CIVIL ENGINEERING REPORT

& CIVIL PLANNING & DEVELOPMENT CODES

FOR

PROPOSED INDUSTRIAL DEVELOPMENT

93 BUKULLA STREET, WACOL. QLD 4076

JOB NO: 25.1595 DA REPORT

APRIL 2026

DEQ Consulting Engineers
5 Parkview Street, Milton QLD 4064
Telephone (07) 3367 0211
Fax (07) 3367 0205
Email: civil@deq.com.au

DOCUMENT CONTROL

Civil Engineering Report & Civil Planning & Development Codes

Job Number:	25.1595 DA REPORT
Issue No:	A
Report Date:	29.04.2026
Author:	Mary Nguyen
Site Address:	93 BUKULLA STREET, WACOL. QLD 4076 4077
RP Description:	Lot 13 on SP 132727
Proposed Development:	INDUSTRIAL DEVELOPMENT
Brisbane City Council Ref:	A006934383

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1 INTRODUCTION

DEQ Consulting Pty Ltd has been commissioned to prepare a Civil Engineering Report & Civil Planning & Development Codes for inclusion with the Development Application with Brisbane City Council for the proposed development at 93 BUKULLA STREET, WACOL. QLD 4076.

This Civil Engineering Report & Civil Planning & Development Codes document should be read in conjunction with the Civil Concept Plan and the associated Civil Development Code Assessments/Forms/Reports (attached in appendices):

- Stormwater Management Code – Refer Appendix D
- Infrastructure Design Code – Refer Appendix E
- Filling and Excavation Code – Refer Appendix F
- Flood wise Property Report – Refer Appendix G
- Erosion and Hazard Assessment Form – Refer Appendix H

2 SITE CHARACTERISTICS

2.1 LOCATION

The subject development site (Lot 13 on SP 132727) is approximately 4516 m^2 in total area and is currently occupied by an existing building structures, sheds and associated unsealed pavements. A site location plan is shown on Figure 1 below. The site is facing Bukulla Street to the North (site's frontage), Bullock Head Creek to the South-West, and by industrial property to the East.

2.2 TOPOGRAPHY AND SITE DRAINAGE

The natural ground levels grade generally at approximately 1 in 12.5 (8,0%) towards the South/West boundaries of the development site. Stormwater runoff currently discharges across South/West boundaries as broad sheet flow and ultimately into existing downstream Bullock Head Creek.

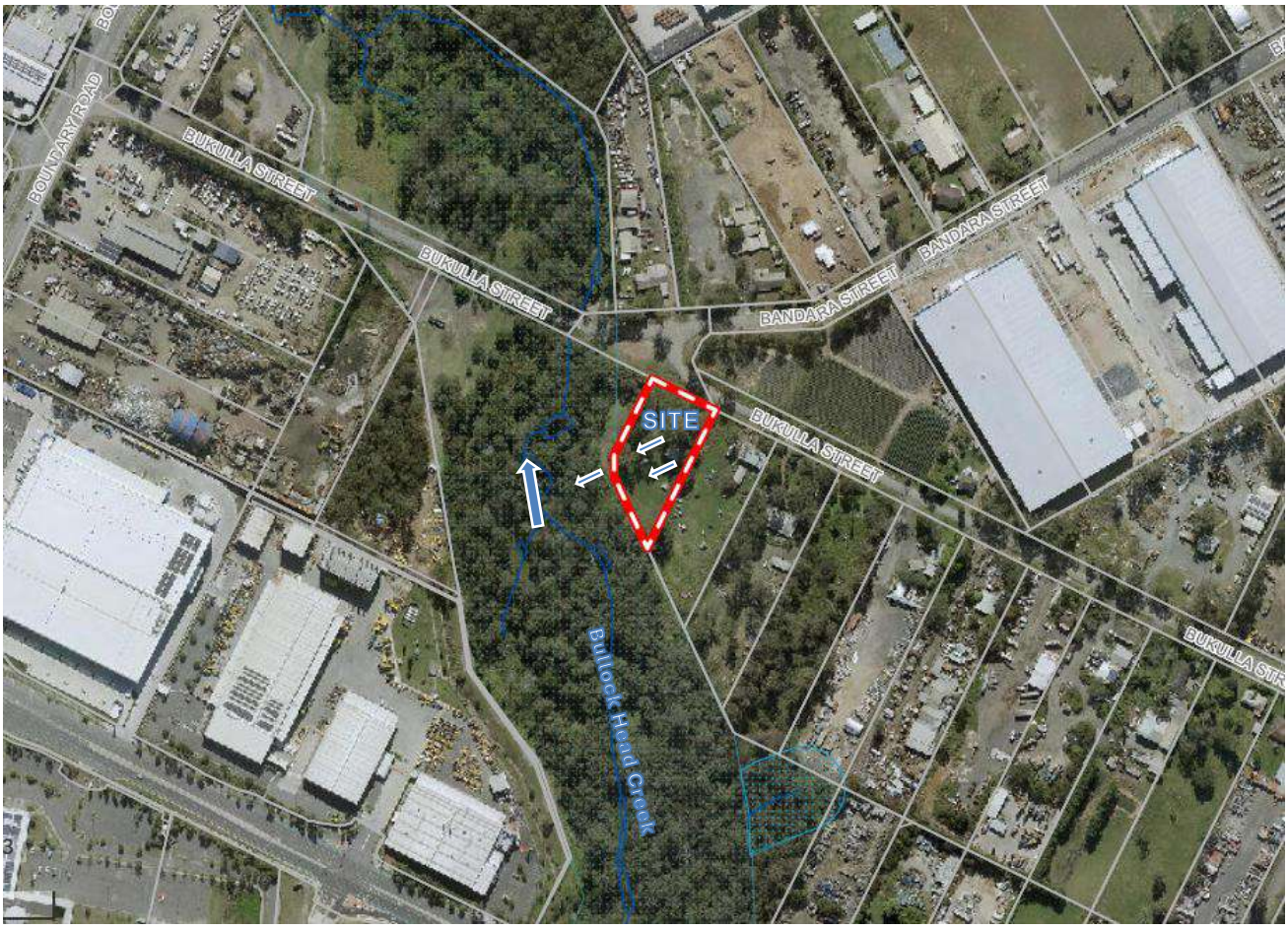


Figure 1 - Site Location Plan

Refer Appendix A - Site Survey Plan & Existing Services

3 DEVELOPMENT PROPOSAL

3.1 PROPOSED DEVELOPMENT

It is proposed to provide industrial development including a new shed with associated driveway hardstand. Vehicle access to the site is proposed via a new 9.0m wide concrete crossover from Bukulla Street.

The development proposal shall be in accordance with Local Authority Guidelines, Development Codes, State Planning Policies and Australian Standards.

Refer Appendix B – Development Proposal

4 DEVELOPMENT SERVICING

4.1 WATER SUPPLY

Council's records indicate that a 150mm diameter water main exists in the Street Frontage roadway corridor.

The main is in a suitable location to provide water connections for the proposed development.

Urban Utilities (UU) maintains the water reticulation network and proposed connections are subject to UU advice and conditional development requirements.

Refer Appendix C – Civil Concept Plans

4.2 SEWER RETICULATION

Council's records indicate a trunk gravity sewer exists a significant distance away in Bukulla Street. Besides a Material change of use development on 21 Bandara Street, Richlands (Council reference No. A005838847 approved dated 02.06.2022) is proposing a new sewer main within Bukulla roadway corridor (Street frontage) from the existing gravity trunk main. This new sewer main alignment would then be in a suitable location to provide sewer connections for the proposed development.

UU maintains the sewer reticulation network and proposed connections are subject to UU advice and conditional development requirements.

Refer Appendix C – Civil Concept Plans

5 STORMWATER DRAINAGE

5.1 LAWFUL POINT OF STORMWATER DISCHARGE

Council records indicate Bullock Head Creek within the immediate South/West immediate downstream boundaries of the development site as a lawful point of discharge.

Proposed stormwater design shall be in accordance with Brisbane City Council's City Plan 2014 and the Queensland Urban Drainage Manual (QUDM, 2013).

Refer Appendix C – Civil Concept Plans

5.2 STORMWATER QUALITY MANAGEMENT

5.2.1 Construction Phase

All construction work will be undertaken in accordance with the Erosion and Sediment Management Plan prepared in association with the detail design documentation for the Operational Works submission.

5.2.2 Operational Phase

Brisbane City Council's City Plan 2014 & the State Planning Policy (State Interest – Water Quality) supports the requirement for implementing Water Sensitive Urban Design (WSUD) principles into the operational phase of the Management Plan.

The total site area is 4516m^2 (over 2500m^2) and will result in an impervious area greater than 25 per cent of the net development area. As such, the development falls within a category where additional modelling and reporting is required (to confirm the design pollutant load reductions approach) to satisfy the requirements as outlined by local authority guidelines and state policies.

A Site Based Stormwater Management Plan is attached under a separate cover for inclusion with the Development Application.

DEQ have also prepared stormwater management codes. This can be found at the back of this report.

Refer Appendix D – Stormwater Management Code

As summary of the proposed developments additional stormwater best practice management (& recommendations in *addition* to the SBSMP) is presented in the following table:

Table 1 – Target opportunities for Stormwater 'Best Management Practices'

Proposed Management	Description	Best Management Design Objective
Recommend Roofwater 'First Flush' Diverters as part of ***future*** building works	'First Flush' Diverters	- Conveyance of the first flush of roofwater in soft landscaped areas provides some minor stormwater treatment
Recommend Porous Pavements as part of future building works	Coarse (open) graded concrete / asphalt pavement or open modular paving	- Minor stormwater treatment - to facilitate infiltration to underlying soil (permeable surface)
Pipe Drainage & Levels	Q10 Piped Drainage Design	- Design Pipe Capacity (Q10) to convey minor stormwater flows
Overland (localised) Flows & Levels	Overland sheet flows to designated flow paths	- Manage Stormwater Flow during major storm events (Q100 – Q10 piped), broad sheet flow conveyance away from Buildings
Grass Coverage & Landscape areas	Grass Buffer Strips / Grass Swale& Landscape areas	- Grass buffer strips and grassed swales provide some minor stormwater treatment - Minor infiltration allowance (permeable surface)
Recommend Onsite Landscape and Litter Management as part of future building works	Landscape and Litter Management	- Onsite sweeping and proper disposal of rubbish has a moderate to high impact on litter control - minor to moderate control of coarse sediment

5.3 STORMWATER QUANTITY MANAGEMENT

The majority of the proposed development areas are proposed to connect to the developments lawful point of discharge (refer section 5.1 for additional details). The proposed drainage network is to reflect original natural conditions and is expected to have negligible effect on the existing stormwater network. Mitigation of stormwater discharge is not proposed.

A Site Based Stormwater Management Plan is attached under a separate cover for inclusion with the Development Application. Final details shall be further confirmed in association with the detailed design documentation for the Operational Works Phase.

DEQ have also prepared stormwater management codes. This can be found at the back of this report.

Refer Appendix D – Stormwater Management Code

6 FLOODING

The site is located within the Brisbane City Council Flood flagged area as shown in Figure 2. The proposed development has therefore been assessed against the requirements of the Council's Flood Overlay Code & provided by specialist flood consultants - 'Storm water consultant', attached under a separate cover.

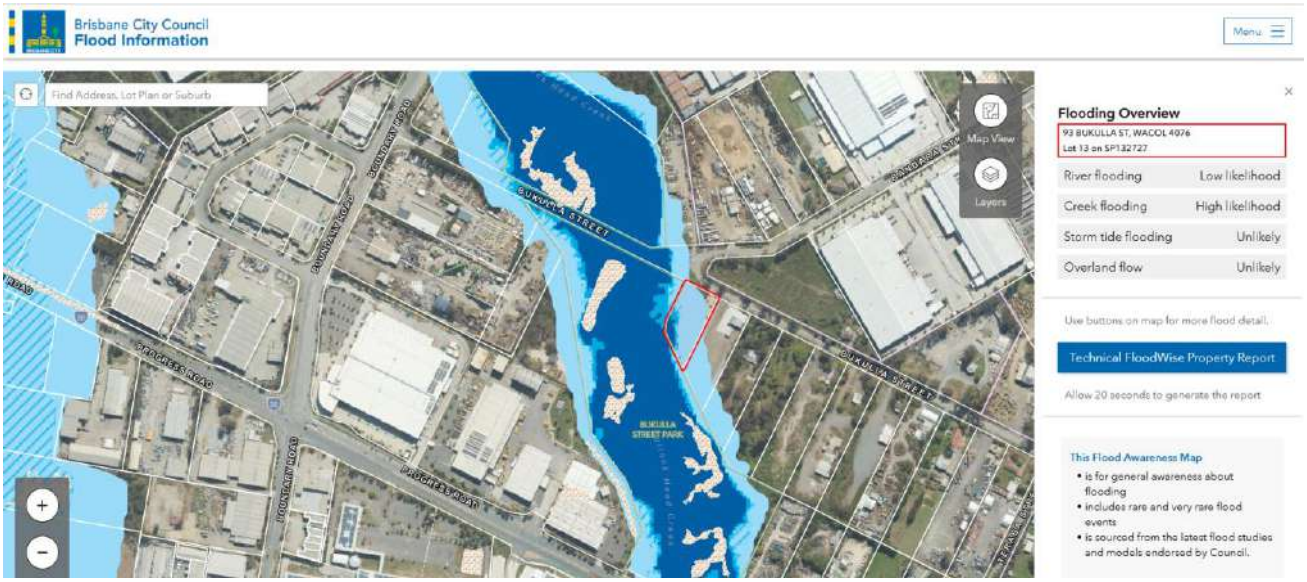


Figure 2 - Site Location Plan

Proposed developments building pad is located above minimum flood immunity levels.

Refer Appendix G – Flood wise Property Report

7 EARTHWORKS

The proposed development has earthworks associated with the building construction.

All earthworks are proposed to be in accordance with Brisbane City Councils Filling and Excavation Code.

Refer Appendix F – Filling and Excavation Code

8 EROSION AND SEDIMENT CONTROL

Based on the information provided and anticipated construction scheme, an Erosion Hazard Assessment (EHA) score indicates the proposed development is 'Medium Risk' with respect to erosion and sediment control.

Refer Appendix H – Erosion Hazard Assessment

All construction work will be undertaken in accordance with an Erosion and Sediment Control (ESC) Management Plan prepared in association with the detail design documentation for the Operational Works submission.

9 CONCLUSION

9.1.1 Development Services

The development site has possible means of connection to the existing water and sewer reticulation network.

Urban Utilities (UU) maintains the existing water and sewer reticulation network and proposed connections are subject to UU advice and conditional development requirements.

9.1.2 Stormwater Management

It has been proposed that the stormwater treatment measures are carried out to the requirements of Local Authority Guidelines and State Policies.

