Structural Civil Flood

Engineering Services Report

DA 3 – Loganview Green

QM Properties

610-626 Loganview Road

Logan Reserve

Job Reference Number – 9948

Date: 23 May 2025

Document Status

Rev No	Author	Reviewer	Approved for Issue			
			Name	Signature	Date	RPEQ #
0	A.Turner	R.Llewelyn	Ryan Llewelyn		23/05/25	31497

Distribution

Rev No	Date	Issue	Issued To	Format
0	23/05/25	DA	QM Properties	PDF

TABLE OF CONTENTS

1 Introduction 4
1.1. Purpose and Scope 4
1.2. Report Limitations 5
2 Site Characteristics 6
2.1. Location 6
2.2. Existing Use 8
2.3. Topography 8
3 Development Layout 9
4 Flooding 10
5 Services, Works, and Infrastructure 12
5.1. Sewerage Reticulation 12
5.2. Water Reticulation 12
5.3. Electricity and Telecommunications 14
6 Filling and Excavation 15
7 Conclusions and Recommendations 16
8 References 17

APPENDICES

APPENDIX A – LOT LAYOUT PLAN

APPENDIX B – CIVIL WORKS DRAWINGS

APPENDIX C – LOGAN CITY COUNCIL FILLING AND EXCAVATION AND INFRASTRUCTURE CODES

1 Introduction

1.1. Purpose and Scope

Inertia Engineering has been commissioned by QM Properties to prepare an Engineering Services Report for the proposed development at 610-626 Loganview Road, Logan Reserve (the subject site). The proposed development is the third Development Application for the Loganview Green residential estate by QM Properties, and will be referred to within this report as DA3. This report will support the development application submitted for the proposed development.

This report, along with the Stormwater Management Report prepared by Inertia will form the engineering submission to Logan City Council (LCC) for the proposed Loganview Green development, DA3 (53 lots).

This report considers the bulk earthwork design and demonstrates conceptually how the development can be serviced by water, sewer, and other infrastructure such as electricity and telecommunications. The separate Stormwater Management Plan prepared by Inertia addresses the stormwater management (quality and quantity) during the construction and operational phases of the proposed development.

The required detailed design for the service infrastructure will be subject to the conditions (if any) attached to the Development Approval to be provided by Council and any nominated referral agencies.

This report has been prepared in accordance with the *State Planning Policy* (SPP, 2017), Queensland Urban Drainage Manual Fourth Edition 2016 (IPWEAQ, 2016) and Logan City Council's Planning Scheme Policy 2015.

1.2. Report Limitations

This report has been prepared by Inertia Engineering Pty Ltd for QM Properties and may only be used and relied on by QM Properties for the purpose agreed between Inertia Engineering and QM Properties as detailed within this report.

Inertia Engineering otherwise disclaims responsibility to any person other than QM Properties arising in connection with this report. Inertia Engineering also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by Inertia Engineering in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. Inertia Engineering has no responsibility or obligation to update this report to account for events or changes occurring after the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by Inertia Engineering described in this report. Inertia Engineering disclaims liability arising from any of the assumptions being incorrect.

Inertia Engineering has prepared this report based on information provided by QM Properties and others who provided information to Inertia Engineering (including Government authorities), which Inertia Engineering has not independently verified or checked beyond the agreed scope of work. Inertia Engineering does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2 Site Characteristics

The land contained within the site is described as follows:

Table 2-1 – Site Characteristics (DA 3 – 'Subject Site')

DA3 –53 Lots	
Title Details:	Lot 12 & 13 RP105335
Street Address:	610-638 Logan Reserve Road, Logan Reserve
Propose DA 3 Area:	4.952 ha

Table 2-2 – Broader Site Characteristics (includes DA applications – not part of this submission)

Broader Site (includes DA1, DA2 & DA3)	
Title Details:	Lot 101 & 102 RP868235 and Lot 7 & 8 RP 105335, Lot 4 & 5 RP105335, Lot 12 & 13 RP105335
Street Address:	100-148 Loganview Road, 610-638 Logan Reserve Road, Logan Reserve
Proposed DA 1 Area:	13.514 ha
Proposed DA 2 Area:	5.837 ha
Proposed DA 3 Area:	4.952 ha
Total Site Area:	24.303 ha

Refer to Appendix A for the proposed Lot Layout and Overall Plan.

2.1. Location

The subject site is located in Logan Reserve, approximately 30km south of Brisbane's CBD and lies within an Emerging Community zone under Logan City Council's Planning Scheme 2015. The site is bounded by Logan Reserve Road to the north-west, Loganview Green DA's 1 & 2 (proposed development) to the south-east and rural residential properties to all other directions. The subject site is shown in red below in Figure 2-1, with Loganview Green DA1 & 2 development areas (LCC Ref: COM_2_2022 AND COM_1_2022) shown in green.



Figure 2-1 – Locality Plan

2.2. Existing Use

The subject site currently consists primarily of rural residential lots with multiple dwellings, small sheds, minor vegetation and open grass land.

Vehicular access to the existing lots is provided from Logan Reserve Road, north of the site.

2.3. Topography

The site falls generally from north to south at a grad of approximately 5%. The highest point on the site is in the northern corner along the Logan Reserve Road frontage at RL 37.5 m AHD, and the lowest point is along the south-western boundary at RL 22 m AHD. At this low point an open watercourse flows in south south-westerly direction onto downstream lots.

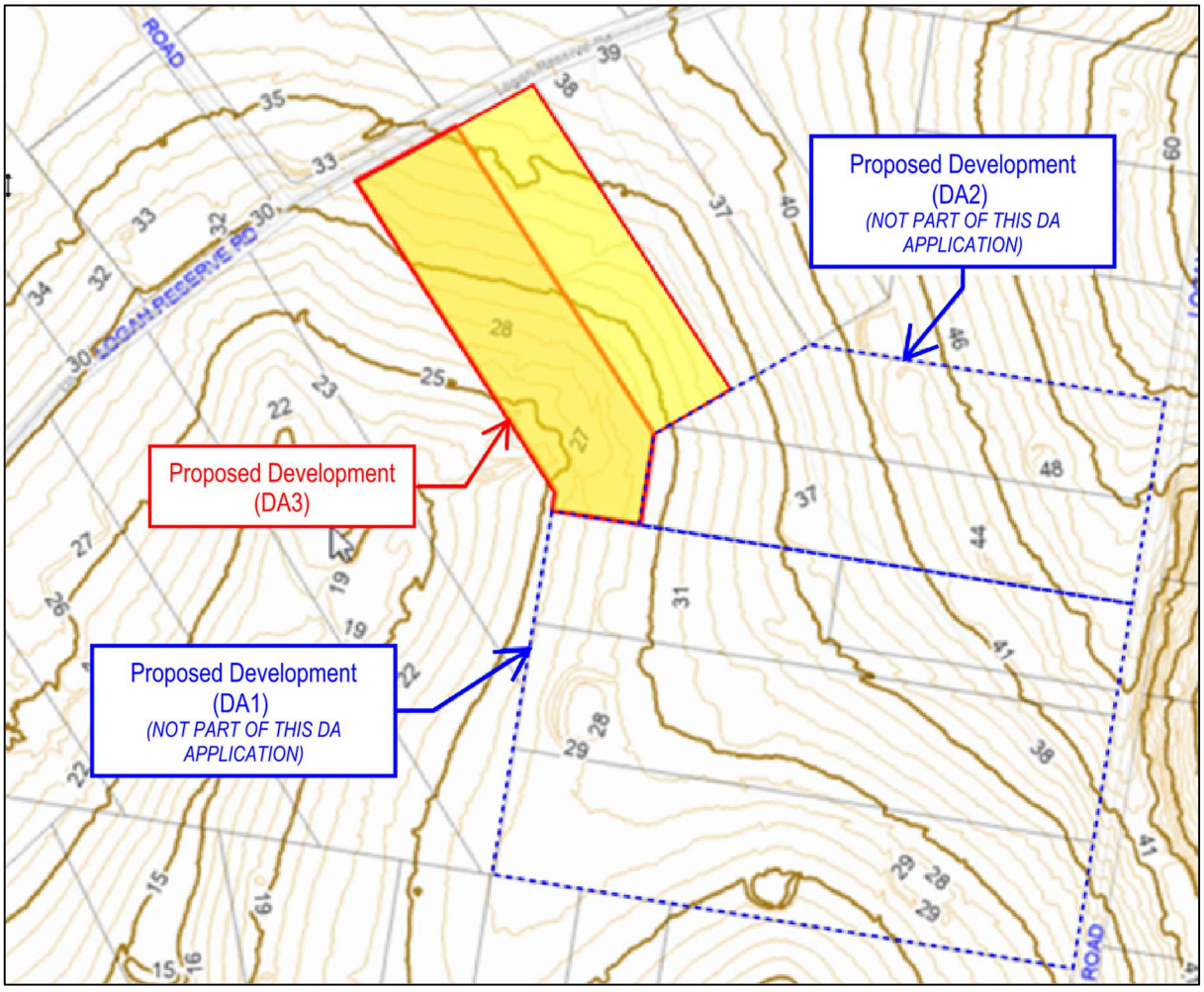


Figure 2-2 – Site Topography

3 Development Layout

The proposed development consists of a reconfiguration of a lot to create 53 residential allotments. Refer to Figure 3-1 for the proposed development layout. Access to the site is via DA 2 of the Loganview Green development to the south-east. The proposed development includes all associated roadworks, drainage, sewer, and water reticulation. Access to the site is via DA 2 of the Loganview Green development to the south-east. For further details refer to the proposed lot layout included in Appendix A.

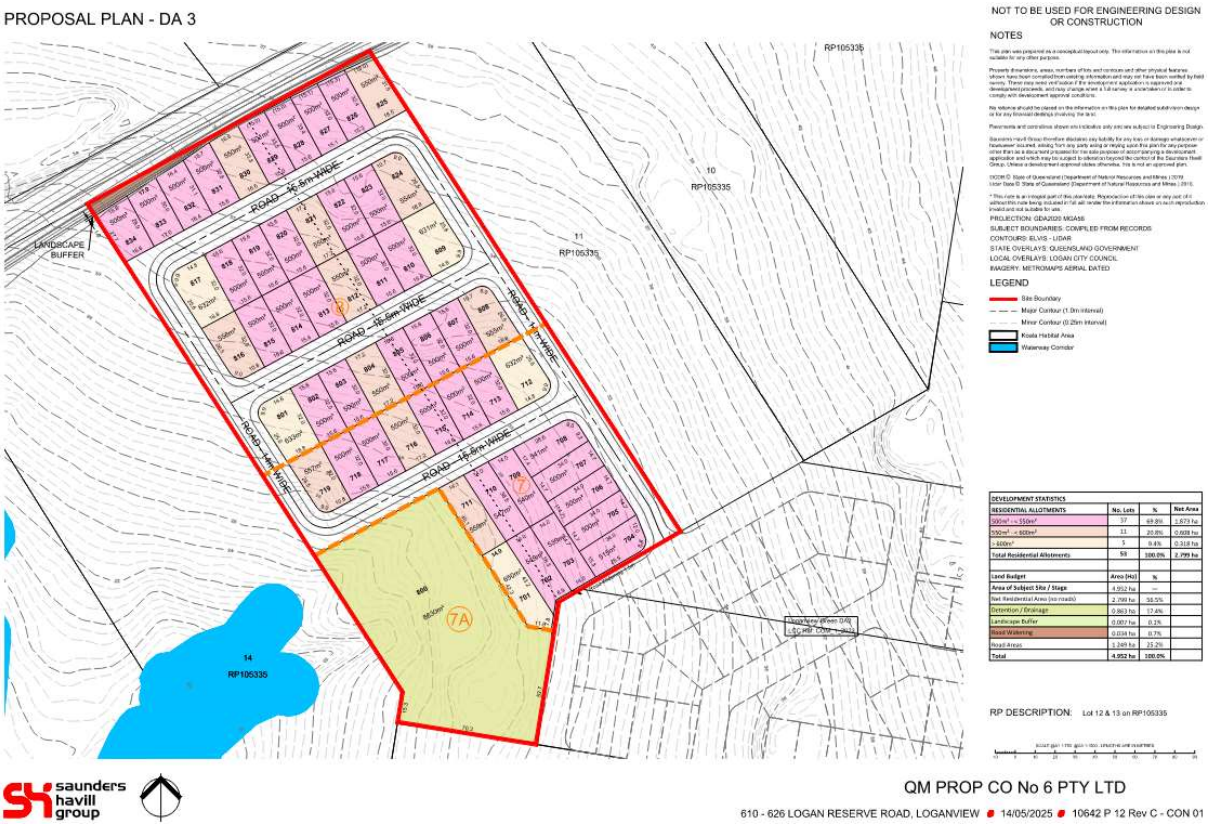


Figure 3-1 – Proposed Development Layout (DA3)

4 Flooding

Logan City Council's Flood Hazard Overlay mapping (OM-05) shows that the proposed development area is not subjected to flood inundation.

