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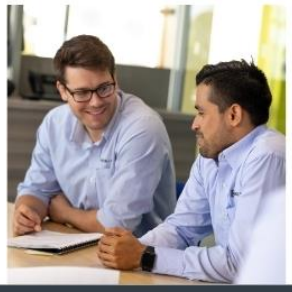

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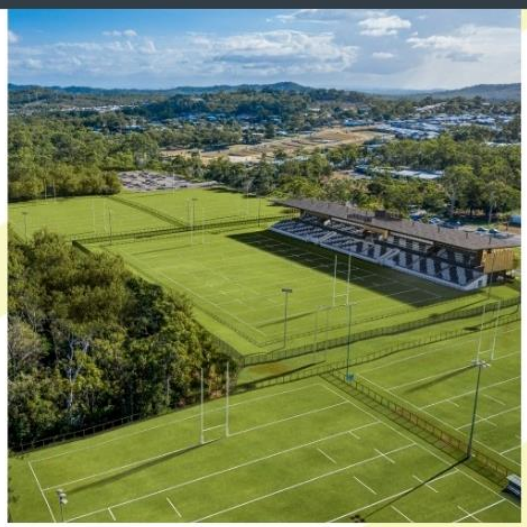

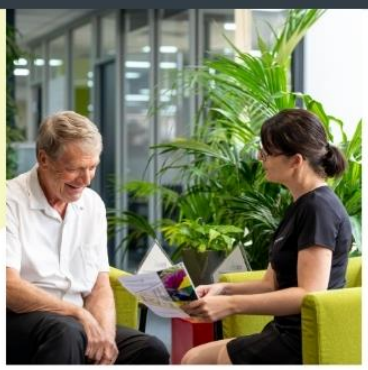

552-558 Chambers Flat Road, Logan Reserve
Park Lane – Stage 6
Civil Engineering Report

Client:	MB Dev B Pty Ltd
Project Number:	BE220314
Document Number:	BE220314-RP-CER-04
Date of Issue:	February 2025

Document Control Record

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Position:	Civil Engineer
Signed:	
Date:	10/02/2025

Approved by:	Lucas Faulkner
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Signed:	 RPEQ - 8093
Date:	10/02/2025

Version No.	Description	Date	Prepared	Approved
01	Original Issue	01/2023	FL	LF
02	Revised Issue	07/2023	FL	LF
03	RFI Response	12/2024	FL	LF
04	Revised Layout	02/2025	HL	LF

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MORETON BAY I SUNSHINE COAST I IPSWICH I BANGALOW

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Appendices

1. Introduction

MB Dev B Pty Ltd have engaged Burchills Engineering Solutions to prepare a Civil Engineering Report to be considered part of a Development Application to Logan City Council for the establishment of a 41-lot subdivision. The proposed development is located at 552-558 Chambers Flat Road, Logan Reserve and is to be Stage 6 of the Park Lane Development.

This report determined that the site is suitable for the proposed development, in relation to matters concerning civil engineering design parameters and site constraints. The development can be undertaken in accordance with the current Logan City Council guidelines, SEQ Water Supply and Sewerage, Design and Construction Code and best management practices.

1.1 Scope of Report

This report describes the existing physical conditions of the site, and suitability for the proposed development with particular respect to:

- Project Identification;
- Proposed Development;
- Site Earthworks;
- Roadworks, Access and Traffic;
- Stormwater Drainage;
- Water Supply;
- Sewer Reticulation; and
- Electricity and Telecommunications Supply.

This report represents an assessment of the facts and circumstances pertaining to these matters, as they are known to the writer at the time of preparation.

2. Project Identification

2.1 Real Property Description

The site is legally described as Lot 5 on RP97736. The corresponding street addresses are 552-558 Chambers Flat Road, Logan Reserve. The combined site is generally rectangular and occupies an area of approximately 3.49 ha.

The site to be developed is shown on the Master Plan prepared by Burchills Engineering Solutions (Drawing No. BE220314-SK01-F) which is included in Appendix B of this report. A detailed site survey has been undertaken by Land Partners and is included within Appendix A of this report. The location of the subject site is shown on Figure 2.1 below.

Figure 2.1 Site Locality Plan

2.2 Physical Description

The site generally grades uniformly from the east to west, with a height differential of approximately 8.5m. The highest point within the site is at the eastern boundary at RL 24.5m AHD, and the lowest point is in the western boundary at approximately 16.0m AHD. The western frontage of the site adjoins Chambers Flat Road. Currently the subject site is being utilised for construction access to the neighbouring residential subdivision (Council Ref: COM/60/2022, Park Lane Stage 1-3) and contains ancillary structures and temporary parking; where the remaining ground coverage is predominantly crop and grassed areas, with some minor tree coverage in the eastern-most portion of the site.

The site is bounded by the following existing land uses:

North:	Park Lane Stages 1-3 (Council Ref: COM/60/2022);
South:	Neighbouring Rural Property;
East:	Neighbouring Rural Property; and
West:	Chambers Flat Road.

3. Proposed Development

The subject site is proposed to be reconfigured and developed from 1 into 41 lots, along with a bioretention basin and drainage reserve corridor. The proposed development layout is shown below in Figure 3.1, and on the Master Plan prepared by Burchills Engineering Solutions (Drawing No. BE220314-SK01-F) which is included in Appendix B of this report.

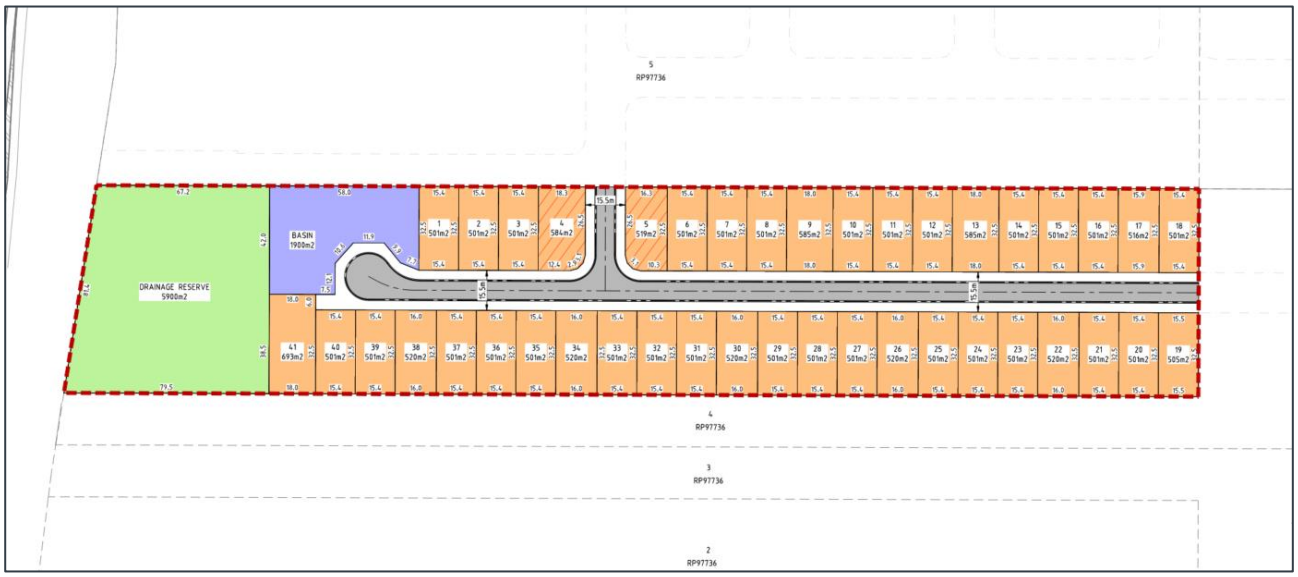

Figure 3.1 Subdivision Proposal Plan

Based on the SEQ Water Supply and Sewerage Design & Construction Code, the Equivalent Tenements (ET) and Equivalent Population (EP) for the proposed development is shown in Table 3.1.

Table 3.1 Development Summary

Use	Unit	Total Units	EP's/Unit	Total EP
Detached Dwelling	Per Dwelling	41	2.79	114.39
Total	-	41	-	**114.39**

4. Site Earthworks

It is anticipated that earthworks associated with the proposed development will be kept to a minimum with general cutting and filling associated with road construction, trenching of services, stormwater management devices, and minor alterations to levels to allow for level building pads.

The Preliminary Earthworks Layout Plan (Drawing No. BE220314-C200-B) demonstrates the development grading, finished surface levels and retaining walls and is included within Appendix C. It should be noted that the existing biodiversity corridor will generally be undisturbed in accordance with the above-mentioned plan.

4.1 Sediment and Erosion Control

The best management practices will be implemented according to the IECA Best Practice Erosion and Sediment Control (2008) guidelines.

The following is a procedure of water quality controls to be implemented for the construction stage of the development.

4.1.1 Phase 1 – Stripping & Bulk Earthworks

- Identify and mark all trees to be retained and erect exclusions zones, if required.
- Prior to any demolition, stripping or bulk earthworks on site, sediment fences, inlet traps, gully protection and entry/exit pad shall be put in place.
- A wash-down area and entry/exit pad will be provided at the construction site entrance to minimise the amount of sediment being tracked off the site.
- The wash down area will be drained to a suitable sediment capture device installed downstream of the construction entry.
- Sediment fences are to be installed along the downstream property boundaries prior to stripping and earthworks commencing.
- Construct an appropriately sized sediment basin for the development.
- If refuelling of machinery is to occur on site, appropriate absorbent products for cleaning oil spills will be provided.
- Provide bins on site for the disposal of waste and building debris.
- All fresh water upstream of disturbed areas and stockpiles is to be diverted around the disturbed area to minimise the amount of sediment mobilization.
- If it is anticipated that stockpiled material will not be used for a period of two weeks or more, a polythene cover (or equivalent) shall be used to prevent sediment transport by rain during wet periods. Conversely during dry periods, a cover shall be used to prevent fine sediments becoming airborne.
- The contractor shall provide on-going maintenance of sediment and erosion control devices around the site.
- The contractor is to stage all works so that disturbed areas remain exposed for a short a period as practicable.

Measures to minimise airborne pollutants during construction in the form of dust during dry and/or windy weather shall include the following:

- Exposed soils shall be kept damp to prevent particulates becoming airborne; and
- Stockpiles exposed for more than two weeks shall be covered to prevent wind erosion.

4.1.2 Phase 2 – Infrastructure, Building & Roadworks

- The site stormwater pipes and pits shall be installed with drop inlets provided to all pits.
- Provide sediment fences, sandbags or fine mesh cover to all gully pits.
- Monitoring of new stormwater pipes and infrastructure (including the storm water quality improvement devices) to ensure they are free of sediment and debris.
- Maintain shake down and wash down area at entry/exit.
- All disturbed areas are to be surfaced or landscaped/grassed (maintained to minimum 70% ground cover) as soon as practicable after completion of localized works.

4.1.3 Phase 3 – Finishing Works & Defects Liability Period

All erosion and sediment control measures, including sediment fences and inlet traps shall be maintained until completion of surface finishes including landscaping and turfing:

- Maintain sediment fences.
- Attend to landscaped areas to maintain ground cover.

