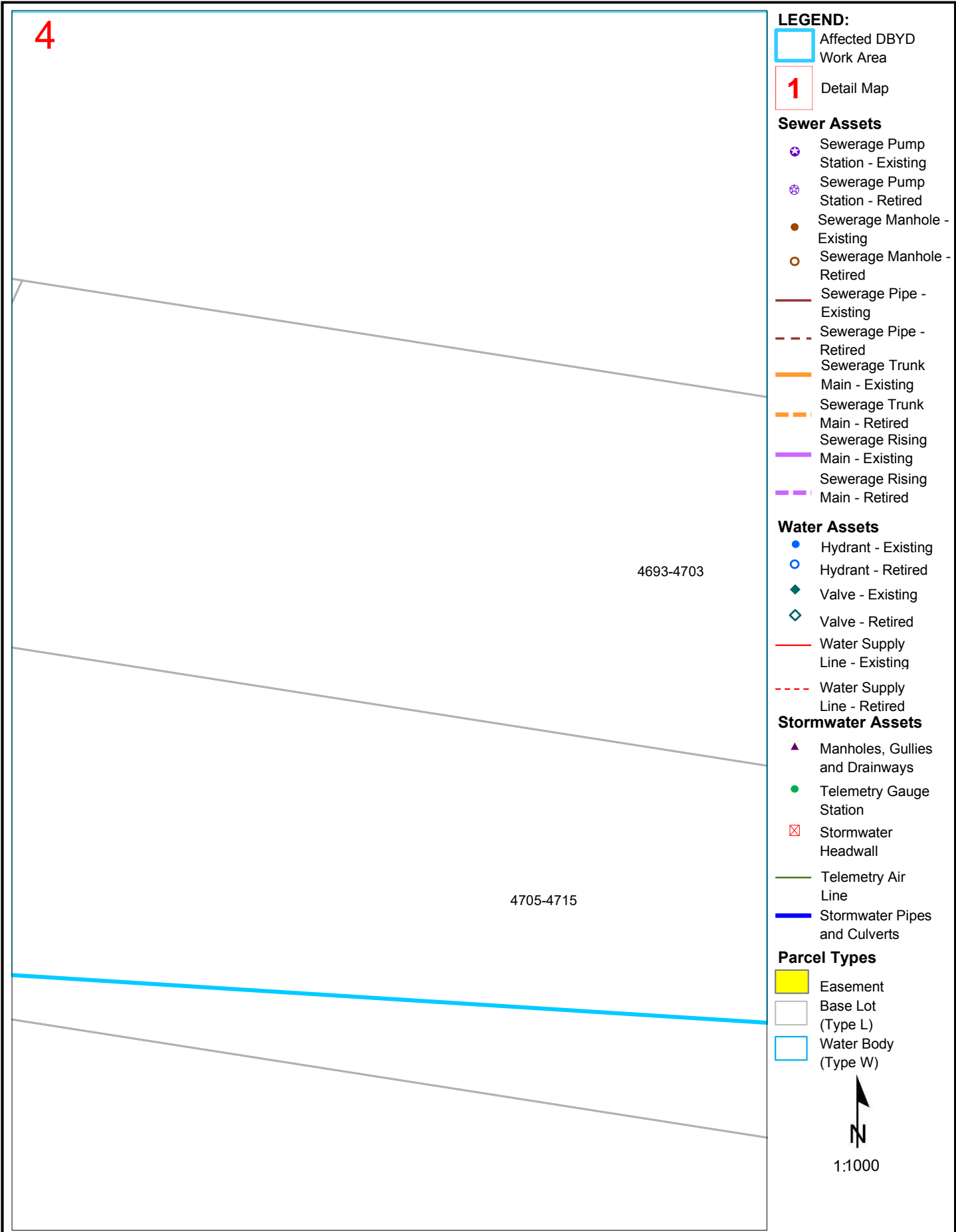
Parcel Types

-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)




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LEGEND:







 Affected DBYD Work Area

 Detail Map






Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired




Water Assets

-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

Parcel Types

-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)





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5

LEGEND:







 Affected DBYD Work Area

 Detail Map






Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired




Water Assets

-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

Parcel Types

-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)




1:1000

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6

LEGEND:







 Affected DBYD Work Area

 Detail Map






Sewer Assets

-  Sewerage Pump Station - Existing
-  Sewerage Pump Station - Retired
-  Sewerage Manhole - Existing
-  Sewerage Manhole - Retired
-  Sewerage Pipe - Existing
-  Sewerage Pipe - Retired
-  Sewerage Trunk Main - Existing
-  Sewerage Trunk Main - Retired
-  Sewerage Rising Main - Existing
-  Sewerage Rising Main - Retired




Water Assets

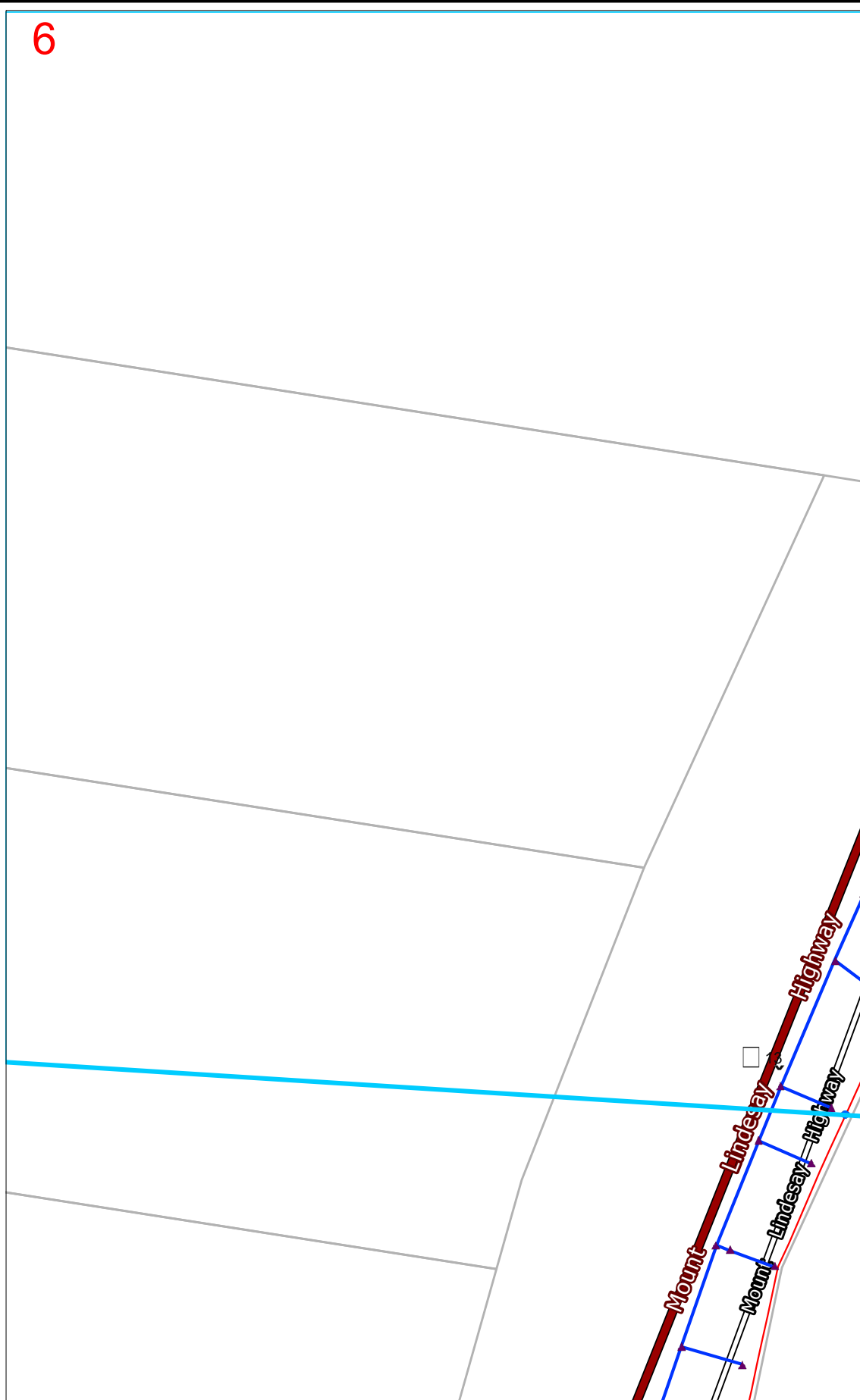
-  Hydrant - Existing
-  Hydrant - Retired
-  Valve - Existing
-  Valve - Retired
-  Water Supply Line - Existing
-  Water Supply Line - Retired

Stormwater Assets

-  Manholes, Gullies and Drainways
-  Telemetry Gauge Station
-  Stormwater Headwall
-  Telemetry Air Line
-  Stormwater Pipes and Culverts

Parcel Types

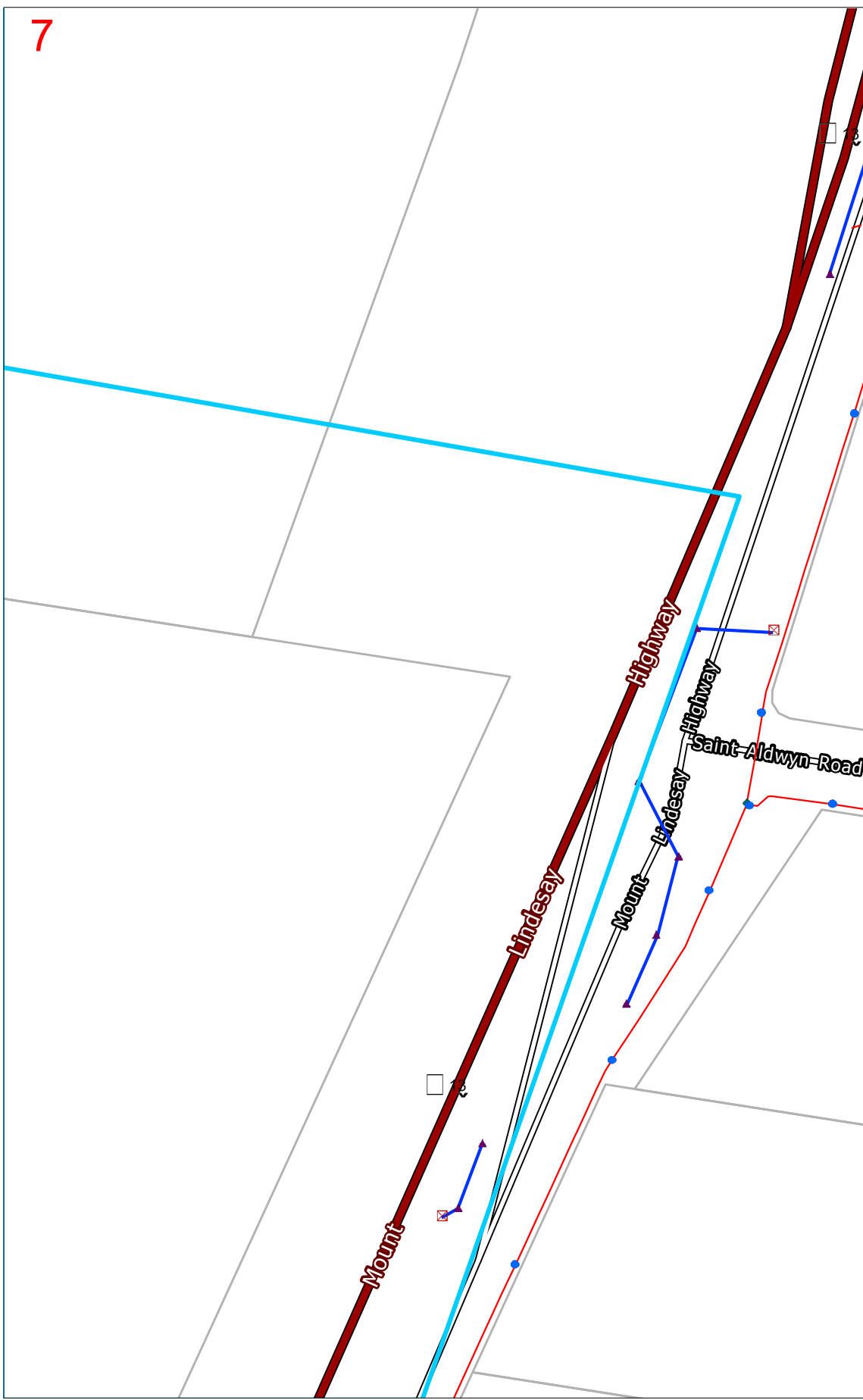
-  Easement
-  Base Lot (Type L)
-  Water Body (Type W)



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7



LEGEND:

- Affected DBYD Work Area
- 1 Detail Map

Sewer Assets

- ✱ Sewerage Pump Station - Existing
- ✱ Sewerage Pump Station - Retired
- Sewerage Manhole - Existing
- Sewerage Manhole - Retired
- Sewerage Pipe - Existing
- - - Sewerage Pipe - Retired
- Sewerage Trunk Main - Existing
- - - Sewerage Trunk Main - Retired
- Sewerage Rising Main - Existing
- - - Sewerage Rising Main - Retired

Water Assets

- Hydrant - Existing
- Hydrant - Retired
- ◆ Valve - Existing
- ◇ Valve - Retired
- Water Supply Line - Existing
- - - Water Supply Line - Retired

Stormwater Assets

- ▲ Manholes, Gullies and Drainways
- Telemetry Gauge Station
- ⊠ Stormwater Headwall
- Telemetry Air Line
- Stormwater Pipes and Culverts

Parcel Types

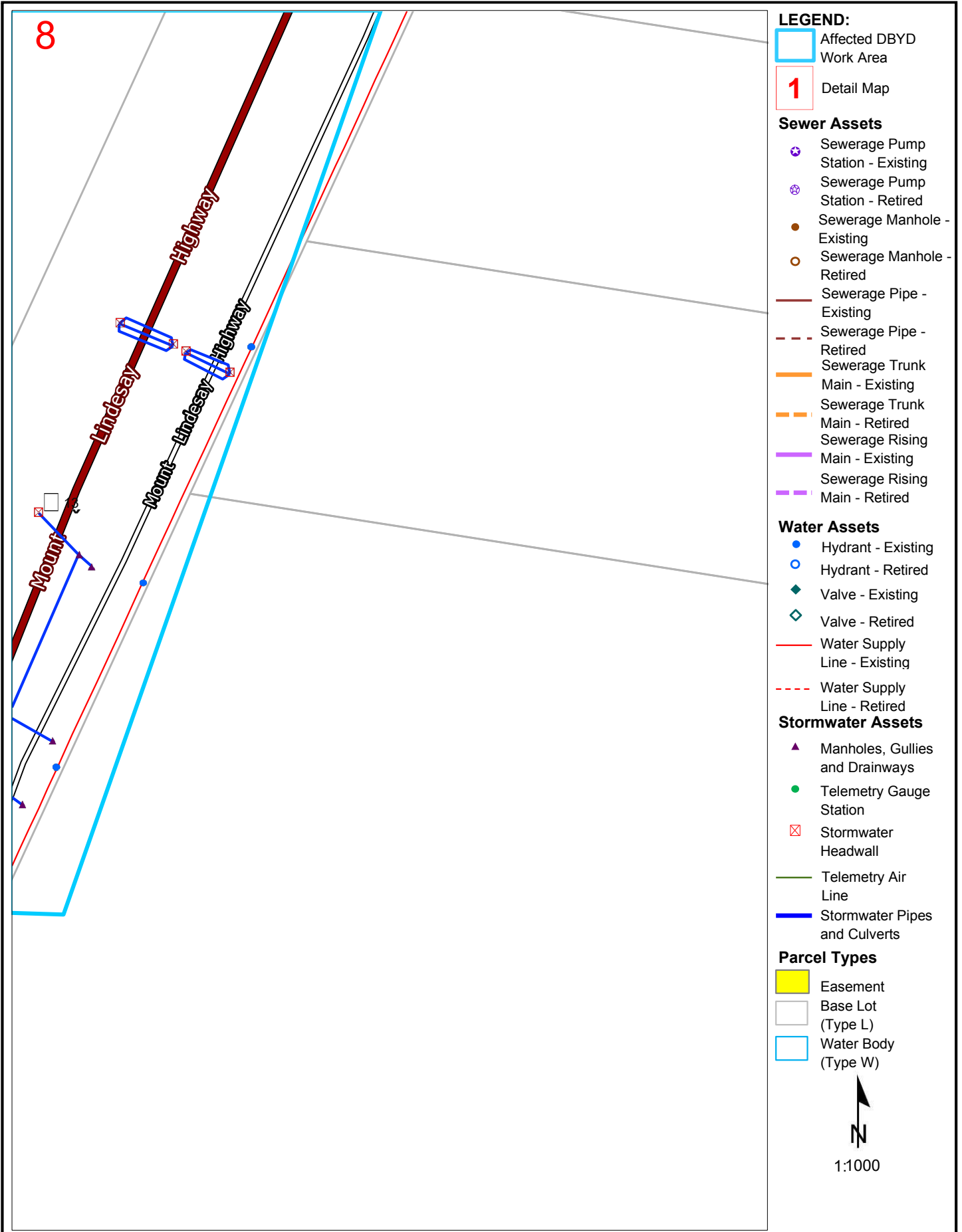
- Easement
- Base Lot (Type L)
- Water Body (Type W)

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1:1000

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LEGEND:

Affected DBYD Work Area

Detail Map

Sewer Assets

- Sewerage Pump Station - Existing
- Sewerage Pump Station - Retired
- Sewerage Manhole - Existing
- Sewerage Manhole - Retired
- Sewerage Pipe - Existing
- Sewerage Pipe - Retired
- Sewerage Trunk Main - Existing
- Sewerage Trunk Main - Retired
- Sewerage Rising Main - Existing
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Water Assets