It is noted that the proposed development (DA 3) currently has an active Operational Works application for earthworks (Application Ref: OW/264/2023) which was lodged and acknowledged as a properly made application, with an approved extension to an information request from Council.

There is also an existing Operational Works application for earthworks (Application Ref: OW/263/2023) over the adjacent development (DA1 & DA2), which was also lodged, acknowledged and approved for an extension to an information request from Council.

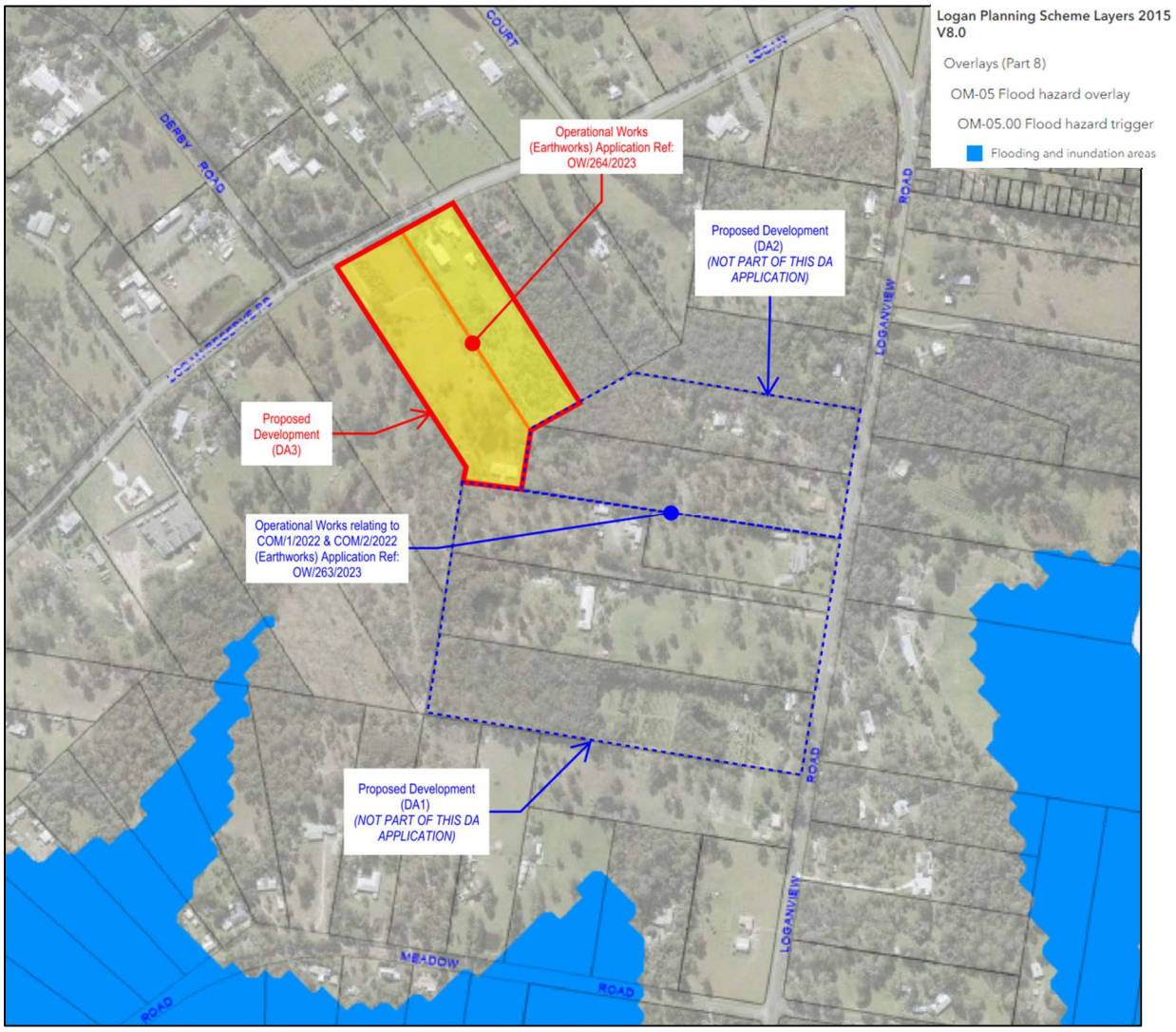


Figure 4-1 – Flooding hazard overlay mapping

Inertia Engineering has also prepared a Flood Impact Assessment for the proposed development. The objectives for the local flood assessment are to confirm the overland flow characteristics through the site and demonstrate that the proposed development works will ensure all stormwater drainage is directed to a lawful point of discharge in accordance with QUDM Section 3.4 (2013); and not adversely

impact flood levels external to the subject site during a local overland flow storm event. This includes determining any required mitigation measures to be included within the proposed development.

5 Services, Works, and Infrastructure

5.1. Sewerage Reticulation

5.1.1. Existing Sewer

There is currently no existing trunk sewer infrastructure to service the proposed development or surrounding region. Logan Water is currently undertaking sewer master planning for the catchment.

5.1.2. Proposed Sewer

A trunk sewer network scoping study is required for the proposed development site. Logan Water has been engaged for this work and will therefore not be expanded on within this engineering services report. It is understood that a 225mm dia trunk sewer main is to be construction through the DA1 site from Loganview Road through to the south-west corner of the DA1 site. The trunk sewer would then continue to a new sewer pump station west of the site.

It is proposed that internally, the DA3 site will be serviced by gravity sewerage reticulation in accordance with Logan Water design standards with connection to sewer reticulation provided with DA's 1 and 2 of Loganview Green.

Refer to Appendix B which illustrates the proposed services layout.

5.2. Water Reticulation

5.2.1. Existing Water

There is currently no existing trunk water infrastructure to service the proposed development or surrounding region. Logan Water is currently undertaking master planning for the catchment.

5.2.2. Proposed Water

As per advice from Logan Water, the proposed Loganview Green development will be serviced by new trunk water infrastructure. It is understood that water connections to both High Level Zone (HLZ) and Low Level Zone (LLZ) water main will be made available at the intersection of Logan Reserve Road and Loganview Road as part of the other current approvals.

The proposed Loganview Green development site will be serviced from both the LLZ and HLZ (Marsden HLZ). All land above an elevation of RL39 metres will need to be serviced from the proposed Marsden HLZ Pump Station located at the intersection of Logan Reserve Road and Loganview Road. New HLZ and LLZ water mains will need to be constructed down Loganview Road to service the proposed development.



Figure 5-1 – Marsden HLZ



Figure 5-2 – Proposed Water Infrastructure in Logan Reserve Road

DA3 will be serviced by making connection with the new internal water reticulation provided with DA's 1 and 2. All water reticulation will be designed in accordance with Logan Water design guidelines.

Refer to Appendix B which illustrates the proposed services layout.

5.3. Electricity and Telecommunications

There is existing overhead electricity infrastructure is available in the near vicinity of the subject site. The appropriate consultants should be engaged to assess the available capacity in the network to service the development. The location of the existing electricity and telecommunication infrastructure should be confirmed via potholing prior to construction. It is proposed that DA3 will be serviced by making connection with the new power supply network provided with DA's 1 and 2.

6 Filling and Excavation

Earthworks for the proposed development will minimise the retaining walls where possible, however, given the existing grade of the site retaining walls have been adopted to provide compliant and saleable lots.

Inter-allotment retaining has been adopted where there is height differential of 0.6m or greater, all other lots manage the minor steps through batters. Where the height is greater than 1.5m, tiered retaining walls have been implemented with a 1.0m horizontal step back.

Refer to Appendix B which shows a schematic of the earthworks proposed for the site.

Any filling and excavation including retaining works is to comply with LCC's Filling and Excavation code.

In all situations where earthworks are proposed and any ground is disturbed by construction works, sediment and erosion control measures will be implemented in accordance with the following documents:

- Relevant LCC sediment and erosion control guidelines;
- International Erosion Control Association (IECA) Sediment and Erosion Control Guidelines; and
- Australian Standards AS 3798-2007.

Given that the site is above RL 20m AHD, the proposed development is not considered to be prospective land for the existence of acid sulphate soils (ASS). Therefore no further investigations are deemed to be required.

Responses to LCC's Filling and Excavation Code are included in Appendix C.

Refer to the Stormwater Management Plan for all erosion and sediment control measures required.

7 Conclusions and Recommendations

This Engineering Services Report has assessed the earthworks and infrastructure servicing requirements for the proposed development at 610-626 Loganview Road, Logan Reserve.

Earthworks, erosion, and sediment control solutions required on site can be performed using common and accepted methods. It is noted that the proposed earthworks will trigger retaining works which will have to be constructed according to LCC codes.

All servicing connections (site access, water reticulation, sewer reticulation, electrical and telecommunications) will be provided with the earlier stages of the Loganview Green development (DA's 1 & 2).

Further liaison with Logan Water will be required to provide trunk infrastructure for sewer.

Refer to the Stormwater Management Plan and Flood Impact Assessment reports by Inertia Engineering for details relating to stormwater quality and quantity management for the development.

This report has demonstrated that the proposed development proposal provides an acceptable solution for all engineering services and has been designed to comply with the *Logan Planning Scheme (2015).*

8 References

LCC (2016) Logan City Council, Guidelines and Standards

- Filling and Excavation Code
- Infrastructure Code

IPWEA (2063), Queensland Urban Drainage Manual Fourth Edition 2016

Department of State Development, Infrastructure and Planning (2017), State Planning Policy

Institute of Public Works Engineering Australasia, Queensland Division (2016), Queensland Urban Drainage Manual Fourth Edition 2016.