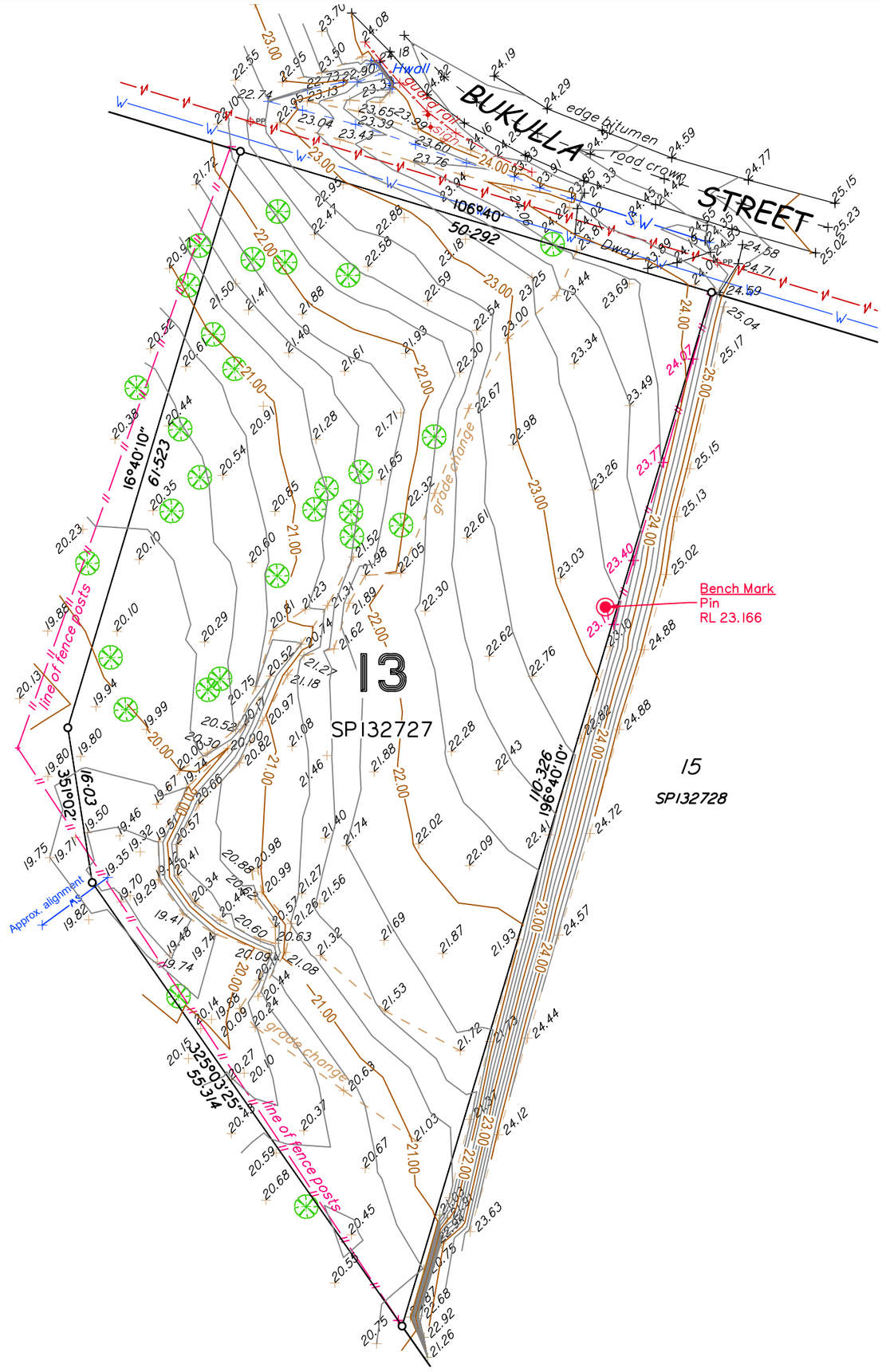
All Stormwater Management measures will be undertaken in accordance with the Stormwater Management Plan prepared in association with the detailed design stage.

9.1.3 Earthworks and Erosion and Sediment Control

An Earthworks and Erosion and Sediment Control Management Plan will be prepared in association with the detailed design stage. All construction work will be undertaken in accordance with these plans.

APPENDIX A

SITE SURVEY PLAN & EXISTING SERVICES



LEGEND TO SYMBOLS

- BENCH MARK
- WATER VALVE
- FIRE HYDRANT
- WM WATER METER (NOT FOUND)
- ELICTRICAL PIT
- SW STORMWATER M/H'S
- TREE
- WA WATER SERVICE MANHOLE
- STREET LIGHT/POWER POLE
- GRATED PIT
- TE COMMUNICATIONS PIT
- SE SEWERAGE MANHOLE
- PP POWER POLE

- SW — DRAINAGE PIPE
- — — — — DRAINAGE EARTHDRAIN
- —V—V— ELECTRICITY O/HEAD
- —// — FENCELINE

A	ORIGINAL ISSUE	19/12/24	
REVISION		DATE	ZONE

N

0 5 10 15 20 25

Scale 1:500

LEVEL DATUM
Level Datum is AHD
By SmartNet Aus
Base: 0021 RL 27.755

NOTE:

Boundaries are approximate only

This plan is for design purposes only. Not to be used for construction setout. Surface indication only of services shown hereon have been located by field survey.

Underground Service and features have not been located by field survey. Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services conduits.

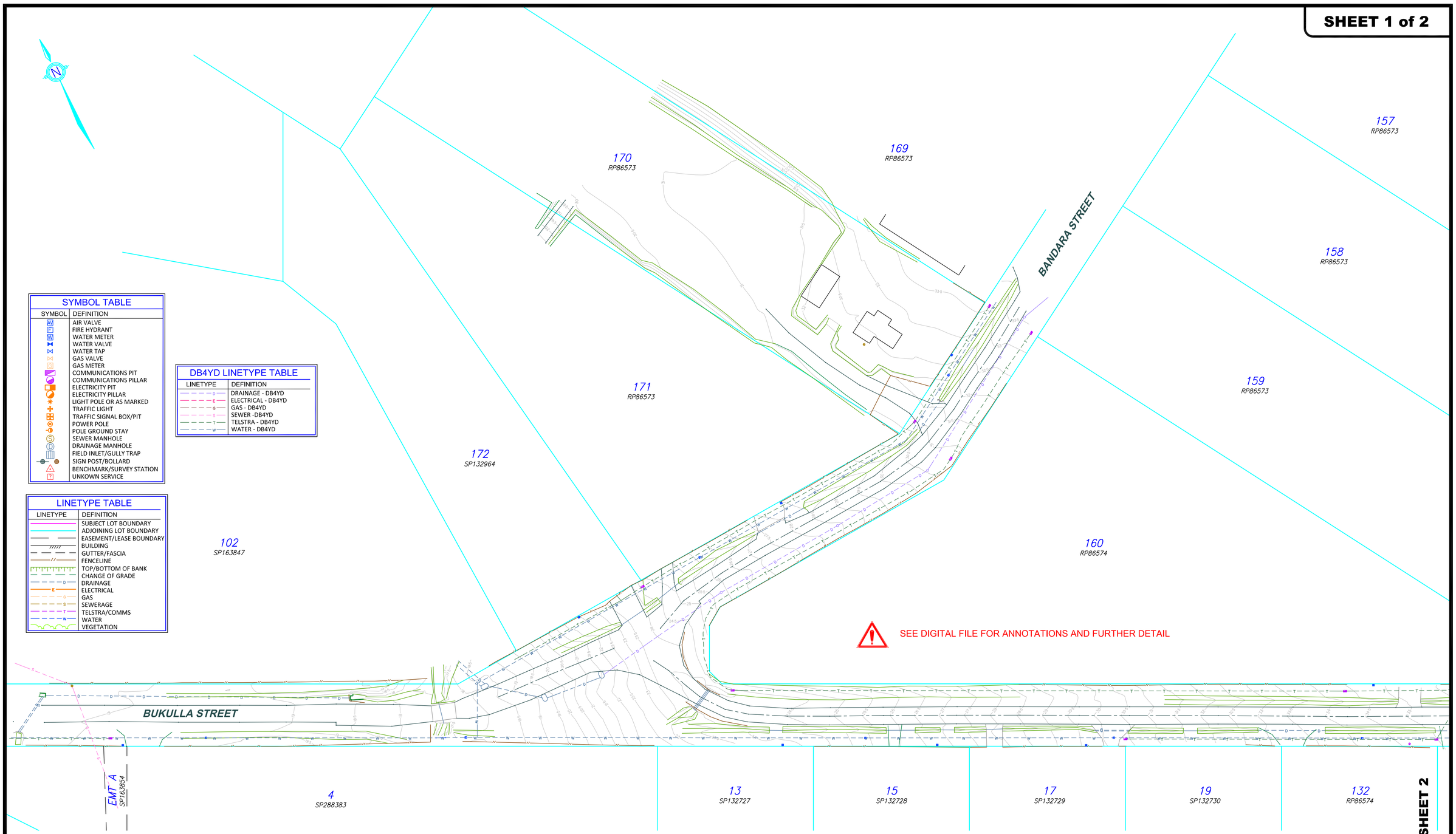
Ken McDonald
SURVEYS
14 Virginia Street, Virginia, Qld 4034
PO Box 307, Zillmere, Qld 4034
Tel: 07 3865 3658
Fax: 07 3865 7035

Surveyor	RG	10/12/24
Drawn	DTD	19/12/24
Checked	KM	19/12/24
Approved	KM	19/12/24

93 Bukulla Street, Wacol

Plan of contour and detail survey over
Lot 13 on SP132727

Local Government: Brisbane City Council
Drawing No. 24149 Rev A
Sheet No. 1 of 1
24149 detail DTD 19dec2024.dwg A3



SYMBOL TABLE	
SYMBOL	DEFINITION
AV	AIR VALVE
F	FIRE HYDRANT
W	WATER METER
	WATER VALVE
	WATER TAP
	GAS VALVE
G	GAS METER
	COMMUNICATIONS PIT
	COMMUNICATIONS PILLAR
	ELECTRICITY PIT
	ELECTRICITY PILLAR
	LIGHT POLE OR AS MARKED
	TRAFFIC LIGHT
	TRAFFIC SIGNAL BOX/PIT
	POWER POLE
	POLE GROUND STAY
S	SEWER MANHOLE
D	DRAINAGE MANHOLE
	FIELD INLET/GULLY TRAP
	SIGN POST/BOLLARD
	BENCHMARK/SURVEY STATION
?	UNKOWN SERVICE

DB4YD LINETYPE TABLE	
LINETYPE	DEFINITION
D	DRAINAGE - DB4YD
E	ELECTRICAL - DB4YD
G	GAS - DB4YD
S	SEWER -DB4YD
T	TELSTRA - DB4YD
W	WATER - DB4YD

LINETYPE TABLE	
LINETYPE	DEFINITION
	SUBJECT LOT BOUNDARY
	ADJOINING LOT BOUNDARY
	EASEMENT/LEASE BOUNDARY
	BUILDING
	GUTTER/FASCIA
	FENCELINE
	TOP/BOTTOM OF BANK
	CHANGE OF GRADE
D	DRAINAGE
E	ELECTRICAL
G	GAS
S	SEWERAGE
T	TELSTRA/COMMS
W	WATER
	VEGETATION

FLOOD SEARCH ALERT
Lawson Surveys has not completed a flood search on this property. Check council for flood information.

Please contact Lawson Surveys for a quote or for further advice.

TITLE SEARCH ALERT
Lawson Surveys has not carried out a Title Search on this property. Check DNRM for easements & encumbrances.

Please contact Lawson Surveys for a quote or for further advice.

"GROUND LEVEL" ALERT
As per Brisbane City Council City Plan 2014 the contours shown on this plan can not be used to determine Maximum Building Heights.

Please contact Lawson Surveys for a quote or for further advice on calculation of Maximum Building Heights.

SERVICES ALERT
Underground services shown have been plotted from records only and possibly from visible features on site. The location of all services must be identified & located prior to any excavation. Service identification has been determined by visible feature marking & needs to be confirmed prior to construction.
The services are symbolic representations only, and whilst they are accurately positioned, they are not to scale.

IDENTIFICATION SURVEY ALERT
The Surface Detail & Contour Survey, as prepared by Lawson Surveys, does not guarantee the location of boundary pegs.

Please contact Lawson Surveys for a quote or for further advice.

GENERAL NOTES
Contour Interval 0.5m
Boundaries have been approximately positioned & remain subject to an Identification Survey.
Tree Species may not be accurate - it is an indication of tree type only.
North Point is indicative only & may not be an accurate representation of True North.
If in doubt contact Lawson Surveys.

SCALE 1:600 at A1 - Lengths are in metres

0 12 24 36 48 60 72 84 96 108 120m
0 100 mm 200 mm

PLAN SHOWING SURFACE DETAIL & CONTOURS

LEVEL DATUM AHD - VIDE PSM 126565 RL 31.760	SCALE 1:600 @ A1
LOCAL AUTHORITY BRISBANE CITY COUNCIL	DATE 28/09/2023
	SURVEYED BY RC
MERIDIAN IS267757	DRAWN BY RC
DWG NAME ACAD-21272-DT	

CLIENT: DUNDRUM CIVIL P/L

LOCATION: **BUKALLA, BANDARA & TERABA STs RICHLANDS**

RPD: LOT 143 & 160 ON RP86574

LAWSON SURVEYS
A.B.N 46 272 949 047
CONSULTING LAND SURVEYORS
9B / 62 BISHOP STREET
KELVIN GROVE QLD 4059
Ph 07 3352 3326 Fax 07 3352 6991
mail@lawsonsurveys.com.au
www.lawsonsurveys.com.au

REFERENCE **21272-DT**

APPENDIX B

DEVELOPMENT PROPOSAL
(REFER ARCHITECTURAL DRAWINGS)

APPENDIX C

CIVIL CONCEPT PLANS

CIVIL DA CONCEPT PLANS

MCU DEVELOPMENT

93 BUKULLA STREET, WACOL. QLD 4077

N

LOCALITY PLAN

IMAGE SOURCED FROM QLD GLOBE
LOCAL AUTHORITY: BRISBANE CITY COUNCIL
NTS

REAL PROPERTY DESCRIPTION
LOT 13 ON SP.132727

DRAWING REGISTER

DRG	DRAWING TITLE
SK.01	DRAWING REGISTER AND GENERAL NOTES
SK.02	CONCEPT PLAN - SHEET 1 OF 3
SK.03	CONCEPT PLAN - SHEET 2 OF 3
SK.04	CONCEPT PLAN - SHEET 3 OF 3
SK.05	CONCEPT EARTHWORKS PLAN - SHEET 1 OF 2
SK.06	CONCEPT EARTHWORKS PLAN - SHEET 2 OF 2

CONCEPT COORDINATION NOTES

1. REFER ARCHITECTS DRAWINGS FOR CONCEPT DEVELOPMENT LAYOUT
2. REFER TRAFFIC ENGINEERS REPORT FOR TRAFFIC CODE COMPLIANCE CONFIRMATIONS.

CONCEPT STORMWATER DRAINAGE NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR IS TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH THE IDENTIFIED EXISTING SERVICES PRIOR TO ANY TRENCH EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVICE OF ANY REDESIGN REQUIREMENTS.
2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT COUNCIL STANDARD SPECIFICATIONS AND DRAWINGS, UNLESS NOTED OTHERWISE.
3. ALL uPVC STORMWATER PIPES SHALL BE CLASS SN8, RCP PIPES SHALL BE CLASS 2, FRC PIPES SHALL BE CLASS 1 UNLESS NOTED OTHERWISE.
4. ROOFWATER DRAINAGE TO CONNECT INTO PITS AS REQUIRED. FOR ROOFWATER DRAINAGE DETAILS REFER HYDRAULICS CONSULTANT'S DRAWINGS.
5. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
6. PROVIDE 'AS CONSTRUCTED' SURVEY OF ALL STORMWATER DRAINAGE INFRASTRUCTURE.

DIAL BEFORE YOU DIG www.1100.com.au

NOTE: LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A DIAL BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF EXISTING SERVICES SHALL BE REPORTED TO THE SUPERINTENDENT.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY.
ALL WORKS ARE TO BE CONSTRUCTED TO THE SATISFACTION OF RELEVANT AUTHORITIES.
THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING NECESSARY PERMITS, AUTHORISATION AND SUBSEQUENT INSPECTIONS AS REQUIRED BY RELEVANT AUTHORITIES.

DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
27.04.26	P3	PRELIMINARY ISSUE 3	MTN				
10.12.25	P2	PRELIMINARY ISSUE 2	MTN				
27.10.25	P1	PRELIMINARY ISSUE 1	MTN				

DEQ DESIGN ENGINEERS QUEENSLAND
Consulting Engineers
Civil, Structural and Soil Testing
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248
5 Parkview Street
Milton Qld. 4064
P: (07) 3367 0211
F: (07) 3367 0205
W: www.deq.com.au
E: structural@deq.com.au
E: civil@deq.com.au
E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT
93 BUKULLA STREET
WACOL. QLD 4077

DUNDRUM CIVIL PTY LTD

CIVIL SITEWORKS
DRAWING REGISTER
AND NOTES

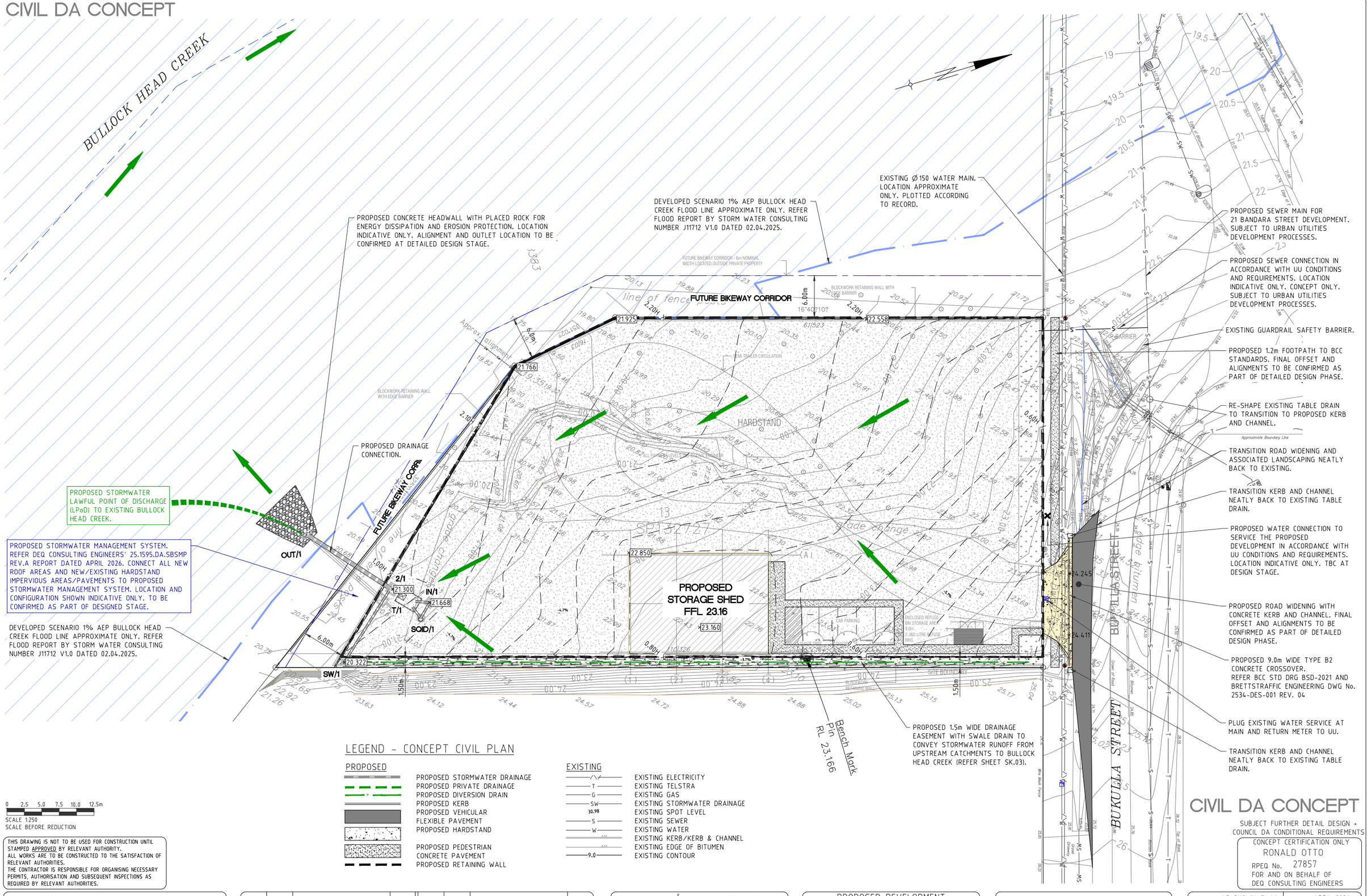
CIVIL DA CONCEPT

SUBJECT FURTHER DETAIL DESIGN + COUNCIL DA CONDITIONAL REQUIREMENTS

CONCEPT CERTIFICATION ONLY
RONALD OTTO
RPEQ No. 27857
FOR AND ON BEHALF OF
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN @ A1		DATE APRIL 2026	
CONTACT: RO		SHEET 1 OF 6	
25.1595 JOB No.	SK.01 DRG. No.		P3 AMMT.
CHECKED RO		DATUM : AHD	

CIVIL DA CONCEPT



LEGEND - CONCEPT CIVIL PLAN

PROPOSED

- PROPOSED STORMWATER DRAINAGE
- PROPOSED PRIVATE DRAINAGE
- PROPOSED DIVERSION DRAIN
- PROPOSED KERB
- PROPOSED VEHICULAR FLEXIBLE PAVEMENT
- PROPOSED HARDSTAND
- PROPOSED PEDESTRIAN CONCRETE PAVEMENT
- PROPOSED RETAINING WALL

EXISTING

- EXISTING ELECTRICITY
- EXISTING TELSTRA
- EXISTING GAS
- EXISTING STORMWATER DRAINAGE
- EXISTING SPOT LEVEL
- EXISTING SEWER
- EXISTING WATER
- EXISTING KERB/KERB & CHANNEL
- EXISTING EDGE OF BITUMEN
- EXISTING CONTOUR

0 2.5 5.0 7.5 10.0 12.5m

SCALE 1:250
SCALE BEFORE REDUCTION

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED APPROVED BY RELEVANT AUTHORITY.
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DATE	EVENT	DETAIL	INITIAL	DATE	EVENT	DETAIL	INITIAL
27.04.26	P3	PRELIMINARY ISSUE 3	MTN				
10.12.25	P2	PRELIMINARY ISSUE 2	MTN				
27.10.25	P1	PRELIMINARY ISSUE 1	MTN				

DEQ DESIGN ENGINEERS QUEENSLAND
Consulting Engineers
Civil, Structural and Soil Testing
DEQ Consulting Pty Ltd t/a ABN 53 065 711 248
5 Parkview Street
Milton Qld. 4064
P: (07) 3367 0211
F: (07) 3367 0205
W: www.deq.com.au
E: structural@deq.com.au
E: civil@deq.com.au
E: soiltesting@deq.com.au

PROPOSED DEVELOPMENT
93 BUKULLA STREET
WACOL. QLD 4077

DUNDRUM CIVIL PTY LTD

CIVIL SITEWORKS
CONCEPT PLAN
SHEET 1 OF 3

SCALE AS SHOWN @ A1	DATE APRIL 2026
CONTACT: RO	SHEET 2 OF 6
25.1595 JOB No.	SK.02 DRG. No. / P3 AMMT.
CHECKED RO	DATUM : AHD

CIVIL DA CONCEPT

SUBJECT FURTHER DETAIL DESIGN + COUNCIL DA CONDITIONAL REQUIREMENTS

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RPEQ No. 27857
FOR AND ON BEHALF OF
DEQ CONSULTING ENGINEERS

CIVIL DA CONCEPT

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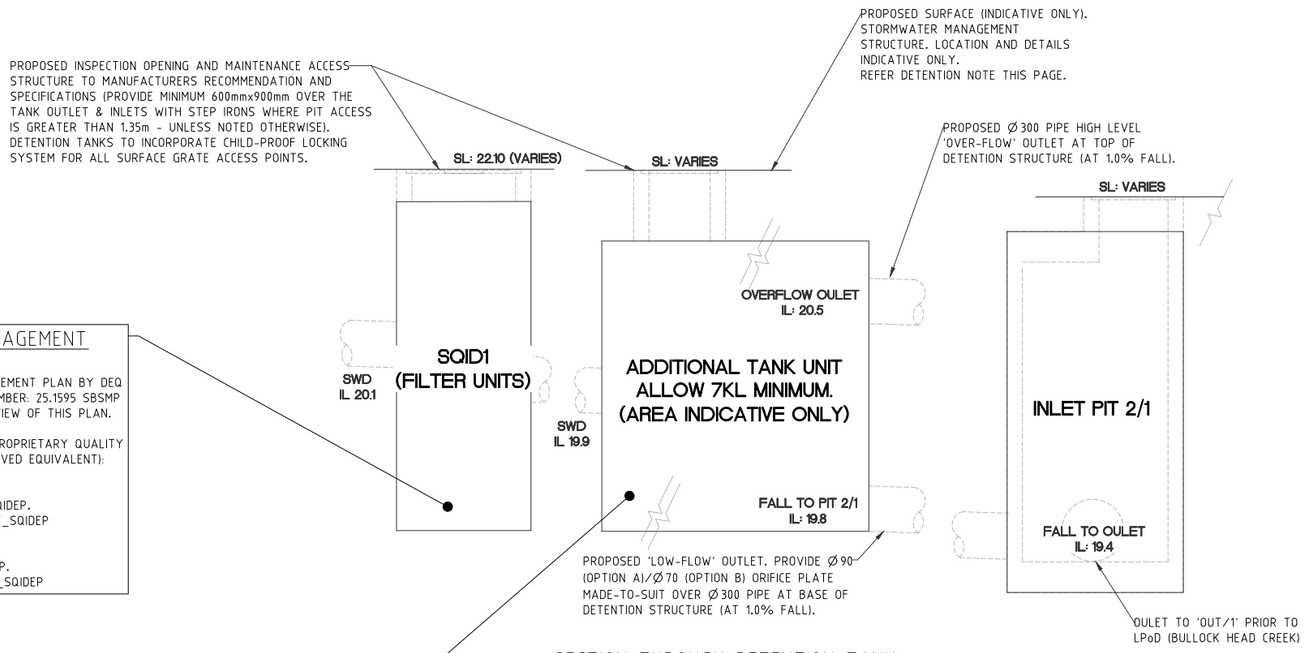
INTERNAL PROPOSED LEVELS

REFER ARCHITECT'S DRAWINGS FOR ALL PROPOSED STEPS, LEVELS, GRADES/FALLS, BUILDING AND CARPARK SETOUT & HYDRAULICS CONSULTANT'S DRAWINGS FOR ROOFWATER AND PLUMBING AND DRAINAGE CONNECTION DETAILS.



SECTION THROUGH DETENTION TANK
SCALE 1:20

PROPOSED QUALITY MANAGEMENT NOTE:

REFER SITE BASED STORMWATER MANAGEMENT PLAN BY DEQ CONSULTING ENGINEERS, REPORT JOB NUMBER: 25.1595 SBSMP REV.A DATED APTIL 2026 WITH THE REVIEW OF THIS PLAN.

WATER QUALITY TREATMENT SYSTEM: PROPRIETARY QUALITY TREATMENT FILTER SYSTEMS (OR APPROVED EQUIVALENT):

OPTION A:
- 4 ATLAN STORMSACKS - STS.6060_SQIDEP.
- 4 ATLAN FILTER (FIL-3.0) FULL HEIGHT_SQIDEP

OPTION B:
- MIN. 5 OCEANGUARDS - OG-200_SQIDEP.
- 5 TALL (690) NP PSORB STORMFILTER_SQIDEP

PROPOSED ON-SITE DETENTION NOTE:

ROOFWATER DISCHARGE SHALL BE IN ACCORDANCE WITH APPROVED HYDRAULIC CONSULTANTS DRAWINGS.

ALLOW TO CONNECT ALL ROOFWATER (INCLUDING MAJORITY OF EXTERNAL IMPERVIOUS AREAS) TO DETENTION STRUCTURE/S.

PROPRIETARY DETENTION STRUCTURE/S SHALL ACHIEVE A MINIMUM TOTAL SIZE OF 7.0 CUBIC METERS (7.0kL) AND AND SATISFY THE REQUIREMENTS OF COUNCILS STORMWATER MANAGEMENT REQUIREMENTS.

STRUCTURE NOTE: OPTIONS OF PROPRIETARY DETENTION STRUCTURE/S - EXAMPLES MAY INCLUDE:
--- "AUSTRALIAN TANKS" UNDERGROUND PRE-CAST CONCRETE TANK SYSTEMS
--- "CHAMBERMAXX" UNDERGROUND PROPRIETARY UNITS
--- CAST INSITU STRUCTURE - STRUCTURAL RPEQ ENGINEERED TANK DESIGN (E.G. CONCRETE BLOCK AND BONDEK SLAB OR APPROVED EQUIVALENT)

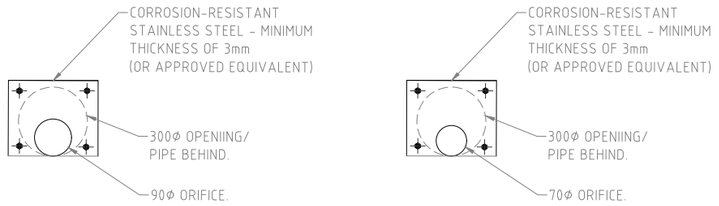
THIS DISCHARGE METHOD IS FOR PRIVATE DRAINAGE ONLY AND ALL ASSOCIATED CONNECTIONS AND FITTINGS MUST BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE APPROVED HYDRAULIC CONSULTANTS DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS, AND SATISFY THE REQUIREMENTS OF THE PLUMBING CODE OF AUSTRALIA (CURRENT NCC - VOLUME 3) AND AS/NZS 3500 SERIES.

NOTE: ALL DEVELOPMENT SITE FLOWS SHALL ULTIMATELY DISCHARGE TO CIVIL PIT AT REAR BOUNDARY (FOR GRAVITY DISCHARGE THE DEVELOPMENTS LAWFUL POINT OF DISCHARGE (EXISTING BULLOCK HEAD CREEK).

CONCEPT STORMWATER MANAGEMENT CONFIGURATION SHOWN INDICATIVE ONLY. TO BE CONFIRMED AS PART OF DESIGNED STAGE.