5. Roadworks, Access and Traffic

Access into the development is proposed via road extension from the existing development to the north of the site on 532-550 Chambers Flat Road, Logan Reserve (Council DA Ref: COM/60/2022, Park Lane Stages 1-3). That development is proposing a temporary vehicular access roadway to Chambers Flat Road and is currently under construction.

The development internal road network will be an access road standard with a 15.5m road reserve, and 7.5m pavement width (K-K). The road pavement will be constructed with a crown and two-way crossfall. Design and grading of the new roads will be in accordance with the Logan City Council Development Guidelines.

6. Stormwater Drainage

The internal road network will collect stormwater runoff and convey it to inlet pits on the edges of the road. These pits will be connected through a series of stormwater drain lines, discharging into a bioretention basin where flows will be released in a controlled manner to ensure that there is non-worsening peak flow in the post-developed scenario.

Refer to the Conceptual Stormwater Management Plan that has been prepared by Burchills Engineering Solutions and is intended to accompany this Development Application (BE220314-RP-CSMP-02).

Stormwater Quantity

- The Lawful Point of Discharge (LPD) for the site has been defined as mapped waterway which traverses the site's northern-western extent.
- Stormwater runoff will be conveyed to the detention basin where it will be released at LPD A in a controlled manner to ensure that there is non-worsening peak flow in the post-developed scenario. This detention device will have a 1% AEP volume of 207 m^3.

Stormwater Quality

- To achieve Logan City Council's Water Quality Objectives, it is proposed to use a bioretention system to treat stormwater runoff.
- The bioretention device will have a total filter media footprint of 305m^2.

Erosion and Sediment Control

- An Erosion Hazard Assessment has identified that the site is high-risk with regard to erosion potential.
- Sediment loss estimates have been used to determine that a sediment basin with approximately 45 m^3 of sediment storage is required.

7. Water Supply

The development will gain its potable water suppler via connection to the proposed water main associated with the proposed development of 532-550 Chambers Flat Road (Council DA Ref: COM/60/2022, Park Lane Stages 1-3). The extents of the proposed water reticulation network are depicted in the Preliminary Water & Sewer Layout Plan, Drawing No. BE220314-C600-B included within Appendix C.

We note that this internal schematic is intended for preliminary purposes only and is subject to a more detailed assessment, including a detailed sizing of mains during the detailed design phase.

7.1 Water Demand Calculation

To determine suitable pipe sizing for the proposed development, water demands are calculated according to the intended new development. The water criteria and design parameters are based on the following references:

- SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code); and
- Water Services Association of Australia – WSA 03-2013 Water Supply Code of Australia, Part 1: Planning and Design.

The service mains internal of each building will be designed and constructed in accordance with AS/NZS 3500.1:2003 Plumbing and Drainage – Water services (Standards Australia, 2003).

The water flow parameters shown in Table 7.1, 7.2 and 7.3 required to meet Unity Water Standards of Service and have been based on Single Supply (Drinking Water Only) Network parameters shown in SEQ Design Criteria Table 7.1.

Table 7.1 Potable Water Supply Demand and Peaking Factor

Property Type	Average Day Demand L/EP/day	Non-Revenue L/EP/day	Peaking Factors		
			MDMM	PD	PH
Residential	230	30	1.5	2.0	4.0

Notes:

MDMM	Mean Day Maximum Month Demand
PD	Peak Day Demand
AD	Average Day Demand
PH	Peak Hour Demand

Table 7.2 Potable Water Pressure Parameters

Item	Pressure Parameter
Minimum Service Pressure	22 metres (at the property boundary)
Maximum Service Pressure	Target 55 metres (at the property boundary)

Table 7.3 Fire Fighting Parameters

Item	Pressure Parameter
Minimum Residential Mains Pressure (Emergency Fire operating conditions)	12 metres at the main at the property boundary 6 metres elsewhere
Fire Flow Urban Residential	7.5 L/s for a duration of 2 hrs
Fire Flow Commercial	30 L/s for a duration of 4 hrs
Background Demand	2/3 x Peak Hour demand (not less than Average Day demand)

The calculated water supply demand for the proposed development is shown in Table 7.4.

Table 7.4 Water Supply Demand Calculations

Use	EP	AD Flow	Non-Revenue	AD (kL/day)	PH (L/s)
Residential	114.39	230	30	29.74	1.258

Calculations of maximum peak demand and demand multiplier for the residential aspect of the development are based on an allowance of 230 L/EP/day and a peak hour factor of 4.0 while applying the Non-Revenue flows of 30 L/EP/day, as follows:

Maximum Peak Demand = PHF x Demand Rate x EP's + NR

= 4.0 x 230 x 114.39 + (30 x 114.39)

= 108,670.5 L/day

= 1.258 L/s

Demand Multiplier = Maximum Demand / EP's

= 0.011 L/sec/EP

8. Sewer Reticulation

The wastewater generated by the development is to be conveyed to the proposed sewer mains associated with the proposed development of 532-550 Chambers Flat Road (Council DA Ref: COM/60/2022, Park Lane Stages 1-3). The Preliminary Water & Sewer Layout Plan, Drawing No. BE220314-C600-B, depicts the development's sewer reticulation and is included within Appendix C.

8.1 Sewer Demand Calculation

The sewer criteria and design parameters are based on the following references:

- SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code); and
- Water Services Association of Australia – WSA 02-2014 Sewerage Code of Australia, Part 1: Planning and Design.

The sewer flow generation, pipe design parameters, minimum sewer pipe grades and maximum capacity are shown below in Table 8.1, 8.2 and 8.3. The following parameters are based on a RIGGS system:

Table 8.1 Sewer Flow Generation Parameters

Flow	Parameter
Average Dry Weather Flow (ADWF)	200 L/EP/d
Peak Dry Weather Flow (PDWF)	PDWF = C2 x ADWF Where: C2 = 4.7 x (EP)^(-0.105) = 2.86
Peak Wet Weather Flow (PWWF)	PWWF = 5 x ADWF

Table 8.2 Pipe Design Parameters

Flow	Parameter
Mannings 'n'	0.013
Minimum velocity @ PDWF	0.7 m/s
Depth of Flow @ PWWF – Existing system	Up to 1.0 m below MH cover level and no spillage through overflow structures
Depth of Flow @ PWWF – Proposed sewers	Max flow depth shall not exceed ¾ pipe full (75% d/D).

Table 8.3 Minimum Pipe Capacity – New Sewers Flowing ¾ Full

Pipe Size (mm)	Min Pipe Grade (1 in x)	Capacity (L/s)
150	180	10.4
225	300	23.6
300	400	44.1
525	750	143.0
1200	2400	796.1

The total development yield has been taken into account, not just the increase in equivalent persons on the subject site. The calculated sewer demand generation for the proposed development is shown in Table 8.4.

Table 8.4 Sewer Demand Calculation

Use	EP	ADWF Rate	ADWF (L/d)	PWWF (L/d)	PWWF (L/s)
Residential	114.39	200	22,878	114,390	1.324

The calculations indicate that the total post development demand at PWWF will be approximately 1.324 L/s.

9. Electrical and Telecommunications

A detailed site survey has been completed by Landpartners and is included in Appendix A of this report. It is envisaged that adequate power supply can be provided to the site from the existing infrastructure. However, a specialist electrical consultant will need to be engaged to provide advice in relation to internal electrical reticulation requirements, prepare detailed designs and liaise with the relevant authorities.

10. Conclusion

The findings of this Civil Engineering Report support the site use proposed in this development application to Logan City Council.

Earthworks associated with the proposed development will be kept to a minimum with general cutting and filling associated with road construction, trenching of services, stormwater management devices, and minor alterations to levels to allow for level building pads.

Access into the development is proposed via road extension from the existing development to the North of the site on 532-550 Chambers Flat Road, Logan Reserve (Council DA Ref: COM/60/2022, Park Lane Stages 1-3). That development is proposing a temporary vehicular access roadway to Chambers Flat Road and is currently under construction. The developments internal road network will be an access road standard with 15.5m road reserve, and 7.5m pavement width (K-K). Design and grading of the new roads is proposed in accordance with the Logan City Council Development Guidelines.

The internal road network will collect stormwater runoff and convey it to inlet pits on the edges of the road. These pits will be connected through a series of stormwater drain lines, discharging into a bioretention basin where flows will be released in a controlled manner to ensure that there is non-worsening peak flow in the post-developed scenario.

The development will gain its potable water suppler via connection to the proposed water main associated with the proposed development of 532-550 Chambers Flat Road (Council DA Ref: COM/60/2022, Park Lane Stages 1-3).

The wastewater generated by the development is to be conveyed to the proposed sewer mains associated with the proposed development of 532-550 Chambers Flat Road (Council DA Ref: COM/60/2022, Park Lane Stages 1-3).

All required essential services can be suitably provided to the development, including:

- Stormwater Drainage;
- Reticulated Water Services;
- Reticulated Sewerage Services;
- Electricity and Telecommunications Supply.

Appendix A – Site Survey

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PROJECT

DETAIL SURVEY
OF
LOTS 6 - 9 on RP97736
Chambers Flat Road
LOGAN RESERVE

NOTES

(i) This plan has been prepared for the exclusive use of GCDEV3 PTY LTD and their consultants for design purposes and is not to be used for any other purpose or by any other entity without the express permission of LandPartners Pty Ltd.

(ii) The title boundaries as shown hereon were reinstated by survey and will be reflected on an Identification Survey Plan that will be lodged with the Department of Resources.

(iii) Services shown hereon have been located where visible by field survey. If not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted or symbolised accordingly. Where such records do not exist or are inadequate a notation has been made hereon.

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3	RGA	8/08/2022	Reinstated boundaries for Lots 6-9 on RP97736
2	RGA	9/05/2022	DETAIL LOTS 6 - 9 ON RP97736
1	MIS	31/01/2021	INITIAL ISSUE

SYM	CODE	DESCRIPTION
	BM	BENCHMARK
	BOL	BOLLARD
	CP	COLUMN / PILLAR
E	EBX	ELECTRICAL BOX
E	ECM	ELEC CABLE MARKER
	ELP	ELEC/LIGHT POLE
	EM	ELECTRICAL PIT
	EP	ELECTRICITY POLE
	ESP	ELECTRICITY STAY POLE
H	FH	FIRE HYDRANT
	FHP	FIRE HYDRANT PILLAR
	FP	FLAG POLE
G	GMH	GAS MANHOLE
	GMK	GAS MARKER
	GP	GUIDE POST
	GS	GUIDE SIGN
	GT	GULLY TRAP
	GV	GAS VALVE
	HB	HOSE BOX/REEL
	HM	HYDRANT MARKER
U	MHU	MANHOLE UNKNOWN
	PLM	PALM TREE
	PIL	TELECOM PILLAR
	PKM	PARKING METER
	PSM	PERM. SURVEY MARK
	SEV	SEWERAGE VENT
	SHB	SHRUB