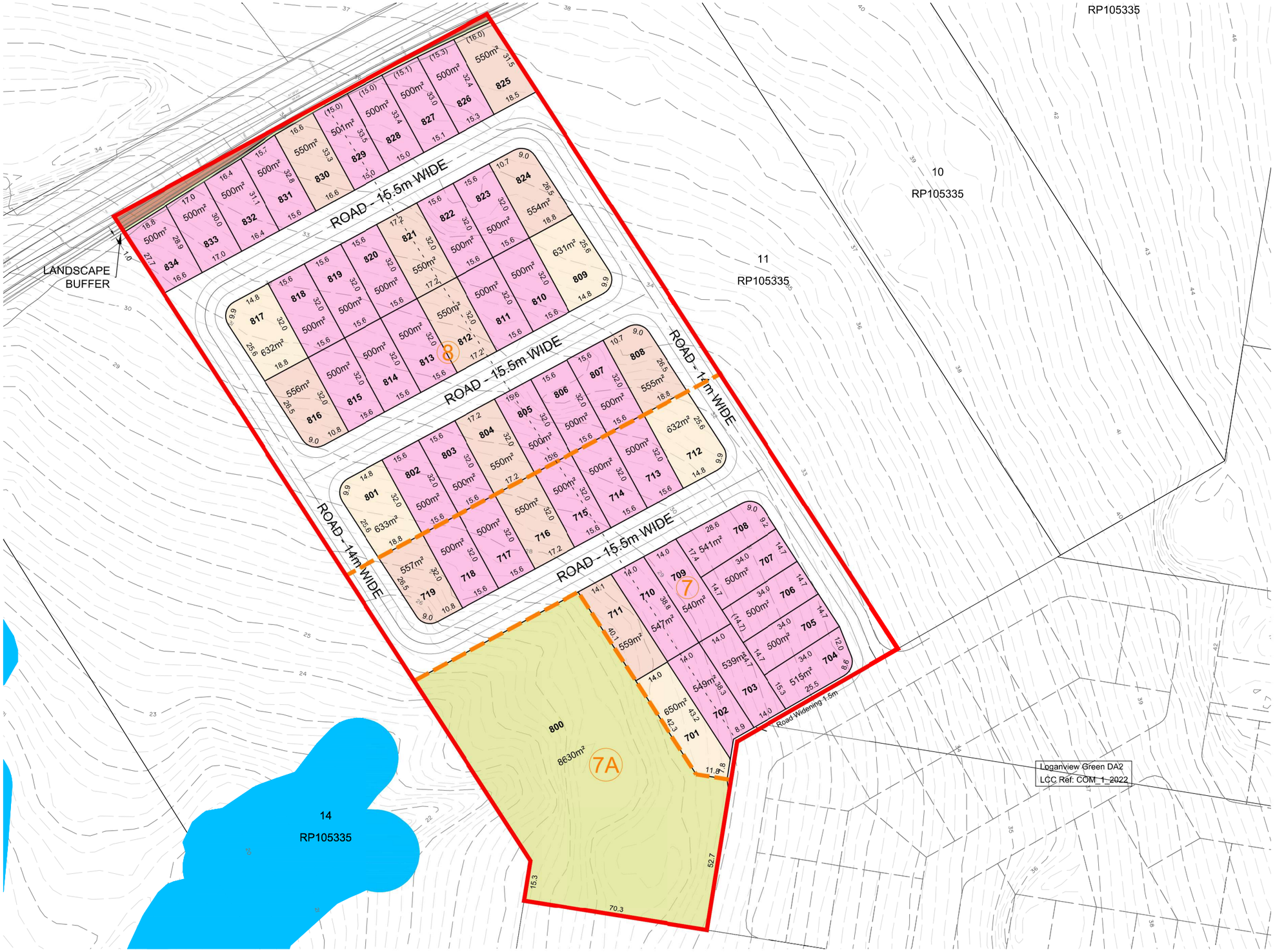
WSAA (2019) Water Services Association of Australia, 'Gravity Sewerage Code of Australia – South East Queensland Services Providers Edition Version 2.0 (July 2019)

WSAA (2019) Water Services Association of Australia, 'Water Supply Code of Australia – South East Queensland Services Providers Edition Version 1.3 (August 2019)

Appendices

Appendix A – Lot Layout Plan

PROPOSAL PLAN - DA 3



NOT TO BE USED FOR ENGINEERING DESIGN OR CONSTRUCTION

NOTES

This plan was prepared as a conceptual layout only. The information on this plan is not suitable for any other purpose.

Property dimensions, areas, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey. These may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions.

No reliance should be placed on the information on this plan for detailed subdivision design or for any financial dealings involving the land.

Pavements and centrelines shown are indicative only and are subject to Engineering Design.

Saunders Havill Group therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of the Saunders Havill Group. Unless a development approval states otherwise, this is not an approved plan.

DCDB © State of Queensland (Department of Natural Resources and Mines) 2019.
Lidar Data © State of Queensland (Department of Natural Resources and Mines) 2016.

* This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid and not suitable for use.

PROJECTION: GDA2020 MGA56
SUBJECT BOUNDARIES: COMPILED FROM RECORDS
CONTOURS: ELVIS - LIDAR
STATE OVERLAYS: QUEENSLAND GOVERNMENT
LOCAL OVERLAYS: LOGAN CITY COUNCIL
IMAGERY: METROMAPS AERIAL DATED

LEGEND

- Site Boundary
- Major Contour (1.0m interval)
- Minor Contour (0.25m interval)
- Koala Habitat Area
- Waterway Corridor

DEVELOPMENT STATISTICS			
RESIDENTIAL ALLOTMENTS	**No. Lots**	**%**	**Net Area**
500m² - < 550m²	37	69.8%	1.873 ha
550m² - < 600m²	11	20.8%	0.608 ha
> 600m²	5	9.4%	0.318 ha
Total Residential Allotments	**53**	**100.0%**	**2.799 ha**
Land Budget	**Area (Ha)**	**%**	
Area of Subject Site / Stage	4.952 ha	—	
Net Residential Area (no roads)	2.799 ha	56.5%	
Detention / Drainage	0.863 ha	17.4%	
Landscape Buffer	0.007 ha	0.1%	
Road Widening	0.034 ha	0.7%	
Road Areas	1.249 ha	25.2%	
Total	**4.952 ha**	**100.0%**	

RP DESCRIPTION: Lot 12 & 13 on RP105335

SCALE @A1 1:750 @A3 1:1500 - LENGTHS ARE IN METRES

10 0 10 20 30 40 50 60 70 80 90

saunders havill group

QM PROP CO No 6 PTY LTD

610 - 626 LOGAN RESERVE ROAD, LOGANVIEW • 14/05/2025 • 10642 P 12 Rev C - CON 01

Appendix B – Civil Works Drawings

LOGANVIEW PRECINCT 3

RESIDENTIAL SUBDIVISION

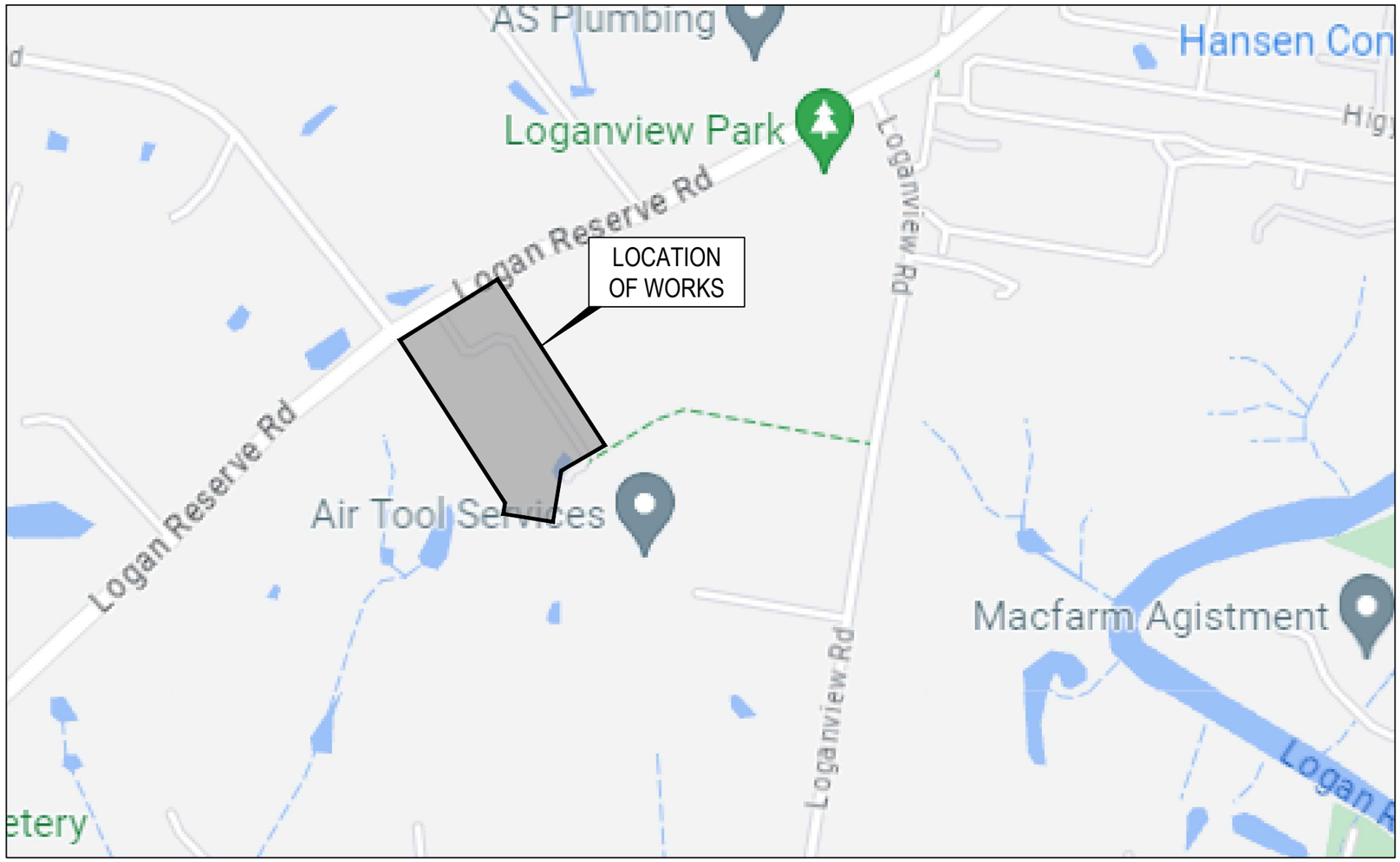
LOGANVIEW ROAD, LOGAN RESERVE, QLD 4142

DEVELOPMENT APPLICATION

FOR QM PROPERTIES

PREPARED BY

DRAWING INDEX	
DWG. NO.	DESCRIPTION
SK-001	OVERALL SITE LAYOUT PLAN
SK-200	BULK EARTHWORKS LAYOUT PLAN - SHEET 1
SK-201	BULK EARTHWORKS LAYOUT PLAN - SHEET 2
SK-202	BULK EARTHWORKS LAYOUT PLAN - SHEET 3
SK-205	BULK EARTHWORKS SITE SECTIONS
SK-300	ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 1
SK-301	ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 2
SK-500	STORMWATER DRAINAGE PRE DEVELOPMENT CATCHMENT PLAN
SK-501	STORMWATER DRAINAGE POST DEVELOPMENT CATCHMENT PLAN
SK-600	SITE SERVICES LAYOUT PLAN - SHEET 1
SK-601	SITE SERVICES LAYOUT PLAN - SHEET 2



LOCALITY PLAN

EXTRACTED FROM GOOGLE MAPS © 2021

NOT TO SCALE

BEFORE YOU DIG www.byda.com.au

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT: N

SCALE BARS:

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE: OVERALL SITE LAYOUT PLAN

FOR INFORMATION

JOB No	DWG No	REV
9948-0301	SK-001	A

\\efile\12 projects\9901-10000\9948\5 Digital\1 Civil\9948-SK0A

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- EXISTING EDGE OF BITUMEN
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING BATTER TOP
- EXISTING BATTER TOE
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED RETAINING WALL
- PROPOSED STAGE BOUNDARY

CUT & FILL LEGEND

EXCAVATION	FILLING
0.01m - 0.50m	
0.50m - 1.00m	
1.00m - 1.50m	
1.50m - 2.00m	
2.00m - 2.50m	
2.50m - 3.00m	
3.00m - 3.50m	
3.50m - 4.00m	
4.00m - 4.50m	

EARTHWORKS VOLUMES

(EXISTING SURFACE TO DESIGN SURFACE)