UNDERGROUND STORMWATER STRUCTURE NOTES:

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR IS TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH THE IDENTIFIED EXISTING SERVICES PRIOR TO ANY TRENCH EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVICE OF ANY REDESIGN REQUIREMENTS.
2. MINIMUM TANK VOLUME SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED SBSMP.
3. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT COUNCILS APPROVAL DRAWINGS, CONDITIONS, STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE.
4. ALL uPVC STORMWATER PIPES SHALL BE CLASS SN8, RCP PIPES SHALL BE CLASS 2, FRC PIPES SHALL BE CLASS 1 UNLESS NOTED OTHERWISE.
5. ROOFWATER DRAINAGE TO CONNECT INTO UPSTREAM PITS AS REQUIRED. FOR ROOFWATER DRAINAGE DETAILS REFER HYDRAULICS CONSULTANT'S DRAWINGS.
6. ORIFICE PLATES:
   - MUST BE MANUFACTURED FROM CORROSION-RESISTANT STAINLESS STEEL PLATES WITH A MINIMUM THICKNESS OF 3mm (5mm WHERE ORIFICE DIAMETER EXCEEDS 150mm), WITH A CENTRAL HOLE MACHINED TO 0.5mm ACCURACY.
   - MACHINED HOLE MUST RETAIN A SHARP EDGE
   - MUST BE PERMANENTLY FIXED TO THE PIT WALL AND EPOXY SEALED TO PREVENT THE ENTRANCE OF WATER AROUND THE EDGES
   - MUST BE ENGRAVED WITH THE ORIFICE DIAMETER AND AN IDENTIFYING MARK, AND THE ORIFICE DIAMETERS CERTIFIED BY THE MANUFACTURER
7. PROPOSED UNDERGROUND TANK DESIGN / SPECIFICATION BY OTHERS. REFER STRUCTURAL ENGINEERS DRAWINGS FOR ASSOCIATED DETAILS (SLAB, PAVEMENT DETAILS, ETC).
8. REFER APPROVED HYDRAULIC CONSULTANTS DRAWINGS FOR ADDITIONAL CONNECTION DETAILS TO UPSTREAM DRAINAGE NETWORK.
9. THE PROPERTY OWNER IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH INSTALLATION, OPERATION AND MAINTENANCE AND IS LIABLE FOR ALL DAMAGES AS A RESULT OF SYSTEM MALFUNCTION.
10. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
11. PROVIDE 'AS CONSTRUCTED' SURVEY OF ALL STORMWATER DRAINAGE INFRASTRUCTURE.



OPTION A-ATLAN

OPTION B-OCEAN PROTECT

ORIFICE PLATE FOR 300ø OPENING
N.T.S.

0 0.2 0.4 0.6 0.8 1.0m
SCALE 1:20
SCALE BEFORE REDUCTION

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DEQ DESIGN ENGINEERS QUEENSLAND
Consulting Engineers
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DEQ Consulting Pty Ltd t/a ABN 53 065 711 248
5 Parkview Street
Milton Qld. 4064
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W: www.deq.com.au
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PROPOSED DEVELOPMENT
93 BUKULLA STREET
WACOL. QLD 4077

DUNDRUM CIVIL PTY LTD

CIVIL SITEWORKS
CONCEPT PLAN
SHEET 2 OF 3

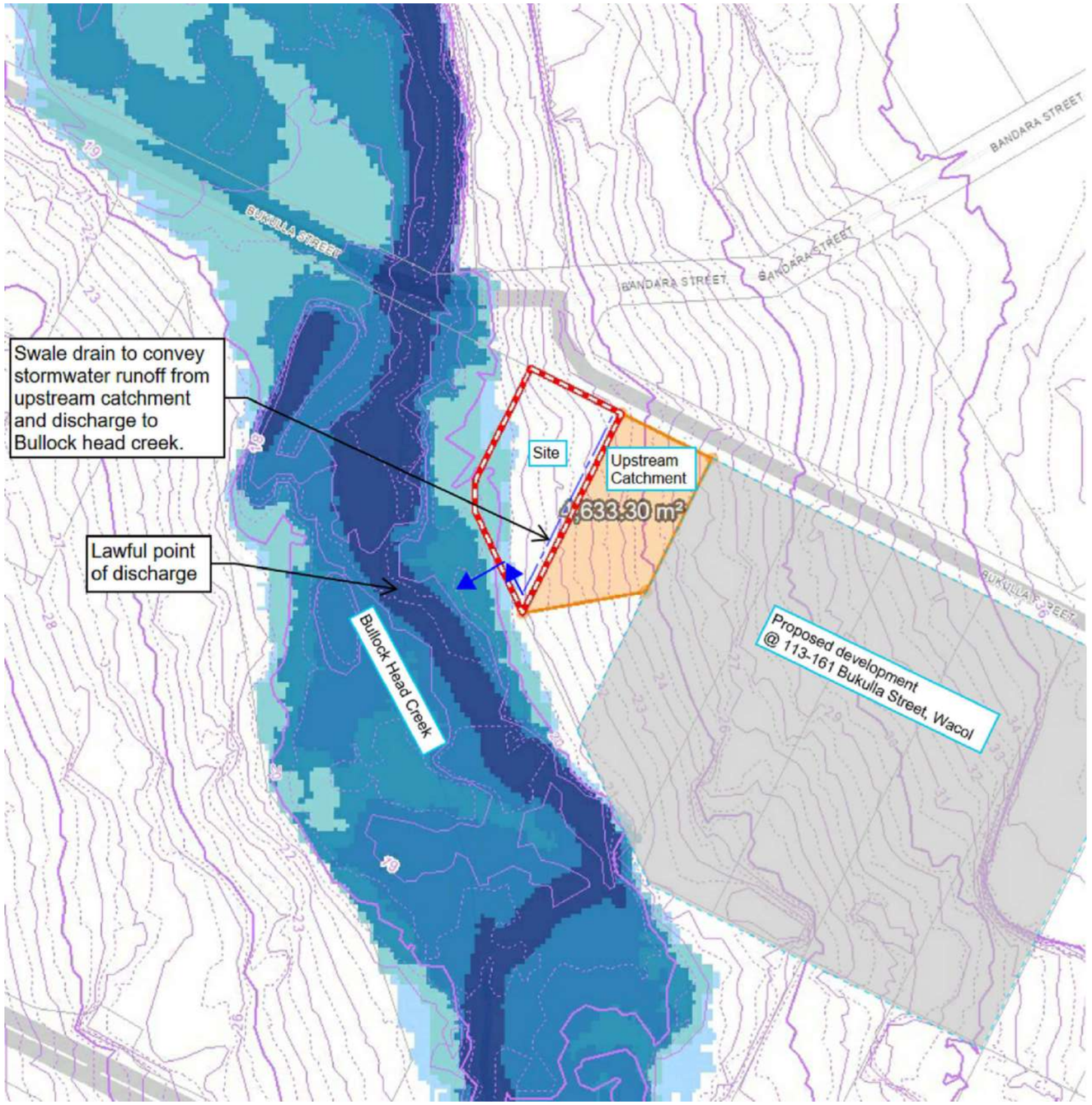
CIVIL DA CONCEPT

SUBJECT FURTHER DETAIL DESIGN + COUNCIL DA CONDITIONAL REQUIREMENTS

CONCEPT CERTIFICATION ONLY
RONALD OTTO
RPEQ No. 27857
FOR AND ON BEHALF OF
DEQ CONSULTING ENGINEERS

SCALE AS SHOWN @ A1		DATE APRIL 2026	
CONTACT: RO		SHEET 3 OF 6	
25.1595 JOB No.		SK.03 DRG. No.	P3 AMMT.
CHECKED RO		DATUM : AHD	

CIVIL DA CONCEPT



EXTERNAL UPSTREAM STORMWATER CATCHMENT PLAN

N.T.S

0 0.2 0.4 0.6 0.8 1.0m

SCALE 1:20

SCALE BEFORE REDUCTION

REFER CONCEPT CIVIL ENGINEERING REPORT AND CIVIL SECONDARY CODES PREPARED BY DEQ CONSULTING ENGINEERS, REPORT REF. NUMBER 25.1595 DA REPORT WITH THE REVIEW OF THIS CONCEPT PLAN.

PROPOSED STORMWATER MANAGEMENT NOTE:

PROPOSED STORMWATER MANAGEMENT SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE SITE BASED STORMWATER MANAGEMENT PLAN (SBSMP) REPORT PREPARED BY DEQ CONSULTING ENGINEERS REF 25.1595.DA.SBSMP REV.A DATED APRIL 2026.

ALL LEVELS AND DETAILS SHOWN ARE CONCEPT ONLY AND SUBJECT TO DETAIL DESIGN AMENDMENTS (IF/WHERE REQUIRED).

THIS SBSMP DESIGN SHALL BE CONFIRMED AS PART OF THE DETAILED DESIGN / OPERATIONAL WORKS DESIGN PHASE TO ENSURE COMPLIANCE WITH THE WATER SENSITIVE URBAN DESIGN (WSUD) PRINCIPLES, LOCAL COUNCIL APPROVAL CONDITIONS/STANDARDS AND STATE PLANNING POLICY (SPP): WATER QUALITY REQUIREMENTS.

WHERE APPLICABLE, PROPOSED RETAINING WALLS AND ASSOCIATED EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BCC FILLING AND EXCAVATION CODE.

EARTHWORKS NOTES:
E1 - TEMPORARY 1in1 BULK EARTHWORKS BATTER SHALL BE PROVIDED FOR ANY EXCAVATIONS WITHIN VICINITY OF PROPERTY BOUNDARY (OR FOR STEP-DOWNS) EXCEEDING 0.5m IN HEIGHT.
E2 - DETAIL DESIGN OF EARTHWORKS SHALL BE UNDERTAKEN AS PART OF OPERATONAL WORKS/DETAILED DESIGN PHASE.
E3 - COVER EXCAVATION FACE WITH PLASTIC EACH DAY.
E4 - ALL BATTERS TO BE EXPOSED FOR MINIMUM PERIOD. DETAIL EXCAVATION REQUIRED PRIOR TO RETAINING WALL CONSTRUCTION.
E5 - RETAINING WALL DESIGN BY OTHERS.
E6 - RETAINING WALLS IN EXCESS OF 1.0m IN HEIGHT TO BE DESIGNED AND CERTIFIED BY RPEQ.

ALL ROOF WATER TO BE COLLECTED AND DISCHARGED TO NEARBY CIVIL STORMWATER INLET PITS ACCORDING TO PLUMBING AND DRAINAGE CODE - AS3500.3. SUBJECT TO DETAIL DESIGN BY HYDRAULIC CONSULTANT (F/WHERE REQUIRED).

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NOTE: LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A DIAL BEFORE YOU DIG SEARCH PRIOR TO COMMENCEMENT OF WORKS. ANY POTENTIAL CONFLICT OF EXISTING SERVICES SHALL BE REPORTED TO THE SUPERINTENDENT.

NOTE: EXISTING SERVICES AND CONNECTIONS TO EXISTING SERVICES ARE TO BE LOCATED AND CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO ANY EXCAVATION. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES FOR POSSIBLE REVISIONS.

CONTRACTOR TO REPAIR ANY DAMAGE TO KERB AND CHANNEL, FOOTWAY, FOOTPATH, ROAD PAVEMENT OR SERVICES CAUSED DURING CONSTRUCTION TO THE SATISFACTION OF COUNCIL.

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Consulting Engineers
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5 Parkview Street
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PROPOSED DEVELOPMENT
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DUNDRUM CIVIL PTY LTD

CIVIL SITEWORKS
CONCEPT PLAN
SHEET 3 OF 3

CIVIL DA CONCEPT

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PROPOSED TEMPORARY 1in1 BULK EARTHWORKS BATTER.
WORKS SHALL BE CARRIED OUT AS PART OF FUTURE BUILDING WORKS.
CONFIRM WITH PROJECT MANAGER PRIOR TO CONSTRUCTION
PROPOSED EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BCC FILLING AND EXCAVATION CODE.

EARTHWORKS NOTE:
E1 - TEMPORARY 1in1 BULK EARTHWORKS BATTER SHALL BE PROVIDED FOR ANY EXCAVATIONS WITHIN VICINITY OF PROPERTY BOUNDARY (OR FOR STEP-DOWNS) EXCEEDING 0.5m IN HEIGHT.
E2 - TEMPORARY EARTHWORKS BATTER SHALL TERMINATE WITHIN 0.3m OF ADJACENT PROPERTY BOUNDARIES.
E3 - COVER EXCAVATION FACE WITH PLASTIC EACH DAY.
E4 - ALL BATTERS TO BE EXPOSED FOR MINIMUM PERIOD. DETAIL EXCAVATION REQUIRED PRIOR TO RETAINING WALL CONSTRUCTION.
E5 - RETAINING WALL DESIGN BY OTHERS.
E6 - WHERE APPLICABLE, RETAINING WALLS IN EXCESS OF 1.0m IN HEIGHT TO BE DESIGNED AND CERTIFIED BY RPEQ.

BULK EARTHWORKS LEVELS CONCEPT ONLY. EXACT LEVELS TO BE CONFIRMED PRIOR TO CONSTRUCTION.

LEGEND - CONCEPT EARTHWORKS PLAN

- 24.500 — PROPOSED BULK EARTHWORKS LEVEL
- 24.0 / 24.20 — EXISTING CONTOURS
- EXISTING SPOT LEVEL
- PROPOSED CUT AREA
- CUT VOLUME: 60m³
- PROPOSED FILL AREA
- FILL VOLUME: 4800m³
- PROPOSED DIVERSION DRAIN
- PROPOSED TOP OF BATTER
- PROPOSED BOTTOM OF BATTER

REDUNDANT INTERNAL STRUCTURES NOTE:

REDUNDANT DRAINAGE PIPEWORK, EXISTING SLABS, FOOTINGS, BUILDERS RUBBLE, AND OTHER DELETERIOUS MATERIAL TO BE TAKEN UP AND REMOVED FROM SITE.

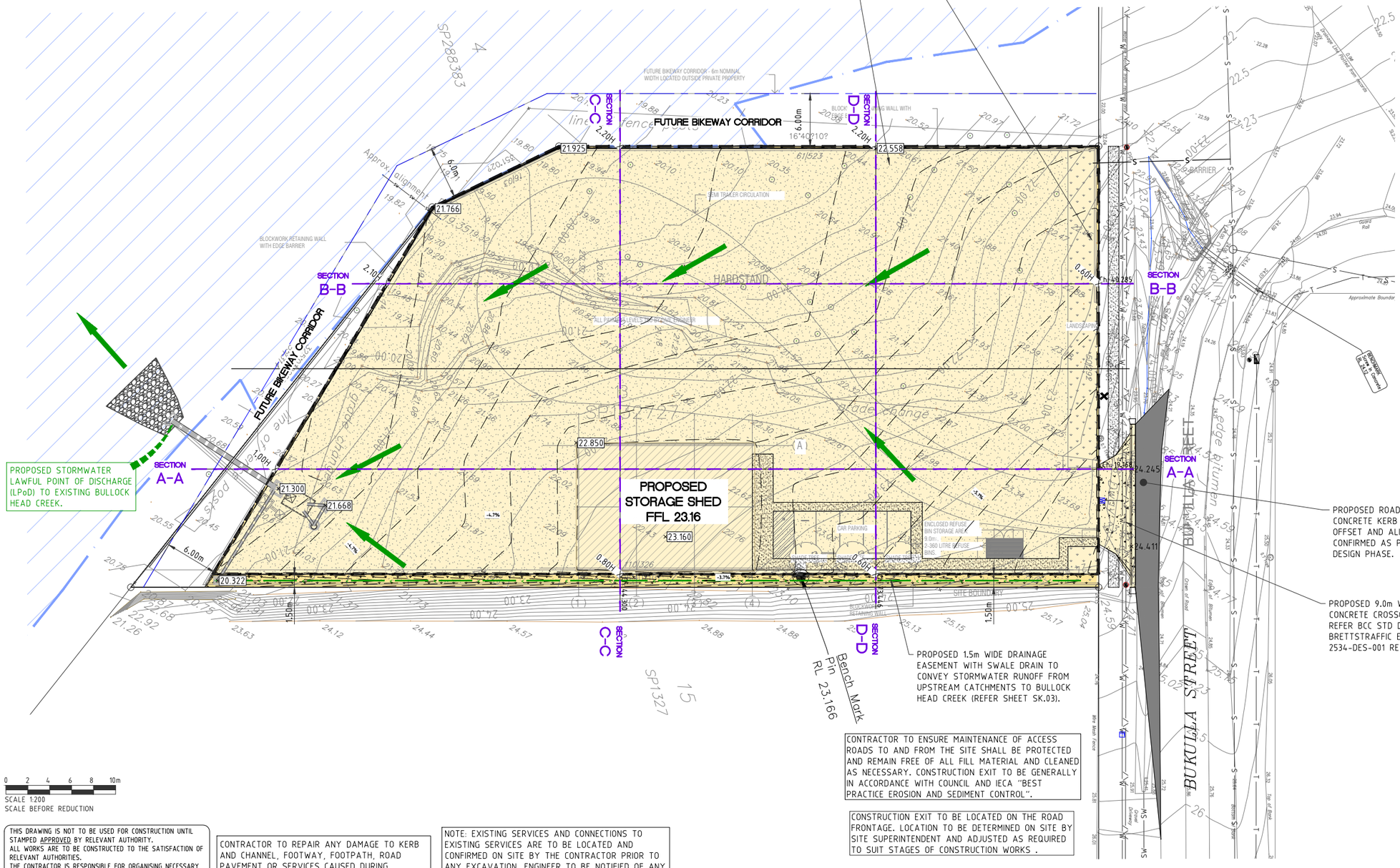
AS DIRECTED BY THE SUPERINTENDENT, THE CONTRACTOR SHALL REMOVE ALL EXISTING FOOTINGS, PIPES AND UNDESIRABLE MATTER AND REPLACE WITH AN APPROVED SUITABLE MATERIAL COMPACTED TO 98% DRY DENSITY RATIO.