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Stormwater Assets

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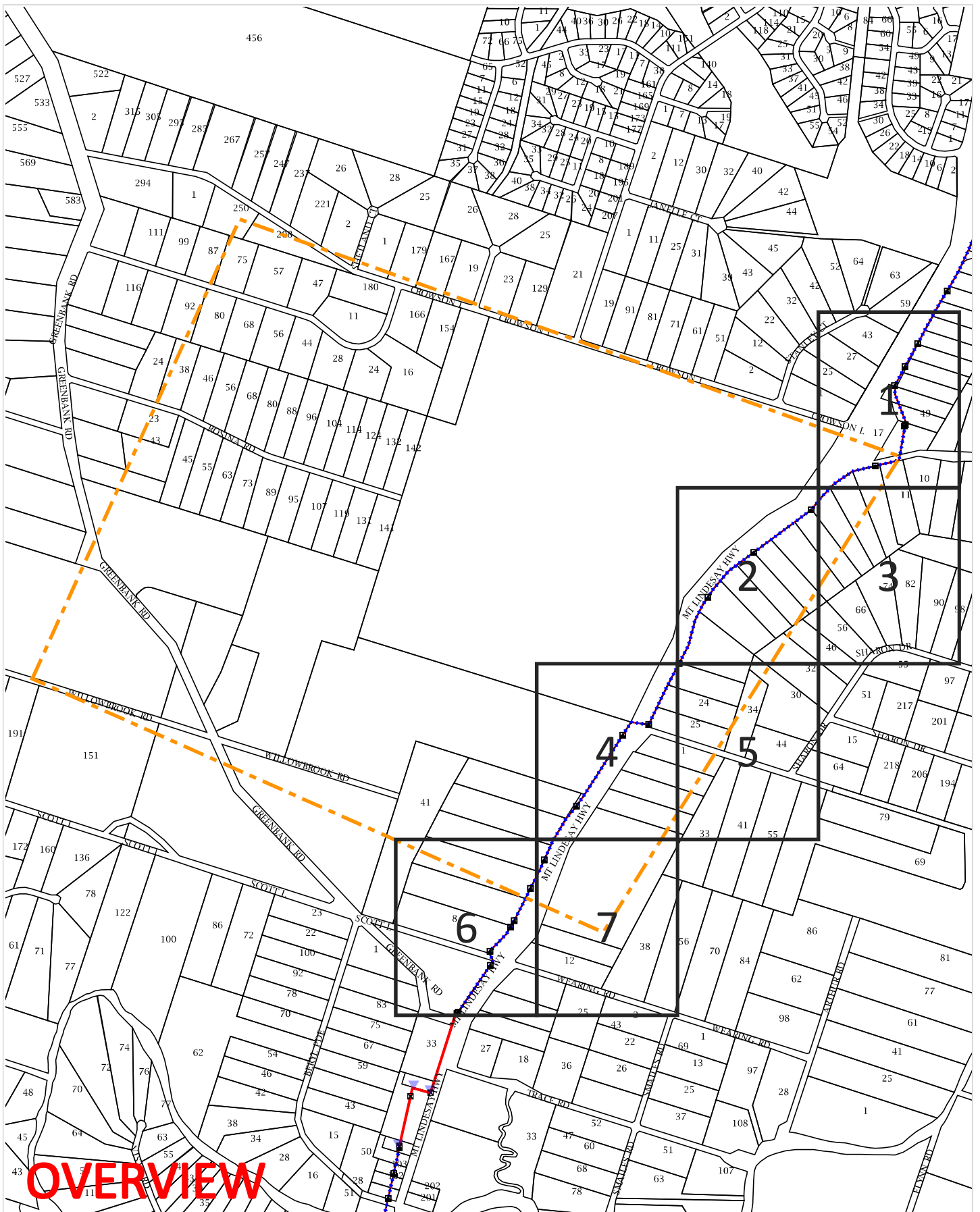
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1:1000

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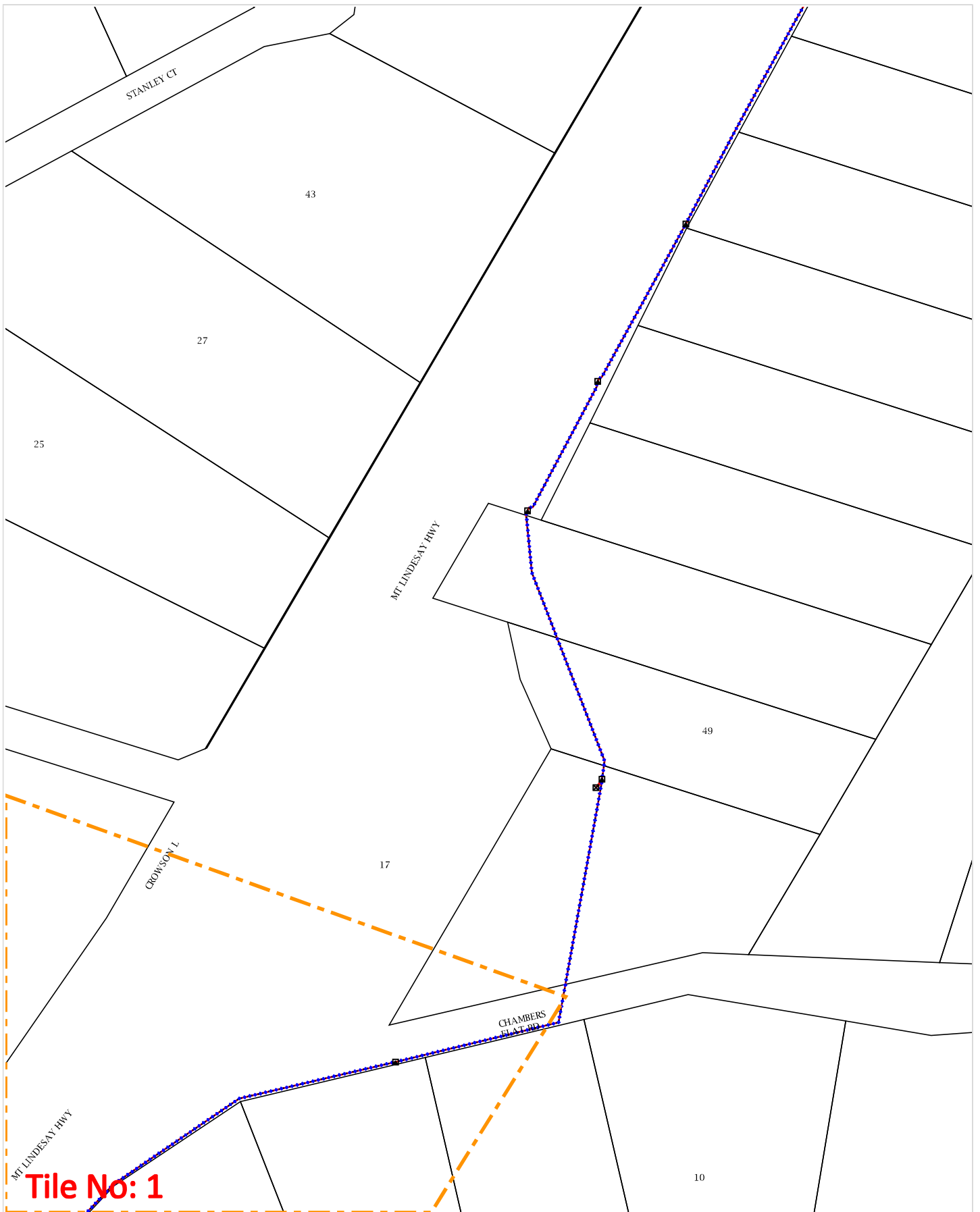
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Date Generated: 14 Jun 2022



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 Email: Fibre.Locations@optus.net.au
 For urgent onsite assistance contact 1800 505 777
 Optus Limited ACN 052 833 208





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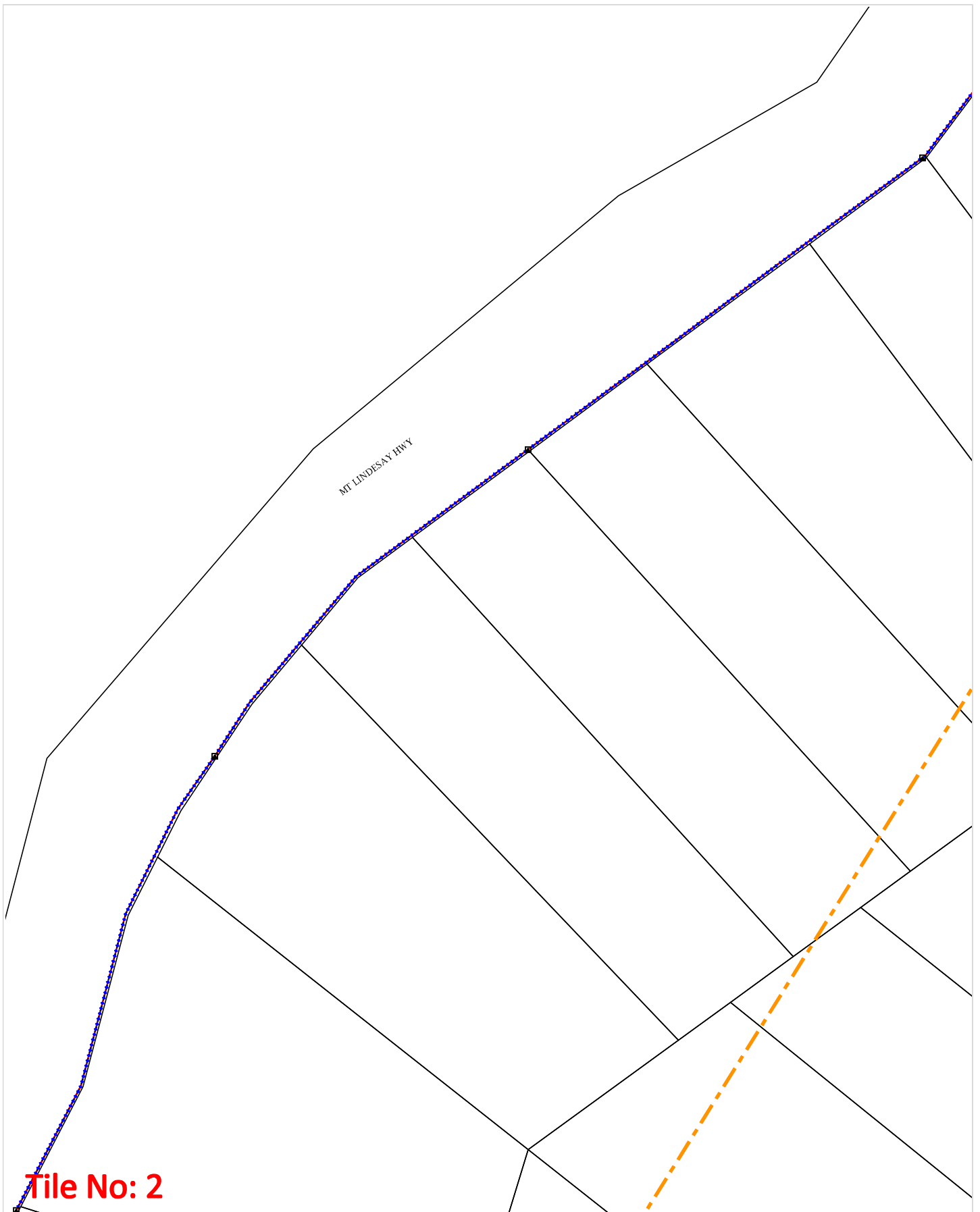
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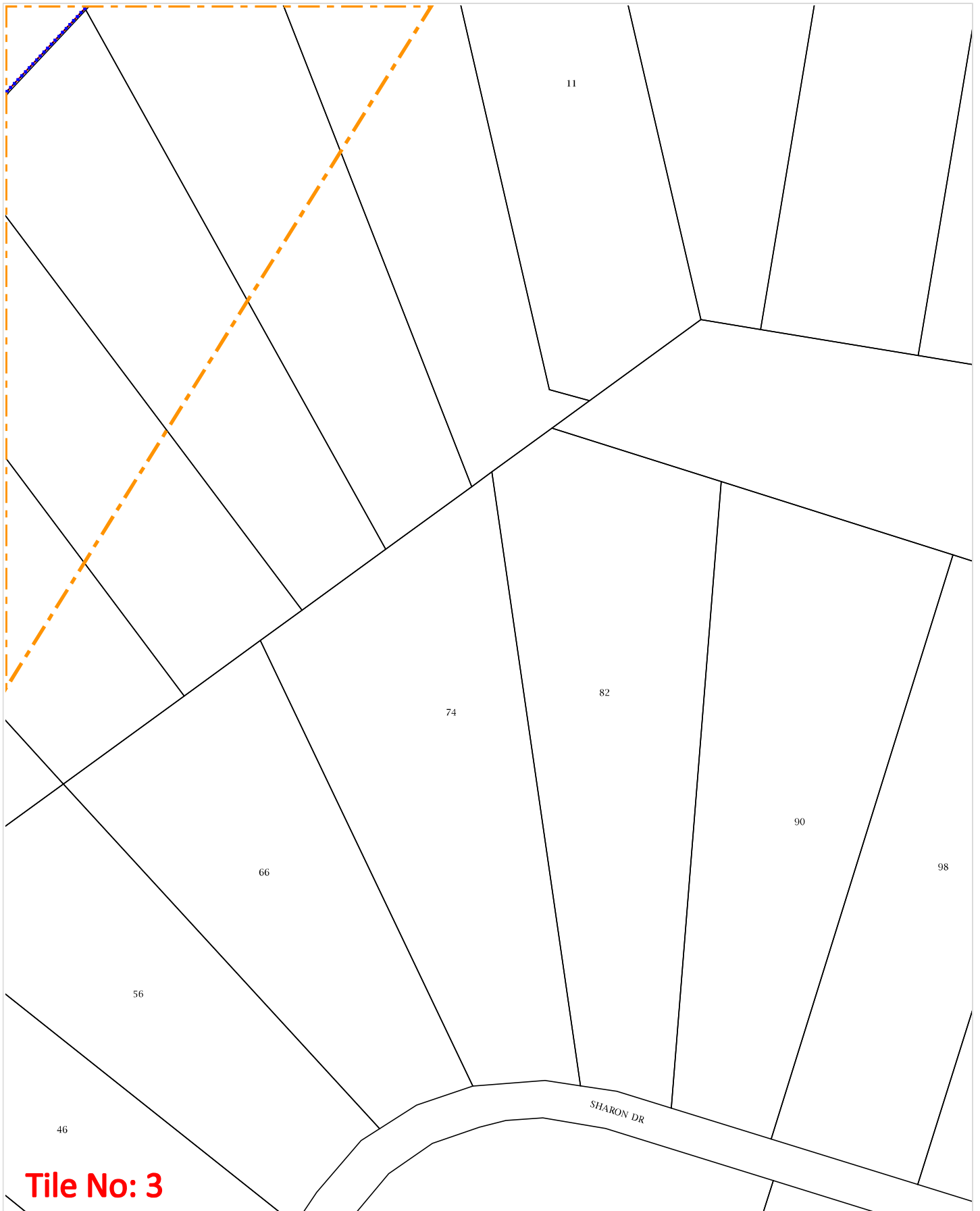
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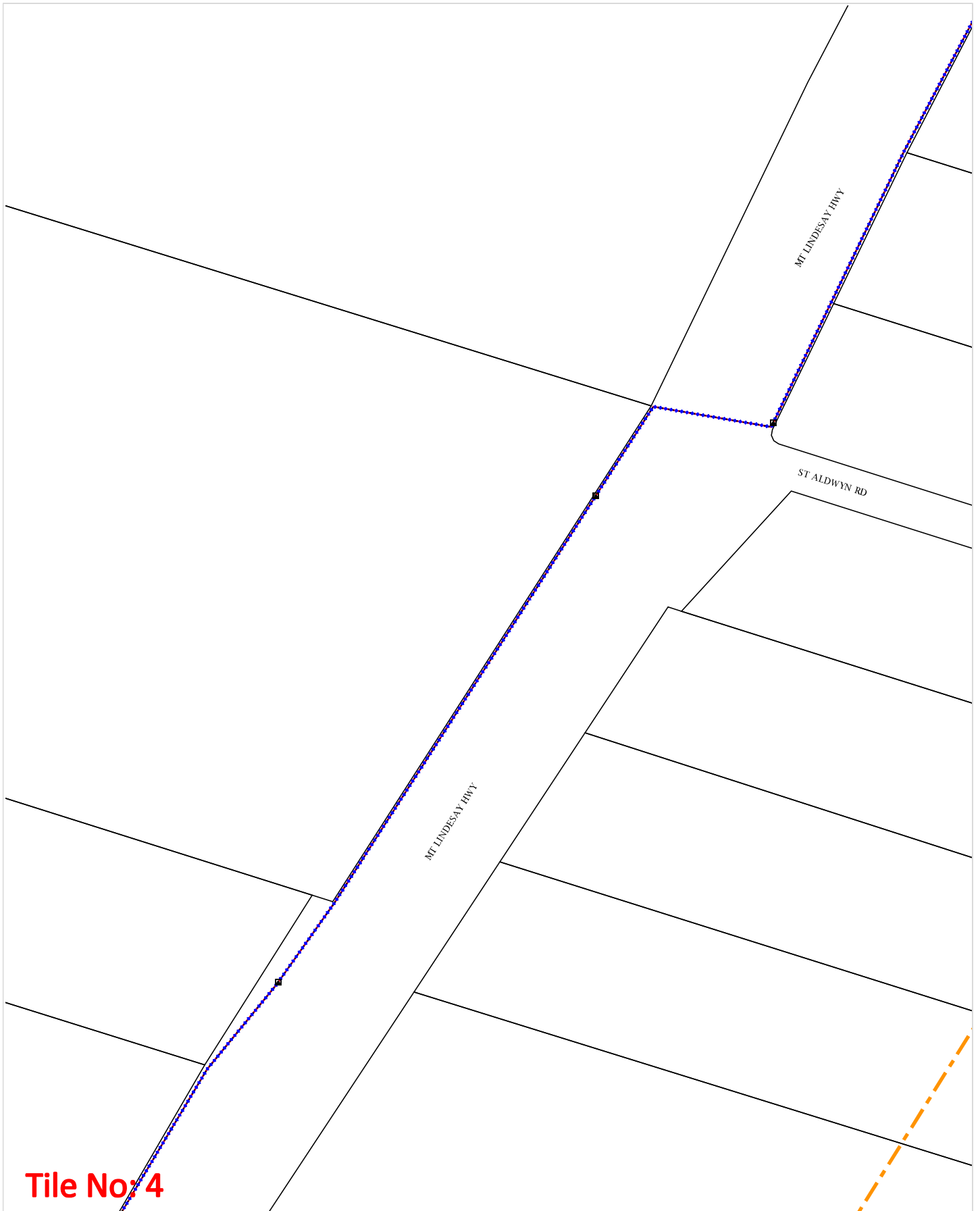
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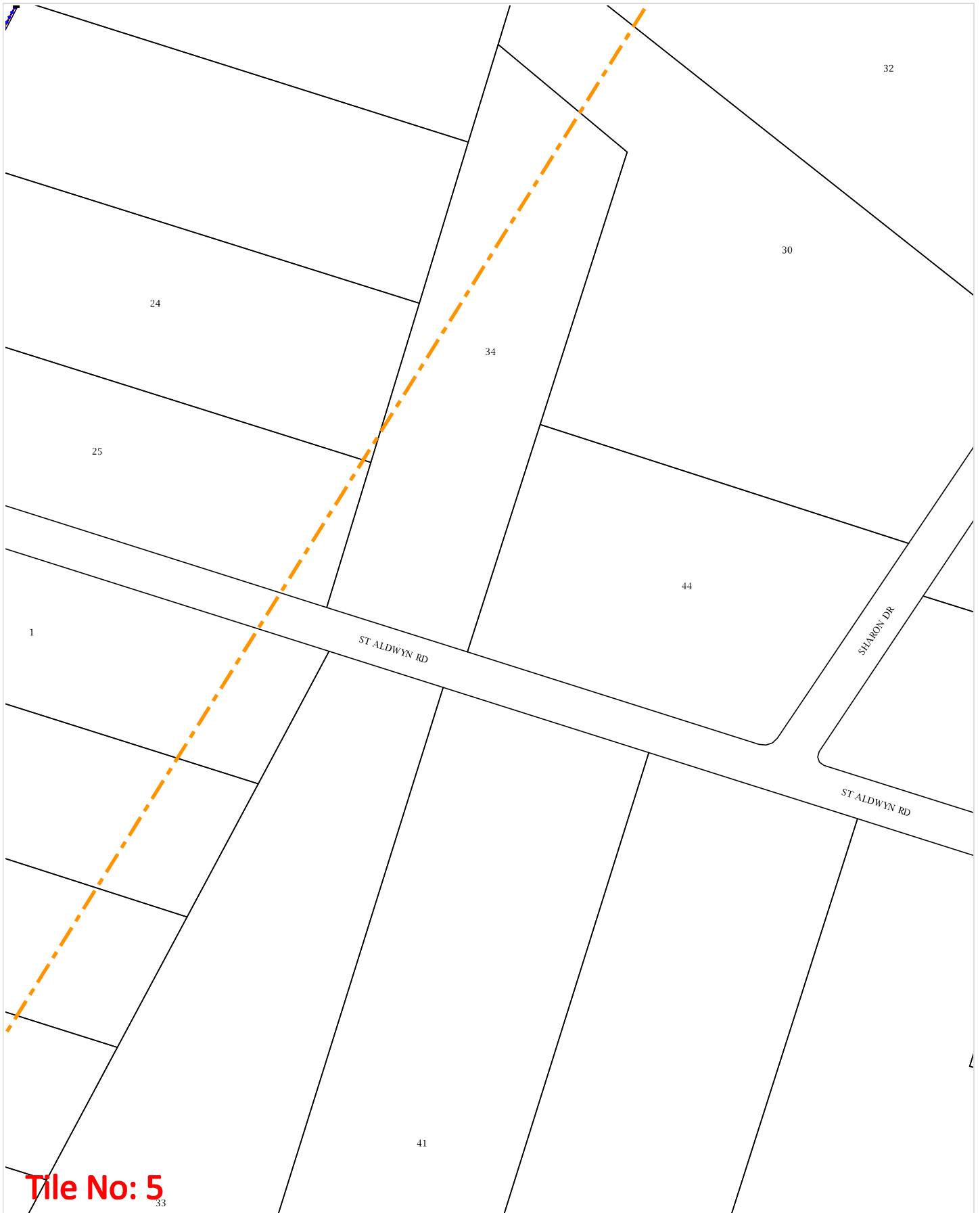
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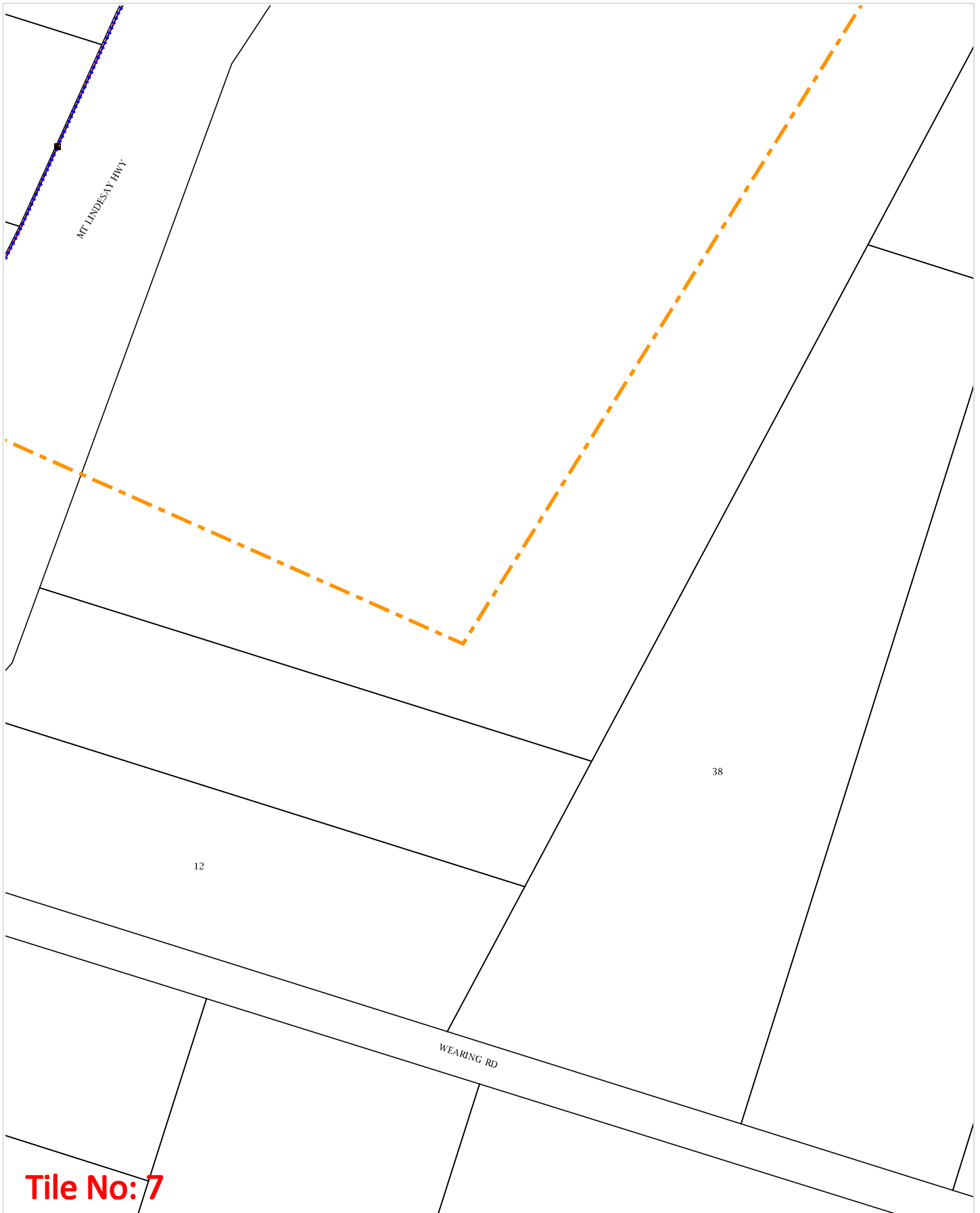
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APPENDIX D