SYM	CODE	DESCRIPTION
	SGN	SIGNS
	SIO	INSPECTION OPENING
S	SM	SEWERAGE MANHOLE
	SN	STREET NAME SIGN
	SPR	SPRINKLER
	SPR	TREE
S	SSV	STOP/SLUICE VALVE
	STN	SURVEY STATION
D	SW	STORMWTR. MANHOLE
	TAP	TAP
	TE	TELECOM PIT
T	TM	TELECOM MANHOLE
	TCH	TRANSFORMER O/HEAD
	TP	TELEPHONE POLE
	TRL	TRAFFIC LIGHTS
	TRP	TRAFFIC PIT
	WAV	WATER AIR VALVE
	WCU	WATER END CAP
	WM	WATER METER
W	WMH	WATER MANHOLE
	WPR	WATER REDUCER
R	WRV	WATER REFLUX VALVE
	WSP	WATER SAMPLE POINT
SC	WSV	WATER SCOUR VALVE
	WTE	WATER TEE JUNCTION
	WV	WATER VALVE
	WVM	WATER VALVE MARKER

Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

LANDPARTNERS surveyors and planners

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ISO 45001 Occupational Health and Safety Management CERTIFIED
AS/NZS 4801 Occupational Health and Safety CERTIFIED

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LEVEL ORIGIN PSM130210 RL 23.629	SCALE 1:600 (A1)
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CO-ORD SYSTEM Arbitrary Plane	DRAWN AJD / DATE 30/11/2021
SURVEYOR MM / DATE OF SURVEY 24/11/2022	CHECKED MEA / DATE 30/11/2022
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UDN SHEET 2 OF 4

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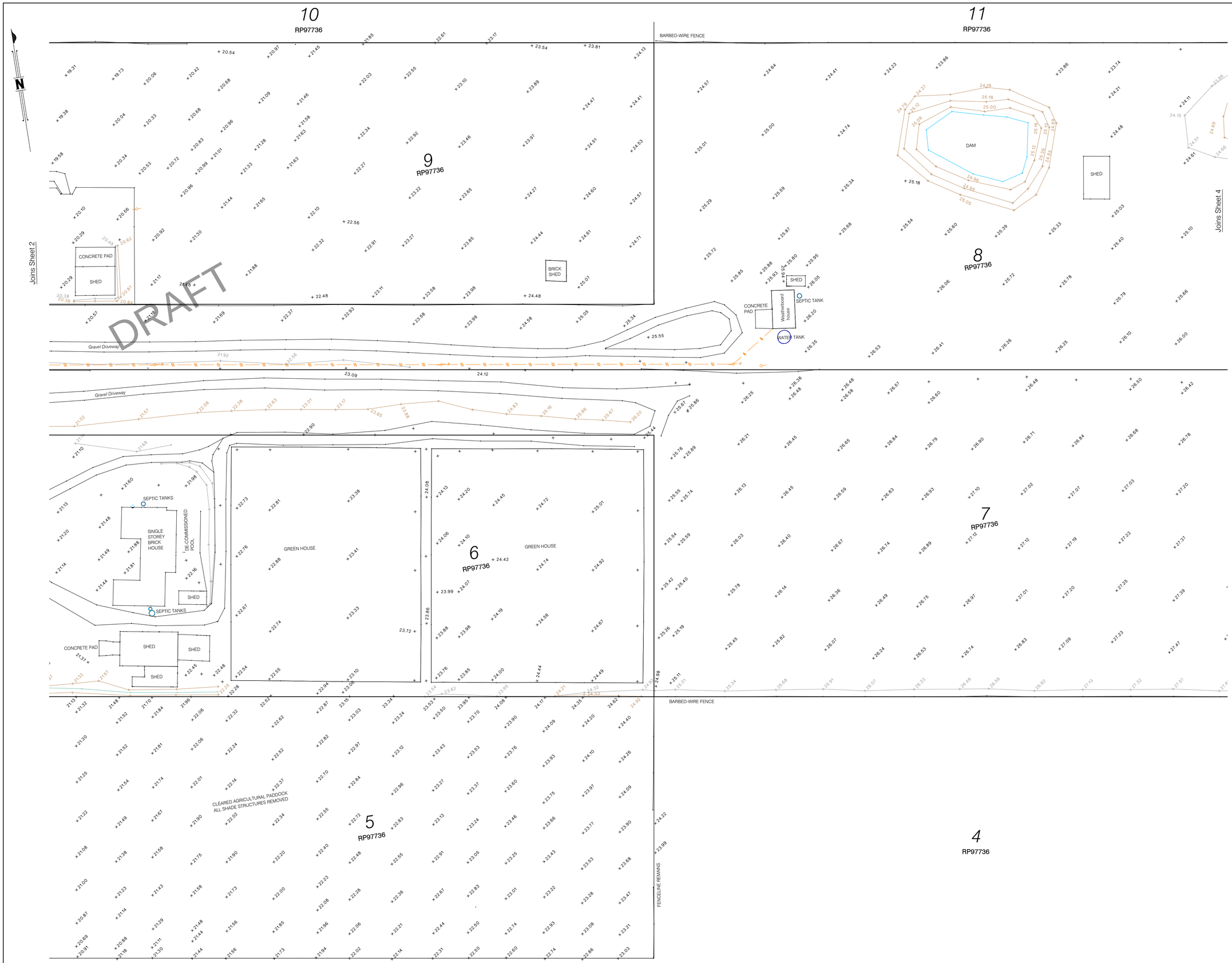

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T	TM	TELECOM MANHOLE
	TOH	TRANSFORMER O/HEAD
	TP	TELEPHONE POLE
	TRL	TRAFFIC LIGHTS
	TRP	TRAFFIC PIT
	WAV	WATER AIR VALVE
	WCU	WATER END CAP
	WM	WATER METER
W	WMH	WATER MANHOLE
	WPR	WATER REDUCER
R	WRV	WATER REFLUX VALVE
	WSP	WATER SAMPLE POINT
SC	WSV	WATER SCOUR VALVE
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ISO 45001 Occupational Health and Safety Management CERTIFIED
AS/NZS 4801 Occupational Health and Safety CERTIFIED

0m 5 10 20 30m

SCALE 1:600 (A1)

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FIELD FILE -6-4, -12-1	APPROVED RGA — DATE 30/11/2022

UDN — SHEET 3 OF 4

BRSS8106-000-6-6

Appendix B – Plan of Development

CHAMBERS FLAT ROAD

5
RP97736

4
RP97736

3
RP97736

2
RP97736

DRAINAGE RESERVE
5900m2

BASIN
1900m2

15.5m

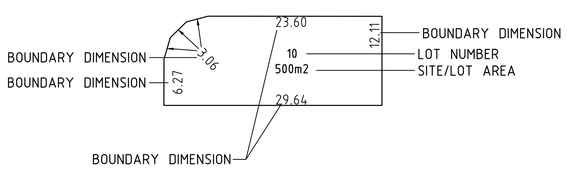
MASTER PLAN VILLAGE PRECINCT

SCALE 10 0 5 10 15 20 25 30 35 (metres)
1 : 750 (FULL SIZE)

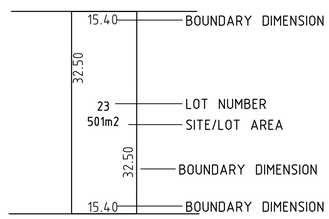
DEVELOPMENT SUMMARY

TOTAL SITE AREA:	3.489 ha
TOTAL AREA OF NEW ROAD:	0.599 ha
LENGTH OF NEW ROAD:	363.19 meters
TOTAL AREA ROAD PAVEMENT:	0.275 ha
TOTAL AREA OF BASIN :	0.19 ha
NET DEVELOPMENT AREA :	2.111 ha
NET SITE AREA DENSITY:	19.42 DWELLINGS/ha
GROSS SITE DENSITY:	11.75 DWELLINGS/ha

CORNER ALLOTMENT



STANDARD ALLOTMENT



LEGEND:

- TYPICAL ALLOTMENTS
- CORNER ALLOTMENTS
- DEVELOPMENT BOUNDARY

LOT FRONTAGE WIDTH BREAKDOWN

FRONTAGE WIDTH	No. ON LOTS
15-15.49m	30
16-16.99m	7
≥18m	4
TOTAL	41

YIELD BREAKDOWN

LOT SIZE	No. ON LOTS
500-549m2	37
550-599m2	3
≥600m2	1
TOTAL	41

PRELIMINARY

PARK LANE STAGE 6 - 552 CHAMBERS FLAT ROAD
LOT 5 RP178746
552-558 CHAMBERS FLAT ROAD
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
F	LAYOUT AMENDED	07.02.25
E	LAYOUT AMENDED	02.09.24
D	RFI AMENDMENTS	28.03.23
C	LAYOUT AMENDED	06.03.23
B	COLLECTOR ROAD ADDED	10.10.22
A	ISSUE FOR INFORMATION	01.07.22

BURCHILLS ENGINEERING SOLUTIONS
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Ipswich I Moreton Bay
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Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
PARK LANE STAGE 6
552 CHAMBERS FLAT ROAD
PRELIMINARY CIVIL
ENGINEERING DESIGN

DRAWING TITLE :
MASTER PLAN
VILLAGE PRECINCT

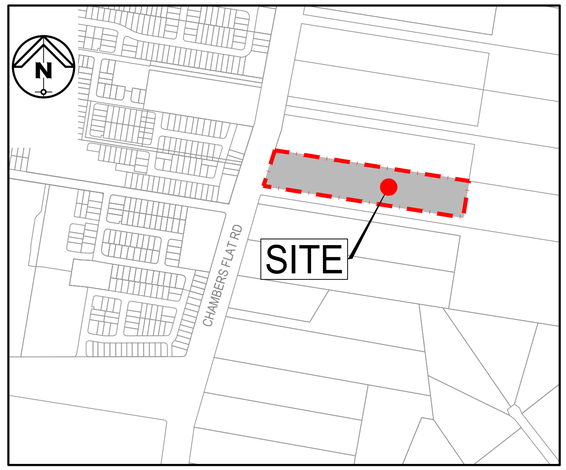
DEVEL. APPLIC. No. :	DATE : 07.02.2025
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TN	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ:	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : SK01 / VERSION: F

Appendix C – Preliminary Engineering Drawings

PROPOSED SUBDIVISION DEVELOPMENT
AT 552 CHAMBERS FLAT RD
LOGAN RESERVE QUEENSLAND
PARK LANE STAGE 6

PRELIMINARY CIVIL ENGINEERING DESIGN

CONTRACT BE220314



LOCALITY PLAN

N.T.S.

DRAWING INDEX	
DWG No.	DESCRIPTION
C000	COVER SHEET AND DRAWING SCHEDULE
C100	OVERALL SITE LAYOUT AND ROAD STRUCTURE PLAN
C101	TYPICAL CROSS SECTION, NOTES AND DETAILS
C200	PRELIMINARY EARTHWORKS LAYOUT PLAN
C210	PRELIMINARY EARTHWORKS SECTIONS
C220	EARTHWORKS NOTES AND DETAILS
C300	PRELIMINARY ROADWORKS & DRAINAGE LAYOUT PLAN
C302	PRELIMINARY ROAD 2 LONGITUDINAL SECTIONS
C301	PRELIMINARY ROAD LONGITUDINAL SECTIONS
C450	PRELIMINARY BIO DETENTION BASIN LAYOUT PLAN
C451	PRELIMINARY BIO BASIN SECTIONS
C452	TYPICAL BIO-RETENTION BASIN DETAILS
C600	PRELIMINARY SEWER & WATER LAYOUT PLAN

NOTE:

CONCEPT DESIGNS ARE BASED ON SITE SURVEY
DATA PROVIDED BY LANDPARTNERS.