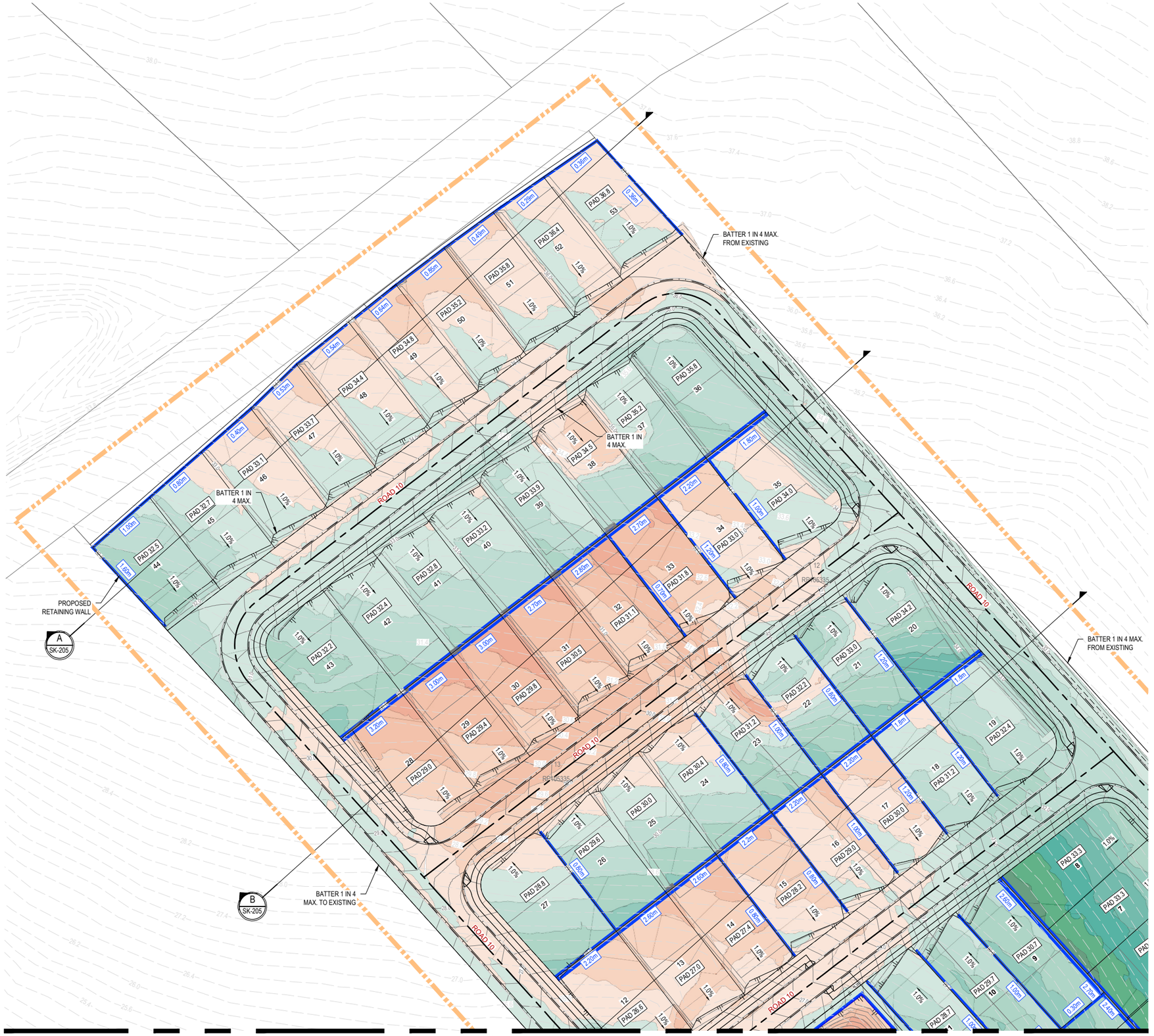
TOTAL CUT	22,935m³
TOTAL FILL	21,230m³
EXCESS MATERIAL	1,705m³

NOTE

THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.

BULK EARTHWORKS NOTES:

1. CUT AND FILL IS PROVIDED FOR GUIDANCE ONLY AND DENOTES LEVEL DIFFERENCE BETWEEN FINISHED SURFACE AND EXISTING / NATURAL SURFACE.
2. AREAS NOT REQUIRING EARTHWORKS ARE TO REMAIN UNDISTURBED.



BEFORE YOU DIG www.byda.com.au

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au
© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT: N

SCALE BARS: 0 10 20 30m
SCALE 1:500 (A1) 1:1000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE: BULK EARTHWORKS LAYOUT PLAN SHEET 1

FOR INFORMATION

JOB No	DWG No	REV
9948-0301	SK-200	A

V:\9501-10000\9948\...\Earth...

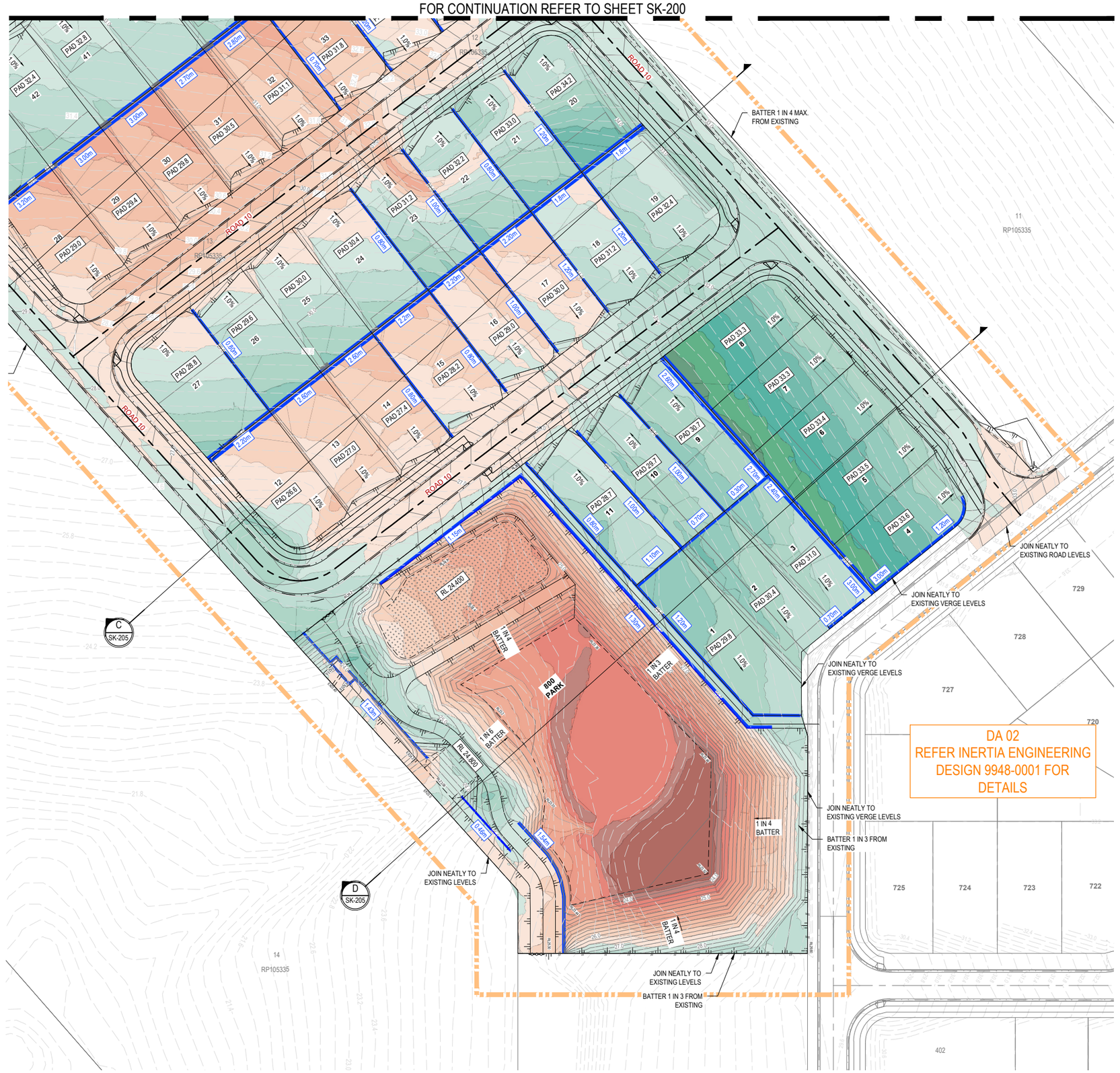
FOR CONTINUATION REFER TO SHEET SK-200

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- EXISTING EDGE OF BITUMEN
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING BATTER TOP
- EXISTING BATTER TOE
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED RETAINING WALL
- PROPOSED STAGE BOUNDARY

CUT & FILL LEGEND

EXCAVATION	FILLING
0.01m - 0.50m	
0.50m - 1.00m	
1.00m - 1.50m	
1.50m - 2.00m	
2.00m - 2.50m	
2.50m - 3.00m	
3.00m - 3.50m	
3.50m - 4.00m	
4.00m - 4.50m	



BEFORE YOU DIG www.byda.com.au

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT: N

SCALE BARS: 0 10 20 30m
SCALE 1:500 (A1) 1:1000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

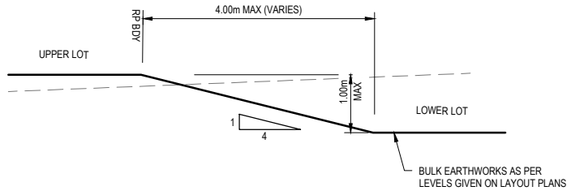
PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE: BULK EARTHWORKS LAYOUT PLAN SHEET 2