DEV 2018/961 Decision Notice



Department of
**State Development, Infrastructure,
Local Government and Planning**

Our ref: DEV2018/961

10 September 2021

Wearco Pty Ltd
C/- Reel Planning Pty Ltd
Att: Ms Amy Adamson
PO Box 2088
MILTON QLD 4064

Email: amy@reelplanning.com

Dear Amy

S89(1)(a) Approval of PDA development application

PDA Development Permit for reconfiguring a lot – 1 lot into 4 lots, plus roads and open space at 4499-4651 Mount Lindesay Highway, North Maclean described as Lot 39 on RP253739

On 10 September 2021, pursuant to s.85(4)(b) of the *Economic Development Act 2012*, the Minister for Economic Development Queensland (MEDQ) decided to grant **all** of the PDA development application applied for, in accordance with the attached PDA decision notice.

The PDA decision notice and approved plans / documents can also be viewed in the MEDQ Development Approvals Register via the Department website at www.dsdilgp.qld.gov.au/pda-da-applications.

If you require any further information, please contact Mr Brandon Bouda, Manager, Development Assessment, in Economic Development Queensland, by telephone on (07) 3452 7422 or at brandon.bouda@dsdilgp.qld.gov.au, who will be pleased to assist.

Yours sincerely

Jeanine Stone
**Director
Development Assessment
Economic Development Queensland**

PDA Decision Notice

Site information		
Name of priority development area (PDA)	Greater Flagstone	
Site address	4499 – 4651 Mount Lindesay Highway, North Maclean	
Lot on plan description	Lot number	Plan description
	39	SP258739
PDA development application details		
DEV reference number	DEV2018/961	
'Properly made' date	19 October 2018	
Type of application	<input checked="" type="checkbox"/> PDA development application for: <ul style="list-style-type: none"> <input type="checkbox"/> Material change of use <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input type="checkbox"/> Development permit <input checked="" type="checkbox"/> Reconfiguring a lot <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input checked="" type="checkbox"/> Development permit <input type="checkbox"/> Operational work <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input type="checkbox"/> Development permit <input type="checkbox"/> Application to change PDA development approval <input type="checkbox"/> Application to extend currency period 	
Proposed development	1 into 4 lots, with road, open space and a context plan	
PDA development approval details		
Decision of the MEDQ	<p>The MEDQ has decided to grant all of the PDA development approval applied for, subject to PDA development conditions forming part of this decision notice.</p> <p>The approval is for:</p> <ul style="list-style-type: none"> • 1 into 4 lots, with road, open space and a context plan 	
Decision date	10 September 2021	
Currency period	6 years from the date of the decision	

Approved plans and documents

The plans and documents approved by the MEDQ and referred to in the PDA development conditions for the PDA development approval are detailed below.

Approved plans and documents		Number	Date
1.	Proposed Development Layout Plan	TIEL2020159.CIV.DA 010, Issue H	07/07/21 (as amended in red dated 08/09/2021)
2.	Staging Plan	TIELK202159.CIV.DA, Dwg No. 16, Issue C	07/07/2021 (as amended in red date 03/09/2021)
3.	Concept Earthworks Layout Plan	TIEL202159.CIV.DA, Dwg No. 015, Issue G	07/07/21
4.	Concept Water Reticulation Layout Plan	TIEL202159.CIV.DA, Dwg No. 014, Issue G	07/07/21
5.	Concept Sewer Reticulation Layout Plan	TIEL202159.CIV.DA, Dwg No. 012, Issue G	07/07/21 (as amended in red dated 03/09/2021)
6.	Concept Stormwater Drainage Layout Plan	TIEL202159.CIV.DA, Dwg No. 013, Issue H	07/07/21
7.	Concept Catchment Layout Plan	TIEL202159.CIV.DA, Dwg No. 008, Issue I	07/07/21
8.	Swale Cross Section	TIEL202159.CIV.DA.DWG No 019, Issue C	07/07/21
9.	Swale Longitudinal Section	TIEL202159.CIV.DA, Dwg No 018, Issue B	07/07/21
10.	Traffic Impact Assessment	16378, Version 3	01/03/19
11.	Bushfire Management Plan	Report 16014, Final V3	13 July 2018
12.	Addendum to the bushfire management plan for the proposed development at 4499-4651 Mount Lindsay Highway, North Maclean		18 February 2019
13.	North Maclean Enterprise Precinct (4499-4651 Mount Lindesay Highway, North Maclean) – Progression of Ecological Issues		31 March 2017

Supporting Plans and Documents

To remove any doubt, the following documents are not approved documents for the purposes of this PDA development approval, but rather are supporting documents.

Supporting plans, reports and specifications	Number (if applicable)	Date (if applicable)
Endorsed Context Plan		
1.	North Maclean Enterprise Context Plan Land Use and Road Network	12/07/2021 (as amended in red dated 03/09/2021)
2.	North Maclean Enterprise Context Plan Land Use and Road Network (Wider Locality)	12/07/2021
3.	North Maclean Enterprise Context Plan Ultimate Water and Sewer Network	12/07/2021
4.	North Maclean Enterprise Context Plan Ultimate Stormwater Network	12/07/2021 (as amended in red dated 03/09/2021)
Supporting Plans, Reports and Specifications		
5.	Site Based Stormwater Management Plan	TEL202159, Issue A 08 July 2021
6.	Engineering Services Report	TEL202159, Issue A 06/07/21.

PDA development conditions

PREAMBLE AND ABBREVIATIONS

PREAMBLE

For the purpose of interpreting this PDA Development Approval, including the PDA Development Conditions, the following applies:

Compliance assessment

Where a condition of this approval requires Compliance Assessment, Compliance Assessment is required in accordance with the following:

a) The applicant must:

- i) pay to MEDQ at the time of submission the relevant fee for Compliance Assessment, including any third party peer review costs which will be charged on a 100% cost recovery basis. The Compliance Assessment fees are set out in EDQ Development Assessment Fees and Charges Schedule¹ (as amended from time to time).
- ii) submit to EDQ DA a duly completed Compliance Assessment form².
- iii) submit to EDQ DA the documentation as required under the relevant condition.

b) Where EDQ is satisfied the documentation submitted for Compliance Assessment meets the requirements of the relevant condition (or element of the condition), EDQ will endorse the documentation and advise by written notice.

¹ The EDQ Development Assessment Fees and Charges Schedule is available at EDQ's website.

² The Compliance Assessment form is available at EDQ's website. It sets out how to submit documentation for Compliance Assessment and how to pay Compliance Assessment fees.

- c) Compliance Assessment and endorsement can be repeated where a different design or solution, to that already endorsed, is sought.
- d) The process and timeframes that apply to Compliance Assessment are as follows:
 - i) applicant submits items required under a) above to EDQ DA for Compliance Assessment.
 - ii) **within 30 business days** – EDQ assesses the documentation and:
 - 1. if satisfied, endorses the documentation; or
 - 2. if not satisfied, notifies the applicant accordingly.
 - iii) if the applicant is notified under ii.2. above, revised documentation must be submitted **within 30 business days** from the date of notification.
 - iv) **within 30 business days** – EDQ assesses the revised documentation and:
 - 1. if satisfied, endorses the revised documentation; or
 - 2. if not satisfied, notifies the applicant accordingly.
 - v) where EDQ notifies the applicant as stated under iv.2. above, repeat steps iii. and iv. above. If either party is not satisfied by the outcome of this process, that party can elect to enter into a mediation process with an independent mediator agreed to by both parties.

Despite note v. above, the condition (or element of the condition) is determined to have been met only when EDQ endorses relevant documentation.

SUBMITTING DOCUMENTATION TO EDQ:

Where a condition of this approval requires documentation to be submitted to either EDQ DA or EDQ TS, submit the documentation to:

- a) EDQ DA at: pdadevelopmentassessment@dsgmip.qld.gov.au.
- b) EDQ TS at: EDQ_PrePostConstruction@dsgmip.qld.gov.au.

ABBREVIATIONS

For the purposes of interpreting the PDA Development Conditions, the following is a list of abbreviations utilised:

- 1. **AILA** means a Landscape Architect registered Australian Institute Landscape Architect.
- 2. **Certification Procedures Manual** means the document titled *Certification Procedures Manual*, prepared by the Department of Infrastructure, Local Government and Planning, dated 16 October 2017 (as amended from time to time).
- 3. **Contributed Asset** means an asset constructed under a PDA development approval or Infrastructure Agreement that will become the responsibility of an External Authority. For the purposes of operational works for a Contributed Asset, the following definitions apply:
 - a. **External Authority** means a public-sector entity other than the MEDQ;
 - b. **Parkland** means carrying out operational work related to the provision of parkland infrastructure;

- c. **Roadworks** means carrying out any operational work within existing or proposed road(s), to a depth of 1.5m measured from the top of kerb, and includes Streetscape Works;
- d. **Sewer Works** means carrying out any operational work related to the provision of wastewater infrastructure;
- e. **Streetscape Works** means carrying out any operational work within the verge of a road, including footpath surface treatments, street furniture, street lighting and landscaping;
- f. **Stormwater Works** means carrying out any operational work related to the provision of stormwater infrastructure; and
- g. **Water Works** means carrying out any operational work related to the provision of water infrastructure.