PREPARED FOR

MB DEV B PTY LTD

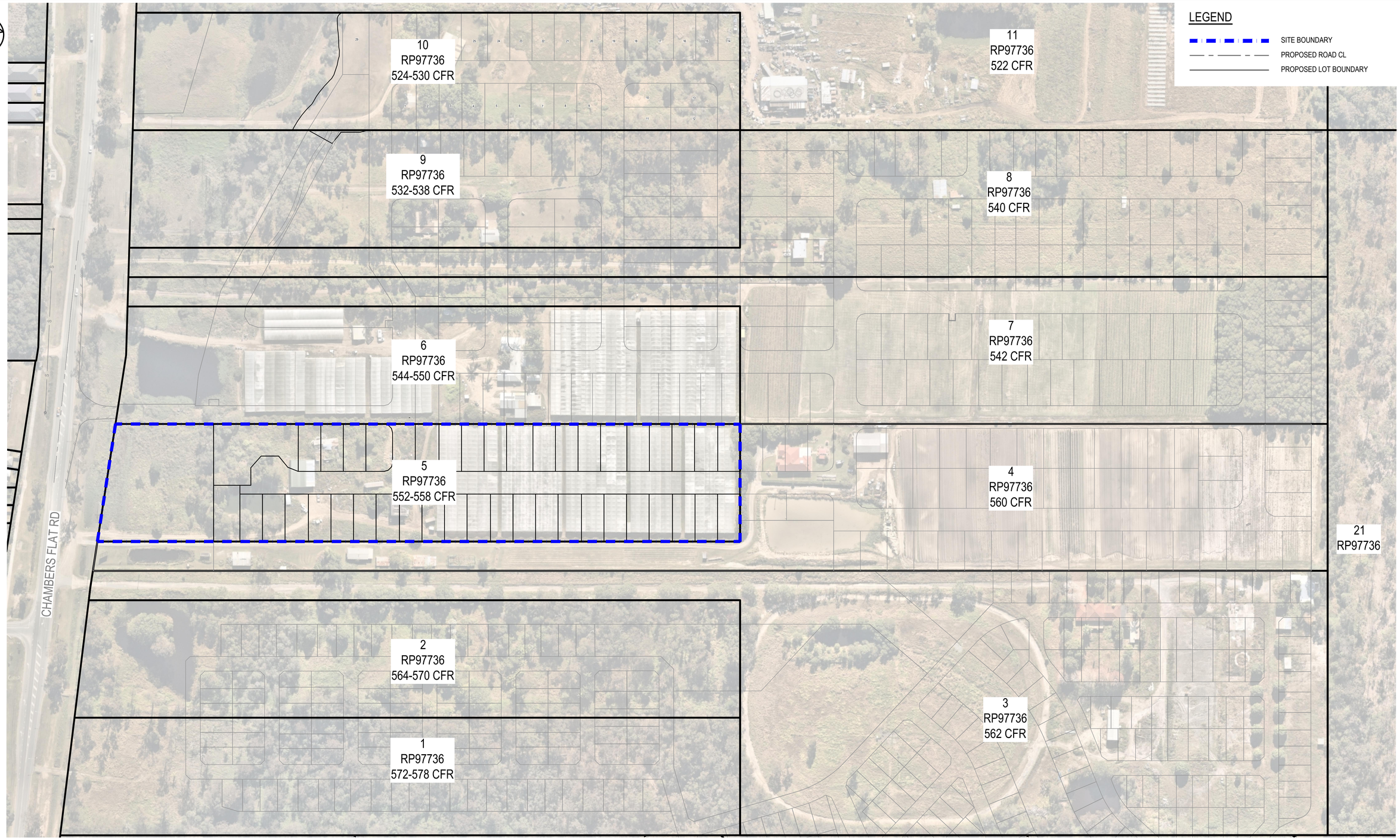
PREPARED BY

BURCHILLS
ENGINEERING SOLUTIONS

GOLD COAST | BRISBANE | TOOWOOMBA
IPSWICH | MORETON BAY
PHONE: +61 7 5509 6400
FAX: +61 7 5509 6411
EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

DATE : 07-02-2025

PROJECT No.:	DRAWING No. :	VERSION:
BE220314	C000	B



OVERALL SITE LAYOUT AND ROAD STRUCTURE PLAN

SCALE 12.5 0 12.5 25 37.5 50 62.5 (metres)
1 : 1250 (FULL SIZE)

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

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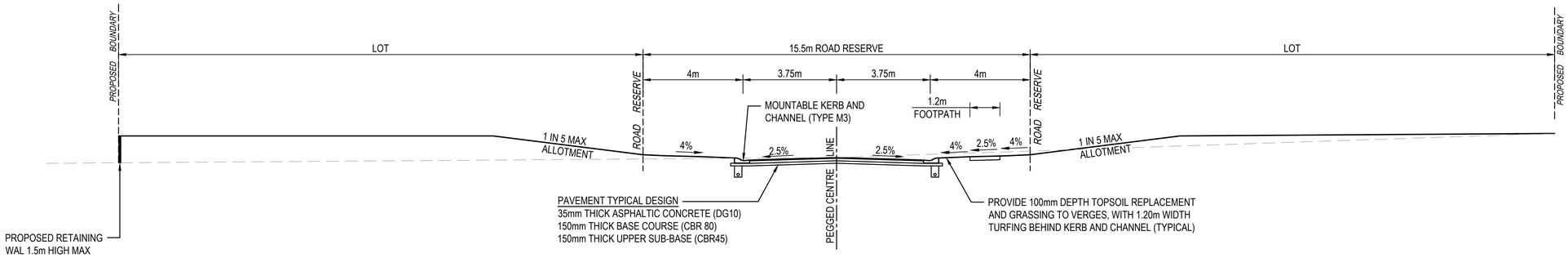
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
OVERALL SITE LAYOUT AND ROAD STRUCTURE PLAN

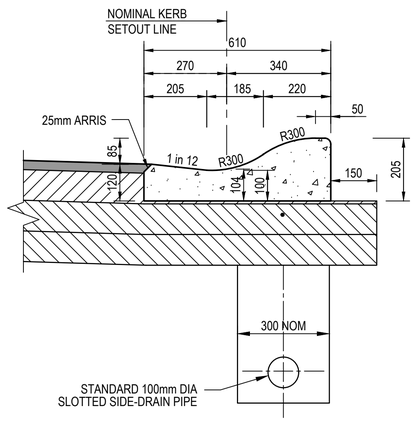
DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	

SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C100	VERSION: B



ROADS 01-02 TYPICAL CROSS SECTION
7.5m K-K ACCESS STREET

SCALE 1 0 1 2 3 4 5 (metres)
1 : 100 (FULL SIZE)



MOUNTABLE KERB AND CHANNEL TYPE M3

SCALE 0.1 0 0.1 0.2 0.3 0.4 0.5 (metres)
1 : 10 (FULL SIZE)

PAVEMENT AND KERB NOTES:

1. BATTER SLOPES AND PAVEMENT CROSSFALLS SHOWN ON THIS DRAWING ARE TYPICAL ONLY. FOR VARIATION FROM THE STANDARD PROFILES REFER RELEVANT ROADWORKS DRAWINGS.
2. PAVEMENT DEPTHS SHOWN ON THIS DRAWING ARE DESIGN DEPTHS ONLY AND MAY BE VARIED ONCE SUBGRADE TESTS ARE TAKEN. TURNOUTS ARE TO BE PAVED WITH THE SAME MATERIAL AND COMPACTED TO THE SAME STANDARD AS THE ROAD ADJACENT.
3. KERB AND CHANNEL, MEDIAN KERB AND OTHER EDGE SECTIONS SHALL BE CONCRETE CLASS S25, AND THE MIX DESIGNED SPECIFICALLY FOR EXTRUSION.
4. REFER IPWEAQ STD DWG RS-080 FOR TYPICAL KERB DETAILS AND NOTES.
5. FOR DETAILS OF SIDE-DRAIN CONSTRUCTION REFER IPWEAQ STD DWGS RS-140 AND RS-142.
6. 1.2m WIDE REINFORCED CONCRETE FOOTPATH INCLUDING KERB RAMPS AND JOINTING TO BE CONSTRUCTED IN ACCORDANCE WITH IPWEAQ STD DWGS RS-065, RS-090 AND RS-094.

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
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A	ISSUE FOR INFORMATION	07-05-24

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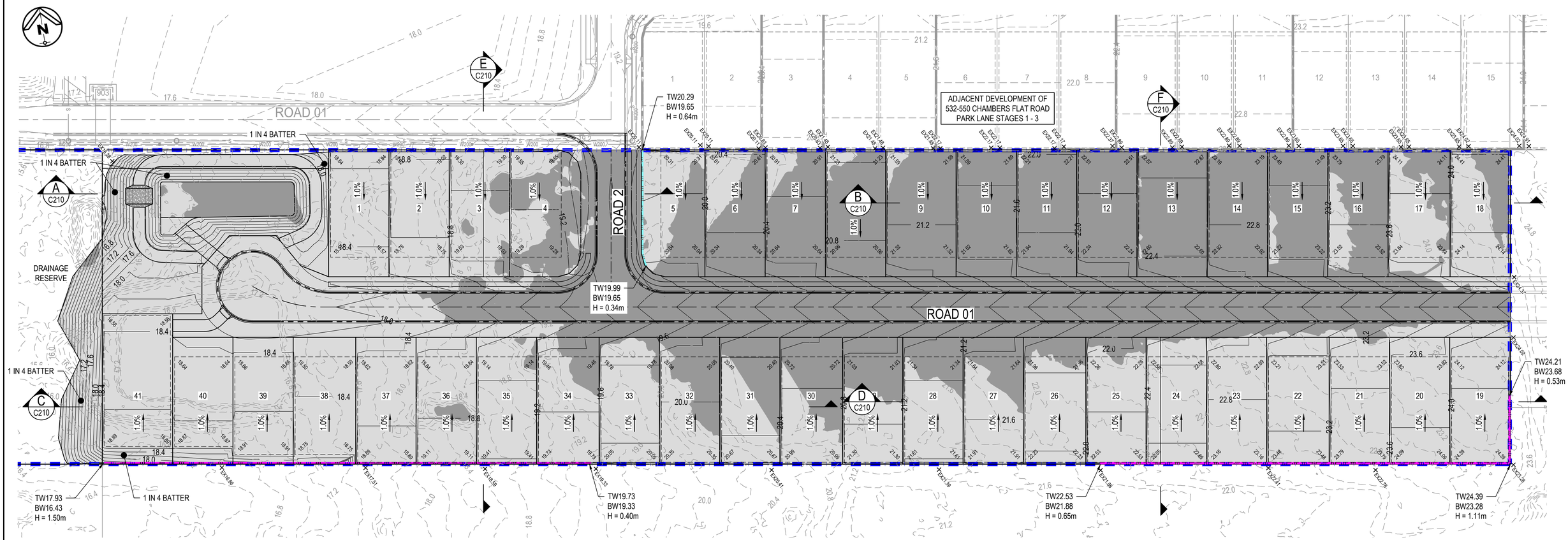
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
TYPICAL CROSS SECTION, NOTES AND DETAILS

DEVEL. APPLIC. No. :		DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG	
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
RPEQ No. :		
SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C101	VERSION: B



PRELIMINARY EARTHWORKS LAYOUT PLAN

SCALE 5 0 5 10 15 20 25 (metres)
1 : 500 (FULL SIZE)

BULK EARTHWORKS SUMMARY

STRUCTURAL FILLING	
AREA	NETT SOLID FILL
OVERALL FILLING	
(ALLOTMENTS, BATTERS	10,810 cu.m.
TOTAL FILL REQUIRED	10,810 cu.m.
EXCAVATION	
AREA	NETT CUT
OVERALL EXCAVATION	4,537 cu.m.
TOTAL CUT	4,537 cu.m.