FOR INFORMATION

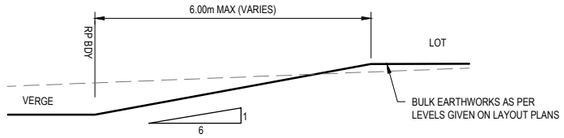
JOB No	DWG No	REV
9948-0301	SK-201	A

V:\9901-10000\9948_Signal_Ourimbah\03A



BATTER DETAIL BETWEEN LOTS

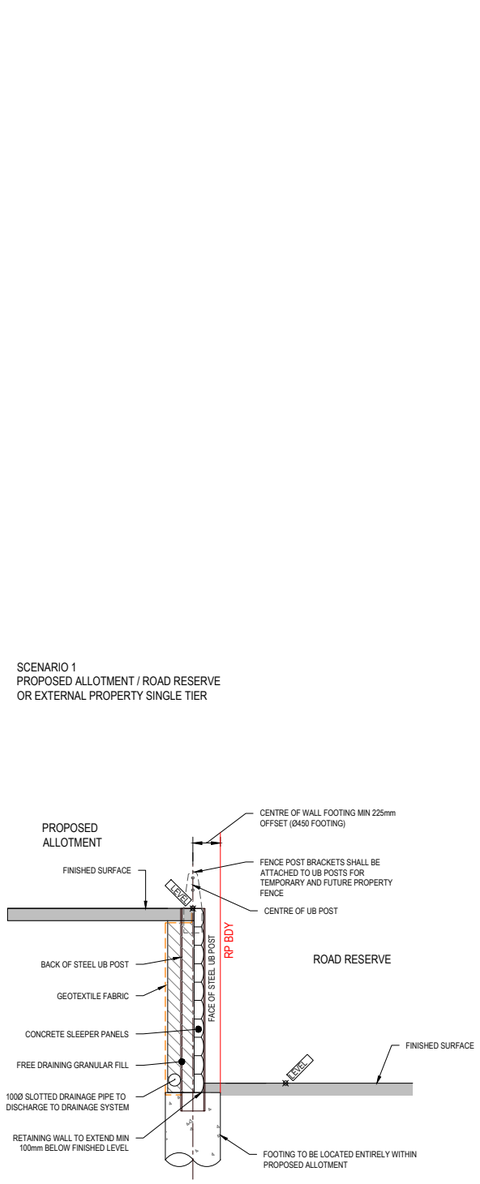
NOT TO SCALE



LOT HIGHER THAN VERGE BATTER DETAIL

NOT TO SCALE

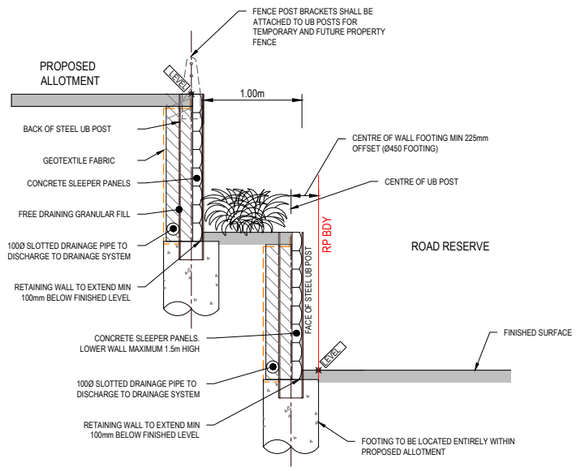
SCENARIO 1
PROPOSED ALLOTMENT / ROAD RESERVE
OR EXTERNAL PROPERTY SINGLE TIER



TYPICAL SECTION - SINGLE TIER (MAX 1.5m)
CONCRETE SLEEPER / UB POST RETAINING WALL

SCALE 1:20

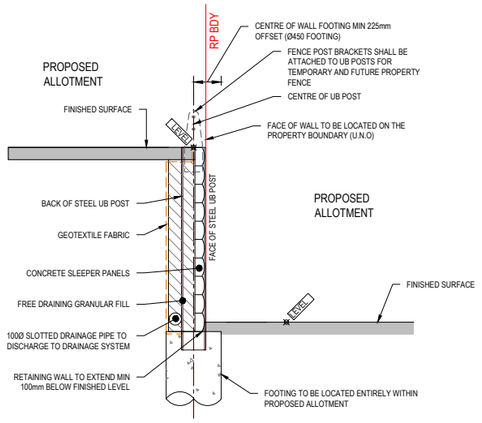
SCENARIO 2
PROPOSED ALLOTMENT / ROAD RESERVE
OR EXTERNAL PROPERTY DUAL TIER



TYPICAL SECTION - DUAL TIER (MAX 3.0m)
CONCRETE SLEEPER / UB POST RETAINING WALL

SCALE 1:20

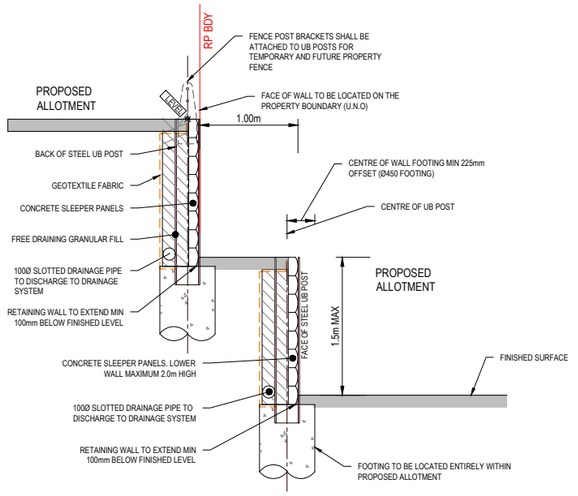
SCENARIO 3
PROPOSED ALLOTMENT / PROPOSED ALLOTMENT SINGLE
TIER



TYPICAL SECTION - SINGLE TIER (MAX 1.5m)
CONCRETE SLEEPER / UB POST RETAINING WALL

SCALE 1:20

SCENARIO 4
PROPOSED ALLOTMENT / PROPOSED ALLOTMENT DUAL
TIER



TYPICAL SECTION - DUAL TIER (MAX 3.0m)
CONCRETE SLEEPER / UB POST RETAINING WALL

SCALE 1:20

BEFORE YOU DIG www.byda.com.au

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3867 7868
E-mail: info@nerlaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT:

SCALE BARS:
0 0.4 0.8 1.2m
SCALE 1:20 (A1) 1:40 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

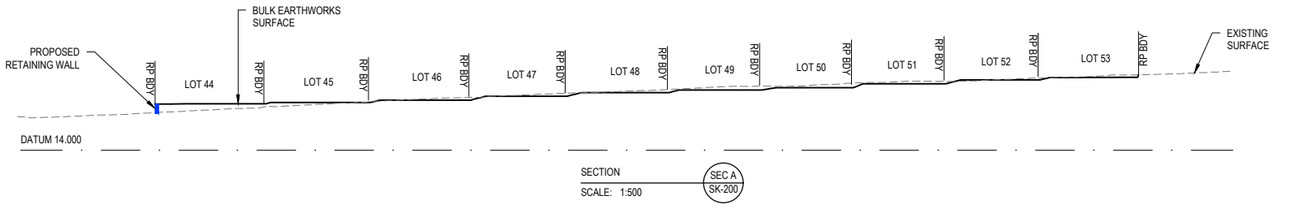
PROJECT:
DEVELOPMENT APPLICATION
FOR RESIDENTIAL SUBDIVISION AT
LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE:
BULK EARTHWORKS
LAYOUT PLAN
SHEET 3

FOR INFORMATION

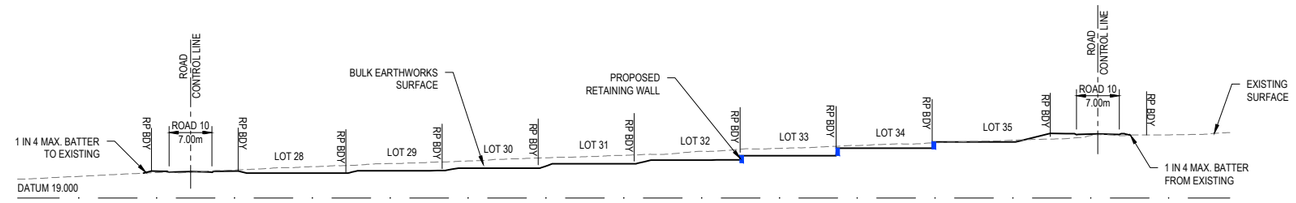
JOB No	DWG No	REV
9948-0301	SK-202	A

V:\9901\10009948_Draft\1 Civil\9948-SK-202.dwg



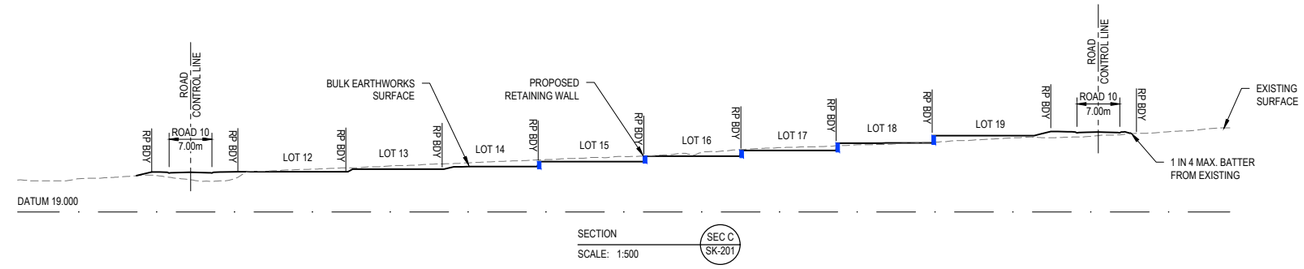
SECTION
SCALE: 1:500

SEC A
SK-200



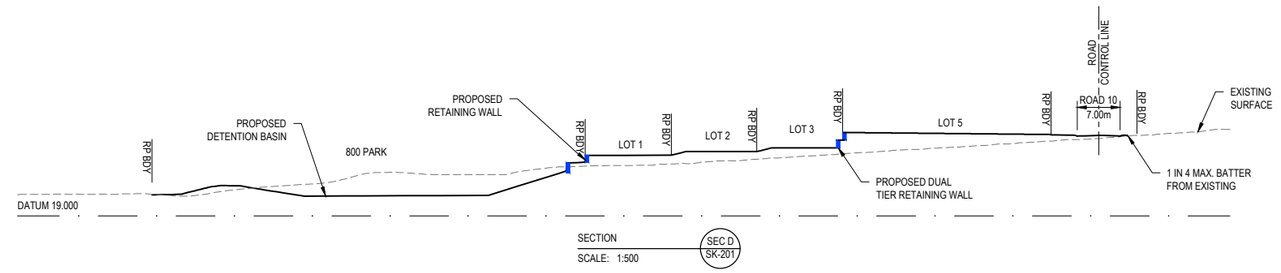
SECTION
SCALE: 1:500

SEC B
SK-200



SECTION
SCALE: 1:500

SEC C
SK-201



SECTION
SCALE: 1:500

SEC D
SK-201

REV	DESCRIPTION	DATE	DRAWN	REVIEW
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	RL

DESIGNER: BM
DRAFTING QA: NS
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT:

SCALE BARS:
0 10 20 30m
SCALE 1:500 (A1) 1:1000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT:
DEVELOPMENT APPLICATION
FOR RESIDENTIAL SUBDIVISION AT
LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE:
BULK EARTHWORKS
SITE SECTIONS

FOR INFORMATION

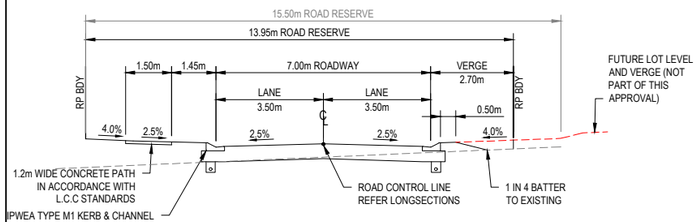
JOB No	DWG No	REV
9948-0301	SK-205	A

\\office-f12.inertia.local\9948-0301 - LOGANVIEW ROAD, LOGAN RESERVE\Digital Data\Civil\9948-0301-SK205.dwg

LEGEND

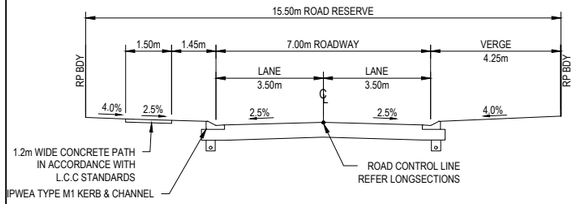
- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- PROPOSED RETAINING WALL
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING BATTER TOP
- EXISTING BATTER TOE
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED STORMWATER DRAINAGE
- PROPOSED STAGE BOUNDARY
- PROPOSED PAVEMENT
- PROPOSED FOOTPATH

NOTE
THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.



TYPICAL ROAD 10 ADJACENT UPSTREAM CATRCHMENT

SCALE 1 : 100



TYPICAL URBAN ACCESS STREET SECTION

SCALE 1 : 100



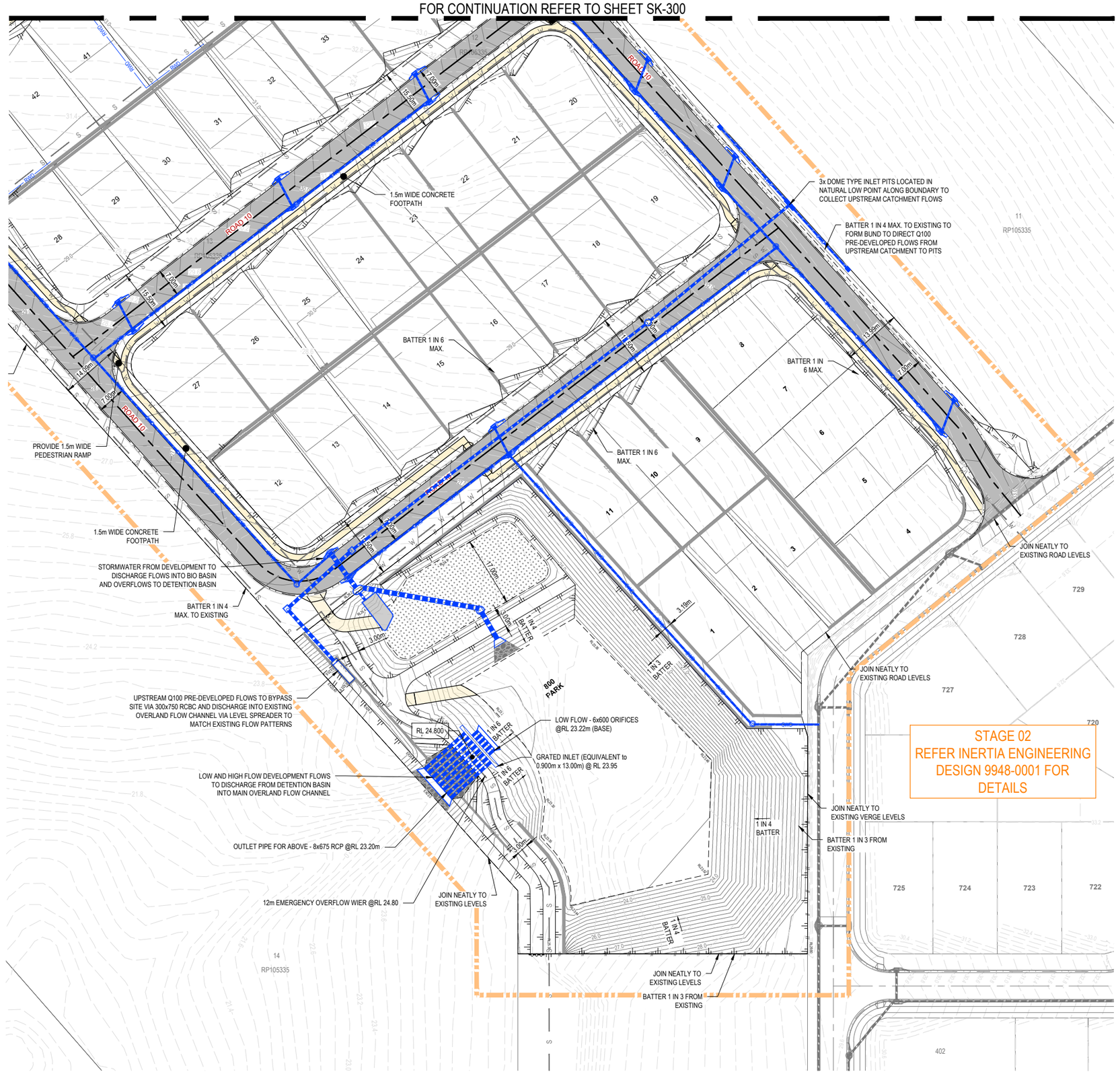
FOR CONTINUATION REFER TO SHEET SK-300

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- PROPOSED RETAINING WALL
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING BATTER TOP
- EXISTING BATTER TOE
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED STAGE BOUNDARY
- PROPOSED PAVEMENT
- PROPOSED FOOTPATH

NOTE

THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.



REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT:

SCALE BARS: 0 10 20 30m
SCALE 1:500 (A1) 1:1000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE: ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2

FOR INFORMATION

JOB No	DWG No	REV
9948-0301	SK-301	A

V:\9900-10000\9948_Digital\1_Cad\Rel\DA\DA



LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- CATCHMENT BOUNDARY
- PROPOSED STAGE BOUNDARY
- C1 — CATCHMENT LABEL
- EPOD — EXISTING POINT OF DISCHARGE
- EXISITNG SEASONAL WATER BODIES EXTENTS FLUCTUATE
- SURFACE FLOW DIRECTION

NOTE
THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.

REV	DESCRIPTION	DATE	DRAWN	REVIEW
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	RL

DESIGNER: BM
DRAFTING QA: NS
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT: N

SCALE BARS: 0 20 40 60m
SCALE 1:1000 (A1) 1:2000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

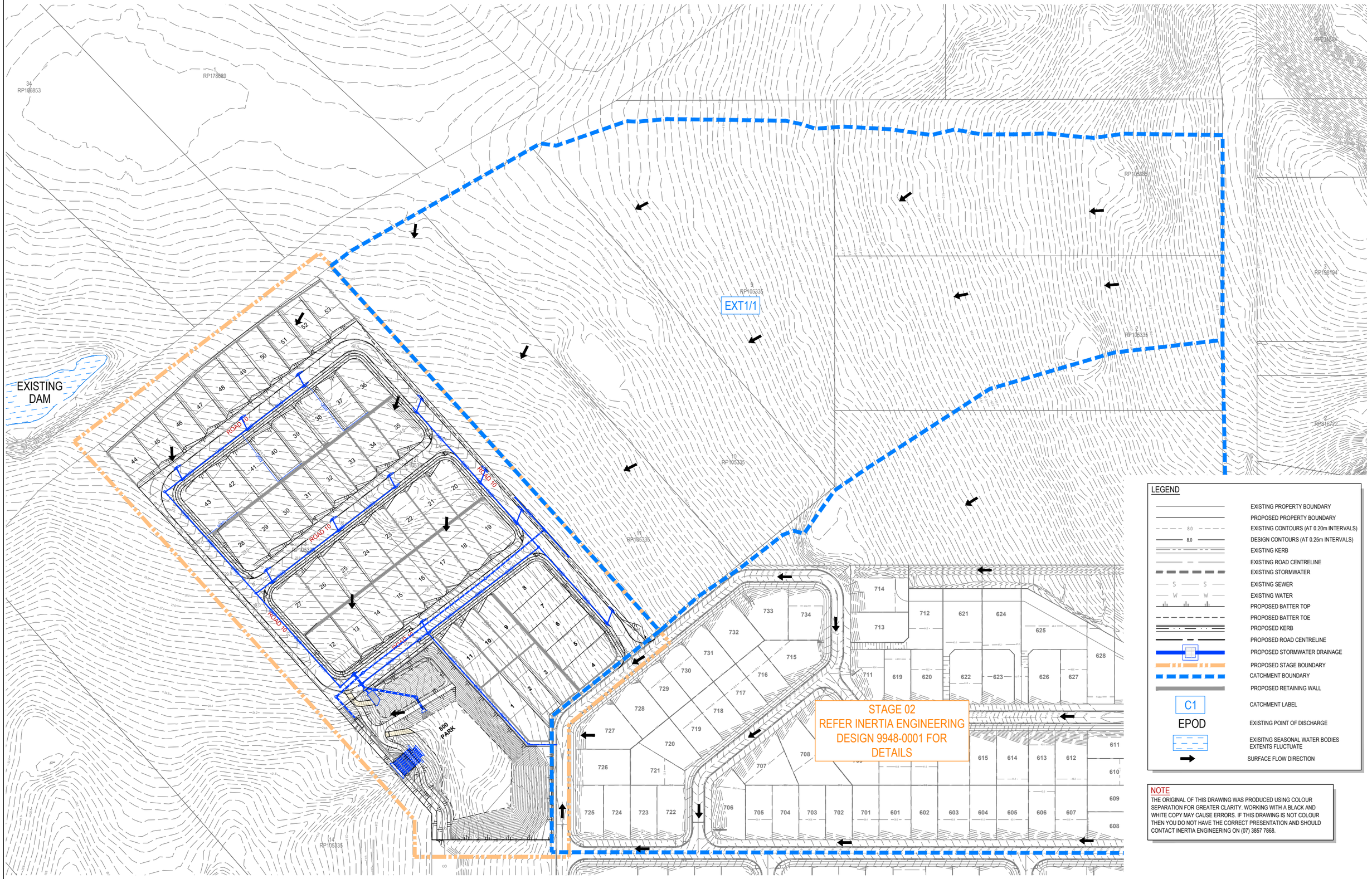
PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE: STORMWATER DRAINAGE PRE DEVELOPMENT CATCHMENT PLAN

FOR INFORMATION

JOB No	DWG No	REV
9948-0301	SK-500	A

\\office-f12 project\9901-9999\9948_Digital1.CA\9948.ctDA



NOTE
THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au
© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES
ASSOCIATED CONSULTANT:
NORTH POINT: N
SCALE BARS: 0 20 40 60m
SCALE 1:1000 (A1) 1:2000 (A3)
THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT: DEVELOPMENT APPLICATION FOR RESIDENTIAL SUBDIVISION AT LOGANVIEW ROAD, LOGAN RESERVE
DRAWING TITLE: STORMWATER DRAINAGE POST DEVELOPMENT CATCHMENT PLAN

FOR INFORMATION
JOB No: 9948-0301 – DWG No: SK-501 – REV: A

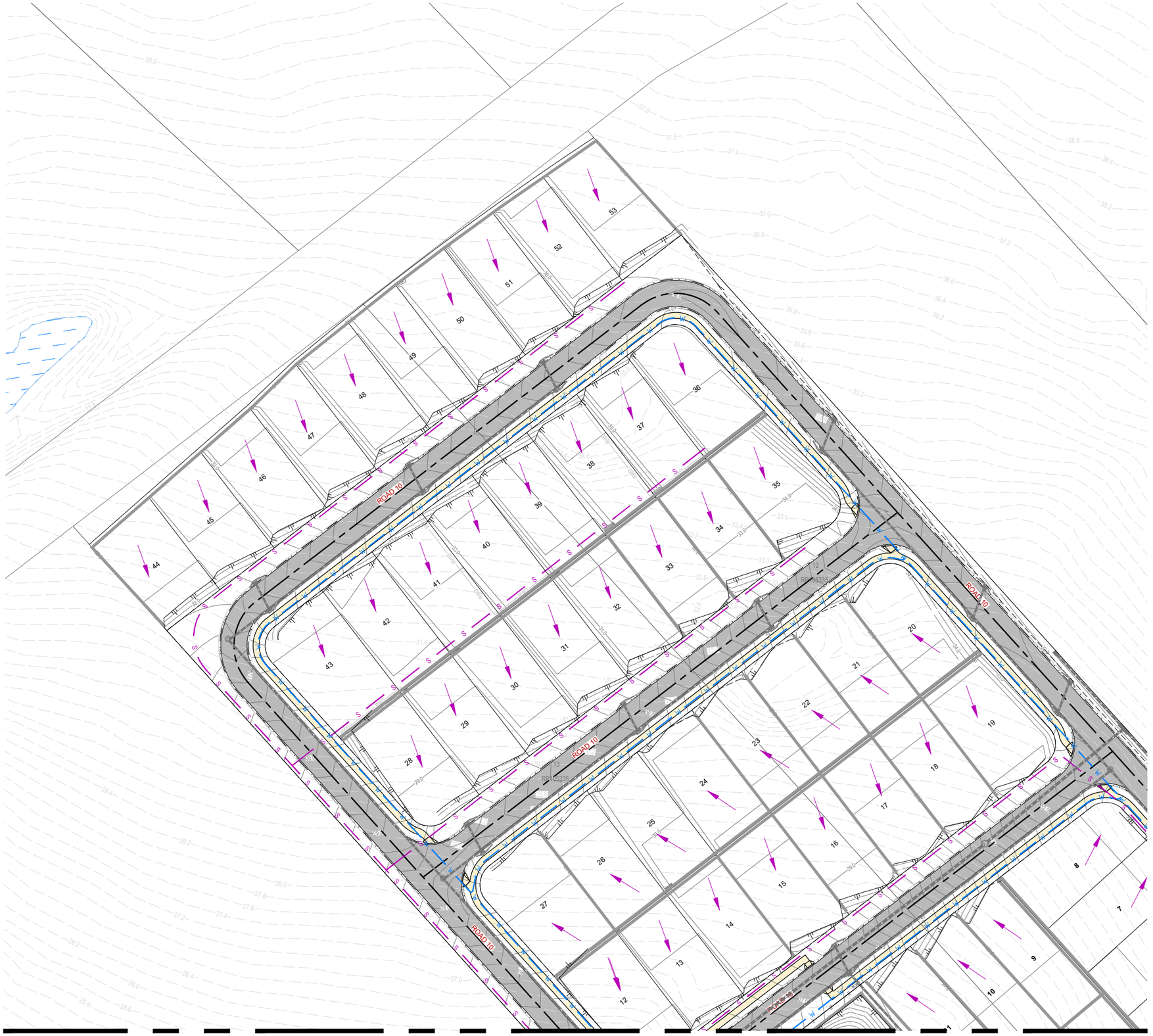
V:\9901-10000\9948_Digital_Cad\Build\SDA

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- EXISTING SEWER
- EXISTING WATER
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- EXISTING STORMWATER
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED Ø150 SEWER
- PROPOSED Ø100 WATER
- PROPOSED PAVEMENT
- PROPOSED FOOTPATH
- LOT FALL DIRECTION FOR SEWER LOT CONTROL
- VALVE, HYDRANT, METER

NOTE
THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.