- 4. **Council** means Logan City Council.
- 5. **DSDILGP** means The Department of State Development, Infrastructure, Local Government and Planning
- 6. **EDQ** means Economic Development Queensland
- 7. **EDQ DA** means Economic Development Queensland's – Development Assessment team.
- 8. **EDQ TS** means Economic Development Queensland's – Technical Services team.
- 9. **IFF** means Infrastructure Funding Framework.
- 10. **MEDQ** means The Minister of Economic Development Queensland.
- 11. **PDA** means Priority Development Area.
- 12. **RPEQ** means Registered Professional Engineer of Queensland

No.	Condition	Timing
General		
1.	<p>Carry out the approved development</p> <p>Carry out the approved development generally in accordance with the approved plans and documents; and any other documentation endorsed via Compliance Assessment as required by these conditions.</p>	Prior to survey plan endorsement for the relevant stage
2.	<p>Street naming</p> <p>Submit to EDQ DA a schedule of street names approved by Council.</p>	Prior to survey plan endorsement for the relevant stage
Construction		
3.	<p>Hours of work - construction</p> <p>Unless otherwise endorsed, via Compliance Assessment for out of hours work, construction hours for the approved development are limited to Monday to Saturday between 6:30am to 6:30pm, excluding public holidays.</p>	During construction unless otherwise endorsed

4.	<p>Out of hours work - Compliance Assessment</p> <p>Where out of hours work is proposed, submit to EDQ DA, for Compliance Assessment, an out of hours work request. The out of hours work request must include a duly completed out of hours work request form³.</p>	<p>Minimum of 10 business days prior to proposed out of hours work commencement date</p>
5.	<p>Certification of Operational Work</p> <p>Carry out all Operational Work under this approval in accordance with the <i>Certification Procedures Manual</i>.</p>	<p>At all times</p>
6.	<p>Construction management plan</p> <p>a) Submit to EDQ TS a site-based Construction Management Plan (CMP), prepared by the principal site contractor and reviewed by a suitably qualified and experienced person responsible for overseeing the site works, to manage construction impacts, including:</p> <ul style="list-style-type: none"> i) noise and dust in accordance with the EP Act; ii) stormwater flows around and through the site without increasing the concentration of total suspended solids or Prescribed Water Contaminants (as defined in the EP Act), causing erosion, creating any ponding and causing any actionable nuisance to upstream and downstream properties; iii) contaminated land, where required under a site suitability statement prepared in accordance with section 389 of the EP Act; iv) complaints procedures; v) site management: <ul style="list-style-type: none"> 1. for the provision of safe and functional alternative pedestrian routes, past, through or around the site; 2. to mitigate impacts to public sector entity assets, including street trees, on or external to the site; 3. for safe and functional temporary vehicular access points and frequency of use; 4. for the safe and functional loading and unloading of materials including the location of any remote loading sites; 5. for the location of materials, structures, plant and equipment; 6. of waste generated by construction activities; 7. detailing how materials are to be loaded/unloaded; 8. of proposed external hoardings and gantries (with clearances to street furniture and other public sector entity assets); 9. of employee and visitor parking areas; 10. of anticipated staging and programming; 11. for the provision of safe and functional emergency exit routes; and 12. any out of hours work as endorsed via Compliance Assessment. <p>b) A copy of the CMP submitted under part a) of this condition must be current and available on site.</p>	<p>a) Prior to commencing work for the relevant stage</p> <p>b) During construction</p>

³ The out of hours work request form is available at EDQ's website.

	c) Carry out all construction work generally in accordance with the CMP submitted under part a) of this condition.	c) During construction
7.	Erosion and sediment management a) Submit to EDQ TS an Erosion and Sediment Control Plan (ESCP), certified by a RPEQ or an accredited professional in erosion and sediment control, and prepared generally in accordance with the following: i) construction phase stormwater management design objectives of the <i>State Planning Policy 2017</i> (Appendix 2 Table A); ii) <i>Healthy Land and Water Technical Note: Complying with the SPP – Sediment Management on Construction Sites</i> . b) Implement the certified ESCP submitted under part a) of this condition.	a) Prior to commencing work for the relevant stage b) During construction
8.	Dispersive soil management a) Submit to EDQ TS a Dispersive Soil Management Plan, prepared by a soil science/soil chemistry specialist that details for the design, construction, and operational phases of the development including: i. the suite of methods required to identify and address potential issues associated with the exposure and re-use of dispersive soils, ii. details of the areas where dispersive soils will be disturbed and treated/rehabilitated. b) Implement and monitor the actions identified in the Dispersive Soil Management Plan as required under part a) of this condition.	a) Prior to commencing site works b) At all times during construction
9.	Traffic Management Plan a) Submit to EDQ TS a Traffic Management Plan (TMP), certified by a person holding a current Traffic Management Design qualification. The TMP must include the following: i) provision for the safe and functional management of traffic around and through the site during and outside of construction work hours; ii) provision for the safe and functional management of pedestrian traffic, including alternative pedestrian routes past, through or around the site; iii) provision of parking for workers and materials delivery; iv) risk identification, assessment and identification of mitigation measures; v) ongoing monitoring, management review and certified updates (as required); and vi) traffic control plans and/or traffic control diagrams, prepared in accordance with <i>Austroads Guide to Temporary Traffic Management</i> , for any temporary part or full road closures. b) Carry out all construction work generally in accordance with the certified TMP submitted under part a) of this condition, which is to be current and available on site.	a) Prior to commencing work for the relevant stage b) During construction

	<p>Advice Note: Operational traffic changes, such as temporary and permanent lane modifications, relaxation of clearway zone hours or footpath closures may require authorisation from Council or DTMR as road manager. It is recommended that applicants engage directly with the applicable road manager.</p>	
10.	<p>Public infrastructure (damage, repairs and relocation)</p> <p>a) Repair any damage to existing public infrastructure caused by works carried out in association with the approved development.</p> <p>b) Where existing public infrastructure require repair or relocation, due to the approved development and/or works associated with the approved development, repair and/or relocate the public infrastructure at no cost to others and in accordance with statutory requirements and adopted design standards.</p> <p>Advice Note: It is recommended applicants record their own dated photographic evidence of the condition of relevant existing public infrastructure both before and after works carried out in association with the approved development.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
Earthworks and retaining walls		
11.	<p>Compliance Assessment - Earthworks</p> <p>a) Submit to EDQ DA for Compliance Assessment detailed earthworks plans, certified by a RPEQ, and designed generally in accordance with:</p> <ol style="list-style-type: none"> i) Australian Standard AS3798 – 2007 Guidelines on Earthworks for Commercial and Residential Developments and ii) the approved Concept Earthworks Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 015, Issue G, Prepared by Telford Civil, dated 07/07/21. <p>The certified earthworks plans are to:</p> <ol style="list-style-type: none"> i) include a geotechnical soils assessment of the site; ii) accord with the Erosion and Sediment Control Plan, as required by condition 7 – Erosion and sediment management; iii) accord with the Dispersive Soil Management Plan, as required by condition 8 – Dispersive soil management; iv) include the location and finished surface levels of any cut and/or fill; v) provide details of any areas where surplus soils are to be stockpiled; vi) detail protection measures to: <ol style="list-style-type: none"> 1. ensure adjoining properties and roads are not impacted by ponding or nuisance stormwater resulting from earthworks associated with the approved development; 2. preserve all drainage structures from structural loading impacts resulting from earthworks associated with the approved development. 	<p>a) Prior to commencing earthworks for the relevant stage</p>

	<p>b) Carry out earthworks generally in accordance with the certified plans endorsed by EDQ through part a) of this condition.</p> <p>c) Submit to EDQ TS RPEQ certification that:</p> <ul style="list-style-type: none"> i) all earthworks have been carried out generally in accordance with the certified plans submitted under part a) of this condition; and ii) any unsuitable material encountered has been treated or replaced with suitable material. 	<p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
12.	<p>Retaining walls (excluding the western boundary retaining wall)</p> <p>a) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, of all retaining walls 1m or greater in height. Retaining walls must be:</p> <ul style="list-style-type: none"> i) certified to achieve a minimum 50 year design life; ii) designed generally in accordance with <i>AS4678 – Earth Retaining Structures</i> and relevant material standards (e.g. <i>AS3600 – Concrete Structures</i>); <p>b) Construct retaining walls generally in accordance with the certified plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS certification from an RPEQ that all retaining wall works 1.0m or greater in height have been constructed generally in accordance with the certified plans submitted under part a) of this condition.</p>	<p>a) Prior to commencing earthworks for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
13.	<p>Compliance Assessment – Western boundary retaining wall</p> <p>a) Submit to EDQ DA for Compliance Assessment preliminary engineering plans, certified by a RPEQ, of the proposed western boundary retaining wall adjoining the swale. The retaining wall must be:</p> <ul style="list-style-type: none"> i) fully contained, including footings, within the private lots; ii) designed based on a professional geotechnical advice; iii) take into consideration scour and flood impacts from the adjoining swale; and iv) appropriately fenced (fauna exclusion). <p>b) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, of the proposed retaining wall along the western swale, generally in accordance with the endorsed plans required under part a) of this condition. The retaining wall must be:</p> <ul style="list-style-type: none"> i) certified to achieve a minimum 100 year design life; ii) designed generally in accordance with <i>AS4678 – Earth Retaining Structures</i> and relevant material standards (e.g. <i>AS3600 – Concrete Structures</i>); <p>c) Construct retaining walls generally in accordance with the certified plans required under part b) of this condition.</p>	<p>a) Prior to commencing earthworks for Stage 2</p> <p>b) Prior to survey plan endorsement for Stage 2</p> <p>c) Prior to survey plan endorsement for Stage 2</p>

	<p>d) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) 'as-constructed' plans, certified by a RPEQ, demonstrating that the retaining wall has been constructed generally in accordance with the certified plans submitted under part a) of this condition. ii) A survey plan identifying the location of wall and footings to the property boundary. 	<p>d) Prior to survey plan endorsement for Stage 2</p>
Roadworks, urban servicing and stormwater management		
<p>14.</p>	<p>Compliance Assessment - Road 1, Road 3 and Road 4</p> <p>a) Submit to EDQ DA for Compliance Assessment functional layout plans, certified by a RPEQ, for Road 1, Road 3 and Road 4 generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards; and ii) Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 iii) Industrial Connector Street Cross-Section as identified in the Engineering Services Report prepared by Telford Civil and dated 06/07/21. <p style="padding-left: 40px;">The roads are to be designed to allow for the use of heavy vehicles (B-doubles).</p> <p>b) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, for roadworks for Road 1, Road 3 and Road 4, including parking bays, traffic devices and footpaths generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards; and ii) functional layout plans endorsed under part a) of this condition. <p>c) Construct roadworks generally in accordance with the certified plans submitted under part b) of this condition.</p> <p>d) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) certification from a RPEQ that all roadworks have been constructed generally in accordance with the certified plans submitted under part a) of this condition; and ii) all documentation as required by the <i>Certification Procedures Manual</i>. iii) as-constructed drawings, asset register and test results, certified by a RPEQ, in a format acceptable to the end asset owners for all roadworks constructed under this condition. 	<p>a) Prior to commencing site works</p> <p>b) Prior to commencing roadworks for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>
<p>15.</p>	<p>Compliance assessment – Crowson Lane and Greenhill Road intersection interim layout</p> <p>Unless ultimate intersection works are already delivered by Council as part of the Crowson Lane augmentation project:</p> <p>a) Submit to EDQ DA for Compliance Assessment engineering design and construction drawings, certified by a RPEQ, for the auxiliary left-turn treatment and channelised right turn lane</p>	<p>a) Prior to commencing intersection works</p>

	<p>treatment at the Crowson Lane/Greenhill Road intersection, generally in accordance with the following plans/documents:</p> <ul style="list-style-type: none"> i. PDA Guideline No. 13 Engineering standards; and ii. Traffic Impact Assessment, Report No. 16378, Version 3 prepared by Rytenskiid Traffic Engineering and dated 1 March 2019. <p>b) Construct the works generally in accordance with the endorsed plans submitted under part a) of this condition.</p> <p>c) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) certification from a RPEQ that the intersection works have been constructed generally in accordance with the certified plans submitted under part b) of this condition; and ii) all documentation as required by the Certification Procedures Manual. iii) as-constructed drawings, asset register and test results, certified by a RPEQ, in a format acceptable to the end asset owners for all roadworks constructed under this condition. 	<p>b) Prior to survey plan endorsement for the first stage</p> <p>c) Prior to survey plan endorsement for the first stage</p>
<p>16.</p>	<p>Mount Lindesay Highway Service Road (Road 2)</p> <p>a) Submit to EDQ TS, approval from the Department of Transport and Main Roads for the Mount Lindesay Highway service lane, identified as Road 2 on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21</p> <p>The service lane is to be designed to allow for the use of heavy vehicles (B-doubles).</p> <p>b) Construct the extent of Road 2 as shown on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 from the intersection with Road 1 to the Crowson Lane Interchange with the first stage of development in accordance with the approval from DTMR as required under part a)</p> <p>c) Construct the extent of Road 2 as shown on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 from the intersection with Road 3 to the intersection of Road 1 with the second stage of development in accordance with the approval from DTMR as required under part a).</p> <p>d) Submit to EDQ TS, certification from a RPEQ that all roadworks have been constructed generally in accordance part a) of this condition.</p> <p><i>Advice Note: Construction of this service lane in accordance with the Industrial Connector cross-section or as alternatively agreed to by EDQ and meets EDQ's minimum requirements for offsetable infrastructure, can be considered offsetable.</i></p>	<p>a) Prior to commencing works for Stage 1</p> <p>b) As indicated</p> <p>c) As indicated</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>

<p>17. Street lighting</p>	<p>Comply with either parts a) and c) or parts b) and c) of this condition.</p> <p>a) Design and install a <u>Rate 2</u> street lighting system, certified by a RPEQ, to all roads, including footpaths/bikeways within road reserves. The design of the street lighting system must:</p> <ul style="list-style-type: none"> i) meet the relevant standards of Energex; ii) be endorsed by Energex as 'Rate 2 Public Lighting'; iii) be endorsed by Council as the Energex 'billable customer'; iv) be generally in accordance with <i>Australian Standards AS1158 – 'Lighting for Roads and Public Spaces</i>. <p>b) Design and install a <u>Rate 3</u> street lighting system, certified by a suitably qualified and experienced RPEQ, to all roads, including footpaths/bikeways within road reserves. The design of the street lighting system must:</p> <ul style="list-style-type: none"> i) be in accordance with <i>Australian Standards AS1158 – 'Lighting for Roads and Public Spaces'</i> ii) meet the requirements of AS3000 – '<i>SAA Wiring Rules</i>'. iii) meet the requirements of Energex for unmetered supply iv) be endorsed by the relevant ownership authority. <p>c) Submit to EDQ TS 'as-constructed' plans and test documentation, certified by a RPEQ, in a format acceptable to Council.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
<p>18. Compliance Assessment - Water reticulation</p>	<p>a) Submit to EDQ DA for Compliance Assessment a detailed water network plan, supported by hydraulic analysis, certified by RPEQ. The water network plan shall be prepared in accordance with:</p> <ul style="list-style-type: none"> i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and ii) Concept Water Reticulation Layout Plan, Plan no. TIEL202159.CIV.DA, Dwg No 014, Issue G, prepared by Telford Civil and dated 07/07/21. <p>b) Submit to EDQ TS detailed water reticulation design plans, certified by a RPEQ. The certified water reticulation design plans must be designed generally in accordance with:</p> <ul style="list-style-type: none"> i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and ii) the endorsed water network analysis required under part a) of this condition. <p>c) Construct water reticulation works generally in accordance with the certified plans submitted under part a) of this condition.</p>	<p>a) Prior to commencing works for Stage 1</p> <p>b) Prior commencing water reticulation work for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>

	<p>d) Submit to EDQ TS 'as constructed' plans, certified by a RPEQ, of all water reticulation infrastructure constructed in accordance with this condition, including an asset register, pressure and bacterial test results in accordance with:</p> <p>i) SEQ Water Supply and Sewerage Design and Construction Code - Asset Information.</p>	<p>d) Prior to survey plan endorsement for the relevant stage</p>
19.	<p>Compliance Assessment – Internal Sewer reticulation</p> <p>a) Submit to EDQ DA for Compliance Assessment a detailed internal sewerage network plan, supported by hydraulic analysis, certified by RPEQ. The internal sewer network plan shall be prepared in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and</p> <p>ii) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No 012, Issue G, prepared by Telford Civil and dated 07/07/21.</p> <p>The sewerage network plan shall include the extension of the internal sewer reticulation to the southern boundary to service the external catchment falling to the site.</p> <p>b) Submit to EDQ TS detailed sewer reticulation design plans, certified by a RPEQ. The certified sewer reticulation design plans must be designed generally in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and</p> <p>ii) the endorsed sewer network plan required under part a) of this condition</p> <p>c) Construct the internal sewer reticulation works generally in accordance with the certified plans submitted under part b) of this condition.</p> <p>d) Submit to EDQ TS 'as constructed' plans, certified by an RPEQ, of all internal sewer reticulation infrastructure constructed in accordance with this condition, including an asset register, pressure and CCTV results in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code - Asset Information.</i></p> <p>Advice Note: <i>The Sub-Regional sewerage pump station NM1 and external sewer rising main will be constructed and put in operation by Council.</i></p>	<p>a) Prior to commencing works for the relevant stage</p> <p>b) Prior to commencing works for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>
20.	<p>Temporary sewage tankering of wastewater</p> <p>Unless the Sub-Regional sewerage pump station NM1 and external rising main is completed and in operation by Council:</p> <p>a) Enter into a tankering agreement with Council for the collection and disposal of wastewater for any lots created; and</p> <p>b) Maintain the tankering agreement required by part a) of this condition until Sub-Regional sewerage pump station NM1 is commissioned.</p>	<p>a) Prior to survey plan endorsement for the first stage</p> <p>b) As indicated</p>

<p>21.</p>	<p>Compliance Assessment – Updated Site Based Stormwater Management Plan</p> <p>Submit to EDQ DA for Compliance Assessment an updated Site Base Stormwater Management Plan (SBSMP), certified by a RPEQ, for the management of stormwater within the site to ensure non-worsening to downstream properties, including Mt Lindesay Highway, generally in accordance with <i>PDA Guideline No. 13 Engineering standards, Stormwater Quantity and Stormwater Quality</i>.</p> <p>The updated SBSMP shall include the following:</p> <ul style="list-style-type: none"> i) Confirmation that the subject site is not impacted by flooding. This confirmation is to be provided through the undertaking of a site based flood model. If impacted by flood, provide further details on the Q100 line and the type of inundation – conveyance and/or storage <p>Or</p> <p>Demonstrate that the updated current solution identified in the SBSMP ensures that there is no worsening at lawful point of discharge based on Council’s nominated 1% AEP flood level at Mt Lindesay Highway.</p> <ul style="list-style-type: none"> ii) he on-site detention/bio-retention basins form part of the overall solution. Provide an engineering and legal strategy/mechanism (e.g. Easement) to ensure that these devices can continue to perform as designed into the future. iii) Demonstrate that the design of the road stormwater system will convey runoff from the road reserve and the pre-developed lots to the proposed detention / bio-retention basin. iv) Demonstrate that the configuration, sizing and operation of the proposed detention / bio-retention basin system will accommodate runoff from the road stormwater system as per part (iii) above and result in no net worsening downstream of the site. v) Conveyance of existing external flows to the existing lawful point of discharge, ensuring no-net worsening downstream of the site. 	<p>Prior to commencing works</p>
<p>22.</p>	<p>Stormwater Conveyance System</p> <ul style="list-style-type: none"> a) Submit to EDQ TS detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the stormwater conveyance system designed generally in accordance with: <ul style="list-style-type: none"> i) <i>PDA Guideline No. 13 Engineering standards – Stormwater quantity</i>; and ii) Updated Site Based Stormwater Management Plan, required by Condition 21 of this approval. b) Construct stormwater network generally in accordance with the certified plans submitted under part a) of this condition. 	<ul style="list-style-type: none"> a) Prior to commencing works for the relevant stage b) Prior to survey plan endorsement for the relevant stage