ELECTRICAL / TELECOMMUNICATIONS NOTE:

INDICATIVE SERVICING LOCATIONS FOR PROPOSED CIVIL CONNECTIONS ARE CONCEPTUAL ONLY. FURTHER DETAIL DESIGN SHALL BE CARRIED OUT AND COORDINATED WITH ELECTRICAL ENGINEER TO CONFIRM (WHERE APPLICABLE):

1. PROPOSED ROOFWATER PIPED DRAINAGE SHALL BE 600mm (MIN.) CLEAR OF ELECTRICAL SERVICE PILLAR, U.N.O.**
2. WATER METERS SHALL BE RELOCATED (E.G. 1.5m FROM BOUNDARY PEG OR TO OPPOSITE SIDE BOUNDARY) WHERE A SHARED COMMON BOUNDARY CLASH OCCURS WITH A ELECTRICAL SERVICE PILLAR, U.N.O.**
3. PROPOSED DRIVEWAY/S (WHERE APPLICABLE) SHALL MAINTAIN A 1.0m (MIN.) CLEARANCE FROM PROPOSED ELECTRICAL PILLARS UNLESS AN APPROVED PROTECTIVE MEASURE IS PROVIDED (E.G. BOLLARD, ETC). U.N.O.**

** UNLESS NOTED OTHERWISE BY ELECTRICAL ENGINEER, LOCAL AUTHORITY AND/OR COUNCIL.



CONTRACTOR TO ENSURE MAINTENANCE OF ACCESS ROADS TO AND FROM THE SITE SHALL BE PROTECTED AND REMAIN FREE OF ALL FILL MATERIAL AND CLEANED AS NECESSARY. CONSTRUCTION EXIT TO BE GENERALLY IN ACCORDANCE WITH COUNCIL AND IECA "BEST PRACTICE EROSION AND SEDIMENT CONTROL".

CONSTRUCTION EXIT TO BE LOCATED ON THE ROAD FRONTAGE. LOCATION TO BE DETERMINED ON SITE BY SITE SUPERINTENDENT AND ADJUSTED AS REQUIRED TO SUIT STAGES OF CONSTRUCTION WORKS .

0 2 4 6 8 10m
SCALE 1:200
SCALE BEFORE REDUCTION

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CIVIL SITEWORKS
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SHEET 1 OF 2

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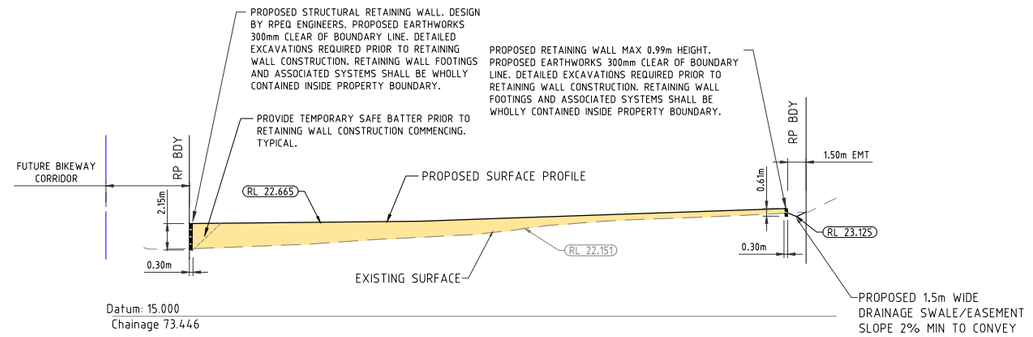
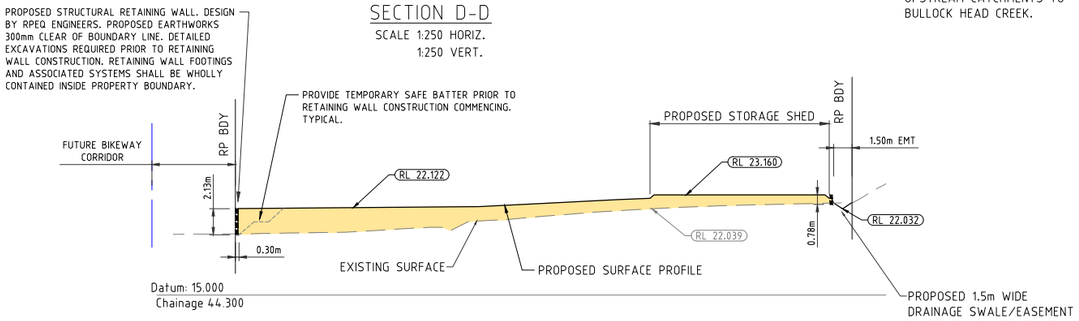
LEGEND-CONCEPT EARTHWORKS SECTIONS

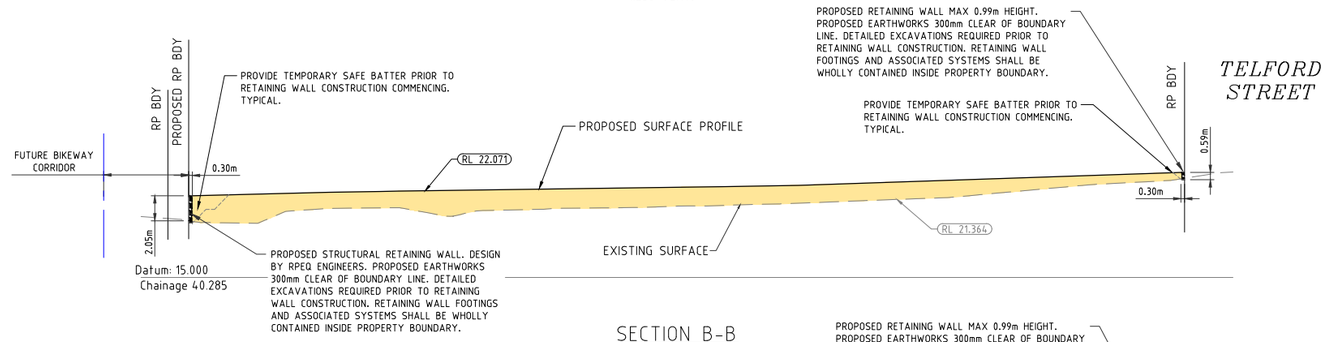
RL 22.550 — EXISTING LEVELS
RL 23.500 — PROPOSED SURFACE LEVELS
EXISTING SURFACE PROFILE
PROPOSED SURFACE PROFILE



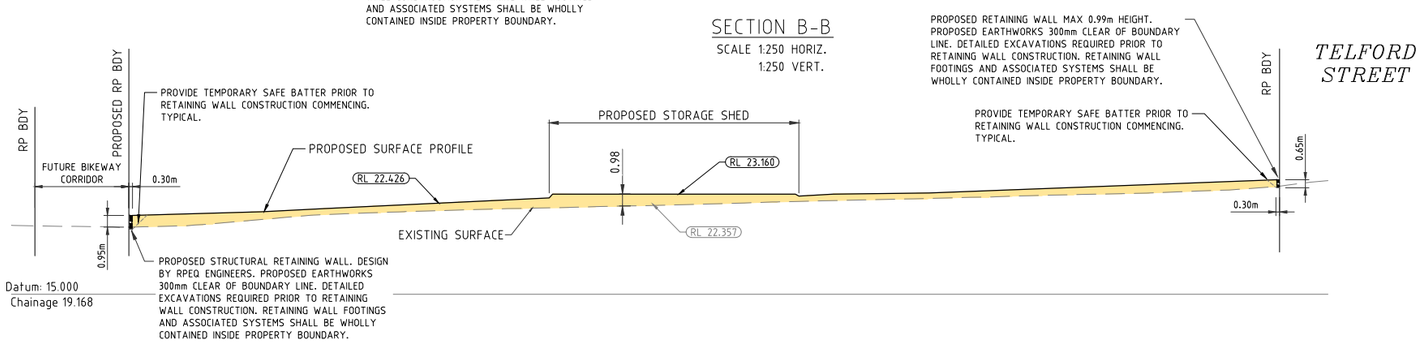
SECTION D-D
SCALE 1:250 HORIZ.
1:250 VERT.



SECTION C-C
SCALE 1:250 HORIZ.
1:250 VERT.



SECTION B-B
SCALE 1:250 HORIZ.
1:250 VERT.



SECTION A-A
SCALE 1:250 HORIZ.
1:250 VERT.