SUMMARY:
TOTAL MATERIAL ON LEADS (NETT FILL) = 6,273 cu.m.
i.e.10,810cu.m - 4,537 cu.m.. = 6,273 cu.m. EXCESS MATERIAL TO BE IMPORTED.
ALLOWANCE FOR 200mm TOPSOIL STRIP
ALLOWANCE FOR 325mm ROAD BOX DEPTH
ALLOWANCE FOR 800mm BIO SPOIL
ALLOWANCE FOR 200mm TOPSOIL RESPREAD TO LOTS, VERGES AND DRAINAGE RESERVE

LEGEND

- SITE BOUNDARY
- 15.0 DESIGN SURFACE CONTOURS
- EXISTING LOT BOUNDARY
- SW EXISTING STORMWATER
- W EXISTING WATER
- S EXISTING SEWER
- EXISTING ROAD CONTROL LINE
- EXISTING KERB
- 15.0 DESIGN SURFACE CONTOURS
- PROPOSED ROAD CONTROL LINE
- PROPOSED MOUNTABLE KERB AND CHANNEL (TYPE M3)
- PROPOSED BOULDER RETAINING WALL (1.5m MAX)
- PROPOSED SLEEPER RETAINING WALL (1.5m MAX)
- EARTHWORKS AREA OF FILL
- EARTHWORKS AREA OF CUT
- ×EX22.75 EXISTING SPOT LEVEL

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

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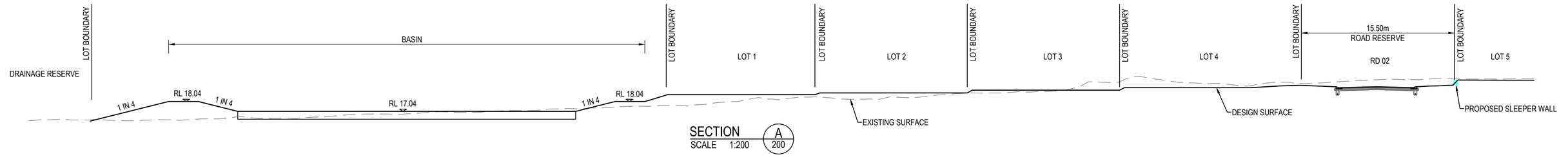
Email: admin@burchills.com.au
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

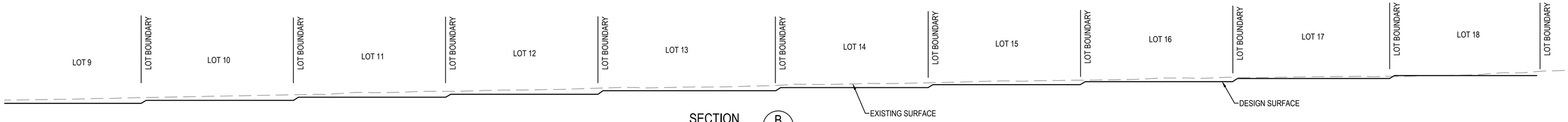
PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY EARTHWORKS LAYOUT PLAN

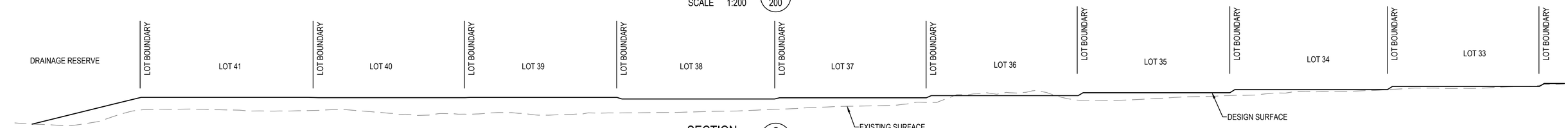
DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C200 / VERSION: B



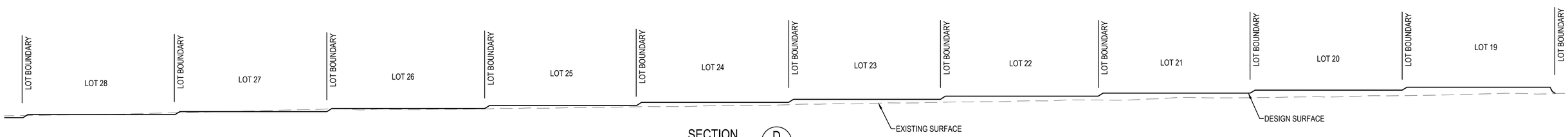
SECTION A
SCALE 1:200 A 200



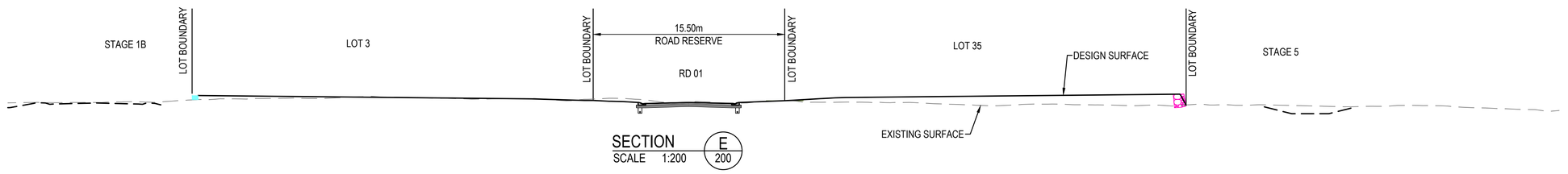
SECTION B
SCALE 1:200 B 200



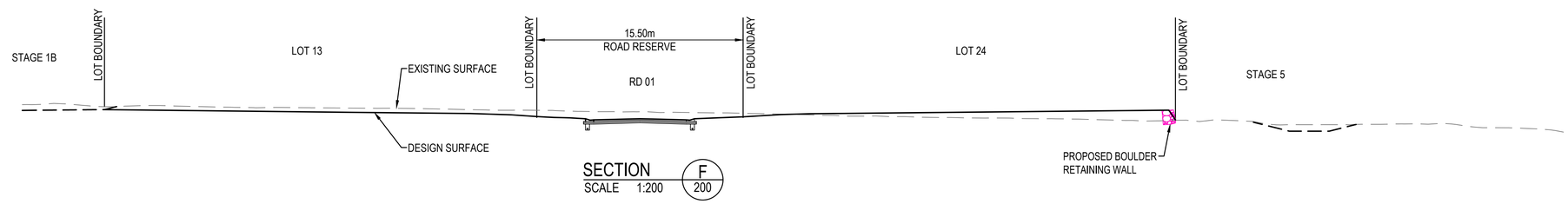
SECTION C
SCALE 1:200 C 200



SECTION D
SCALE 1:200 D 200



SECTION E
SCALE 1:200 E 200



SECTION F
SCALE 1:200 F 200

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

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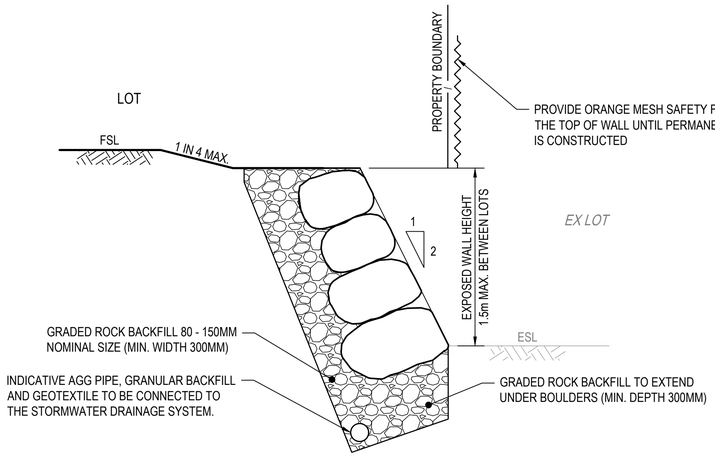
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

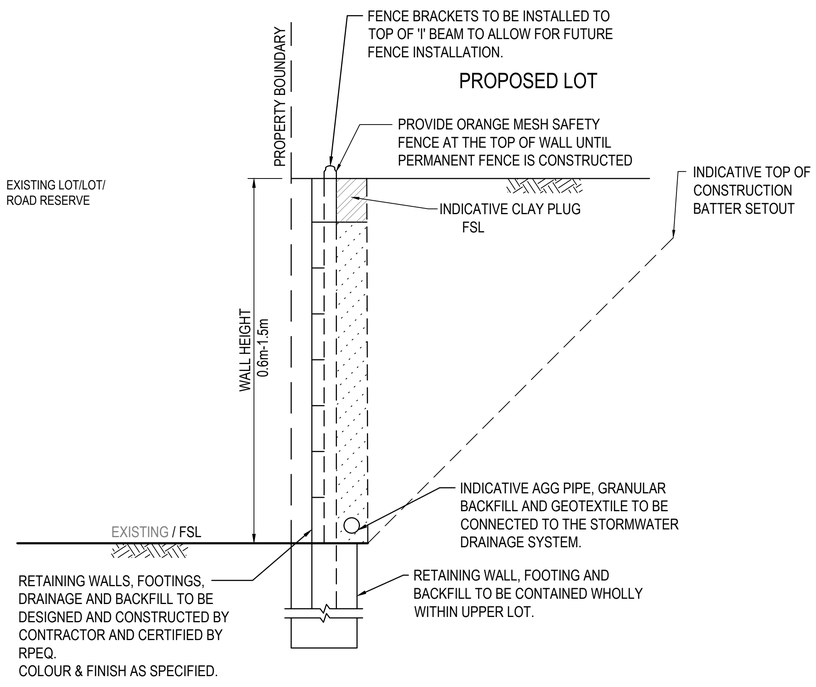
PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY EARTHWORKS SECTIONS

DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C210 / VERSION: B



BOULDER RETAINING WALL CONFIGURATION BETWEEN LOTS & EXISTING LOTS (1.5m MAX.)



RETAINING WALL CONFIGURATION - BETWEEN PROPOSED LOTS

NTS

NOTE:
RETAINING WALL DESIGN, CONSTRUCTION, SUPERVISION AND CERTIFICATION TO BE PROVIDED BY SPECIALIST SUB-CONTRACTOR.