	<p>c) Submit to EDQ TS "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p>	<p>c) Prior to survey plan endorsement for the relevant stage</p>
<p>23. Compliance Assessment - Stormwater detention/bio-retention basin</p>	<p>a) Submit to EDQ DA for Compliance Assessment detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the proposed detention/bio-retention basin designed generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards – Stormwater Quantity and Stormwater Quality; and ii) Updated Site Based Stormwater Management Plan, required by Condition 21 of this approval. <p>b) Construct the basin generally in accordance with the endorsed plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p> <p>Advice Note: <i>The proposed industrial allotments will have lot-based on-site stormwater detention and water quality treatment measures in the post-development phase. These treatment devices will be installed by the future lot owner with their size and location being allocated to suit the end use. Maintenance of these devices will be the responsibility of the future lot owners.</i></p>	<p>a) Prior to commencing works</p> <p>b) Prior to survey plan endorsement for the first stage</p> <p>c) Prior to survey plan endorsement for the first stage</p>
<p>24. Compliance Assessment – Swale</p>	<p>a) Submit to EDQ DA for Compliance Assessment detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the stormwater swale on the western boundary of the land designed generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards – Stormwater quantity and: ii) Concept Catchment Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 008 Issue I, Prepared by Telford Civil and dated 07/07/2021 iii) Swale Longitudinal Section, Plan No. TIEL202159.CIV.DA, Dwg No 018 Issue B, Prepared by Telford Civil and dated 07/07/2021 iv) Swale Cross Sections, Plan No. TIEL202159.CIV.DA, Dwg No 019 Issue C, Prepared by Telford Civil and dated 07/07/2021 <p>The detailed design shall ensure that the swale:</p> <ul style="list-style-type: none"> i) has adequate capacity to convey overland flow up to including the 1 in 100year event with appropriate freeboard ii) is free flowing with no ponding iii) is provided with an adjacent track to allow future maintenance iv) maintain a depth*velocity product not exceeding 0.6 up to including 1 in 100year event unless agreed in writing by Council 	<p>a) Prior to commencing works</p>

	<p>v) is appropriately fenced (fauna exclusion) along the eastern side of the swale.</p> <p>b) Construct the swale generally in accordance with the endorsed plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS swale "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p>	<p>b) Prior to survey plan endorsement for Stage 2</p> <p>c) Prior to survey plan endorsement for Stage 2</p>
25. Electricity	<p>a) Submit to EDQ TS a Certificate of Electricity Supply from ENERGEX for the provision of electricity supply to the approved development.</p> <p>b) Connect the approved development in accordance with the Certificate of Electricity Supply submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
26. Telecommunications	<p>a) Submit to EDQ TS documentation from an authorised telecommunication service provider confirming that an agreement has been entered into for the provision of underground telecommunication services to the approved development.</p> <p>b) Connect the approved development in accordance with the documentation submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
27. Broadband	<p>a) Submit to EDQ TS written agreement, from an authorised telecommunications service provider, confirming that fibre-ready pit and pipe infrastructure designed to service the approved development can accommodate services compliant with <i>Industry Guideline G645:2017 Fibre-Ready Pit and Pipe Specification for Real Estate Development Projects</i>.</p> <p>b) Construct the fibre-ready pit and pipe infrastructure specified in the agreement submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
28. Gas	<p>a) Submit to EDQ TS, documentation from an authorised gas service provider, confirming that an agreement has been entered into for the provision of underground gas services to the proposed development.</p> <p>b) Connect the development to underground gas services in accordance with the agreement mentioned in part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>

Landscape and environment

29. Streetscape works – Compliance Assessment

a) Submit to EDQ DA, for Compliance Assessment, detailed streetscape works drawings, certified by an AILA, for proposed streetscape works of Roads 1, 3 and 4, including a schedule of proposed standard and non-standard Contributed Assets to be transferred to Council.

The certified drawings are to include, where relevant:

1. location and type of street lighting in accordance with AS1158 –‘*Lighting for Roads and Public Spaces*’;
2. footpath treatments;
3. location and specifications of streetscape furniture;
4. location and size of stormwater treatment devices; and
5. street trees and plants, including species, size and location generally in accordance with Council’s adopted planting schedules and guidelines.

b) Construct streetscape works generally in accordance with the streetscape plans endorsed under part a) of this condition.

c) Submit to EDQ TS ‘as constructed’ plans, certified by an AILA, and asset register in a format acceptable to Council.

a) Prior to commencing streetscape work for the relevant stage

b) Prior to survey plan endorsement for the relevant stage

c) Prior to survey plan endorsement for the relevant stage

30. Vegetation Clearing

a) Submit to EDQ TS a vegetation clearing plan prepared by an ecologist for each stage that excludes the 25m buffer corridor and lot identified for open space.

b) Undertake vegetation clearing generally in accordance with the plan submitted under part a) of this condition. The clearing is to be undertaken with the stage to be developed.

c) Vegetation clearing is to be supervised by an Ecologist.

d) Submit to EDQ TS written certification from an Ecologist that vegetation clearing has been carried out generally in accordance with part b) of this condition.

a) Prior to commencement of clearing for relevant stage

b) At all times

c) At all times

d) Within 3 months of completion of clearing of the relevant stage

31. Fauna Spotter

a) A licensed Wildlife Spotter/Catcher under the *Nature Conservation Act 1992* is to undertake a survey of the site to identify any fauna or habitat features (e.g. nests, tree hollows) and certify that any necessary fauna protection measures or relocation procedures have been implemented.

b) A licensed Wildlife Spotter/Catcher must be present during the vegetation clearing.

a) Prior to commencement of vegetation clearing for the relevant stage

b) At all times during vegetation clearing

	<p>c) Submit to EDQ TS certification from the licensed Wildlife Spotter/Catcher that vegetation clearing and fauna protection measures was carried out generally in accordance with the conditions of approval.</p> <p>Advice Note: <i>Where an Environmental Protection and Biodiversity Conservation Act 1999 (EPBC) approval has been granted and includes fauna spotter requirements, the fauna spotter requirements under this condition will not be applicable for the same matters under the EPBC approval.</i></p>	<p>c) Within 3 months of the completion of vegetation clearing of the relevant stage</p>
<p>32. Vegetation – Compensatory Planting</p>	<p>a) Submit to EDQ TS a planting plan certified by an ecologist showing the extent of compensatory planting to be undertaken in lot identified as ‘Open Space’ on Proposed Development Layout Plan, Plan No. TIEL2020159.CIV.DA, Dwg 10, Issue H dated 07/07/2021, excluding the minimum 25m buffer on the western boundary, including, type and extent of planting, as set out in the EDQ Guideline 17: Remnant Vegetation and Koala Habitat Obligations in Greater Flagstone and Yarrabilba PDAs dated May 2015.</p> <p>b) Undertake compensatory planting in accordance with a) of this condition.</p> <p>c) Once compensatory planting has been undertaken, submit to EDQ TS confirmation from a qualified arborist (AQF Level 5) or ecologist that the compensatory planting has been undertaken in accordance with b) of this condition.</p>	<p>a) Prior to commencement of vegetation clearing for the relevant stage</p> <p>b) Within 3 months of commencement of vegetation clearing</p> <p>c) Within 12 months of commencement of vegetation clearing of the relevant stage</p>
<p>33. Bushfire management</p>	<p>a) Carry out bushfire management works in accordance with:</p> <ul style="list-style-type: none"> (i) Section 6 of the approved Bushfire Management Plan, Report 16014, Final V3, dated 13 July 2018 (ii) Addendum to the Bushfire Management Plan for the proposed development at 4499-4651 Mount Lindsay Highway, North Maclean dated 18 February 2021. <p>b) Submit to EDQ TS verification from a suitably qualified professional that the works required for bushfire management and mitigation within the relevant stages have been carried out generally in accordance with the relevant approved plans and documents.</p> <p>Advice Note: <i>If the adjoining landowner obtains approval for vegetation clearing that reduces bushfire impact, then this can be articulated though an updated context plan supported by a new bushfire advice.</i></p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>

Surveying, land transfers and easements		
34.	<p>Land transfers - contaminated land</p> <p>Submit to EDQ TS a copy of a site suitability statement, as required under the EP Act, confirming that all land conditioned to be transferred to a trustee is suitable for the intended purpose(s). The site suitability statement must be prepared by a suitably qualified person and be certified by an approved auditor in accordance with the EP Act.</p> <p><i>NOTES:</i> For the purpose of this condition a suitably qualified person is defined in the EP Act.</p> <p>A list of approved auditors can be found at the following website: https://www.qld.gov.au/environment/pollution/management/contaminated-land/auditor-engagement.</p>	Prior to survey plan endorsement for the relevant stage
35.	<p>Land transfers – drainage and offset area</p> <p>Transfer, in fee simple, to Council as trustee, the Lot identified as Open Space as shown on the approved plans for drainage and offset open space purposes.</p>	At registration of survey plan for Stage 2
36.	<p>Land transfers – Sewerage pump station</p> <p>a) Submit to EDQ TS, confirmation from Council on the size and location of the Sewer pump station site.</p> <p>b) Transfer in fee simple, to Council as trustee, land for the proposed sub-regional pump station generally in accordance as shown on:</p> <p style="padding-left: 20px;">i) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 012, Issue G, prepared by Teleford Civil and dated 07/07/21.</p> <p>The land metes and bounds must be to the satisfaction of the Chief Executive Officer of the authority.</p> <p>Advice Note: This land forms part of the sub-regional sewer infrastructure to be delivered by Council. Offsets for the land may be available.</p>	<p>a) Prior to survey plan endorsement of the first stage</p> <p>b) At registration of survey plan for the first stage</p>
37.	<p>Rising main easement</p> <p>Provide a 6m wide easement, in favour of and at no cost to the Council, along the southern boundary for the proposed sub-regional sewerage rising main generally in accordance as shown on:</p> <p style="padding-left: 20px;">i) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 012, Issue G, prepared by Teleford Civil and dated 07/07/21.</p> <p>The terms of public utility easements are to be to the satisfaction of the Chief Executive Officer of the authority which is to accept and maintain the Contributed Assets.</p> <p>Advice Note: If an alternative route for the rising main is pursued, the easement can be cancelled at the agreement of Council.</p>	At registration of survey plan for the first stage

38.	<p>Easements over infrastructure</p> <p>Provide public utility easements, in favour of and at no cost to the grantee, over infrastructure located in land (other than road) for Contributed Assets. .</p> <p>The terms of public utility easements are to be to the satisfaction of the Chief Executive Officer of the authority which is to accept and maintain the Contributed Assets.</p>	<p>At registration of survey plan for the relevant stage</p>
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STANDARD ADVICE

Please note that to lawfully undertake development, it may be necessary to obtain approvals other than this PDA development approval. For advice on other approvals that may be necessary in relation to your proposal, it is recommended that you seek professional advice.

**** End of Package ****

APPENDIX D

DEV 2018/961 Decision Notice



Department of
**State Development, Infrastructure,
Local Government and Planning**

Our ref: DEV2018/961

10 September 2021

Wearco Pty Ltd
C/- Reel Planning Pty Ltd
Att: Ms Amy Adamson
PO Box 2088
MILTON QLD 4064

Email: amy@reelplanning.com

Dear Amy

S89(1)(a) Approval of PDA development application

PDA Development Permit for reconfiguring a lot – 1 lot into 4 lots, plus roads and open space at 4499-4651 Mount Lindesay Highway, North Maclean described as Lot 39 on RP253739

On 10 September 2021, pursuant to s.85(4)(b) of the *Economic Development Act 2012*, the Minister for Economic Development Queensland (MEDQ) decided to grant **all** of the PDA development application applied for, in accordance with the attached PDA decision notice.

The PDA decision notice and approved plans / documents can also be viewed in the MEDQ Development Approvals Register via the Department website at www.dsdilgp.qld.gov.au/pda-da-applications.

If you require any further information, please contact Mr Brandon Bouda, Manager, Development Assessment, in Economic Development Queensland, by telephone on (07) 3452 7422 or at brandon.bouda@dsdilgp.qld.gov.au, who will be pleased to assist.

Yours sincerely

Jeanine Stone
Director
Development Assessment
Economic Development Queensland

PDA Decision Notice

Site information		
Name of priority development area (PDA)	Greater Flagstone	
Site address	4499 – 4651 Mount Lindesay Highway, North Maclean	
Lot on plan description	Lot number	Plan description
	39	SP258739
PDA development application details		
DEV reference number	DEV2018/961	
'Properly made' date	19 October 2018	
Type of application	<input checked="" type="checkbox"/> PDA development application for: <ul style="list-style-type: none"> <input type="checkbox"/> Material change of use <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input type="checkbox"/> Development permit <input checked="" type="checkbox"/> Reconfiguring a lot <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input checked="" type="checkbox"/> Development permit <input type="checkbox"/> Operational work <ul style="list-style-type: none"> <input type="checkbox"/> Preliminary approval <input type="checkbox"/> Development permit <input type="checkbox"/> Application to change PDA development approval <input type="checkbox"/> Application to extend currency period 	
Proposed development	1 into 4 lots, with road, open space and a context plan	
PDA development approval details		
Decision of the MEDQ	<p>The MEDQ has decided to grant all of the PDA development approval applied for, subject to PDA development conditions forming part of this decision notice.</p> <p>The approval is for:</p> <ul style="list-style-type: none"> • 1 into 4 lots, with road, open space and a context plan 	
Decision date	10 September 2021	
Currency period	6 years from the date of the decision	

Approved plans and documents

The plans and documents approved by the MEDQ and referred to in the PDA development conditions for the PDA development approval are detailed below.

Approved plans and documents		Number	Date
1.	Proposed Development Layout Plan	TIEL2020159.CIV.DA 010, Issue H	07/07/21 (as amended in red dated 08/09/2021)
2.	Staging Plan	TIELK202159.CIV.DA, Dwg No. 16, Issue C	07/07/2021 (as amended in red date 03/09/2021)
3.	Concept Earthworks Layout Plan	TIEL202159.CIV.DA, Dwg No. 015, Issue G	07/07/21
4.	Concept Water Reticulation Layout Plan	TIEL202159.CIV.DA, Dwg No. 014, Issue G	07/07/21
5.	Concept Sewer Reticulation Layout Plan	TIEL202159.CIV.DA, Dwg No. 012, Issue G	07/07/21 (as amended in red dated 03/09/2021)
6.	Concept Stormwater Drainage Layout Plan	TIEL202159.CIV.DA, Dwg No. 013, Issue H	07/07/21
7.	Concept Catchment Layout Plan	TIEL202159.CIV.DA, Dwg No. 008, Issue I	07/07/21
8.	Swale Cross Section	TIEL202159.CIV.DA.DWG No 019, Issue C	07/07/21
9.	Swale Longitudinal Section	TIEL202159.CIV.DA, Dwg No 018, Issue B	07/07/21
10.	Traffic Impact Assessment	16378, Version 3	01/03/19
11.	Bushfire Management Plan	Report 16014, Final V3	13 July 2018
12.	Addendum to the bushfire management plan for the proposed development at 4499-4651 Mount Lindsay Highway, North Maclean		18 February 2019
13.	North Maclean Enterprise Precinct (4499-4651 Mount Lindesay Highway, North Maclean) – Progression of Ecological Issues		31 March 2017

Supporting Plans and Documents

To remove any doubt, the following documents are not approved documents for the purposes of this PDA development approval, but rather are supporting documents.

Supporting plans, reports and specifications	Number (if applicable)	Date (if applicable)
Endorsed Context Plan		
1.	North Maclean Enterprise Context Plan Land Use and Road Network	12/07/2021 (as amended in red dated 03/09/2021)
2.	North Maclean Enterprise Context Plan Land Use and Road Network (Wider Locality)	12/07/2021
3.	North Maclean Enterprise Context Plan Ultimate Water and Sewer Network	12/07/2021
4.	North Maclean Enterprise Context Plan Ultimate Stormwater Network	12/07/2021 (as amended in red dated 03/09/2021)
Supporting Plans, Reports and Specifications		
5.	Site Based Stormwater Management Plan	TEL202159, Issue A 08 July 2021
6.	Engineering Services Report	TEL202159, Issue A 06/07/21.

PDA development conditions

PREAMBLE AND ABBREVIATIONS

PREAMBLE

For the purpose of interpreting this PDA Development Approval, including the PDA Development Conditions, the following applies:

Compliance assessment

Where a condition of this approval requires Compliance Assessment, Compliance Assessment is required in accordance with the following:

a) The applicant must:

- i) pay to MEDQ at the time of submission the relevant fee for Compliance Assessment, including any third party peer review costs which will be charged on a 100% cost recovery basis. The Compliance Assessment fees are set out in EDQ Development Assessment Fees and Charges Schedule¹ (as amended from time to time).
- ii) submit to EDQ DA a duly completed Compliance Assessment form².
- iii) submit to EDQ DA the documentation as required under the relevant condition.

b) Where EDQ is satisfied the documentation submitted for Compliance Assessment meets the requirements of the relevant condition (or element of the condition), EDQ will endorse the documentation and advise by written notice.

¹ The EDQ Development Assessment Fees and Charges Schedule is available at EDQ's website.

² The Compliance Assessment form is available at EDQ's website. It sets out how to submit documentation for Compliance Assessment and how to pay Compliance Assessment fees.

- c) Compliance Assessment and endorsement can be repeated where a different design or solution, to that already endorsed, is sought.
- d) The process and timeframes that apply to Compliance Assessment are as follows:
 - i) applicant submits items required under a) above to EDQ DA for Compliance Assessment.
 - ii) **within 30 business days** – EDQ assesses the documentation and:
 - 1. if satisfied, endorses the documentation; or
 - 2. if not satisfied, notifies the applicant accordingly.
 - iii) if the applicant is notified under ii.2. above, revised documentation must be submitted **within 30 business days** from the date of notification.
 - iv) **within 30 business days** – EDQ assesses the revised documentation and:
 - 1. if satisfied, endorses the revised documentation; or
 - 2. if not satisfied, notifies the applicant accordingly.
 - v) where EDQ notifies the applicant as stated under iv.2. above, repeat steps iii. and iv. above. If either party is not satisfied by the outcome of this process, that party can elect to enter into a mediation process with an independent mediator agreed to by both parties.

Despite note v. above, the condition (or element of the condition) is determined to have been met only when EDQ endorses relevant documentation.