NOTE
THE STORMWATER DRAINAGE LAYOUT SHOWN ON THIS PLAN IS TO DEMONSTRATE SERVICEABILITY AND CLEARANCE OF PROPOSED SERVICES ONLY. REFER TO SK007 FOR ROADWORK AND DRAINAGE PLAN

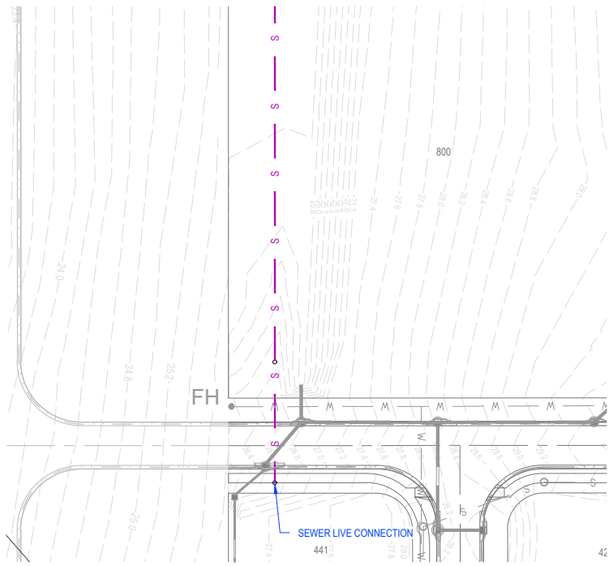

ROAD 10
ROAD 10
ROAD 10
ROAD 10
ROAD 10
ROAD 10
RP 153335
RP 153335
RP 153335

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CONTOURS (AT 0.20m INTERVALS)
- DESIGN CONTOURS (AT 0.25m INTERVALS)
- EXISTING KERB
- EXISTING ROAD CENTRELINE
- EXISTING SEWER
- EXISTING WATER
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER
- EXISTING STORMWATER
- PROPOSED BATTER TOP
- PROPOSED BATTER TOE
- PROPOSED KERB
- PROPOSED ROAD CENTRELINE
- PROPOSED Ø150 SEWER
- PROPOSED Ø100 WATER
- PROPOSED PAVEMENT
- PROPOSED FOOTPATH
- LOT FALL DIRECTION FOR SEWER LOT CONTROL
- VALVE, HYDRANT, METER

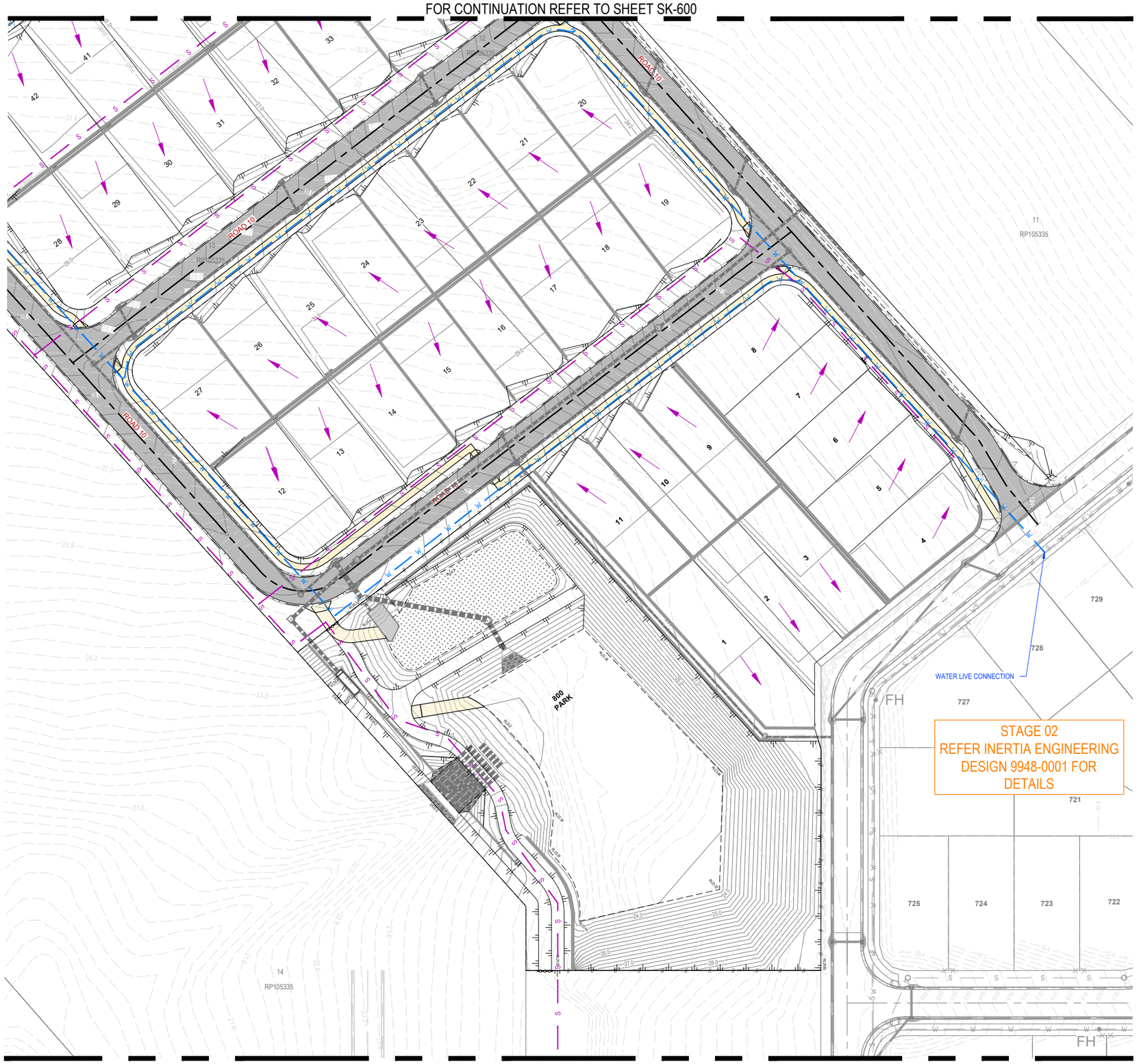
NOTE
THE ORIGINAL OF THIS DRAWING WAS PRODUCED USING COLOUR SEPARATION FOR GREATER CLARITY. WORKING WITH A BLACK AND WHITE COPY MAY CAUSE ERRORS. IF THIS DRAWING IS NOT COLOUR THEN YOU DO NOT HAVE THE CORRECT PRESENTATION AND SHOULD CONTACT INERTIA ENGINEERING ON (07) 3857 7868.

NOTE
THE STORMWATER DRAINAGE LAYOUT SHOWN ON THIS PLAN IS TO DEMONSTRATE SERVICEABILITY AND CLEARANCE OF PROPOSED SERVICES ONLY. REFER TO SK007 FOR ROADWORK AND DRAINAGE PLAN



INSET A

FOR CONTINUATION REFER TO SHEET SK-600



REFER INSET A FOR CONTINUATION

REV	DESCRIPTION	DATE	DRAWN	REVIEW
C	ROAD INTERSECTION AND LOT 4 BOUNDARY MINOR UPDATE	22.05.25	DMP	RL
B	FOR INFORMATION	24.04.25	NS	RL
A	FOR INFORMATION	08.01.25	NS	ML

DESIGNER: DMP
DRAFTING QA: LM
DESIGN QA: IO
QA CHECKED: RL

Inertia
ABN 82 115 498 023
Phone: 3857 7868
E-mail: info@inertiaeng.com.au

© COPYRIGHT of this engineering design and plan is the property of INERTIA ENGINEERING Pty Ltd

CLIENT: QM PROPERTIES

ASSOCIATED CONSULTANT:

NORTH POINT: N

SCALE BARS: 0 10 20 30m
SCALE 1:500 (A1) 1:1000 (A3)

THIS DRAWING IS TO BE PRINTED IN COLOUR REPRODUCTION OR READING OF THIS DRAWING IN OTHER THAN FULL COLOUR MAY IMPART FALSE OR MISLEADING INFORMATION

PROJECT:
DEVELOPMENT APPLICATION
FOR RESIDENTIAL SUBDIVISION AT
LOGANVIEW ROAD, LOGAN RESERVE

DRAWING TITLE:
SITE SERVICES
LAYOUT PLAN
SHEET 2

FOR INFORMATION

JOB No	DWG No	REV
9948-0301	SK-601	A

V:\9801-10000\9948_Digital_Civil\9948SDA

Appendix C – LCC Filling & Excavation & Infrastructure Code Responses

9.4.2 Filling and excavation code

9.4.2.1 Application

1. This code applies to:
    a. material change of use:
        i. that is accepted development (subject to requirements) or code assessable and for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use in Part 5 - Tables of assessment;
        ii. that is made impact assessment in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use or section 5.9 - Categories of development and assessment - local plans in Part 5 - Tables of assessment;
    b. reconfiguring a lot:
        i. that is code assessable and for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
        ii. that is impact assessable in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
    c. operational work that is accepted development (subject to requirements) and code assessable operational work - filling or excavation for which the Filling and excavation code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.8.1 - Operational work.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3 - Determining the 'assessment benchmarks for assessable development and requirements for accepted development' located in Part 5 - Tables of assessment.

9.4.2.2 Purpose

1. The purpose of the code is to protect premises, people and natural processes from adverse impacts associated with filling or excavation.
2. The purpose of the code will be achieved through the following overall outcomes:
    a. development protects:
        i. natural physical processes and ecosystems;
        ii. existing and planned infrastructure;
        iii. personal health and safety and premises;

iv. visual amenity.

9.4.2.3 Assessment benchmarks for assessable development and requirements for accepted development

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 9.4.2.3.1 - Filling and excavation code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments
For accepted development (subject to requirements) and assessable development		
Protection of natural processes and ecosystems		
PO1 The discharge of sediments and pollutants from filling or excavation does not adversely affect a waterway or the stormwater network.	**AO1** The discharge of sediments and pollutants to a waterway or stormwater network complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Filling and excavation will not result in discharge of harmful sediments or pollutants into a waterway or stormwater network.
PO2 Topsoil and spoil stockpiled on the premises do not adversely affect natural processes and ecosystems.	**AO2** Topsoil and spoil is stockpiled to comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Topsoil and spoil will be stockpiled to not adversely affect natural processes and ecosystems
PO3 Filling is carried out using stable, solid and clean earth, free of organic and putrescible waste, rubbish and refuse material.	**AO3** Filling complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Filling will be carried out in accordance with Part 3.3

Protection of existing and planned infrastructure		
PO4 Filling or excavation works do not adversely affect infrastructure, including any services.	**AO4** Filling or excavation works comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Filling and excavation works will not adversely affect infrastructure (including services) and will comply with part 3.3.
Protection and enhancement of personal health and safety and premises		
PO5 Filling or excavation works do not adversely affect personal health and safety.	**AO5** Filling or excavation works comply with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	Filling and excavation works will comply with part 3.3 and will not adversely affect personal health and safety
Surface water flow		
PO6 Surface water drainage does not cause any of the following: a. ponding on any premises; or b. a hazard or adversely affect personal health and safety and premises; or c. diversion or concentration of flow from or onto adjoining premises or infrastructure.	**AO6** Surface water drainage complies with part 3.3 - Filling or excavation standards in Planning scheme policy 5 - Infrastructure.	Surface water drainage will comply with part 3.3 and will not cause ponding, adversely affect personal health and safety, or divert or concentrate flow from or onto adjoining premises and infrastructure.
Batters		
PO7 A batter: a. does not adversely affect the natural physical processes and ecosystems; b. protects existing and planned infrastructure; c. is safe, stable and easily maintained; d. is landscaped to enhance visual amenity.	**AO7** A batter is designed and constructed to comply with the standards specified in 3.3.6 - Batters and retaining walls in Planning scheme policy 5 - Infrastructure.	Batters will be designed and constructed in accordance with section 3.3.6 (batters have slopes that are 1 in 4).

Retaining walls		
PO8 A retaining wall: a. is not constructed of timber and is not located on existing or proposed lot boundaries, or movement networks; b. does not adversely affect the natural physical processes and ecosystems; c. is located to avoid conflict with adjoining premises; d. is located such that existing and planned infrastructure is not adversely affected; e. protects the visual amenity of adjoining premises or a public open space; f. is located within the premises that is being filled; g. is located within the premises that is cut and is designed to take any surcharge loading allowable on the uphill lot; h. is safe and stable; i. enables easy access for maintenance.	**AO8** A retaining wall is designed and constructed to comply with the standards specified in section 3.3.6.2 - Retaining walls in Planning scheme policy 5 - Infrastructure.	Retaining walls will be designed and constructed in accordance with section 3.3.6.2. All proposed walls to be constructed of concrete sleeper panels.
Filling of a dam		
PO9 The filling of a dam: a. does not adversely affect the natural physical processes and ecosystems; b. creates a safe and stable surface; c. is integrated into the landscape.	**AO9** The filling of a dam complies with part 3.3 - Filling and excavation standards in Planning scheme policy 5 - Infrastructure.	The filling of dams will comply with Part 3.3.

9.4.3 Infrastructure code

9.4.3.1 Application

1. This code applies to:
    a. material change of use:
        i. that is accepted development (subject to requirements) or code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use in Part 5 - Tables of assessment;
        ii. that is made impact assessment in a table of assessment in section 5.5 - Categories of development and assessment - Material change of use or section 5.9 - Categories of development and assessment - Local plans in Part 5 - Tables of assessment;
    b. reconfiguring a lot:
        i. that is code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
        ii. made impact assessment in Table 5.6.1 - Reconfiguring a lot in Part 5 - Tables of assessment;
    c. operational work that is infrastructure work:
        i. that is accepted development (subject to requirements) or code assessable and for which the Infrastructure code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column Table 5.8.1 - Operational work in Part 5 - Tables of assessment.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3 - Determining the 'assessment benchmarks for assessable development and requirements for accepted development' located in Part 5 - Tables of assessment.