GENERAL EARTHWORKS NOTES:

1. ALL EARTHWORKS CONSTRUCTION UNDER THIS CONTRACT IS TO BE PERFORMED STRICTLY IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY THE PRINCIPAL'S GEOTECHNICAL CONSULTANT.
2. ALL COMPACTION TESTING UNDER THIS CONTRACT IS TO BE CARRIED OUT TO AS3798 LEVEL 1 STANDARD BY A NATA-ACCREDITED TESTING AUTHORITY. CERTIFICATION FOR ALL EARTHWORKS CONSTRUCTION AND TESTING IS TO BE PROVIDED BY A REGISTERED PROFESSIONAL ENGINEER QUEENSLAND (RPEQ) ENGAGED BY THE CONTRACTOR.
3. ALL DESIGN LEVELS SHOWN ON THE CONTRACT DRAWINGS ARE FINISHED SURFACE LEVELS FOLLOWING TOPSOIL REPLACEMENT.
4. ALL STRUCTURAL FILL MATERIAL PLACED SHALL BE COMPACTED TO THE FOLLOWING MINIMUM DENSITY IN ACCORDANCE WITH THE SPECIFICATION AND THE GEOTECHNICAL REPORT:

   a) 95% DENSITY RATIO FOR GENERAL STRUCTURAL FILL (COHESIVE MATERIAL)
   b) 98% DENSITY RATIO FOR THE TOP 300mm DEPTH BELOW PAVEMENT SUBGRADE LEVEL
   (COHESIVE MATERIAL)
5. FILL MATERIAL USED IN WETLAND BATTERS IS TO BE STIFF TO HARD CLAYS OR OTHER SUITABLE MATERIAL AS DIRECTED BY GEOTECHNICAL ENGINEER.
6. ALL EARTHWORKS BATTERS STEEPER THAN 1 IN 4 ARE TO BE LANDSCAPED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS PLANS.
7. EXISTING DAMS ARE TO BE DE-WATERED AND CLEANED-OUT. ALL UNSUITABLE OR SATURATED MATERIAL IS TO BE REMOVED AND REPLACED WITH SELECTED ON-SITE STRUCTURAL FILL MATERIAL AND COMPACTED AS SPECIFIED.
8. PROVIDE CONDITION SURVEY OF ADJACENT RESIDENTIAL BUILDINGS FOR ALL PROPERTIES LOCATED WITHIN NOMINAL 100m OF EARTHWORKS OPERATIONS. CONDITION SURVEY TO BE UNDERTAKEN BY QUALIFIED PERSONNEL WITH BUILDING EXPERIENCE.

RETAINING WALL NOTES:

1. RETAINING WALLS, FOOTINGS, DRAINAGE, BACKFILL AND CONNECTION OF AGGREGATE DRAINS TO STORMWATER DRAINAGE SYSTEM TO BE DESIGNED AND CONSTRUCTED BY THE CONTRACTOR AND CERTIFIED BY AN SUITABLY QUALIFIED RPEQ
2. THESE DRAWINGS IDENTIFY SURFACE PROFILES, RETAINING WALL LOCATIONS, AND SETOUT INFORMATION ONLY. REFER TO CONTRACTOR SUPPLIED DRAWINGS FOR RPEQ STRUCTURAL DETAILS, WALL MATERIALS AND COMPACTION SPECIFICATIONS AND CONSTRUCTIBILITY INFORMATION.
3. RETAINING WALL DESIGN ENGINEER TO PROVIDE RPEQ FORM 15 STRUCTURAL CERTIFICATE INCLUDING GEOTECHNICAL GLOBAL STABILITY CERTIFICATION BY GEOTECHNICAL ENGINEER. WALL DESIGN TO ASSUME SURCHARGE LOADING BEHIND WALL. DESIGN TO BE IN ACCORDANCE WITH AS4678 INCLUDING ALL REQUIRED DESIGN LOAD CASES AND COMBINATIONS.
4. RETAINING WALLS TO BE DESIGNED TO CONSIDER ALL LOADS INCLUDING CONSTRUCTION LOADS AND OPERATIONAL LOADS.
5. ANY GEOTECHINCAL INFORMATION PROVIDED BY THE PRINCIPAL OR THE SUPERINTENDENT SHALL BE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR AND THE RETAINING WALL DESIGN ENGINEER SHOULD SATISFY THEMSELVES OF THE DESIGN SOIL PARAMETERS AND UNDERTAKE AND ADDITIONAL GEOTECHNICAL INVESTIGATION DEEMED NECESSARY BY THE DESIGN ENGINEER.
6. THE CONTRACTOR SHALL ENSURE THAT ANY CONFLICT BETWEEN THESE PROJECT DRAWINGS AND THE RETAINING WALL DRAWINGS PREPARED BY THE RETAINING WALL DESIGN ENGINEER IS RESOLVED WITH THE SUPERINTENDENT PRIOR TO CONSTRUCTION COMMENCING.
7. A COPY OF THE RETAINING WALL DESIGN DRAWINGS, INCLUDING CONNECTION OF AGGREGATE DRAINS TO THE STORMWATER DRAINAGE SYSTEM, DESIGN PARAMETERS AND CERTIFICATION BE PROVIDED TO THE SUPERINTENDENT AT THE PRE-START MEETING PRIOR TO CONSTRUCTION COMMENCING.
8. ANY RETAINING WALL AND BATTER EXCEEDING THE HEIGHT OF 1.5m, THE CONTRACTOR SHALL UNDERTAKE A THIRD PARTY RPEQ REVIEW OF THE PROPOSED DESIGN.

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

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B	ISSUE FOR APPROVAL	07-02-25
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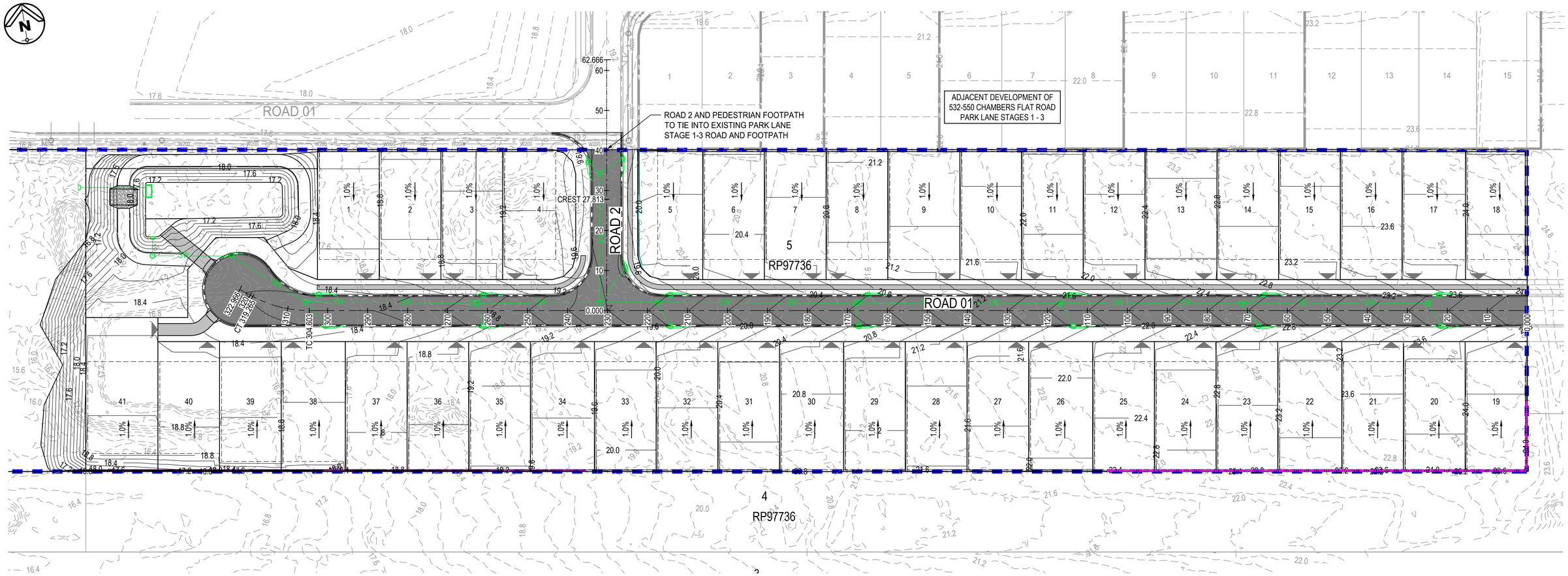
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
EARTHWORKS NOTES AND DETAILS

DEVEL. APPLIC. No. :		DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG	
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
RPEQ No. :		
SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C220	VERSION: B



PRELIMINARY ROADWORKS & DRAINAGE LAYOUT PLAN

SCALE 5 0 5 10 15 20 25 (metres)
1 : 500 (FULL SIZE)

LEGEND

- SITE BOUNDARY
- 15.0 DESIGN SURFACE CONTOURS
- EXISTING LOT BOUNDARY
- SW EXISTING STORMWATER
- W EXISTING WATER
- S EXISTING SEWER
- EXISTING ROAD CONTROL LINE
- EXISTING KERB
- 15.0 DESIGN SURFACE CONTOURS
- PROPOSED ROAD CONTROL LINE
- PROPOSED MOUNTABLE KERB AND CHANNEL (TYPE M3)
- PROPOSED BOULDER RETAINING WALL (1.5m MAX)
- PROPOSED SLEEPER RETAINING WALL (1.5m MAX)
- SW PROPOSED STORMWATER
- GULLY PIT / MANHOLE STORMWATER
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- VXO LOCATION

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

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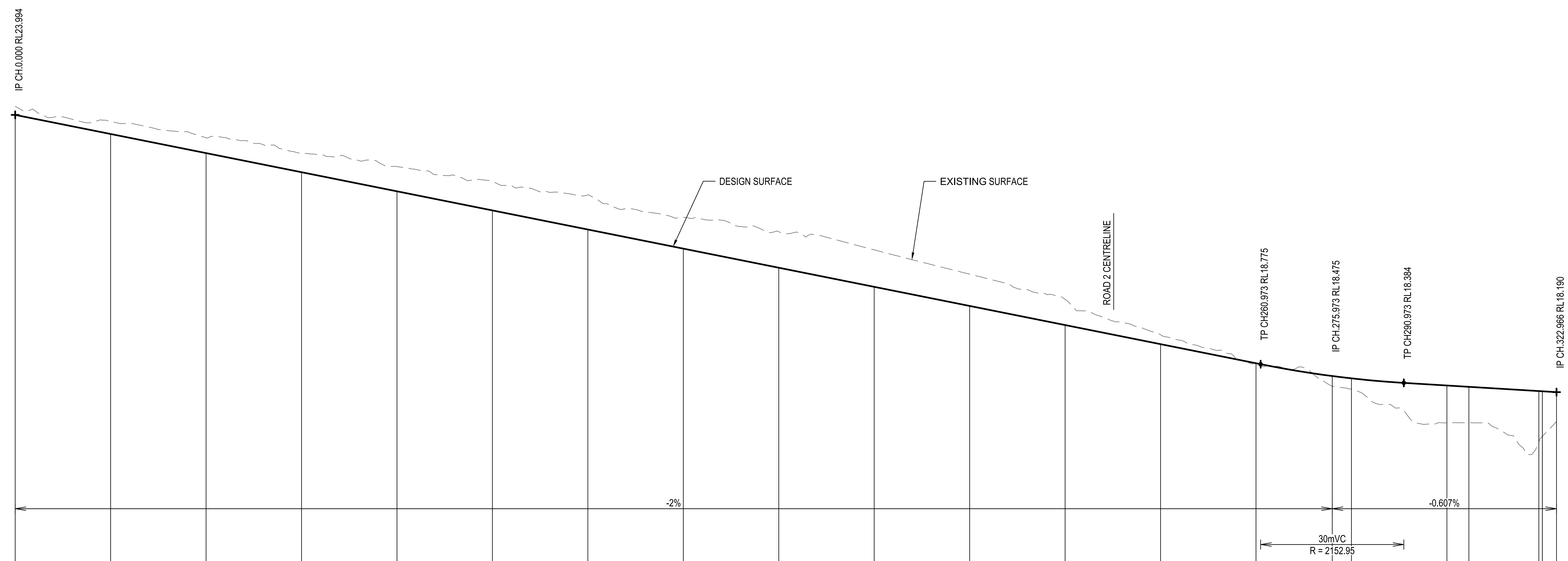
PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY ROADWORKS & DRAINAGE LAYOUT PLAN

DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C300 / VERSION: B



VERTICAL GRADE (%)

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)

DATUM RL 14.0

DEPTH OF CUT (-ve) HEIGHT OF FILL (+ve)	-0.18	-0.27	-0.32	-0.40	-0.52	-0.61	-0.72	-0.66	-0.75	-0.77	-0.67	-0.54	-0.20	0.02	0.21	0.22	0.78	0.75	1.06	0.95	0.62
FINISHED SURFACE LEVEL	23.994	23.594	23.194	22.794	22.394	21.994	21.594	21.194	20.794	20.394	19.994	19.594	19.194	18.794	18.527	18.479	18.329	18.301	18.212	18.208	18.190
EXISTING SURFACE LEVEL	24.17	23.87	23.51	23.19	22.91	22.60	22.32	21.85	21.55	21.17	20.66	20.13	19.39	18.77	18.32	18.25	17.55	17.55	17.15	17.26	17.57
CONTROL LINE CHAINAGE	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	160.000	180.000	200.000	220.000	240.000	260.000	275.973	280.000	300.000	304.603	319.265	320.000	322.966

HORIZONTAL GEOMETRY

R30m
14.66m

PRELIMINARY ROAD LONGITUDINAL SECTIONS

SCALES
5 0 5 10 15 20 25 — 1 : 500 HORIZ.
0.5 0 0.5 1.0 1.5 2.0 2.5 — 1 : 50 VERT. (FULL SIZE)
(metres)

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

BURCHILLS ENGINEERING SOLUTIONS
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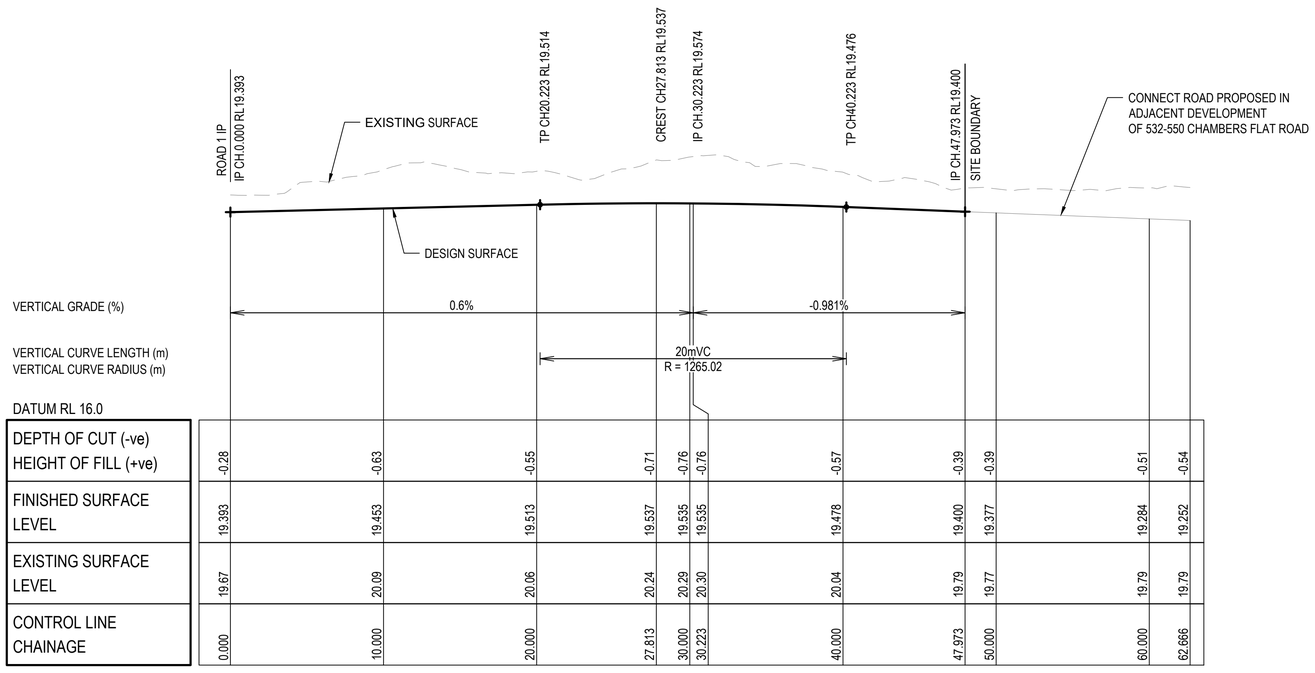
Ipswich I Moreton Bay
Phone: +61 7 5509 6400
Fax: +61 7 5509 6411
Email: admin@burchills.com.au
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY ROAD LONGITUDINAL SECTIONS

DEVEL. APPLIC. No. : | DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS | DESIGNER : TG
DRAFTSPERSON : TT | CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365
RPEQ No. :
SCALE : | DATUM : AHD | FULL SIZE : A1
PROJECT No.: BE220314 | DRAWING No. : C301 | VERSION: B



DEPTH OF CUT (-ve) HEIGHT OF FILL (+ve)	-0.28	-0.63	-0.55	-0.71	-0.76	-0.76	-0.57	-0.39	-0.39	-0.51	-0.54	
FINISHED SURFACE LEVEL	19.393	19.453	19.513	19.537	19.535	19.535	19.478	19.400	19.377	19.284	19.252	
EXISTING SURFACE LEVEL	19.67	20.09	20.06	20.24	20.29	20.30	20.04	19.79	19.77	19.79	19.79	
CONTROL LINE CHAINAGE	0.000	10.000	20.000	27.813	30.000	30.223	40.000	47.973	50.000	60.000	62.666	

HORIZONTAL GEOMETRY

PRELIMINARY ROAD 2 LONGITUDINAL SECTIONS

VERTICAL SCALE 0.5 0 0.5 1 1.5 2 2.5 1:50 (meters)

HORIZONTAL SCALE 2 0 2 4 6 8 10 1:200 (meters)

(FULL SIZE)

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

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B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

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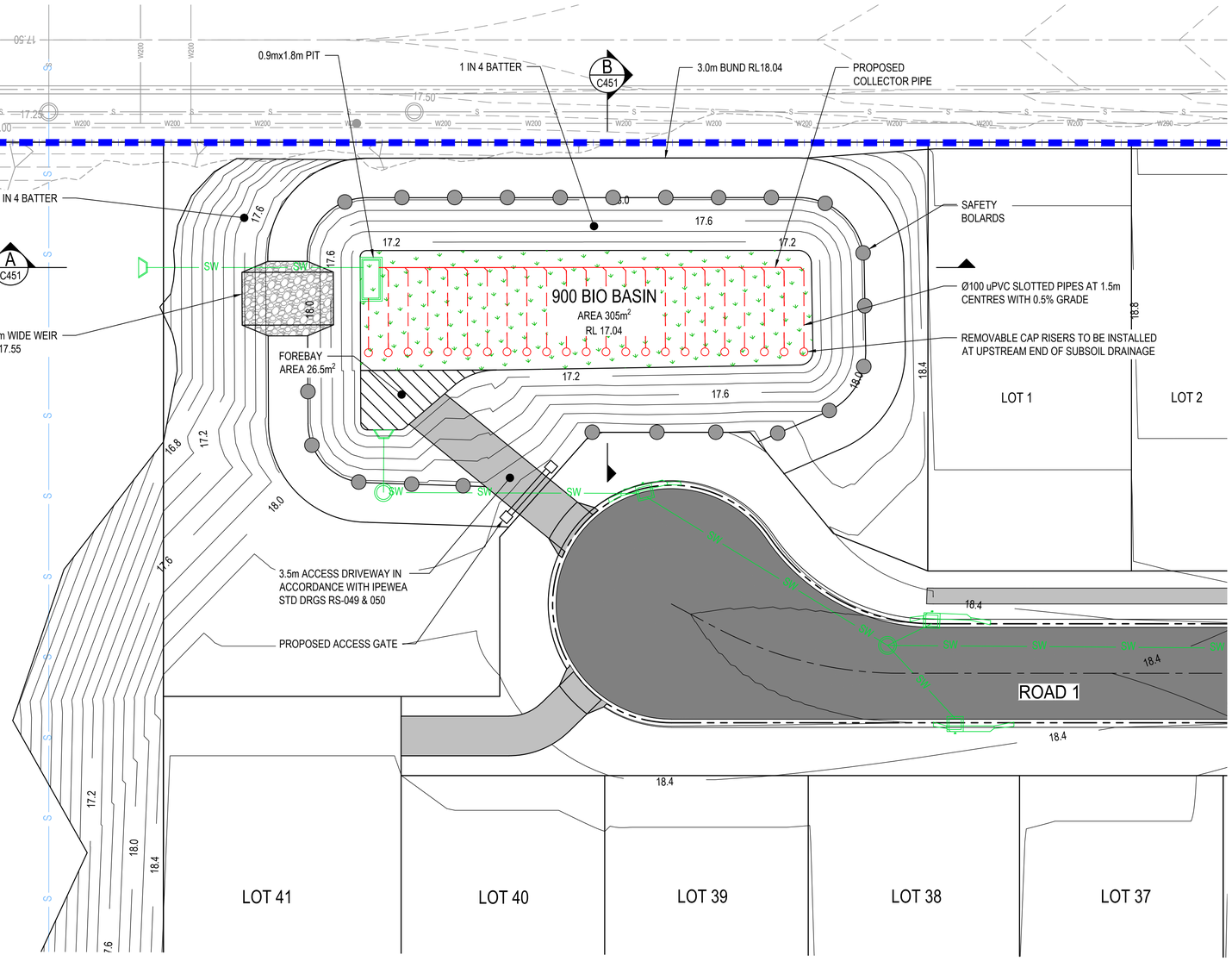
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY ROAD 2
LONGITUDINAL SECTIONS

DEVEL. APPLIC. No. :		DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG	
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
RPEQ No. :		
SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C302	VERSION: B



LEGEND

- SITE BOUNDARY
- EXISTING SURFACE CONTOURS
- PROPOSED ROAD CENTRELINE
- PROPOSED SURFACE CONTOURS
- PROPOSED LOT BOUNDARY
- PROPOSED STORMWATER PIPE
- PROPOSED PAD LEVEL
- PROPOSED FIELD INLET PIT
- PROPOSED KERB INLET PIT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT

PRELIMINARY BIO DETENTION BASIN LAYOUT PLAN

SCALE 2 0 2 4 6 8 10 (metres)
1 : 200 (FULL SIZE)

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

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B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