SUBMITTING DOCUMENTATION TO EDQ:

Where a condition of this approval requires documentation to be submitted to either EDQ DA or EDQ TS, submit the documentation to:

- a) EDQ DA at: pdadevelopmentassessment@dsgmip.qld.gov.au.
- b) EDQ TS at: EDQ_PrePostConstruction@dsgmip.qld.gov.au.

ABBREVIATIONS

For the purposes of interpreting the PDA Development Conditions, the following is a list of abbreviations utilised:

1. **AILA** means a Landscape Architect registered Australian Institute Landscape Architect.
2. **Certification Procedures Manual** means the document titled *Certification Procedures Manual*, prepared by the Department of Infrastructure, Local Government and Planning, dated 16 October 2017 (as amended from time to time).
3. **Contributed Asset** means an asset constructed under a PDA development approval or Infrastructure Agreement that will become the responsibility of an External Authority. For the purposes of operational works for a Contributed Asset, the following definitions apply:
 - a. **External Authority** means a public-sector entity other than the MEDQ;
 - b. **Parkland** means carrying out operational work related to the provision of parkland infrastructure;

- c. **Roadworks** means carrying out any operational work within existing or proposed road(s), to a depth of 1.5m measured from the top of kerb, and includes Streetscape Works;
- d. **Sewer Works** means carrying out any operational work related to the provision of wastewater infrastructure;
- e. **Streetscape Works** means carrying out any operational work within the verge of a road, including footpath surface treatments, street furniture, street lighting and landscaping;
- f. **Stormwater Works** means carrying out any operational work related to the provision of stormwater infrastructure; and
- g. **Water Works** means carrying out any operational work related to the provision of water infrastructure.

- 4. **Council** means Logan City Council.
- 5. **DSDILGP** means The Department of State Development, Infrastructure, Local Government and Planning
- 6. **EDQ** means Economic Development Queensland
- 7. **EDQ DA** means Economic Development Queensland's – Development Assessment team.
- 8. **EDQ TS** means Economic Development Queensland's – Technical Services team.
- 9. **IFF** means Infrastructure Funding Framework.
- 10. **MEDQ** means The Minister of Economic Development Queensland.
- 11. **PDA** means Priority Development Area.
- 12. **RPEQ** means Registered Professional Engineer of Queensland

No.	Condition	Timing
General		
1.	<p>Carry out the approved development</p> <p>Carry out the approved development generally in accordance with the approved plans and documents; and any other documentation endorsed via Compliance Assessment as required by these conditions.</p>	Prior to survey plan endorsement for the relevant stage
2.	<p>Street naming</p> <p>Submit to EDQ DA a schedule of street names approved by Council.</p>	Prior to survey plan endorsement for the relevant stage
Construction		
3.	<p>Hours of work - construction</p> <p>Unless otherwise endorsed, via Compliance Assessment for out of hours work, construction hours for the approved development are limited to Monday to Saturday between 6:30am to 6:30pm, excluding public holidays.</p>	During construction unless otherwise endorsed

4.	<p>Out of hours work - Compliance Assessment</p> <p>Where out of hours work is proposed, submit to EDQ DA, for Compliance Assessment, an out of hours work request. The out of hours work request must include a duly completed out of hours work request form³.</p>	<p>Minimum of 10 business days prior to proposed out of hours work commencement date</p>
5.	<p>Certification of Operational Work</p> <p>Carry out all Operational Work under this approval in accordance with the <i>Certification Procedures Manual</i>.</p>	<p>At all times</p>
6.	<p>Construction management plan</p> <p>a) Submit to EDQ TS a site-based Construction Management Plan (CMP), prepared by the principal site contractor and reviewed by a suitably qualified and experienced person responsible for overseeing the site works, to manage construction impacts, including:</p> <ul style="list-style-type: none"> i) noise and dust in accordance with the EP Act; ii) stormwater flows around and through the site without increasing the concentration of total suspended solids or Prescribed Water Contaminants (as defined in the EP Act), causing erosion, creating any ponding and causing any actionable nuisance to upstream and downstream properties; iii) contaminated land, where required under a site suitability statement prepared in accordance with section 389 of the EP Act; iv) complaints procedures; v) site management: <ul style="list-style-type: none"> 1. for the provision of safe and functional alternative pedestrian routes, past, through or around the site; 2. to mitigate impacts to public sector entity assets, including street trees, on or external to the site; 3. for safe and functional temporary vehicular access points and frequency of use; 4. for the safe and functional loading and unloading of materials including the location of any remote loading sites; 5. for the location of materials, structures, plant and equipment; 6. of waste generated by construction activities; 7. detailing how materials are to be loaded/unloaded; 8. of proposed external hoardings and gantries (with clearances to street furniture and other public sector entity assets); 9. of employee and visitor parking areas; 10. of anticipated staging and programming; 11. for the provision of safe and functional emergency exit routes; and 12. any out of hours work as endorsed via Compliance Assessment. <p>b) A copy of the CMP submitted under part a) of this condition must be current and available on site.</p>	<p>a) Prior to commencing work for the relevant stage</p> <p>b) During construction</p>

³ The out of hours work request form is available at EDQ's website.

	c) Carry out all construction work generally in accordance with the CMP submitted under part a) of this condition.	c) During construction
7.	Erosion and sediment management a) Submit to EDQ TS an Erosion and Sediment Control Plan (ESCP), certified by a RPEQ or an accredited professional in erosion and sediment control, and prepared generally in accordance with the following: i) construction phase stormwater management design objectives of the <i>State Planning Policy 2017</i> (Appendix 2 Table A); ii) <i>Healthy Land and Water Technical Note: Complying with the SPP – Sediment Management on Construction Sites</i> . b) Implement the certified ESCP submitted under part a) of this condition.	a) Prior to commencing work for the relevant stage b) During construction
8.	Dispersive soil management a) Submit to EDQ TS a Dispersive Soil Management Plan, prepared by a soil science/soil chemistry specialist that details for the design, construction, and operational phases of the development including: i. the suite of methods required to identify and address potential issues associated with the exposure and re-use of dispersive soils, ii. details of the areas where dispersive soils will be disturbed and treated/rehabilitated. b) Implement and monitor the actions identified in the Dispersive Soil Management Plan as required under part a) of this condition.	a) Prior to commencing site works b) At all times during construction
9.	Traffic Management Plan a) Submit to EDQ TS a Traffic Management Plan (TMP), certified by a person holding a current Traffic Management Design qualification. The TMP must include the following: i) provision for the safe and functional management of traffic around and through the site during and outside of construction work hours; ii) provision for the safe and functional management of pedestrian traffic, including alternative pedestrian routes past, through or around the site; iii) provision of parking for workers and materials delivery; iv) risk identification, assessment and identification of mitigation measures; v) ongoing monitoring, management review and certified updates (as required); and vi) traffic control plans and/or traffic control diagrams, prepared in accordance with <i>Austroads Guide to Temporary Traffic Management</i> , for any temporary part or full road closures. b) Carry out all construction work generally in accordance with the certified TMP submitted under part a) of this condition, which is to be current and available on site.	a) Prior to commencing work for the relevant stage b) During construction

	<p>Advice Note: Operational traffic changes, such as temporary and permanent lane modifications, relaxation of clearway zone hours or footpath closures may require authorisation from Council or DTMR as road manager. It is recommended that applicants engage directly with the applicable road manager.</p>	
10.	<p>Public infrastructure (damage, repairs and relocation)</p> <p>a) Repair any damage to existing public infrastructure caused by works carried out in association with the approved development.</p> <p>b) Where existing public infrastructure require repair or relocation, due to the approved development and/or works associated with the approved development, repair and/or relocate the public infrastructure at no cost to others and in accordance with statutory requirements and adopted design standards.</p> <p>Advice Note: It is recommended applicants record their own dated photographic evidence of the condition of relevant existing public infrastructure both before and after works carried out in association with the approved development.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
Earthworks and retaining walls		
11.	<p>Compliance Assessment - Earthworks</p> <p>a) Submit to EDQ DA for Compliance Assessment detailed earthworks plans, certified by a RPEQ, and designed generally in accordance with:</p> <ol style="list-style-type: none"> i) Australian Standard AS3798 – 2007 Guidelines on Earthworks for Commercial and Residential Developments and ii) the approved Concept Earthworks Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 015, Issue G, Prepared by Telford Civil, dated 07/07/21. <p>The certified earthworks plans are to:</p> <ol style="list-style-type: none"> i) include a geotechnical soils assessment of the site; ii) accord with the Erosion and Sediment Control Plan, as required by condition 7 – Erosion and sediment management; iii) accord with the Dispersive Soil Management Plan, as required by condition 8 – Dispersive soil management; iv) include the location and finished surface levels of any cut and/or fill; v) provide details of any areas where surplus soils are to be stockpiled; vi) detail protection measures to: <ol style="list-style-type: none"> 1. ensure adjoining properties and roads are not impacted by ponding or nuisance stormwater resulting from earthworks associated with the approved development; 2. preserve all drainage structures from structural loading impacts resulting from earthworks associated with the approved development. 	<p>a) Prior to commencing earthworks for the relevant stage</p>

	<p>b) Carry out earthworks generally in accordance with the certified plans endorsed by EDQ through part a) of this condition.</p> <p>c) Submit to EDQ TS RPEQ certification that:</p> <ul style="list-style-type: none"> i) all earthworks have been carried out generally in accordance with the certified plans submitted under part a) of this condition; and ii) any unsuitable material encountered has been treated or replaced with suitable material. 	<p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
12.	<p>Retaining walls (excluding the western boundary retaining wall)</p> <p>a) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, of all retaining walls 1m or greater in height. Retaining walls must be:</p> <ul style="list-style-type: none"> i) certified to achieve a minimum 50 year design life; ii) designed generally in accordance with <i>AS4678 – Earth Retaining Structures</i> and relevant material standards (e.g. <i>AS3600 – Concrete Structures</i>); <p>b) Construct retaining walls generally in accordance with the certified plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS certification from an RPEQ that all retaining wall works 1.0m or greater in height have been constructed generally in accordance with the certified plans submitted under part a) of this condition.</p>	<p>a) Prior to commencing earthworks for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
13.	<p>Compliance Assessment – Western boundary retaining wall</p> <p>a) Submit to EDQ DA for Compliance Assessment preliminary engineering plans, certified by a RPEQ, of the proposed western boundary retaining wall adjoining the swale. The retaining wall must be:</p> <ul style="list-style-type: none"> i) fully contained, including footings, within the private lots; ii) designed based on a professional geotechnical advice; iii) take into consideration scour and flood impacts from the adjoining swale; and iv) appropriately fenced (fauna exclusion). <p>b) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, of the proposed retaining wall along the western swale, generally in accordance with the endorsed plans required under part a) of this condition. The retaining wall must be:</p> <ul style="list-style-type: none"> i) certified to achieve a minimum 100 year design life; ii) designed generally in accordance with <i>AS4678 – Earth Retaining Structures</i> and relevant material standards (e.g. <i>AS3600 – Concrete Structures</i>); <p>c) Construct retaining walls generally in accordance with the certified plans required under part b) of this condition.</p>	<p>a) Prior to commencing earthworks for Stage 2</p> <p>b) Prior to survey plan endorsement for Stage 2</p> <p>c) Prior to survey plan endorsement for Stage 2</p>

	<p>d) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) 'as-constructed' plans, certified by a RPEQ, demonstrating that the retaining wall has been constructed generally in accordance with the certified plans submitted under part a) of this condition. ii) A survey plan identifying the location of wall and footings to the property boundary. 	<p>d) Prior to survey plan endorsement for Stage 2</p>
Roadworks, urban servicing and stormwater management		
<p>14.</p>	<p>Compliance Assessment - Road 1, Road 3 and Road 4</p> <p>a) Submit to EDQ DA for Compliance Assessment functional layout plans, certified by a RPEQ, for Road 1, Road 3 and Road 4 generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards; and ii) Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 iii) Industrial Connector Street Cross-Section as identified in the Engineering Services Report prepared by Telford Civil and dated 06/07/21. <p style="padding-left: 40px;">The roads are to be designed to allow for the use of heavy vehicles (B-doubles).</p> <p>b) Submit to EDQ TS detailed engineering plans, certified by a RPEQ, for roadworks for Road 1, Road 3 and Road 4, including parking bays, traffic devices and footpaths generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards; and ii) functional layout plans endorsed under part a) of this condition. <p>c) Construct roadworks generally in accordance with the certified plans submitted under part b) of this condition.</p> <p>d) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) certification from a RPEQ that all roadworks have been constructed generally in accordance with the certified plans submitted under part a) of this condition; and ii) all documentation as required by the <i>Certification Procedures Manual</i>. iii) as-constructed drawings, asset register and test results, certified by a RPEQ, in a format acceptable to the end asset owners for all roadworks constructed under this condition. 	<p>a) Prior to commencing site works</p> <p>b) Prior to commencing roadworks for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>
<p>15.</p>	<p>Compliance assessment – Crowson Lane and Greenhill Road intersection interim layout</p> <p>Unless ultimate intersection works are already delivered by Council as part of the Crowson Lane augmentation project:</p> <p>a) Submit to EDQ DA for Compliance Assessment engineering design and construction drawings, certified by a RPEQ, for the auxiliary left-turn treatment and channelised right turn lane</p>	<p>a) Prior to commencing intersection works</p>

	<p>treatment at the Crowson Lane/Greenhill Road intersection, generally in accordance with the following plans/documents:</p> <ul style="list-style-type: none"> i. PDA Guideline No. 13 Engineering standards; and ii. Traffic Impact Assessment, Report No. 16378, Version 3 prepared by Rytenskiid Traffic Engineering and dated 1 March 2019. <p>b) Construct the works generally in accordance with the endorsed plans submitted under part a) of this condition.</p> <p>c) Submit to EDQ TS:</p> <ul style="list-style-type: none"> i) certification from a RPEQ that the intersection works have been constructed generally in accordance with the certified plans submitted under part b) of this condition; and ii) all documentation as required by the Certification Procedures Manual. iii) as-constructed drawings, asset register and test results, certified by a RPEQ, in a format acceptable to the end asset owners for all roadworks constructed under this condition. 	<p>b) Prior to survey plan endorsement for the first stage</p> <p>c) Prior to survey plan endorsement for the first stage</p>
<p>16.</p>	<p>Mount Lindesay Highway Service Road (Road 2)</p> <p>a) Submit to EDQ TS, approval from the Department of Transport and Main Roads for the Mount Lindesay Highway service lane, identified as Road 2 on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21</p> <p>The service lane is to be designed to allow for the use of heavy vehicles (B-doubles).</p> <p>b) Construct the extent of Road 2 as shown on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 from the intersection with Road 1 to the Crowson Lane Interchange with the first stage of development in accordance with the approval from DTMR as required under part a)</p> <p>c) Construct the extent of Road 2 as shown on Proposed Development Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 010, Issue H, prepared by Telford Civil and dated 07/07/21 from the intersection with Road 3 to the intersection of Road 1 with the second stage of development in accordance with the approval from DTMR as required under part a).</p> <p>d) Submit to EDQ TS, certification from a RPEQ that all roadworks have been constructed generally in accordance part a) of this condition.</p> <p><i>Advice Note: Construction of this service lane in accordance with the Industrial Connector cross-section or as alternatively agreed to by EDQ and meets EDQ's minimum requirements for offsetable infrastructure, can be considered offsetable.</i></p>	<p>a) Prior to commencing works for Stage 1</p> <p>b) As indicated</p> <p>c) As indicated</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>

<p>17. Street lighting</p>	<p>Comply with either parts a) and c) or parts b) and c) of this condition.</p> <p>a) Design and install a <u>Rate 2</u> street lighting system, certified by a RPEQ, to all roads, including footpaths/bikeways within road reserves. The design of the street lighting system must:</p> <ul style="list-style-type: none"> i) meet the relevant standards of Energex; ii) be endorsed by Energex as 'Rate 2 Public Lighting'; iii) be endorsed by Council as the Energex 'billable customer'; iv) be generally in accordance with <i>Australian Standards AS1158 – 'Lighting for Roads and Public Spaces</i>. <p>b) Design and install a <u>Rate 3</u> street lighting system, certified by a suitably qualified and experienced RPEQ, to all roads, including footpaths/bikeways within road reserves. The design of the street lighting system must:</p> <ul style="list-style-type: none"> i) be in accordance with <i>Australian Standards AS1158 – 'Lighting for Roads and Public Spaces'</i> ii) meet the requirements of AS3000 – '<i>SAA Wiring Rules</i>'. iii) meet the requirements of Energex for unmetered supply iv) be endorsed by the relevant ownership authority. <p>c) Submit to EDQ TS 'as-constructed' plans and test documentation, certified by a RPEQ, in a format acceptable to Council.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>
<p>18. Compliance Assessment - Water reticulation</p>	<p>a) Submit to EDQ DA for Compliance Assessment a detailed water network plan, supported by hydraulic analysis, certified by RPEQ. The water network plan shall be prepared in accordance with:</p> <ul style="list-style-type: none"> i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and ii) Concept Water Reticulation Layout Plan, Plan no. TIEL202159.CIV.DA, Dwg No 014, Issue G, prepared by Telford Civil and dated 07/07/21. <p>b) Submit to EDQ TS detailed water reticulation design plans, certified by a RPEQ. The certified water reticulation design plans must be designed generally in accordance with:</p> <ul style="list-style-type: none"> i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and ii) the endorsed water network analysis required under part a) of this condition. <p>c) Construct water reticulation works generally in accordance with the certified plans submitted under part a) of this condition.</p>	<p>a) Prior to commencing works for Stage 1</p> <p>b) Prior commencing water reticulation work for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p>