0 2.5 5.0 7.5 10.0 12.5m
SCALE 1:250
SCALE BEFORE REDUCTION

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APPENDIX D

STORMWATER MANAGEMENT CODE

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
Section A—If for a material change of use, reconfiguring a lot, operational work or building work Note—Compliance with the performance outcomes and acceptable outcomes in this section should be demonstrated by the submission of a site-based stormwater management plan for high risk development only.				
PO1 Development provides a stormwater management system which achieves the integrated management of stormwater to: (a) minimise flooding; (b) protect environmental values of receiving waters; (c) maximise the use of water sensitive urban design; (d) minimise safety risk to all persons; (e) maximise the use of natural waterway corridors and natural channel design principles. Editor's note—The stormwater management system to be developed to address PO1 is not intended to require management of stormwater quality.	**AO1** Development provides a stormwater management system designed in compliance with the Infrastructure design planning scheme policy.	✓	Development provides a stormwater management system designed in compliance with the Infrastructure design planning scheme policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO2 Development ensures that the stormwater management system and site work does not adversely impact flooding or drainage characteristics of premises which are up slope, down slope or adjacent to the site.	**AO2.1** Development does not result in an increase in flood level or flood hazard on up slope, down slope or adjacent premises.	✓	The proposed development works do not adversely impact on flooding or drainage of properties that are upstream, downstream or adjacent to the subject site.	
	AO2.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	✓	Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	
PO3 Development ensures that the stormwater management system does not direct stormwater run-off through existing or proposed lots and property where it is likely to adversely affect the safety of, or cause nuisance to properties.	**AO3.1** Development ensures that the location of the stormwater drainage system is contained within a road reserve, drainage reserve, public pathway, park or waterway corridor.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
	AO3.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
	AO3.3 Development obtains a lawful point of	✓	The proposed development provides a drainage network and	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	discharge in compliance with the standards in the Infrastructure design planning scheme policy.		lawful point of discharge in accordance with the Infrastructure design planning scheme policy.	
	AO3.4 Where on private land, all underground stormwater infrastructure is secured by a drainage easement.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
PO4 Development provides a stormwater management system which has sufficient capacity to safely convey run-off taking into account increased run-off from impervious surfaces and flooding in local catchments.	**AO4.1** Development provides a stormwater conveyance system which is designed to safely convey flows in compliance with the standards in the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
	AO4.2 Development provides sufficient area to convey run-off which will comply with the standards in the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO5 Development designs stormwater channels, creek modification works, bridges, culverts and major drains to protect and enhance the value of the waterway corridor or drainage path for fauna movement.	**AO5** Development ensures the design of stormwater channels, creek modifications or other infrastructure, permits terrestrial and aquatic fauna movement.	**N/A**	Stormwater channels, creek modifications and/or drainage network externally not proposed.	
PO6 Development ensures that location and design of stormwater detention and water quality treatment: (a) minimises risk to people and property; (b) provides for safe access and maintenance; (c) minimises ecological impacts to creeks and waterways.	**AO6.1** Development locates stormwater detention and water quality treatment: (a) outside of a waterway corridor; (b) offline to any catchment not contained within the development.	✓	No waterway corridor exists over or adjacent the site. No offline catchment is conveyed through the proposed stormwater management system.	
	AO6.2 Development providing for stormwater detention and water quality treatment devices are designed in compliance with the standards in the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
PO7 Development is designed, including any car parking areas and channel works to: (a) reduce property damage;	**AO7.1** Development (including any ancillary structures and car parking areas) is located above minimum flood immunity levels in Table 9.4.9.3.B, Table 9.4.9.3.C, Table	✓	Development (minimum pad levels) is located above minimum flood immunity levels	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(b) provide safe access to the site during the defined flood event.	9.4.9.3.D, Table 9.4.9.3.E and Table 9.4.9.3.F. Note—Compliance with this acceptable outcome can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels (as part of a site-based stormwater management plan).			
	AO7.2 Development including the road network provides a stormwater management system that provides safe pedestrian and vehicle access in accordance with the standards in the Infrastructure design planning scheme policy.	✓	Road access to the existing street frontage is to be maintained. The Q100 flood levels inundate the road access to a level less than 300mm depth. Access for serviceability shall be safely managed and maintained for a major storm event.	
PO8 Development designs stormwater channels, creek modification works and the drainage network to protect and enhance the environmental values of the waterway corridor or drainage path.	**AO8.1** Development ensures natural waterway corridors and drainage paths are retained.	✓	The development ensures that the stormwater channels, creek modification works and drainage network protects and enhances the environmental values of the drainage path.	
	AO8.2 Development provides the required hydraulic conveyance of the drainage channel and floodway, while maximising its potential to	✓	The development ensures that the stormwater channels, creek modification works and drainage network protects and enhances the environmental values of the	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	maximise environmental benefits and minimise scour. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines.		drainage path.	
	AO8.3 Development provides stormwater outlets into waterways, creeks, wetlands and overland flow paths with energy dissipation to minimise scour in compliance with the standards in the Infrastructure design planning scheme policy.	✓	The development ensures that the stormwater channels, creek modification works and drainage network protects and enhances the environmental values of the drainage path.	
	AO8.4 Development ensures that the design of modifications to the existing design of new stormwater channels, creeks and major drains is in compliance with the standards in the Infrastructure design planning scheme policy.	✓	The development ensures that the stormwater channels, creek modification works and drainage network protects and enhances the environmental values of the drainage path.	
PO9 Development is designed to manage run-off and peak flows by minimising large areas of impervious material and maximising opportunities for capture and re-use.	**AO9** No acceptable outcome is prescribed.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO10 Development ensures that there is sufficient site area to accommodate an effective stormwater management system. Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only.	**AO10** No acceptable outcome is prescribed.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
PO11 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to the: (a) existing capacity of stormwater infrastructure within and external to the site, and any planned stormwater infrastructure upgrades; (b) safe management of stormwater discharge from existing and future up-slope development; (c) implication for adjacent and down-slope development.	**AO11.1** Development with up-slope external catchment areas provides a drainage connection sized for ultimate catchment conditions that is directed to a lawful point of discharge.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
	AO11.2 Development ensures that existing stormwater infrastructure that is undersized is upgraded in compliance with the Priority infrastructure plan and the standards in the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO12 Development provides stormwater infrastructure which: (a) remains fit for purpose for the life of the development and maintains full functionality in the design flood event; (b) can be safely accessed and maintained cost effectively; (c) ensures no structural damage to existing stormwater infrastructure.	**AO12.1** The stormwater management system is designed in compliance with the Infrastructure design planning scheme policy.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
	AO12.2 Development provides a clear area with a minimum of 2m radius from the centre of an existing manhole cover and with a minimum height clearance of 2.5m.	✓	The proposed development provides a drainage network in accordance with the Infrastructure design planning scheme policy.	
PO13 Development ensures that all reasonable and practicable measures are taken to manage the impacts of erosion, turbidity and sedimentation, both within and external to the development site from construction activities, including vegetation clearing, earthworks, civil construction, installation of services, rehabilitation, revegetation and landscaping to protect: (a) the environmental values and water quality objectives of waters; (b) waterway hydrology;	**AO13** No acceptable outcome is prescribed.	✓	The Erosion Hazard Assessment indicates the site is classified as a 'Medium' risk development. A detailed Erosion and Sediment Control Management Plan will be prepared in accordance with the Infrastructure design planning scheme policy at the Operational Works stage for submission to Brisbane City Council for approval.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(c) the maintenance and serviceability of stormwater infrastructure. Note—The Infrastructure design planning scheme policy outlines the appropriate measures to be taken into account to achieve the performance outcome.				
PO14 Development ensures that: (a) unnecessary disturbance to soil, waterways or drainage channels is avoided; (b) all soil surfaces remain effectively stabilised against erosion in the short and long term.	**AO14** No acceptable outcome is prescribed.	✓	The Erosion Hazard Assessment indicates the site is classified as a 'Medium' risk development. A detailed Erosion and Sediment Control Management Plan will be prepared in accordance with the Infrastructure design planning scheme policy at the Operational Works stage for submission to Brisbane City Council for approval.	
PO15 Development does not increase: (a) the concentration of total suspended solids or other contaminants in stormwater flows during site construction; (b) run-off which causes erosion either on site or off site.	**AO15** No acceptable outcome is prescribed.	✓	The Erosion Hazard Assessment indicates the site is classified as a 'Medium' risk development. A detailed Erosion and Sediment Control Management Plan will be prepared in accordance with the Infrastructure design	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
			planning scheme policy at the Operational Works stage for submission to Brisbane City Council for approval.	
Section B—Additional criteria which apply to high-risk development, being one or more of the following: (a) a material change of use for an urban purpose which involves greater than 2,500m^2 of land that: (i) will result in an impervious area greater than 25% of the net developable area; or (ii) will result in 6 or more dwellings. (b) reconfiguring a lot for an urban purpose that involves greater than 2,500m^2 of land and will result in 6 or more lots; (c) operational work for an urban purpose which involves disturbing greater than 2,500m^2 of land.				
PO16 Development ensures that the entry and transport of contaminants into stormwater is avoided or minimised to protect receiving water environmental values. Note—Prescribed water contaminants are defined in the *Environmental Protection Act 1994*. Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only.	**AO16** Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	✓	A Site Based Stormwater Management Plan has been prepared in accordance with the Infrastructure Design Planning Scheme Policy and is attached under a separate cover.	
PO17	**AO17**	✓	A Site Based Stormwater Management Plan has been	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
Development ensures that: (a) the discharge of wastewater to a waterway or external to the site is avoided; or (b) if the discharge cannot practicably be avoided, the development minimises wastewater discharge through re-use, recycling, recovery and treatment. Note—The preparation of a wastewater management plan can assist in demonstrating achievement of this performance outcome. Editor's note—This code does not deal with sewerage which is the subject of the Wastewater code.	No acceptable outcome is prescribed.		prepared in accordance with the Infrastructure Design Planning Scheme Policy and is attached under a separate cover.	
Section C—Additional performance outcomes and acceptable outcomes for assessable development for a material change of use or reconfiguring a lot				
PO18 Development protects stormwater infrastructure to ensure the following are not compromised: (a) the long term infrastructure for the stormwater network in the Long term infrastructure plans; (b) the existing and planned infrastructure for the stormwater network in the Local government infrastructure plan;	**AO18** Development protects stormwater infrastructure in compliance with the following: (a) for long term infrastructure for the stormwater network, the Long term infrastructure plans;	✓	A Site Based Stormwater Management Plan has been prepared in accordance with the Infrastructure Design Planning Scheme Policy and is attached under a separate cover.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(c) the provision of long term, existing and planned infrastructure for the stormwater network which: (i) is required to service the development or an existing and future urban development in the planning scheme area; or (ii) is in the interests of rational development or the efficient and orderly planning of the general area in which the site is situated. Editor's note—A condition which requires a proposed development to keep permanent improvements and structures associated with the approved development clear of the area of long term infrastructure, may be imposed.	(b) for existing and planned infrastructure for the stormwater network, the Local government infrastructure plan; (c) the standards for stormwater drainage in the Infrastructure design planning scheme policy.			
PO19 Development provides for the payment of extra trunk infrastructure costs for the following: (a) for development completely or partly outside the priority infrastructure area in the https://www.brisbane.qld.gov.au/planning-building/planning-guidelines-tools/local-government-infrastructure-plan-lgip-2016-2026Local government infrastructure plan;	**AO19** No acceptable outcome is prescribed.	**N/A**	Payment of extra trunk infrastructure costs not applicable.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(b) for development completely inside the priority infrastructure area in the Local government infrastructure plan involving: (i) trunk infrastructure that is to be provided earlier than planned in the Local government infrastructure plan; (ii) long term infrastructure for the stormwater network which is made necessary by development that is not assumed future urban development; (iii) other infrastructure for the stormwater network associated with development that is not assumed future urban development which is made necessary by the development. Editor's note—The payment of extra trunk infrastructure costs for development completely inside the priority infrastructure area in the Local government infrastructure plan is to be worked out in accordance with the Charges Resolution. Editor's note—See section 130 Imposing Development conditions (Conditions for extra trunk infrastructure costs) of the *Planning Act 2016*.				

APPENDIX E

INFRASTRUCTURE DESIGN CODE

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO1 Development provides roads, pavement, edging and landscaping which: (a) are designed and constructed in accordance with the road hierarchy; (b) provide for safe travel for pedestrians, cyclists and vehicles; (c) provide access to properties for all modes; (d) provide utilities; (e) provide high levels of aesthetics and amenity, improved liveability and future growth; (f) provide for the amelioration of noise and other pollution; (g) provide a high-quality streetscape; (h) provide a low-maintenance asset with a minimal whole-of-life cost. Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.	**AO1** Development provides roads and associated pavement, edging and landscaping which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	✓	The frontage to the proposed development will maintain/provide a standard in accordance with the Infrastructure Design Planning Scheme Policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO2 Development provides road pavement surfaces which: (a) are well designed and constructed; (b) durable enough to carry the wheel loads of the intended types and numbers of travelling and parked vehicles; (c) ensures the safe passage of vehicles, pedestrians and cyclists, the discharge of stormwater run-off and the preservation of all-weather access; (d) allows for reasonable travel comfort.	**AO2** Development provides road pavement surfaces which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	✓	The frontage to the proposed development will maintain/provide a standard in accordance with the Infrastructure Design Planning Scheme Policy.	
PO3 Development provides a pavement edge which is designed and constructed to: (a) control vehicle movements by delineating the carriageway for all users; (b) provide for people with disabilities by allowing safe passage of wheelchairs and other mobility aids.	**AO3** Development provides pavement edges which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	✓	The frontage to the proposed development will provide a standard in accordance with the Infrastructure Design Planning Scheme Policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO4 Development provides verges which are designed and constructed to: (a) provide safe access for pedestrians clear of obstructions and access areas for vehicles onto properties; (b) provide a sufficient area for public utility services; (c) be maintainable by the Council.	**AO4** Development provides verges which are designed and constructed in compliance with the road corridor design and streetscape locality advice standards in the Infrastructure design planning scheme policy.	✓	The frontage to the proposed development will maintain/provide a standard in accordance with the Infrastructure Design Planning Scheme Policy.	
PO5 Development provides a lane or laneway identified in a neighbourhood plan which: (a) allows equitable access for all modes; (b) is safe and secure; (c) has 24-hour access; (d) is a low-speed shared zone environment; (e) has a high-quality streetscape.	**AO5** Development provides a lane or laneway identified in a neighbourhood plan which is embellished in compliance with the streetscape locality advice standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No lanes or laneways are proposed.	
PO6 Development of an existing premises provides at the frontage to the site, if not	**AO6** Development of an existing premises provides at the frontage of the site, if not already existing, the following infrastructure to the	✓	The frontage to the proposed development will maintain/provide a standard in accordance with the	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
already provided, the following infrastructure to an appropriate urban standard: (a) an effective, high-quality paved roadway; (b) an effective, high-quality roadway kerb and channel; (c) safe, high-quality vehicle crossings over channels and verges; (d) safe, accessible, high-quality verges compatible and integrated with the surrounding environment; (e) safe vehicle access to the site that enables ingress and egress in a forward gear; (f) provision of and required alterations to public utilities; (g) effective drainage; (h) appropriate conduits to facilitate the provision of required street-lighting systems and traffic signals.	standard that would have applied if the development involved new premises as stated in the road corridor design standards in the Infrastructure design planning scheme policy: (a) concrete kerb and channel; (b) forming and grading to verges; (c) crossings over channels and verges; (d) a constructed bikeway; (e) a constructed verge or reconstruction of any damaged verge; (f) construction of the carriageway; (g) payment of costs for required alterations to public utility mains, services or installations; (h) construction of and required alterations to public utility mains, services or installations; (i) drainage works; (j) installation of electrical conduits.		Infrastructure Design Planning Scheme Policy.	
PO7 Development provides both cycle and walking routes which:	**AO7** Development provides cycle and walking routes which are located, designed and	✓	The frontage to the proposed development will maintain/provide a standard in accordance with the	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✖)	RESPONSE	COUNCIL USE ONLY
(a) are located, designed and constructed to their network classification (where applicable); (b) provide safe and attractive travel routes for pedestrians and cyclists for commuter and recreational purposes; (c) provide safe and comfortable access to properties for pedestrians and cyclists; (d) incorporate water sensitive urban design into stormwater drainage; (e) provide for utilities; (f) provide for a high level of aesthetics and amenity, improved liveability and future growth; (g) are a low-maintenance asset with a minimal whole-of-life cost; (h) minimise the clearing of significant native vegetation. Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.	constructed in compliance with the road corridor design and off-road pathway design standards in the Infrastructure design planning scheme policy.		Infrastructure Design Planning Scheme Policy.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO8 Development provides refuse and recycling collection, separation and storage facilities that are located and managed so that adverse impacts on building occupants, neighbouring properties and the public realm are minimised.	**AO8.1** Development provides refuse and recycling collection and storage facilities in accordance with the Refuse planning scheme policy.	✓	Refuse and recycling collection and storage to be compliant with Brisbane City Council requirements.	
	AO8.2 Development ensures that refuse and recycling collection and storage location and design do not have any adverse impact including odour, noise or visual impacts on the amenity of land uses within or adjoining the development. Note—Refer to the Refuse planning scheme policy for further guidance.	✓	Refuse and recycling collection and storage to be compliant with Brisbane City Council requirements.	
PO9 Development ensures that: (a) land used for an urban purpose is serviced adequately with regard to water supply and waste disposal; (b) the water supply meets the stated standard of service for the intended use and fire-fighting purposes.	**AO9.1** Development ensures that the reticulated water and sewerage distribution system for all services is in place before the first use is commenced.	✓	Sewer reticulation and water property service are provided and will be undertaken in accordance with Urban Utilities and SEQ Code requirements.	
	AO9.2 Development provides the lot with reticulated water supply and sewerage to a standard acceptable to the distributor–retailer.	✓	An application to UU for water approval will be made to determine relevant conditions for the servicing of the site. All works will be undertaken in accordance	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
			with UU and SEQ Code requirements.	
PO10 Development provides public utilities and street lighting which are the best current or alternative technology and facilitate accessibility, easy maintenance, minimal whole-of-life costs, and minimal adverse environmental impacts.	**AO10.1** Development provides public utilities and street lighting which are located and aligned to: (a) avoid significant native vegetation and areas identified within the Biodiversity areas overlay map; (b) minimise earthworks; (c) avoid crossing waterways, waterway corridors and wetlands or if a crossing is unavoidable, tunnel-boring techniques are used to minimise disturbance, and a disturbed area is reinstated and restored on completion of the work. Note—Guidance on the restoration of habitat is included in the Biodiversity areas planning scheme policy.	✓	Public utilities and street lighting will be in accordance with Brisbane City Council requirements.	
	AO10.2 Development provides compatible public utility services and street-lighting services which are co-located in common trenching for underground services.	✓	Public utilities and street lighting will be in accordance with Brisbane City Council requirements.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	AO10.3 Development provides public utilities and street lighting which are designed and constructed in compliance with the public utilities standards in the Infrastructure design planning scheme policy.	✓	Public utilities and street lighting will be in accordance with Brisbane City Council requirements.	
PO11 Development ensures that land used for urban purposes is serviced adequately with telecommunications and energy supply.	**AO11** Development provides land with the following services to the standards of the approved supplier: (a) electricity; (b) telecommunications services; (c) gas service where practicable.	✓	The relevant services will be provided in accordance with Brisbane City Council requirements	
PO12 Development ensures that major public projects promote the provision of affordable, high-bandwidth telecommunications services throughout the city.	**AO12** Development provides conduits which are provided in all major Council and government works projects to enable the future provision of fibre optic cabling, if: (a) the additional expense is unlikely to be prohibitive; or	✓	The relevant services will be provided in accordance with Brisbane City Council requirements.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	(b) further major work is unlikely or disruption would be a major concern, such as where there is a limited capacity road; or (c) there is a clear gap in the telecommunications network; or (d) there is a clear gap in the bandwidth available to the area. Editor's note—An accurate, digital 'as built' three-dimensional location plan is to be supplied for all infrastructure provided in a road.			
PO13 Development provides public art identified in a neighbourhood plan or park concept plan which: (a) is provided commensurate with the status and scale of the proposed development; (b) is sited and designed: (i) as an integrated part of the project design; (ii) as conceptually relevant to the context of the location; (iii) to reflect and respond to the cultural values of the community;	**AO13** Development provides public art identified in a neighbourhood plan or park concept plan which is sited and designed in compliance with the public art standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No public art designs are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(iv) to promote local character in a planned and informed manner.				
PO14 Development provides signage of buildings and spaces which promote legibility to help users find their way.	**AO14** Development provides public signage: (a) at public transport interchanges and stops, key destinations, public spaces, pedestrian linkages and at entries to centre developments; (b) which details the location of the key destinations, public spaces and pedestrian linkages in the vicinity, the services available within the development and where they are located. Editor's note—Signage is to be in accordance with Local Law Number 1 (Control of Advertisements Local Law).	**N/A**	Not Applicable. No public signage designs are proposed.	
PO15 Development that provides community facilities which form part of the development is functional, safe, low maintenance, and fit for purpose.	**AO15** Development that provides community facilities which form part of the development is designed in compliance with the community facilities standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No community facilities are proposed.	
PO16	**AO16**	**N/A**	Not Applicable. No public toilets are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
Development provides public toilets which: (a) are required as part of a community facility or park; (b) are located, designed and constructed to be: (i) safe; (ii) durable; (iii) resistant to vandalism; (iv) able to service expected demand; (v) fit for purpose.	Development that provides public toilets is designed and constructed in compliance with the public toilets standards in the Infrastructure design planning scheme policy.			
PO17 Development provides bridges, tunnels, elevated structures and water access structures that are designed and constructed using proven methods, materials and technology to provide for: (a) safe movement of intended users; (b) an attractive appearance appropriate to the general surroundings and any adjacent structures; (c) functionality and easy maintenance;	**AO17** Development that provides bridges, tunnels, elevated structures and water access structures is designed and constructed in compliance with the standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No bridges, tunnels, elevated structures or water access structures are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(d) minimal whole-of-life cost; (e) longevity; (f) current and future services. Note—All bridges and elevated and associated elements must be designed and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.				
PO18 Development provides culverts which are designed and constructed using proven methods, materials and technology to provide for: (a) safety; (b) an attractive appearance appropriate to the general surroundings; (c) functionality and easy maintenance; (d) minimal whole-of-life cost; (e) longevity; (f) future widening; (g) current and future services;	**AO18** Development that provides culverts is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No culverts are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(h) minimal adverse impacts, such as increase in water levels or flow velocities, and significant change of flood patterns. Note—All culverts and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.				
PO19 Development provides batters, retaining walls, and seawalls and river walls which are designed and constructed using proven methods, materials and technology to provide for: (a) safety; (b) an attractive appearance appropriate to the surrounding area; (c) easy maintenance; (d) minimal whole-of-life cost; (e) longevity; (f) minimal water seepage. Note—All retaining walls and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.	**AO19** Development that provides batters, retaining walls, seawalls and river walls is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	**N/A**	Not Applicable. No seawalls or river walls (and associate batters / retaining walls) are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
If for development with a gross floor area greater than 1,000m^2				
PO20 Development ensures that construction is managed so that use of public spaces and movement on pedestrian, cyclist and other traffic routes is not unreasonably disrupted and existing landscaping is adequately protected from short- and long-term impacts. Note—The preparation of a construction management plan can assist in demonstrating achievement of this performance outcome. Note—The Transport, access, parking and servicing planning scheme policy provides advice on the management of vehicle parking and deliveries during construction.	**AO20** Development ensures that during construction: (a) the ongoing use of adjoining and surrounding parks and public spaces, such as malls and outdoor dining, is not compromised; (b) adjoining and surrounding landscaping is protected from damage; (c) safe, legible, efficient and sufficient pedestrian, cyclist and vehicular accessibility and connectivity to the wider network are maintained.	**N/A**	Not Applicable.	
PO21 Development ensures that construction and demolition activities are guided by measures that prevent or minimise adverse impacts including sleep disturbance at a sensitive use, due to noise and dust, including dust from construction vehicles entering and leaving the site. Note—A noise and dust impact management plan prepared in accordance with the Management plans	**AO21.1** Development ensures that demolition and construction: (a) only occur between 6:30am and 6:30pm Monday to Saturday, excluding public holidays; (b) do not occur over periods greater than 6 months.	**N/A**	Not Applicable.	
	AO21.2	**N/A**	Not Applicable.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
planning scheme policy can assist in demonstrating achievement of this performance outcome.	Development including construction and demolition does not release dust emissions beyond the boundary of the site.			
	AO21.3 Development construction and demolition does not involve asbestos-containing materials.	**N/A**	Not Applicable.	
PO22 Development ensures that: (a) construction and demolition do not result in damage to surrounding property as a result of vibration; (b) vibration levels achieve the vibration criteria in Table 9.4.4.3.B, Table 9.4.4.3.C, Table 9.4.4.3.D and Table 9.4.4.3.E. Note—A vibration impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	**AO22** Development ensures that the nature and scale of construction and demolition do not generate noticeable levels of vibration.	**N/A**	Not Applicable.	
If for a material change of use or reconfiguring a lot in an urban area (as defined in the Regulation) involving premises that is, or will be, accessed by common private title, where involving buildings, either attached or detached, that are not covered by other legislation mandating fire hydrants.				