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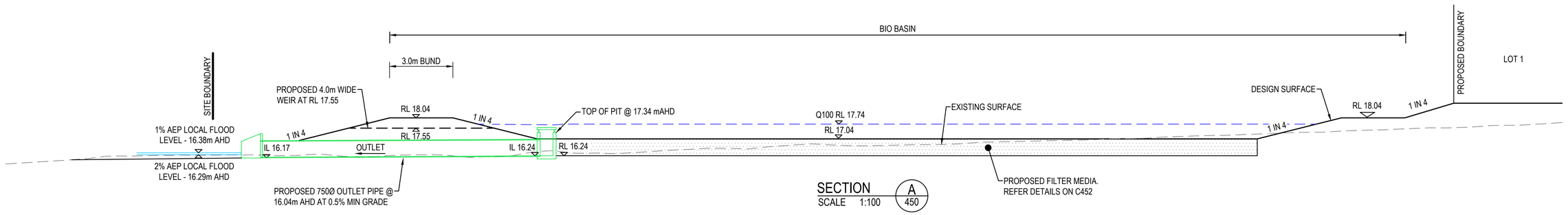
ABN 76 166 942 365

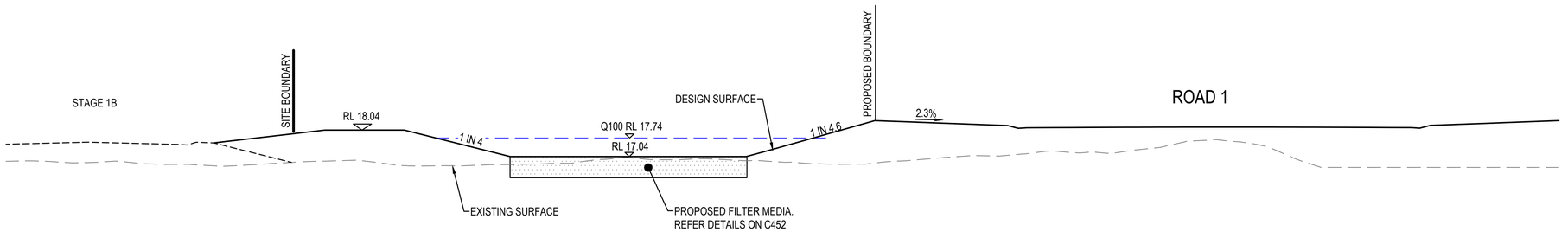
PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY BIO DETENTION BASIN LAYOUT PLAN

DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C450 / VERSION: B



SECTION A
SCALE 1:100 450



SECTION B
SCALE 1:100 450

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

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B	ISSUE FOR APPROVAL	07-02-25
A	ISSUE FOR INFORMATION	07-05-24

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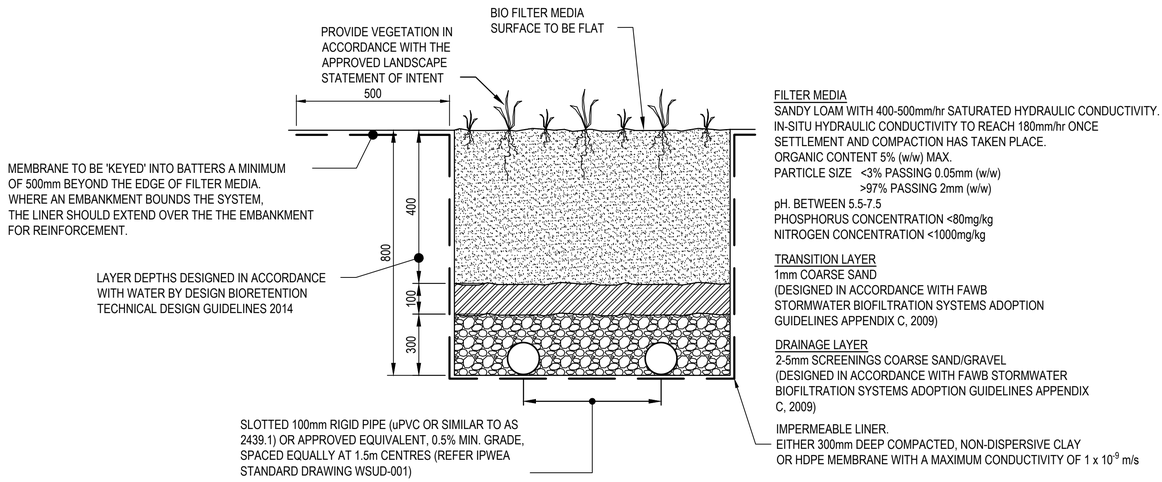
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

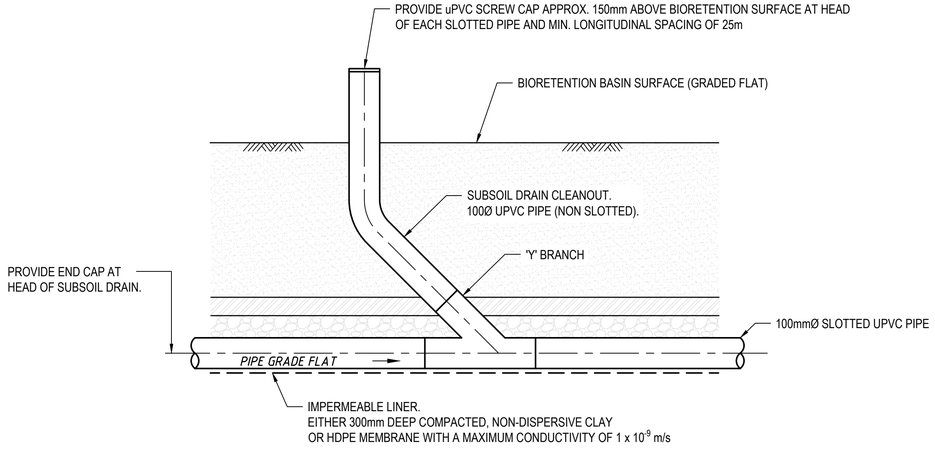
DRAWING TITLE :
PRELIMINARY BIO BASIN SECTIONS

DEVEL. APPLIC. No. :		DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG	
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
RPEQ No. :		
SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C451	VERSION: B



TYPICAL BIO-RETENTION MEDIA CROSS SECTION

SCALE 0.1 0 0.1 0.2 0.3 0.4 0.5 (metres)
1 : 10 (FULL SIZE)



TYPICAL BIO-RETENTION BASIN SUBSOIL DRAIN CLEANOUT

N.T.S.

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
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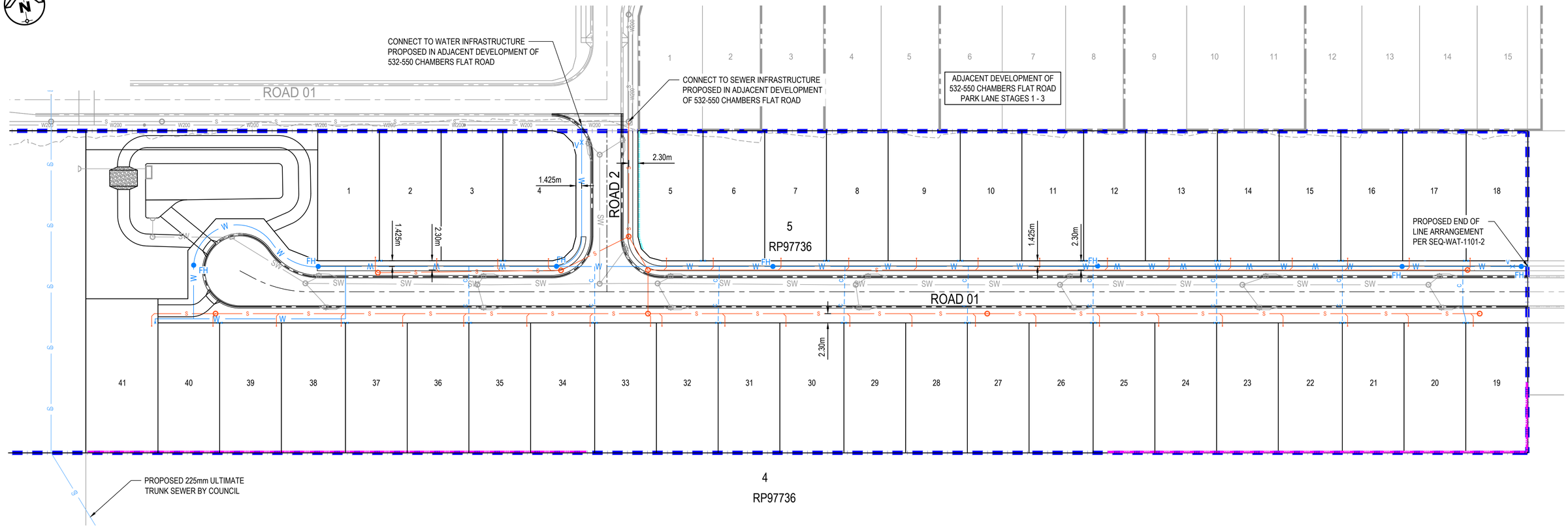
Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
TYPICAL BIO-RETENTION BASIN DETAILS

DEVEL. APPLIC. No. :		DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG	
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
RPEQ No. :		
SCALE :	DATUM : AHD	FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C452	VERSION: B



PRELIMINARY SEWER & WATER LAYOUT PLAN

SCALE 5 0 5 10 15 20 25 (metres)
1 : 500 (FULL SIZE)

LEGEND

- SITE BOUNDARY
- EXISTING LOT BOUNDARY
- EXISTING STORMWATER
- EXISTING WATER
- EXISTING SEWER
- EXISTING ROAD CONTROL LINE
- EXISTING KERB
- PROPOSED ROAD CONTROL LINE
- PROPOSED MOUNTABLE KERB AND CHANNEL (TYPE M3)
- PROPOSED BOULDER RETAINING WALL (1.5m MAX)
- PROPOSED SLEEPER RETAINING WALL (1.5m MAX)
- PROPOSED WATER
- HYDRANT / VALVE
- WATER SERVICE LOCATION
- PROPOSED SEWER AND MANHOLE
- PROPOSED DN225 ULTIMATE TRUNK SEWER
- PROPOSED STORMWATER
- GULLY PIT / MANHOLE STORMWATER

552-558 CHAMBERS FLAT ROAD, LOGAN RESERVE
RPD: LOT 5 ON RP 178746
FOR
MB DEV B PTY LTD

A1 ORIGINAL SIZE BEFORE REDUCTION

VER.	DESCRIPTION	DATE
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A	ISSUE FOR INFORMATION	07-05-24

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Coote Burchills Engineering Pty Ltd
ABN 76 166 942 365

PROJECT:
552-558 CHAMBERS FLAT ROAD
LOGAN RESERVE
PARK LANE STAGE 6

DRAWING TITLE :
PRELIMINARY SEWER & WATER LAYOUT PLAN

DEVEL. APPLIC. No. :	DATE : 07-02-25
PROJECT LEADER : FRASER LUCAS	DESIGNER : TG
DRAFTSPERSON : TT	CHECKED : FRASER LUCAS
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
RPEQ No. :	
SCALE :	DATUM : AHD / FULL SIZE : A1
PROJECT No.: BE220314	DRAWING No. : C600 / VERSION: B