	<p>d) Submit to EDQ TS 'as constructed' plans, certified by a RPEQ, of all water reticulation infrastructure constructed in accordance with this condition, including an asset register, pressure and bacterial test results in accordance with:</p> <p>i) SEQ Water Supply and Sewerage Design and Construction Code - Asset Information.</p>	<p>d) Prior to survey plan endorsement for the relevant stage</p>
19.	<p>Compliance Assessment – Internal Sewer reticulation</p> <p>a) Submit to EDQ DA for Compliance Assessment a detailed internal sewerage network plan, supported by hydraulic analysis, certified by RPEQ. The internal sewer network plan shall be prepared in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and</p> <p>ii) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No 012, Issue G, prepared by Telford Civil and dated 07/07/21.</p> <p>The sewerage network plan shall include the extension of the internal sewer reticulation to the southern boundary to service the external catchment falling to the site.</p> <p>b) Submit to EDQ TS detailed sewer reticulation design plans, certified by a RPEQ. The certified sewer reticulation design plans must be designed generally in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code</i>; and</p> <p>ii) the endorsed sewer network plan required under part a) of this condition</p> <p>c) Construct the internal sewer reticulation works generally in accordance with the certified plans submitted under part b) of this condition.</p> <p>d) Submit to EDQ TS 'as constructed' plans, certified by an RPEQ, of all internal sewer reticulation infrastructure constructed in accordance with this condition, including an asset register, pressure and CCTV results in accordance with:</p> <p>i) <i>SEQ Water Supply and Sewerage Design and Construction Code - Asset Information.</i></p> <p>Advice Note: <i>The Sub-Regional sewerage pump station NM1 and external sewer rising main will be constructed and put in operation by Council.</i></p>	<p>a) Prior to commencing works for the relevant stage</p> <p>b) Prior to commencing works for the relevant stage</p> <p>c) Prior to survey plan endorsement for the relevant stage</p> <p>d) Prior to survey plan endorsement for the relevant stage</p>
20.	<p>Temporary sewage tankering of wastewater</p> <p>Unless the Sub-Regional sewerage pump station NM1 and external rising main is completed and in operation by Council:</p> <p>a) Enter into a tankering agreement with Council for the collection and disposal of wastewater for any lots created; and</p> <p>b) Maintain the tankering agreement required by part a) of this condition until Sub-Regional sewerage pump station NM1 is commissioned.</p>	<p>a) Prior to survey plan endorsement for the first stage</p> <p>b) As indicated</p>

<p>21.</p>	<p>Compliance Assessment – Updated Site Based Stormwater Management Plan</p> <p>Submit to EDQ DA for Compliance Assessment an updated Site Base Stormwater Management Plan (SBSMP), certified by a RPEQ, for the management of stormwater within the site to ensure non-worsening to downstream properties, including Mt Lindesay Highway, generally in accordance with <i>PDA Guideline No. 13 Engineering standards, Stormwater Quantity and Stormwater Quality</i>.</p> <p>The updated SBSMP shall include the following:</p> <ul style="list-style-type: none"> i) Confirmation that the subject site is not impacted by flooding. This confirmation is to be provided through the undertaking of a site based flood model. If impacted by flood, provide further details on the Q100 line and the type of inundation – conveyance and/or storage <p>Or</p> <p>Demonstrate that the updated current solution identified in the SBSMP ensures that there is no worsening at lawful point of discharge based on Council’s nominated 1% AEP flood level at Mt Lindesay Highway.</p> <ul style="list-style-type: none"> ii) he on-site detention/bio-retention basins form part of the overall solution. Provide an engineering and legal strategy/mechanism (e.g. Easement) to ensure that these devices can continue to perform as designed into the future. iii) Demonstrate that the design of the road stormwater system will convey runoff from the road reserve and the pre-developed lots to the proposed detention / bio-retention basin. iv) Demonstrate that the configuration, sizing and operation of the proposed detention / bio-retention basin system will accommodate runoff from the road stormwater system as per part (iii) above and result in no net worsening downstream of the site. v) Conveyance of existing external flows to the existing lawful point of discharge, ensuring no-net worsening downstream of the site. 	<p>Prior to commencing works</p>
<p>22.</p>	<p>Stormwater Conveyance System</p> <ul style="list-style-type: none"> a) Submit to EDQ TS detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the stormwater conveyance system designed generally in accordance with: <ul style="list-style-type: none"> i) <i>PDA Guideline No. 13 Engineering standards – Stormwater quantity</i>; and ii) Updated Site Based Stormwater Management Plan, required by Condition 21 of this approval. b) Construct stormwater network generally in accordance with the certified plans submitted under part a) of this condition. 	<ul style="list-style-type: none"> a) Prior to commencing works for the relevant stage b) Prior to survey plan endorsement for the relevant stage

	<p>c) Submit to EDQ TS "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p>	<p>c) Prior to survey plan endorsement for the relevant stage</p>
23.	<p>Compliance Assessment - Stormwater detention/bio-retention basin</p> <p>a) Submit to EDQ DA for Compliance Assessment detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the proposed detention/bio-retention basin designed generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards – Stormwater Quantity and Stormwater Quality; and ii) Updated Site Based Stormwater Management Plan, required by Condition 21 of this approval. <p>b) Construct the basin generally in accordance with the endorsed plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p> <p>Advice Note: <i>The proposed industrial allotments will have lot-based on-site stormwater detention and water quality treatment measures in the post-development phase. These treatment devices will be installed by the future lot owner with their size and location being allocated to suit the end use. Maintenance of these devices will be the responsibility of the future lot owners.</i></p>	<p>a) Prior to commencing works</p> <p>b) Prior to survey plan endorsement for the first stage</p> <p>c) Prior to survey plan endorsement for the first stage</p>
24.	<p>Compliance Assessment – Swale</p> <p>a) Submit to EDQ DA for Compliance Assessment detailed engineering drawings and hydraulic calculations, certified by a RPEQ, for the stormwater swale on the western boundary of the land designed generally in accordance with:</p> <ul style="list-style-type: none"> i) PDA Guideline No. 13 Engineering standards – Stormwater quantity and: ii) Concept Catchment Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 008 Issue I, Prepared by Telford Civil and dated 07/07/2021 iii) Swale Longitudinal Section, Plan No. TIEL202159.CIV.DA, Dwg No 018 Issue B, Prepared by Telford Civil and dated 07/07/2021 iv) Swale Cross Sections, Plan No. TIEL202159.CIV.DA, Dwg No 019 Issue C, Prepared by Telford Civil and dated 07/07/2021 <p>The detailed design shall ensure that the swale:</p> <ul style="list-style-type: none"> i) has adequate capacity to convey overland flow up to including the 1 in 100year event with appropriate freeboard ii) is free flowing with no ponding iii) is provided with an adjacent track to allow future maintenance iv) maintain a depth*velocity product not exceeding 0.6 up to including 1 in 100year event unless agreed in writing by Council 	<p>a) Prior to commencing works</p>

	<p>v) is appropriately fenced (fauna exclusion) along the eastern side of the swale.</p> <p>b) Construct the swale generally in accordance with the endorsed plans required under part a) of this condition.</p> <p>c) Submit to EDQ TS swale "as constructed" plans, certified by a RPEQ including an asset register in a format acceptable to Council.</p>	<p>b) Prior to survey plan endorsement for Stage 2</p> <p>c) Prior to survey plan endorsement for Stage 2</p>
25. Electricity	<p>a) Submit to EDQ TS a Certificate of Electricity Supply from ENERGEX for the provision of electricity supply to the approved development.</p> <p>b) Connect the approved development in accordance with the Certificate of Electricity Supply submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
26. Telecommunications	<p>a) Submit to EDQ TS documentation from an authorised telecommunication service provider confirming that an agreement has been entered into for the provision of underground telecommunication services to the approved development.</p> <p>b) Connect the approved development in accordance with the documentation submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
27. Broadband	<p>a) Submit to EDQ TS written agreement, from an authorised telecommunications service provider, confirming that fibre-ready pit and pipe infrastructure designed to service the approved development can accommodate services compliant with <i>Industry Guideline G645:2017 Fibre-Ready Pit and Pipe Specification for Real Estate Development Projects</i>.</p> <p>b) Construct the fibre-ready pit and pipe infrastructure specified in the agreement submitted under part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>
28. Gas	<p>a) Submit to EDQ TS, documentation from an authorised gas service provider, confirming that an agreement has been entered into for the provision of underground gas services to the proposed development.</p> <p>b) Connect the development to underground gas services in accordance with the agreement mentioned in part a) of this condition.</p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>

Landscape and environment

29. Streetscape works – Compliance Assessment

a) Submit to EDQ DA, for Compliance Assessment, detailed streetscape works drawings, certified by an AILA, for proposed streetscape works of Roads 1, 3 and 4, including a schedule of proposed standard and non-standard Contributed Assets to be transferred to Council.

The certified drawings are to include, where relevant:

1. location and type of street lighting in accordance with AS1158 –‘*Lighting for Roads and Public Spaces*’;
2. footpath treatments;
3. location and specifications of streetscape furniture;
4. location and size of stormwater treatment devices; and
5. street trees and plants, including species, size and location generally in accordance with Council’s adopted planting schedules and guidelines.

b) Construct streetscape works generally in accordance with the streetscape plans endorsed under part a) of this condition.

c) Submit to EDQ TS ‘as constructed’ plans, certified by an AILA, and asset register in a format acceptable to Council.

a) Prior to commencing streetscape work for the relevant stage

b) Prior to survey plan endorsement for the relevant stage

c) Prior to survey plan endorsement for the relevant stage

30. Vegetation Clearing

a) Submit to EDQ TS a vegetation clearing plan prepared by an ecologist for each stage that excludes the 25m buffer corridor and lot identified for open space.

b) Undertake vegetation clearing generally in accordance with the plan submitted under part a) of this condition. The clearing is to be undertaken with the stage to be developed.

c) Vegetation clearing is to be supervised by an Ecologist.

d) Submit to EDQ TS written certification from an Ecologist that vegetation clearing has been carried out generally in accordance with part b) of this condition.

a) Prior to commencement of clearing for relevant stage

b) At all times

c) At all times

d) Within 3 months of completion of clearing of the relevant stage

31. Fauna Spotter

a) A licensed Wildlife Spotter/Catcher under the *Nature Conservation Act 1992* is to undertake a survey of the site to identify any fauna or habitat features (e.g. nests, tree hollows) and certify that any necessary fauna protection measures or relocation procedures have been implemented.

b) A licensed Wildlife Spotter/Catcher must be present during the vegetation clearing.

a) Prior to commencement of vegetation clearing for the relevant stage

b) At all times during vegetation clearing

	<p>c) Submit to EDQ TS certification from the licensed Wildlife Spotter/Catcher that vegetation clearing and fauna protection measures was carried out generally in accordance with the conditions of approval.</p> <p>Advice Note: <i>Where an Environmental Protection and Biodiversity Conservation Act 1999 (EPBC) approval has been granted and includes fauna spotter requirements, the fauna spotter requirements under this condition will not be applicable for the same matters under the EPBC approval.</i></p>	<p>c) Within 3 months of the completion of vegetation clearing of the relevant stage</p>
<p>32.</p>	<p>Vegetation – Compensatory Planting</p> <p>a) Submit to EDQ TS a planting plan certified by an ecologist showing the extent of compensatory planting to be undertaken in lot identified as ‘Open Space’ on Proposed Development Layout Plan, Plan No. TIEL2020159.CIV.DA, Dwg 10, Issue H dated 07/07/2021, excluding the minimum 25m buffer on the western boundary, including, type and extent of planting, as set out in the EDQ Guideline 17: Remnant Vegetation and Koala Habitat Obligations in Greater Flagstone and Yarrabilba PDAs dated May 2015.</p> <p>b) Undertake compensatory planting in accordance with a) of this condition.</p> <p>c) Once compensatory planting has been undertaken, submit to EDQ TS confirmation from a qualified arborist (AQF Level 5) or ecologist that the compensatory planting has been undertaken in accordance with b) of this condition.</p>	<p>a) Prior to commencement of vegetation clearing for the relevant stage</p> <p>b) Within 3 months of commencement of vegetation clearing</p> <p>c) Within 12 months of commencement of vegetation clearing of the relevant stage</p>
<p>33.</p>	<p>Bushfire management</p> <p>a) Carry out bushfire management works in accordance with:</p> <ul style="list-style-type: none"> (i) Section 6 of the approved Bushfire Management Plan, Report 16014, Final V3, dated 13 July 2018 (ii) Addendum to the Bushfire Management Plan for the proposed development at 4499-4651 Mount Lindsay Highway, North Maclean dated 18 February 2021. <p>b) Submit to EDQ TS verification from a suitably qualified professional that the works required for bushfire management and mitigation within the relevant stages have been carried out generally in accordance with the relevant approved plans and documents.</p> <p>Advice Note: <i>If the adjoining landowner obtains approval for vegetation clearing that reduces bushfire impact, then this can be articulated though an updated context plan supported by a new bushfire advice.</i></p>	<p>a) Prior to survey plan endorsement for the relevant stage</p> <p>b) Prior to survey plan endorsement for the relevant stage</p>

Surveying, land transfers and easements		
34. Land transfers - contaminated land	<p>Submit to EDQ TS a copy of a site suitability statement, as required under the EP Act, confirming that all land conditioned to be transferred to a trustee is suitable for the intended purpose(s). The site suitability statement must be prepared by a suitably qualified person and be certified by an approved auditor in accordance with the EP Act.</p> <p><i>NOTES:</i> For the purpose of this condition a suitably qualified person is defined in the EP Act.</p> <p>A list of approved auditors can be found at the following website: https://www.qld.gov.au/environment/pollution/management/contaminated-land/auditor-engagement.</p>	Prior to survey plan endorsement for the relevant stage
35. Land transfers – drainage and offset area	<p>Transfer, in fee simple, to Council as trustee, the Lot identified as Open Space as shown on the approved plans for drainage and offset open space purposes.</p>	At registration of survey plan for Stage 2
36. Land transfers – Sewerage pump station	<p>a) Submit to EDQ TS, confirmation from Council on the size and location of the Sewer pump station site.</p> <p>b) Transfer in fee simple, to Council as trustee, land for the proposed sub-regional pump station generally in accordance as shown on:</p> <p style="padding-left: 20px;">i) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 012, Issue G, prepared by Teleford Civil and dated 07/07/21.</p> <p>The land metes and bounds must be to the satisfaction of the Chief Executive Officer of the authority.</p> <p>Advice Note: This land forms part of the sub-regional sewer infrastructure to be delivered by Council. Offsets for the land may be available.</p>	<p>a) Prior to survey plan endorsement of the first stage</p> <p>b) At registration of survey plan for the first stage</p>
37. Rising main easement	<p>Provide a 6m wide easement, in favour of and at no cost to the Council, along the southern boundary for the proposed sub-regional sewerage rising main generally in accordance as shown on:</p> <p style="padding-left: 20px;">i) Concept Sewer Reticulation Layout Plan, Plan No. TIEL202159.CIV.DA, Dwg No. 012, Issue G, prepared by Teleford Civil and dated 07/07/21.</p> <p>The terms of public utility easements are to be to the satisfaction of the Chief Executive Officer of the authority which is to accept and maintain the Contributed Assets.</p> <p>Advice Note: If an alternative route for the rising main is pursued, the easement can be cancelled at the agreement of Council.</p>	At registration of survey plan for the first stage

38.	<p>Easements over infrastructure</p> <p>Provide public utility easements, in favour of and at no cost to the grantee, over infrastructure located in land (other than road) for Contributed Assets. .</p> <p>The terms of public utility easements are to be to the satisfaction of the Chief Executive Officer of the authority which is to accept and maintain the Contributed Assets.</p>	<p>At registration of survey plan for the relevant stage</p>
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STANDARD ADVICE

Please note that to lawfully undertake development, it may be necessary to obtain approvals other than this PDA development approval. For advice on other approvals that may be necessary in relation to your proposal, it is recommended that you seek professional advice.

**** End of Package ****

APPENDIX E

Technical Memo - NM2 Sewer Servicing

Date 23/01/2023
To Economic Development Queensland (EDQ)
From Arcadis
Subject North Maclean 2 – Sewer Servicing

1 INTRODUCTION & BACKGROUND

Arcadis are undertaking civil engineering services for land development works at two adjacent sites. Namely, North Maclean 1 and North Maclean 2 (referred to as “NM1” and “NM2” in this memo) – located on the Mount Lindesay Hwy, North Maclean QLD 4280.

North Maclean 1 & North Maclean 2 sites are to be serviced by a gravity reticulation system that conveys all flows to a future sewer pump station (SPS) to be constructed in the northeast corner of NM1.

The sewer rising main (SRM) will convey flows from NM1 back through NM2.

The purpose of this Technical Memo is to confirm that the preliminary gravity reticulation and preliminary earthworks design for NM2, prepared by Arcadis, and shown on sketch drawing 3013905-AAP-WS00OP-CV-SKT-001-05 will satisfactorily service NM2 Lots in accordance with the SEQ Water D&C code.

Key to the successful outcome of this tech memo is to confirm:

- Earthworks Finished Surface Levels for NM1, NM2, & SPS, and Mount Lindesay Hwy verge.
- Equivalent Person Loadings (EP's) for NM2
- Gravity pipe diameter and material

Noting that at the time of writing this Technical Memo, a road network layout for NM2 has yet to be designed.

An extract is shown in Figure 1 of the NM2 area.

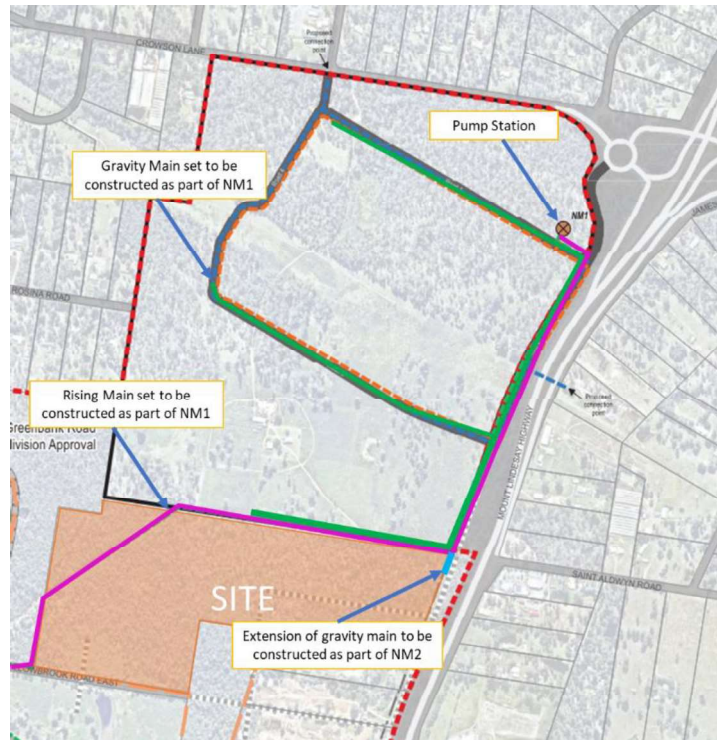


Figure 1 – NM2 Site Plan

2 EARTHWORKS – CONDITIONS, CONSTRAINTS AND OPPORTUNITIES

The EP loadings for NM2 are based on direction from Logan City Council to adopt 37.8 EP/ha. Given the net developable area of NM2 is 17.438 ha, this equates to an EP loading of 660.