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO23 Development ensures that fire hydrants are: (a) installed and located to enable fire services to access water safely, effectively and efficiently; (b) suitably identified so that fire services can locate them at all hours.	**AO23.1** Above or below ground fire hydrants are provided on residential, commercial and industrial streets and private roads, at not more than 90m intervals, and at each street intersection. Note—On residential streets, above ground fire hydrants may be single outlet. On commercial and industrial streets above ground fire hydrants should have dual valved outlets	✓	Water reticulation and fire hydrant provisions shall be verified/provided in accordance with Queensland Urban Utilities and SEQ Code requirements. Final Details shall be confirmed with the projects Hydraulic Consultant as part of Water Approval process. All associated works to be at developer's expense.	
	AO23.2 Fire hydrants are identified by: (a) raised reflectorised pavement markers (RRPM) on sealed roads; (b) marker posts at the fence line where on an unsealed road, as road (HR) or path (HP) hydrants.	✓	Water reticulation and fire hydrant provisions shall be verified/provided in accordance with Queensland Urban Utilities and SEQ Code requirements. Final Details shall be confirmed with the projects Hydraulic Consultant as	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
			part of Water Approval process. All associated works to be at developer's expense.	
PO24 Development ensures road widths and construction within the development, are adequate for refuse vehicles and for fire emergency vehicles to gain access to a safe working area close to buildings and near water supplies whether or not on-street parking spaces are occupied.	**AO24** Internal private roads have a minimum roadway clearance between obstructions of 3.5m wide and 4.8m high in addition to any width required for on-street parking.	✓	Internal private roads provided to a standard in accordance with the Infrastructure Design Planning Scheme Policy and AS 2890 (Off-Street Car Parking Code).	
Development for major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System where not in the Utility services zone precinct of the Special purpose zone				
PO25 Development avoids or otherwise minimises adverse impacts on surrounding land uses through the use of buffers and setbacks and the appropriate design and location of plant and operational areas within the site.	**AO25** No acceptable outcome is prescribed.	**N/A**	Not Applicable. Major electricity infrastructure and bulk water supply infrastructure not proposed.	
Development potentially impacting on major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System where the infrastructure is not in the Utility services zone precinct of the Special purpose zone				

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO26 Development is sited and designed to: (a) avoid safety risks to people or property; (b) minimise noise and visual impacts to people and property; (c) ensure the physical integrity and operation, maintenance and expansion of the infrastructure is not compromised.	**AO26** No acceptable outcome is prescribed.	**N/A**	Not Applicable. Development NOT potentially impacting on major electricity infrastructure and bulk water supply infrastructure.	

APPENDIX F

FILLING AND EXCAVATION CODE

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO1 Development for filling or excavation minimises visual impacts from retaining walls and earthworks.	**AO1** Development ensures that the total height of any cut and fill, whether or not retained, does not exceed: (a) 2.5m in a zone in the Industry zones category; (b) 1m in all other zones, or if adjoining a sensitive zone.		Development for filling or excavation minimises visual impacts from retaining walls and earthworks. Fill-side retaining walls present to Bullock Head Creek bushland. Proposed retaining walls satisfy performance outcomes intents and purposes.	
PO2 Development of a retaining wall proposed as a result of filling or excavation: (a) is designed and constructed to be fit for purpose; (b) does not impact adversely on significant vegetation; (c) is capable of easy maintenance. Editor's note—A retaining wall also needs to comply with the Building Regulation and embankment gradients will need to comply with the Building Regulation. Note—Guidance on the protection of native vegetation is included in the Biodiversity areas planning scheme policy.	**AO2.1** Development of a retaining structure, including footings, surface drainage and subsoil drainage: (a) is wholly contained within the site; (b) if the total height to be retained is greater than 1m, then: (i) the retaining wall at the property boundary is no greater than 1m above the ground level; (ii) all further terracing from the 1m high boundary retaining wall is 1 vertical unit:1 horizontal unit; (iii) the distance between each successive retaining wall (back of lower wall to face of	✓	Sufficient setbacks are provided to facilitate retaining wall construction to be wholly contained within the site inclusive of footings, subsoil drainage, backfill etc. All earthworks are proposed to be undertaken in accordance with BCC Infrastructure design planning scheme policy. Fill-side retaining walls present to Bullock Head Creek bushland. Proposed retaining walls satisfy performance outcomes intents and purposes. The construction issue drawings will detail the Earthworks in accordance with	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	higher wall) is no less than 1m horizontally to incorporate planting areas.		BCC Infrastructure design planning scheme policy.	
	AO2.2 Development of a retaining wall over 1m in height protects significant vegetation on the site and on adjoining land and is designed and constructed in accordance with the structures standards in the Infrastructure design planning scheme policy and certified by a Registered Professional Engineer Queensland.	✓	Retaining walls over 1.0m in height will be designed to have no negative impact on existing or proposed vegetation. Retaining walls over 1.0m will be certified by an RPEQ.	
	AO2.3 Development provides a retaining wall finish that presents to adjoining land that is maintenance free if the setback is less than 750mm from the boundary.	✓	Retaining walls presenting to adjoining land will be of a high-quality appearance, compatible with the surrounding development and maintenance free.	
	AO2.4 Development for filling only uses clean fill that does not include any construction rubble or debris.	✓	Imported fill to be clean fill free of contaminants	
PO3 Development ensures that a rock anchor is designed and constructed to be fit for purpose.	**AO3** Development ensures that a rock anchor:	**N/A**	Note Applicable. No rock anchors are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	(a) is constructed in accordance with the standards in the Infrastructure design planning scheme policy; (b) where it extends beyond the property boundary, is supported by a letter of consent from the adjoining land and building owners.			
PO4 Development protects all services and public utilities.	**AO4** Development protects services and public utilities and ensures that any alteration or relocation of services or public utilities meets the standard design specifications of the responsible service authorities.	✓	All existing services are to be protected during construction. Any relocation or repair works required will be undertaken at the developer's expense to the applicable service authority requirements	
PO5 Development provides surface and sub-surface drainage to prevent water seepage, concentration of run-off or ponding of stormwater on adjacent land.	**AO5** Development ensures all flows and subsoil drainage are directed to a lawful point of discharge of a surface water diversion drain, including to the top or toe of a retaining wall in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	✓	All works are proposed to be undertaken in accordance with the Infrastructure Design Planning Scheme Policy. The Development is to provide surface and sub-surface drainage to ensure a non-actionable nuisance with respect to water seepage, concentration of run-off or ponding of stormwater on adjacent land.	
PO6 Development ensures that the design and construction of all open drainage works is	**AO6** No acceptable outcome is prescribed.	**N/A**	Not Applicable. No open drainage works or channels are proposed.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
undertaken in accordance with natural channel design principles, being the development of a stormwater conveyance system for major flows, by using a vegetated open channel or drain that approximates the features and functions of a natural waterway to enhance or improve riparian values of those stormwater conveyance systems. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines.				
PO7 Development for filling or excavation: (a) does not degrade water quality or adversely affect environmental values in receiving waters; (b) ensures site sediment and erosion control standards are best practice.	**AO7.1** Development for filling or excavation provides water quality treatment that complies with the stormwater drainage section of the Infrastructure design planning scheme policy.	✓	All earthworks are proposed to be undertaken in accordance with BCC Infrastructure design planning scheme policy. The Operation Works drawings will detail the Earthworks in accordance with BCC Infrastructure design planning scheme policy.	
	AO7.2 Development provides erosion and sediment control standards that are in accordance with the stormwater drainage section of	✓	All earthworks are proposed to be undertaken in accordance with BCC Infrastructure design planning scheme policy. The construction issue drawings will	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
	the Infrastructure design planning scheme policy.		detail the Erosion and Sediment Control plans in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	
PO8 Development for filling or excavation is conducted such that adverse impacts at a sensitive use due to noise and dust are prevented or minimised. Note—A noise and dust impact management plan prepared in accordance with the Management plans planning scheme policy can assist in demonstrating achievement of this performance outcome.	**AO8.1** Development ensures that no dust emissions extend beyond the boundary of the site, including dust from construction vehicles entering and leaving the site.	✓	Dust emissions are to be managed during construction and maintained with the site.	
	AO8.2 Development for filling or excavation activity only occurs between the hours of 6:30am and 6:30pm Monday to Saturday, excluding public holidays.	✓	Filling or excavations to be undertaken only during permitted hours.	
PO9 Development ensures that vibration generated by the filling or excavation operation does not exceed the vibration criteria in Table 9.4.3.3.D, Table 9.4.3.3.E, Table 9.4.3.3.F and Table 9.4.3.3.G. Note—A noise management report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	**AO9** Development involving filling or excavation does not cause a ground-borne vibration beyond the boundary of the site.	✓	Vibration generated by construction is to be managed on site and comply with the vibration criteria.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
PO10 Development ensures that heavy trucks hauling material to and from the site do not affect the amenity of established areas and limits environmental nuisance impact on adjacent land.	**AO10** Development ensures that heavy trucks hauling material to and from the site: (a) occur for a maximum of 3 weeks; (b) use a major road to access the site; (c) only use a minor road for the shortest-most-direct route that has the least amount of environmental nuisance if there is no major road alternative.	✓	Haulage to and from the site is to be limited to a 3-week period. Construction traffic is to enter and exit the site via the existing roadway access available at the sites frontage.	
PO11 Development for filling or excavation protects the environment and community health and wellbeing from exposure to contaminated land and contaminated material.	**AO11** Development does not involve: (a) excavation on land previously occupied by a notifiable activity or on land listed on the Environmental Management Register or the Contaminated Land Register; (b) filling with material containing a contaminant.	✓	The site is not on the Environmental Management Register or the Contaminated Land Register All filling material is to be free of contaminants	
PO12 Development provides for: (a) landscaping for water conservation purposes;	**AO12.1** Development provides landscaping which is designed using the standards in the Landscape design guidelines for water conservation planning scheme policy.	✓	Landscaping proposal is to be compliant with Brisbane City Council guidelines.	

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	ACCEPTABLE OUTCOME COMPLIANCE (✓/✗)	RESPONSE	COUNCIL USE ONLY
(b) water sensitive urban design measures which are employed within the landscape design to maximise stormwater use and to reduce any adverse impacts on the landscape; (c) stormwater harvesting to be maximised and any adverse impacts of stormwater minimised.	**AO12.2** Development ensures that the design and requirements for irrigation are in compliance with the standards in the Landscape design guidelines for water conservation planning scheme policy.	✓	Landscaping proposal is to be compliant with Brisbane City Council guidelines.	
	AO12.3 Development provides areas of pavement, turf and mulched garden beds which are drained. Note—This may be achieved through the provision and/or treatment of swales, spoon drains, field gullies, sub-surface drainage and stormwater connections.	✓	Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	
PO13 Development ensures cutting and filling for the development of canals or artificial waterways avoids adverse impacts on coastal resources and processes.	**AO13** Development does not involve the creation of canals or artificial waterways.	✓	Development does not involve the creation of canals or artificial waterways.	