9.4.3.2 Purpose

1. The purpose of the code is to ensure that infrastructure is provided to service development.
2. The purpose of the code will be achieved through the following overall outcomes:
    a. development protects the existing infrastructure and planned infrastructure networks being the:
        i. movement network;
        ii. park network;

iii. water network;
iv. sewerage network;
v. stormwater network;
vi. other networks including electricity, gas and telecommunications;
vii. land for community facilities network;

b. development other than operational work provides infrastructure that is necessary to service the development, including elements of:
i. a safe, efficient and legible road network;
ii. a safe, efficient and legible public transport network;
iii. a safe, efficient and legible cycle network;
iv. a safe, efficient and legible pedestrian network;
v. a safe, efficient and legible parks network;
vi. a safe and efficient water network;
vii. a safe and efficient sewerage network;
viii. a safe and efficient stormwater network;
ix. safe and efficient other networks including electricity, gas and telecommunications;
x. a safe and efficient road lighting network;
xi. land for a community facilities network;

c. development integrates with existing and planned infrastructure networks;
d. infrastructure is designed and constructed to deliver a standard of service that is efficient and equitable;
e. the cost to the community for the life of the infrastructure is minimised by providing for a suitable design life, ease of maintenance and ease of replacement;
f. development appropriately manages refuse and recycling storage and collection;
g. infrastructure protects personal health and safety and premises;
h. infrastructure protects environmental values.

9.4.3.3 Assessment benchmarks for assessable development and requirements for accepted development

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments

For accepted development (subject to requirements) and assessable development		
Provision, design, construction and location of infrastructure		
PO1 Development is demonstrated to be capable of being serviced by necessary infrastructure.	**AO1** Reports, plans and drawings are provided in accordance with part 2 of Planning scheme policy 5 - Infrastructure.	The reports, plans and drawings provided demonstrate that the development is capable of being serviced by necessary infrastructure.
PO2 Development: a. provides necessary infrastructure to service the development; b. provides that the design, construction and location of necessary infrastructure: i. protects existing and planned infrastructure networks; ii. services proposed development; iii. integrates with existing and planned infrastructure networks; iv. delivers a standard of service that is efficient and equitable; v. minimises the cost to the community for the life of the infrastructure by providing a suitable design life, ease of maintenance and ease of replacement; vi. protects personal health, safety and premises; vii. protects environmental values.	**AO2** Development: a. in a water supply service area connects to the water network in accordance with the SEQ Water Supply and Sewerage Design and Construction Code; b. not in a water supply service area provides a tank with a minimum storage capacity of 45,000 litres; c. in a sewerage supply service area connects to the waste water network in accordance with the SEQ Water Supply and Sewerage Design and Construction Code; d. not in a sewerage supply service area complies with part 1 of the Queensland Plumbing and Wastewater Code; e. provides stormwater infrastructure in accordance with part 3.6 of Planning scheme policy 5 - Infrastructure; f. provides a movement network infrastructure in accordance with part 3.4 of Planning scheme policy 5 - Infrastructure;	Necessary infrastructure will be provided to service the development in accordance with: • SEQ Water Supply and Sewerage Design and Construction Code • Part 3.6 of Planning Scheme policy 5 – Infrastructure for stormwater infrastructure • Part 3.4 of Planning Scheme policy 5 – Infrastructure for movement • Part 3.5 of Planning Scheme policy 5 – Infrastructure for street lighting • Part 3.8 of Planning Scheme policy 5 – Infrastructure for electricity reticulation • Part 3.9 of Planning Scheme policy 5 – Infrastructure for gas and telecommunications • Part 3.12 of Planning Scheme policy 5 – Infrastructure for parks The development with the general planning layouts in Part 7.2 of Planning scheme policy 5 - Infrastructure.

	g. provides parks in accordance with part 3.12 of Planning scheme policy 5 - Infrastructure; h. provides road lighting in accordance with part 3.5 of Planning scheme policy 5 - Infrastructure; i. provides electricity reticulation in accordance with part 3.8 of Planning scheme policy 5 - Infrastructure; j. provides gas and telecommunications reticulation in accordance with part 3.9 of Planning scheme policy 5 - Infrastructure. k. is consistent with the general planning layouts in part 7.2 of Planning scheme policy 5 - Infrastructure. Editor's note - The delivery of any part of a network identified in the plans for trunk infrastructure is governed by Part 4 - Local government infrastructure plan.	
Location of development		
PO3 Development is located to protect trunk infrastructure networks.	**AO3** Development is located outside a network identified in Local government infrastructure plan map LGIP-03.00 to 08.00 Plans for trunk infrastructure in Schedule 3 - Local government infrastructure plan mapping and tables.	The development is located outside a network identified in Local government infrastructure plan map LGIP-03.00 to 08.00 Plans for trunk infrastructure in Schedule 3 - Local government infrastructure plan mapping and tables.
Fire fighting		
PO4 Development in a water service area accessed by common private title provides:	**AO4** Development in a water service area involving a material change of use or	

a. fire hydrant infrastructure; b. unimpeded access for emergency services vehicles. Editor's note - The term common private title refers to areas such as access roads in community title developments or strata title unit access, which are private and under group or body corporate control.	reconfiguring a lot where, or to be, accessed by common private title ensures that fire hydrant placement and technical requirements for streets and access ways are in accordance with: a. Australian Standard (AS) 2419.1 - 2005 *Fire hydrant installations*; b. QFES: *Fire Hydrant and vehicle access guidelines for residential, commercial and industrial lots*.	Development will provide fire hydrant infrastructure and unimpeded access for emergency services vehicles in accordance with: • Australian Standard (AS) 2419.1 - 2005 *Fire hydrant installations*; • QFES: *Fire Hydrant and vehicle access guidelines for residential, commercial and industrial lots*.
PO5 Development not in a water service area provides sufficient water storage with adequate pressure, volume and flow to service development for fire fighting purposes.	**AO5** Development: a. is connected to a reticulated water supply scheme that has sufficient flow and pressure characteristics for fire fighting purposes at all times with a minimum pressure and flow of 10 litres per second at 200kPa; or b. has on-site water storage in accordance with Table 9.4.3.3.2 - Water storage for fire fighting, dedicated or retained for fire fighting purposes that is made of fire resistant materials and is: i. a separate tank; or ii. a reserve section in the bottom part of the main water supply tankwater tank. Editor's note - The requirement in AO5 is: - in addition to the requirement for potable water supply/storage in AO2 in Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development;	Development will be serviced by new trunk water infrastructure that has sufficient flow and pressure characteristics for fire fighting purposes at all times with a minimum pressure and flow of 10 litres per second at 200kPa.

	- reflected in AO5 in Table 8.2.3.3.1 - Bushfire hazard overlay code: accepted development (subject to requirements) and assessable development.	
Waste management		
PO6 Development provides refuse and recycling collection and storage facilities that are located and managed so that adverse impacts on building occupants, neighbouring properties and the public realm are minimised.	**AO6.1** Development provides refuse and recycling collection and storage facilities in accordance with Planning scheme policy 9 - Waste management. **AO6.2** Development ensures that the location and design of refuse and recycling collection and storage facilities does not have any adverse impact including odour, noise or visual impacts on the amenity of land uses within or adjoining the development. Note - Planning scheme policy 9 - Waste management provides guidance on how to achieve this outcome.	Development will provide refuse and recycling collection and storage facilities in accordance with Planning Scheme policy 9 – Waste Management.
Disposal of trade waste		
PO7 The disposal of trade waste in a sewerage supply service area does not adversely affect the sewerage network.	**AO7** The disposal of trade waste in a sewerage supply service area complies with the sewer admission standards in section 3.2.6 - Sewer admission standards in Planning scheme policy 3 - Environmental management.	No trade waste to be disposed as part of this development.
Roof water drainage and surface water drainage		
PO8 Development provides stormwater infrastructure for the drainage of the	**AO8** Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Development will comply with standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 – Infrastructure

premises so as not to cause any of the following: a. ponding of stormwater on the premises; b. a hazard to personal health and safety; c. damage to premises; d. an increased risk of flooding to premises within the catchment.		
Natural flow of surface water		
PO9 Development provides that the natural flow of surface water is: a. not altered so as to cause a risk to personal health and safety or damage to property; b. not increased in intensity, velocity or frequency; c. not concentrated onto adjoining premises.	**AO9** Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Development will comply with the intent for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 – Infrastructure. As per Section 3.6 of the Flood Report: Peak flood levels downstream of the discharge points have increased over a short distance due to the concentration of flow from the outlet structures. The pre-development discharge condition included 3 identifiable flowpaths while the post-development scenario consolidates this to two flowpaths. The increases to flood level in this area are confined to previously flooded areas and are largely within LCC mapped waterway corridors. Minor ponding along the upstream boundary of the site is evident due to the earthworks directing sheet flow laterally to the proposed inlet pits.

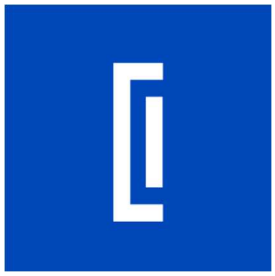
Water sensitive urban design		
PO10 Development which provides stormwater infrastructure incorporates water sensitive urban design principles having regard to: a. protecting existing natural features and ecological processes; b. protecting the natural hydrologic behaviour of catchments; c. protecting the existing natural flow and water quality regimes of waterways; d. protecting water quality of surface and ground waters; e. minimising demand on the water network; f. minimising sewage discharges to the natural environment; g. integrating water into the landscape to enhance visual and ecological values.	**AO10** Development complies with the standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 - Infrastructure.	Development will comply with standards for stormwater infrastructure specified in part 3.6 of Planning scheme policy 5 – Infrastructure
Movement network		
PO11 The projected traffic levels for a use do not adversely affect the planned standards of service for a road or intersection.	**AO11** Development does not cause or contribute to projected traffic levels: a. exceeding the maximum vehicle trips per day in Table 3.4.1.4.2 in Planning scheme policy 5 - Infrastructure; or b. exceeding the maximum control delays through intersections in peak periods in Table 3.4.1.4.3 in Planning scheme policy 5 - Infrastructure.	

Integrated movement concept report		
PO12 Development which generates more than 3,000 vehicle trips per average weekday is designed to integrate the movement network to minimise the transportation costs required to service the use.	**AO12** Development which generates more than 3,000 vehicle trips per average weekday provides an integrated movement concept report which integrates the planning of the movement network in accordance with part 2 and 3 of Planning scheme policy 5 - Infrastructure.	
For assessable development only		
Land use and transport integration		
PO13 Development within 400 metres of existing or future public passenger transport facilities where the total site area is 5,000m^2 or more: a. supports a road hierarchy which facilitates efficient, safe and accessible bus services connecting to existing and future public passenger transport facilities; b. enhances connectivity between existing and future public passenger transport facilities and other transport modes; c. optimises the walkable catchment to existing and future public passenger transport facilities; d. provides for direct and safe access to and use of existing or future public passenger transport facilities.	**AO13** No acceptable outcome provided.	

Note - SPP code: Land use and transport integration in Appendix 4 of the state planning policy provides guidance to achieve this outcome.		

Table 9.4.3.3.2 - Water storage for fire fighting

Column 1 Lot size / use type	Column 2 Water requirement
For each residential lot:	
a. less than 1,000m^2	5,000 litres
b. between 1,000m^2 and less than 1 hectare	10,000 litres
c. greater than 1 hectare	20,000 litres
Multiple dwelling	5,000 litres per dwelling up to a maximum of 20,000 litres
A use other than Multiple dwelling	5,000 litres or the prevailing rural fire brigade standard



INERTIA ENGINEERING PTY LTD

2/139 Coronation Drive, MILTON QLD 4064

P I 07 3857 7868 E I info@inertiaeng.com.au

© Inertia Engineering 2025

This report is and shall remain the property of Inertia Engineering Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.