Logan Water Planning Scheme 2015 nominates other salient design items which are summarised and calculated in Table 1 below

Table 1

Design Criteria	Value	Reference / Unit
Min grade	1:180 – DN 150 (1 in 80 in last section between last MH or to an end)	Table 10 Seq code – design criteria / LW planning scheme 2015
Pipe material	uPVC SN 8	IPAMS list – Sept 2022
ADWF	1.53	l/s
PDWF	3.63	l/s
PWWF	7.64	l/s

3 CAPACITY ASSESSMENT – PIPE SIZING

Logan Water assess pipe capacity based on a Colebrook White formula, with a k factor of 1.5mm. The assessment confirms that a DN150 has sufficient capacity to convey the 660 EP loading from NM2.

4 HORIZONTAL ALIGNMENT

- **Internal to NM2**

The gravity sewer is to be located within the road corridor on a 1.9m offset as per the standard cross section for the 25.0m road reserve typical cross section – refer to Attachment B – dwg 3-109334.

5 TIMING OF WORKS - DEPENDENCY

The NM2 gravity sewer is dependent on the construction and commissioning of

- the downstream gravity sewer across the frontage and through the NM1 site
- North Maclean SPS
- North Mclean sewer rising main.

If the downstream infrastructure is not completed to suit the timing of NM2, either a tankering agreement or other onsite alternative will need to be investigated and agreed with Logan Water.

6.0 Earthworks Finished Surface Levels

The preliminary Finished Surface bulk earthworks plan of NM2 is provided as Attachment A.

The NM2 site has a high point within the approximate centre grading uniformly in all direction. Retaining walls have constructed around the perimeter of the site.

The minimum FSL of NM2 is at the Mount Lindesay Hwy common boundary at Mt Lindsay Hwy is approximately 28.17m. This is the sewer connection point for the NM2 site.

The most disadvantaged location of the NM2 is considered to be the rear or western boundary.

Arcadis has performed a grade check for all 3 points along the western boundary. The most disadvantaged point is highlighted in **bold** in Table 2 below.

Table 2

Location	FSL (m)	Sewer length (m) – direct length
Nth Western Corner	30.15	680

Western Boundary – change in direction	29.9	650
Sth Western Corner	29.72	638

7.0 Grading assumptions

As a road and lot layout is yet to be confirmed for NM2 the following assumptions were made. These include

1. Sewer grade of 1: 80 for first 70m at top of the line, then adopt a grade of 1: 160 for remaining 570m
2. Assume 7 manholes along length of sewer alignment with average 40mm fall (total 280mm, -adopt 300mm)
3. IL at NM2 connection point - Arcadis preliminary sewer MH 1/3 = 24.177m (say 24.2m). Refer to Appendix D for Preliminary sewer longitudinal sections.

The maximum sewer IL at the most disadvantaged location (with FSL of 29.72m) was calculated to be as per Table 3 below.

Table 3

Description	m
Sewer IL at Mt Lindesay Hwy	24.2 (AHD)
Allowance for 7 manholes	0.3
Allowance for 570m of sewer @ 1:160	3.56
Allowance for 70m of sewer internal house connection	0.88
Sewer IL at most disadvantaged point	28.9 (AHD)
Depth to invert	0.8

A depth to invert of 0.8m is considered satisfactory. A longitudinal section sketch to the most disadvantaged sewer system point is shown in Attachment C.

6 CONCLUSION

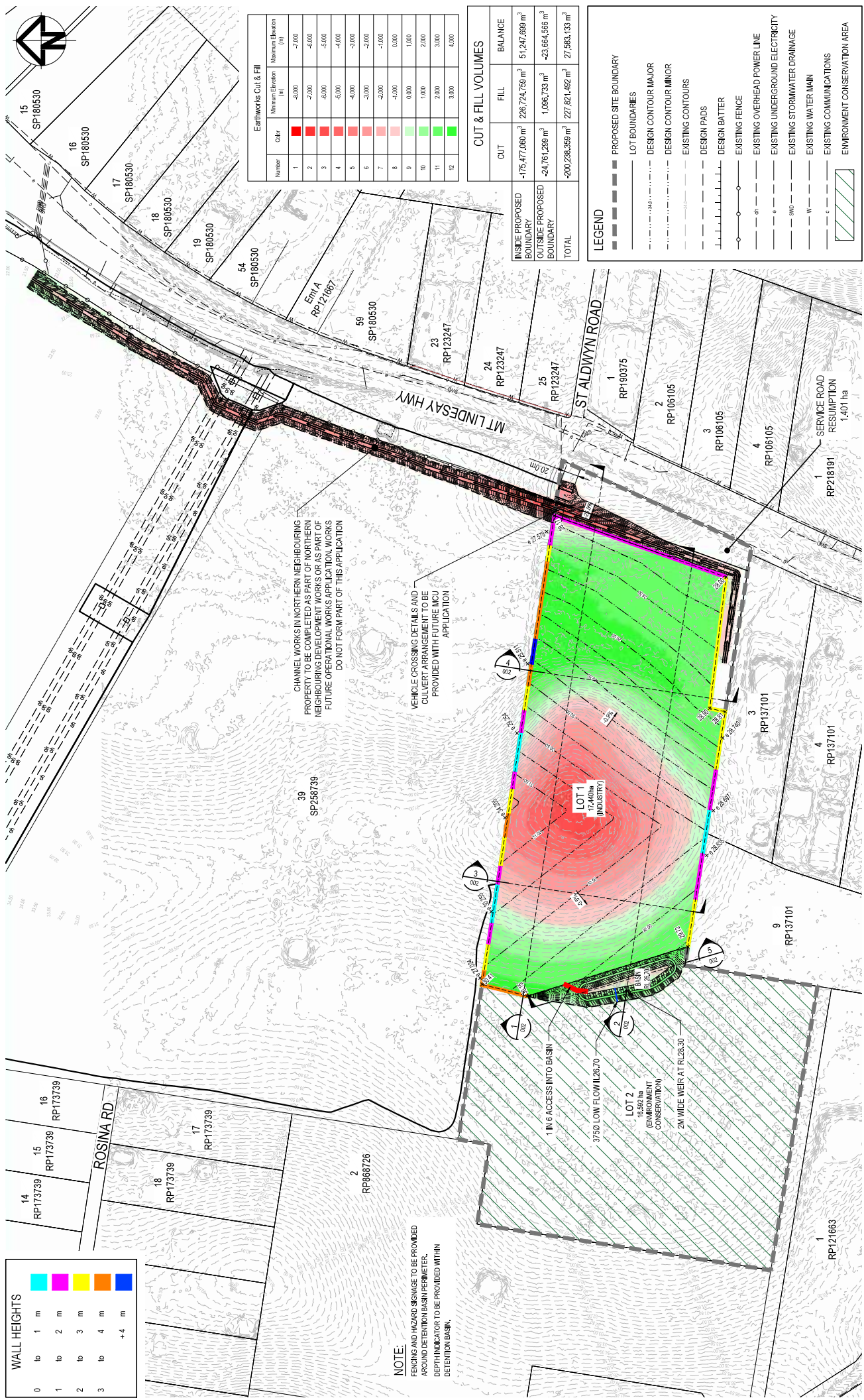
An assessment of the current Arcadis earthworks drawing including FSL, length of outfall etc confirm that the draft Arcadis gravity sewer design and preliminary Earthworks layout for Lot NM2 is **likely** to be able to satisfactorily service the most disadvantaged location of NM2.

However, it will be necessary to perform a detailed design sewer serviceability following the confirmation of the NM2 road network and Lot layout. This will allow the precise length of sewer to the most disadvantaged point on the NM2 site to be confirmed.



Richard Mulligan RPEQ

ATTACHMENT A – ARCADIS LAYOUT PLAN for
NM2 – SKT -001 -05



Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-6.000	-2.000
2	Red	-7.000	-6.000
3	Red	-6.000	-5.000
4	Red	-6.000	-4.000
5	Red	-4.000	-3.000
6	Red	-3.000	-2.000
7	Red	-2.000	-1.000
8	Red	0.000	1.000
9	Red	1.000	2.000
10	Red	2.000	3.000
11	Red	3.000	4.000
12	Red	4.000	5.000

CUT & FILL VOLUMES		
CUT	FILL	
INSIDE PROPOSED BOUNDARY	-175,477.000 m ³	226,724,750 m ³
OUTSIDE PROPOSED BOUNDARY	-24,761,299 m ³	1,096,733 m ³
TOTAL	-200,238,359 m ³	227,821,483 m ³

LEGEND	
--- (dashed line)	PROPOSED SITE BOUNDARY
--- (solid line)	LOT BOUNDARIES
--- (dotted line)	DESIGN CONTOUR MAJOR
--- (dotted line)	DESIGN CONTOUR MINOR
--- (dotted line)	EXISTING CONTOURS
--- (dotted line)	DESIGN PADS
--- (dotted line)	DESIGN BATTER
--- (dotted line)	EXISTING FENCE
--- (dotted line)	EXISTING OVERHEAD POWER LINE
--- (dotted line)	EXISTING UNDERGROUND ELECTRICITY
--- (dotted line)	EXISTING STORMWATER DRAINAGE
--- (dotted line)	EXISTING WATER MAIN
--- (dotted line)	EXISTING COMMUNICATIONS
--- (dotted line)	ENVIRONMENT CONSERVATION AREA

WALL HEIGHTS	
0 to 1 m	Light Blue
1 to 2 m	Yellow
2 to 3 m	Orange
3 to 4 m	Red
+ 4 m	Dark Red

NOTE:
 FENCING AND HAZARD SIGNAGE TO BE PROVIDED AROUND DETENTION BASIN PERIMETER. DEPTH INDICATOR TO BE PROVIDED WITHIN DETENTION BASIN.

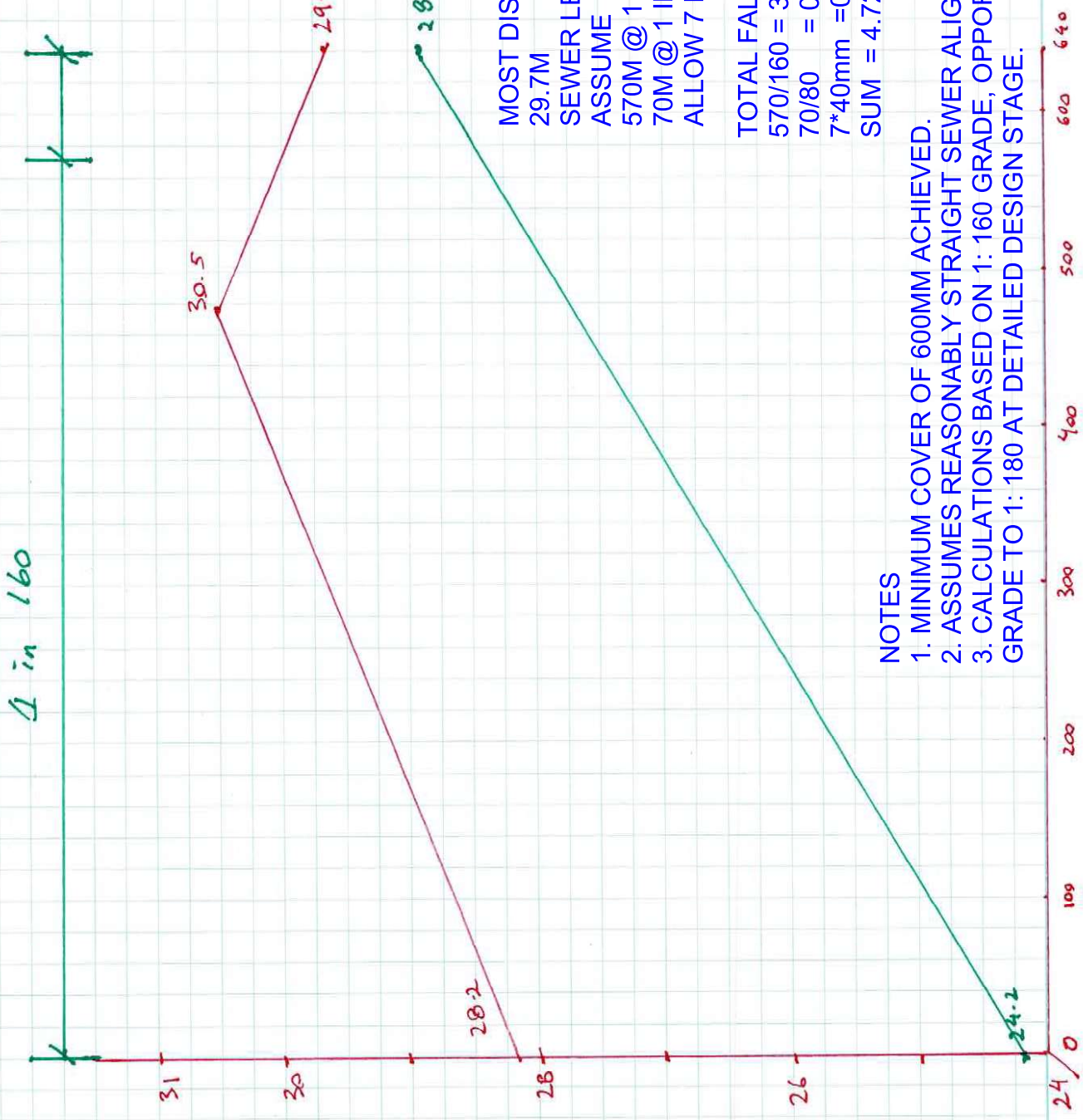
CHANNEL WORKS IN NORTHERN NEIGHBOURING PROPERTY TO BE COMPLETED AS PART OF NORTHERN NEIGHBOURING DEVELOPMENT WORKS OR AS PART OF FUTURE OPERATIONAL WORKS APPLICATION. WORKS DO NOT FORM PART OF THIS APPLICATION.

VEHICLE CROSSING DETAILS AND CULVERT ARRANGEMENT TO BE PROVIDED WITH FUTURE MCU APPLICATION.

ARCADIS Arcadis Australasia Pacific Pty Limited 11th Floor, 111 St George Street SYDNEY NSW 2000 ABN 76 104 485 289 www.arcadis.com.au	
MACLEAN ESTATES PTY LTD 4653-4691 MOUNT LINDESAY HIGHWAY, NORTH MACLEAN	
BULK EARTHWORKS SKETCH PLAN	
Scale: 1:2500 0 50 100 150 200 250m	Project: 30139050 - AAP - W6500P - CV - SKT - 001 - 06 Date: 18 Mar 2024
Status: CONCEPT DESIGN ONLY NOT TO BE USED FOR CONSTRUCTION	Drawn: J. GRIEBLER Checked: J. GRIEBLER Project Manager: G. ELLIS Verified: G. ELLIS
Original Issue Signatures: J. GRIEBLER Original Size: A1 Original Date: AHD	© Copyright reserved
Designer: J. GRIEBLER Checker: J. GRIEBLER Project Manager: G. ELLIS Verified: G. ELLIS	Date: 18 Mar 2024

ATTACHMENT B – ROAD VERGE CORRIDOR

ATTACHMENT C – SKETCH LONGITUDINAL SECTION



MOST DISADVANTAGED POINT- FSL
 29.7M
 SEWER LENGTH 640M.
 ASSUME
 570M @ 1 IN 160
 70M @ 1 IN 80
 ALLOW 7 MH's @ 40mm FALL.

TOTAL FALL
 570/160 = 3.56
 70/80 = 0.88
 7*40mm = 0.28
 SUM = 4.72M

NOTES

1. MINIMUM COVER OF 600MM ACHIEVED.
2. ASSUMES REASONABLY STRAIGHT SEWER ALIGNMENT.
3. CALCULATIONS BASED ON 1: 160 GRADE, OPPORTUNITY TO FLATTEN GRADE TO 1: 180 AT DETAILED DESIGN STAGE.

ATTACHMENT D – PRELIMINARY GRAVITY SEWER DESIGN



NOTE:

- THIS DRAWING IS BASED ON:
- EXISTING LIDAR SURVEY FROM WOLTERS RECEIVED 09.03.2022.
- WATSON YOUNG MASTERPLAN JOB No. 22055.
- DRAWING No. MP01 REVISION 7 RECEIVED 30.06.2022.
- FINISHED SURFACE LEVELS SHOWN ON THE PLANS.

LEGEND

	LIMIT OF WORKS
	TOP OF BATTER
	TOE OF BATTER
	PROPOSED RETAINING WALL
	PROPOSED BOULDER RETAINING WALL
	DESIGN CONTOUR MAJOR
	DESIGN CONTOUR MINOR
	EXISTING CONTOURS
	OVERLAND FLOW PATHS
	PROPOSED STORMWATER DRAINAGE
	PROPOSED SEWER RISING MAIN
	PROPOSED SEWER GRAVITY MAIN
	PROPOSED SEWER MANHOLE
	PROPOSED LOT CONNECTION POINT
	EXISTING STORMWATER DRAINAGE
	EXISTING OVERHEAD POWER LINE
	EXISTING WATER MAIN
	EXISTING UNDERGROUND ELECTRICITY
	EXISTING COMMUNICATIONS
	POWERLINK FASEMENT
	WATSON YOUNG MASTERPLAN LAYOUT P6



sewer connection point
IL 24.177

NM2

<p>ARCADIS Arcadis Australia Pacific Pty Limited Level 10, 100 Sturt Street SYDNEY NSW 2000 Tel No: +61 2 8907 9000 www.arcadis.com.au</p>		<p>Project 4499-4651 MOUNT LINDSEY HIGHWAY, NORTH MACLEAN</p>	
<p>Status CONCEPT DESIGN ONLY NOT TO BE USED FOR CONSTRUCTION</p>		<p>File A1</p>	
Original Issue Signatures	Original Size	Original Date	Original Grid
Drawn: J GREIBLER	A1		
Designed: J GREIBLER			AHD
Project Manager: EPEEK			
Verified: G ELLIS			
<p>Client Charter Hall</p>		<p>Surveyor WOLTER consulting group</p>	
<p>Architect WOLTER consulting group</p>		<p>Scale 1:3000</p>	
Issue	Description	DR	CH
01	LINE 14 ADDED	AS	EP
02	LINE 2 AND 3 ADDED	AS	EP
03	ORIGINAL ISSUE	AS	EP
04		AS	EP
05		AS	EP
06		AS	EP
07		AS	EP
08		AS	EP
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11		AS	EP
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