APPENDIX G

FLOOD WISE PROPERTY REPORT

FloodWise Property Report

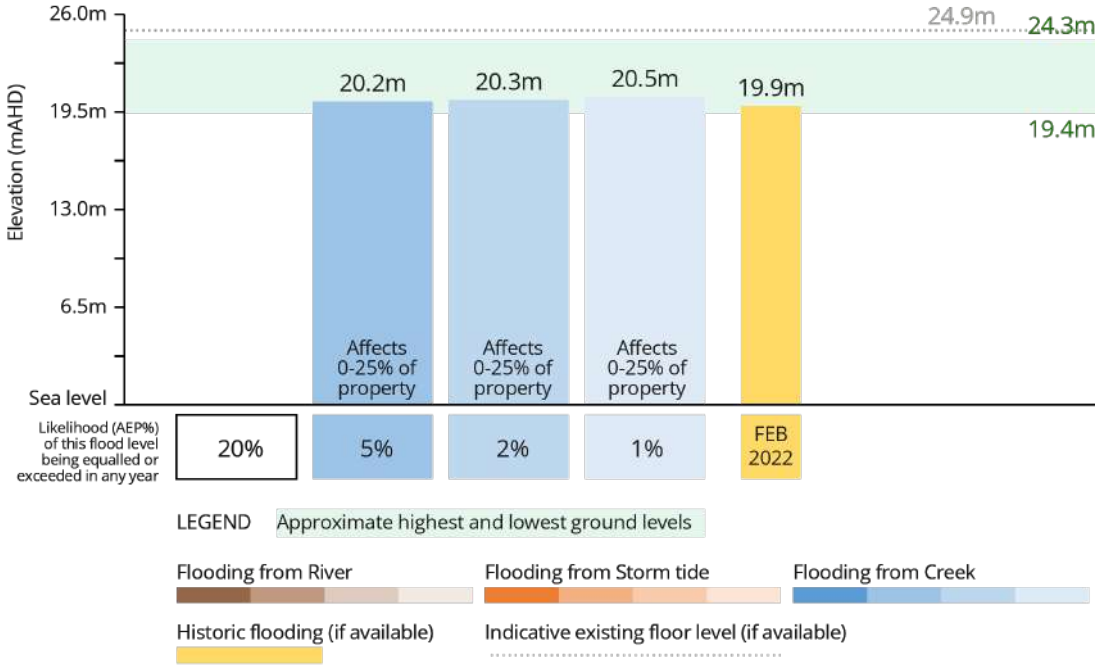
93 BUKULLA ST, WACOL 4076
Lot 13 on SP132727

Dedicated to a better Brisbane

THE PURPOSE OF THIS REPORT IS FOR BUILDING AND DEVELOPMENT

Brisbane City Council's FloodWise Property Report **provides technical flood planning information** including estimated flood levels, habitable floor level requirements and more. **This report uses the adopted flood planning information in Brisbane City Plan 2014**, that guides how land in Brisbane is used and developed for the future. Find out more about planning and building. To understand how to be **resilient and prepare for floods**, visit Council's Be Prepared webpage. Find more information about how to read a FloodWise Property Report.

Graph showing only the highest source/type of flooding for 1%, 2%, 5% and 20% likelihoods. Also shows historic flood levels. Other flood types and levels may be present and will be listed in the Flood Planning Information table below. This graph does not include overland flow flooding. If applicable, overland flow information is shown in the Planning and Development Information section below.
NOTE: See Useful Definitions section to explain terminology.



Combined 1% AEP for river, creek and storm tide flood extent (if applicable) from the adopted Brisbane City Plan 2014.
Read more about Brisbane City Plan 2014.

Are you resilient and ready for flood?

- Sign up to the Brisbane Severe Weather Alert at **brisbane.qld.gov.au/beprepared**
- Visit bom.gov.au for the latest weather updates.
- Have an evacuation plan, emergency kit and important phone numbers ready.
- Observe where water flows from and to during heavy rain.
- Consider how flood-resilient building techniques will have you home faster and with less damage.

Life threatening emergencies
000 Police/fire/ambulance
(mobiles **000** and **112**)

State Emergency Service (SES) **132 500**
Energex **13 19 62**
Brisbane City Council **3403 8888**

Technical Summary

This section of the FloodWise Property Report contains more detailed flood information for this property so **surveyors, builders, certifiers, architects, and engineers can plan and build** in accordance with Council's planning scheme.

Find more information about planning and building in Brisbane or talk to a Development Services Planning Information Officer via Council's Contact Centre on (07) 3403 8888.

Property Information Summary

The following table provides a summary of flood information for this property. More detailed flood level information is provided in the following sections of this report.

Property Summary	Level (mAHD) / Comment	Data Quality Code
Minimum ground level	19.4	C
Maximum ground level	24.3	C
Indicative existing floor level	24.9	C
Source of highest flooding	Creek/Waterway	

Flood Planning Information

The table below displays the peak estimated flood levels by probability for this property. Estimated flood level data should be used in conjunction with applicable planning scheme requirements - Refer to Flood Planning and Development Information section below for further information.

Note this table does not include overland flow. If overland flow is applicable to this property, refer to the Flood Planning and Development section below for further information.

Likelihood / Description	Level (mAHD)	Source
20%	N/A	
5%	20.2	Creek/Waterway (Wolston Creek)
2%	20.3	Creek/Waterway (Wolston Creek)
1%	20.5	Creek/Waterway (Wolston Creek)
0.2%	19.9	River (Brisbane River)
0.2%	20.6	Creek/Waterway (Wolston Creek)
February 2022	19.9	River (Brisbane River and Creeks/Waterways)
Minimum Habitable Floor Level (dwelling house)	N/A*	

* Council may not have this data available. Customers are recommended to engage a Registered Professional Engineer of QLD (RPEQ) for further advice. For information on seeking Planning Advice, please visit www.brisbane.qld.gov.au/planning-and-building.

Flood Planning and Development Information

This section of the FloodWise Property Report contains information about Council's planning scheme overlays. Overlays identify areas within the planning scheme that reflect distinct themes that may include constrained land and/or areas sensitive to the effects of development.

Flood overlay code

The Flood overlay code of Council's planning scheme uses the following information to provide guidelines when developing properties. The table below summarises the flood planning areas (FPAs) that apply to this property. Development guidelines for the FPAs are explained in **Council's planning scheme**.

Flood planning areas (FPA)		
River	**Creek / waterway**	**Overland flow**
FPA5	FPA4	Not Applicable
	FPA5	

To find more information about Council's flood planning areas (FPAs) for Brisbane River and Creek/waterway flooding to guide future building and development in flood prone areas, please review **Council's Flood Planning Provisions**.

Coastal hazard overlay code

The Coastal hazard overlay code of Council's planning scheme uses the following information to provide guidelines when conducting new developments. The table below summarises the coastal hazard categories that apply to this property. Development guidelines for the following Coastal hazard overlay sub-categories are explained in Council's **planning scheme**.

Coastal hazard overlay sub-categories
There are currently no Coastal hazard overlay sub-categories that apply to this property.

Note: Where land is identified within one for more flood planning areas on the Flood overlay or is identified within one of the Storm tide inundation area sub-categories on the Coastal hazard overlay, the assessment criteria that provides the highest level of protection from any source of flooding applies.

Property development flags
Waterway corridor - This property may also be located within a mapped waterway corridor as identified in the Waterway corridors overlay map of Council's planning scheme. Please consider this in conjunction with Council's planning scheme requirements.
Large allotment - This property is either a Large Allotment of over 1000 square metres or is located within a Large Allotment. Flood levels may vary significantly across allotments of this size. Further investigations may be warranted in determining the variation in flood levels and the minimum habitable floor level across the site. For more information or advice, please consult a Registered Professional Engineer of Queensland (RPEQ).

Useful Flood Information Definitions

Australian Height Datum (AHD) - The reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level.

Annual Exceedance Probability (AEP) - The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.

- **0.2% AEP** - A flood event of this size is considered rare but may still occur. A flood of size or larger has a 1 in 500 chance or a 0.2% probability of occurring in any year.
- **1% AEP** - A flood of this size or larger has a 1 in 100 chance or a 1% probability of occurring in any year.
- **2% AEP** - A flood of this size or larger has a 1 in 50 chance or a 2% probability of occurring in any year.
- **5% AEP** - A flood of this size or larger has a 1 in 20 chance or a 5% probability of occurring in any year.
- **20% AEP** - A flood of this size or larger has a 1 in 5 chance or a 20% probability of occurring in any year.

Data quality

- **Data Quality Code A** - Level data based on recent surveyor report or approved as-constructed drawings.
- **Data Quality Code B** - Level data based on ground-based mobile survey or similar.
- **Data Quality Code C** - Level data derived from Airborne Laser Scanning or LiDAR information.

Defined Flood Level (DFL) - The DFL is used for commercial and industrial development. The Defined flood level (DFL) for Brisbane River flooding is a level of 3.7m AHD at the Brisbane City Gauge based on a flow of 6,800 m/s. DFL is only applicable for non-residential uses affected by Brisbane River flooding.

Flood planning area (FPA) - Council has developed five Flood planning areas (FPAs) as part of Brisbane City Plan 2014 Flood overlay mapping for Brisbane River, Creek/waterway flooding and Overland flow to guide future building and development in flood prone areas. Storm tide flooding is mapped separately. The FPAs are designed to recognise the flood hazard for different flooding types. Flood hazard is a combination of frequency of flooding, the flood depth, and the speed at which the water is travelling. **Find more information here**.

Maximum and minimum ground level - Highest and lowest ground levels on the property based on available ground level information. A Registered Surveyor can confirm exact ground levels.

Minimum habitable floor level (dwelling house) - The minimum level in metres AHD at which habitable areas of development (generally induding bedrooms, living rooms, kitchen, study, family, and rumpus rooms) must be constructed as required by the Brisbane City Plan 2014.

Indicative existing floor level - The approximate level in metres AHD of the lowest habitable floor in the existing building (exduding apartments). The data is sourced from a range of sources with varying accuracy levels.

Property - A property will contain 1 or more lots. The multiple lot warning is shown if you have selected a property that contains multiple lots.

Residential flood level (RFL) - This flood level for the Brisbane River equates to the 1% annual exceedance probability (AEP) flood level.

To learn more, visit **Brisbane City Council's Flood Information Hub**

Brisbane City Council's Online Flood Tools

Council provides several online flood tools:

- to guide planning and development
- to help residents and businesses understand their flood risk and prepare for flooding.

Council's online flood tools for planning and development purposes indude:

- **FloodWise Property Report**
- **Flood Overlay Code**

For more information on Council's planning scheme and online flood tools for planning and development:

- phone (07) 3403 8888 and ask to talk to a Development Services Planning Information Officer

- visit brisbane.qld.gov.au/planning-building

Council's Planning Scheme - The Brisbane City Plan 2014 (planning scheme) has been prepared in accordance with the Sustainable Planning Act as a framework for managing development in a way that advances the purpose of the Act. In seeking to achieve this purpose, the planning scheme sets out the Council's intention for future development in the planning scheme area, over the next 20 years.

Disclaimer

1. Defined flood levels and residential flood levels, minimum habitable floor levels and indicative existing floor levels are determined from the best available information to Council at the date of issue. These levels, for a particular property, may change if more detailed information becomes available or changes are made in the method of calculating levels.
2. Council makes no warranty or representation regarding the accuracy or completeness of a FloodWise Property Report. Council disdaims any responsibility or liability in relation to the use or reliance by any person on a FloodWise Property Report.

Planning to build or renovate?

For information, guidelines, tools and resources to help you track, plan or apply for your development visit brisbane.qld.gov.au/planning-building

You can also find the Brisbane City Plan 2014 and Neighbourhood Plans as well as other information and training videos to help, with your building and development plans.

APPENDIX H

EROSION HAZARD ASSESSMENT

BRISBANE CITY COUNCIL ABN 72 002 765 795

Erosion Hazard Assessment - June 2014

Brisbane City Council (BCC), *Erosion Hazard Assessment* form must be read in conjunction with the *Erosion Hazard Assessment- Supporting Technical Notes* (June 2014 or later version) for explanatory terms and Certification information.

What is an Erosion Hazard Assessment?
Soil erosion and sediment from urban development, particularly during construction activities, is a significant source of sediment pollution in Brisbane's waterways. The Erosion Hazard Assessment determines whether the risk of soil erosion and sediment pollution to the environment is 'low' , 'medium' or 'high'.

When is the EHA required?
An *Erosion Hazard Assessment* form must be completed and lodged with BCC for any Development Application (ie MCU or ROL) that will result in soil disturbance OR Operational Works or Compliance Assessment Application for 'Filling' or Excavation.

Failure to submit this form during lodgement of an application may result in assessment delays or refusal of the application.

Privacy Statement
The personal information collected on this form will be used by Brisbane City Council for the purposes of fulfilling your request and undertaking associated Council functions and services. Your personal information will not be disclosed to any third party without your consent, unless this is required or permitted by law.

Assessment Details

1 Please turn over and complete the erosion hazard assessment.

2 Based on the erosion hazard assessment overleaf, is the site:

☐ ***A 'low' risk site***

Best practice erosion and sediment control (ESC) must be implemented but no erosion and sediment control plans need to be submitted with the development application. Factsheets outlining best practice ESC can be found at http://www.waterbydesign.com.au/factsheets

☑ ***A 'medium' risk site***

If the development is approved, the applicant will need to engage a Registered Professional Engineer (RPEQ) or Certified Professional in Erosion and Sediment Control (CPESC) to prepare an ESC Program and Plan and supporting documentation — in accordance with the requirements of the Infrastructure Design Planning Scheme Policy.

☐ ***A 'high' risk site***

If the development is approved, the applicant will need to engage a RPEQ and CPESC to prepare an ESC Program and Plan and supporting documentation — in accordance with the requirements of the Infrastructure Design Planning Scheme Policy. The plans and program will need to be certified by a CPESC.

3 Site Information and Certification

Application number (if known)

Site address

93 Bukulla Street,
Wacol
Postcode 4076

I certify that:

☑ I have made all relevant enquiries and am satisfied no matters of significance have been withheld from the assessment manager.

☑ I am a person with suitable qualifications and/or experience in erosion and sediment control.

☑ The Erosion Hazard Assessment was completed in accordance with the Erosion Hazard Assessment Supporting Technical Notes and the BCC Infrastructure Design Planning Scheme Policy.

☑ The Erosion Hazard Assessment accurately reflects the site's overall risk of soil erosion and sediment pollution to the environment.

☑ I acknowledge and accept that the BCC, as assessment manager, relies, in good faith, on this certification as part of its development assessment process and the provision of false or misleading information to the BCC constitutes an offence for which BCC may take punitive steps/ action against me/ enforcement action against me.

Certified by *Print name*

Mary Nguyen

Certifier's signature

M T N

Date

02 / 10 / 2025

Assessment Table

Table 1: Low Risk Test

		Yes	*No*
1.1	is the area of land disturbance > 1000 m^2	☑	☐
1.2	does any land disturbance occur in a BCC mapped waterway corridor	☐	☑
1.3	is there any slope on site (longer than three metres in length) before, during or after construction that is steeper than 5%	☑	☐
1.4	does any land disturbance occur below 5 m AHD	☐	☑
1.5	does development involve endorsement of a staging plan	☐	☑
1.6	is there an upstream catchment passing through the site > 1 hectare	☐	☑

	Yes	*No*	
Have you answered 'yes' to any of the questions in Table 1?	☑	☐	**If '*No*' then site is <u>low risk</u> with respect to erosion and sediment control**

If '*Yes*' then proceed to Table 2

Table 2: Medium Risk Test

		Yes	*No*	
2.1	is the area of land disturbance > 1 hectare	☐	☑	**If '*No*' then site is <u>medium risk</u> with respect to erosion and sediment control**

If '*Yes*' then proceed to Table 3

Table 3: High Risk Test

3.1	is there an upstream catchment passing through the site > 1 hectare	☐	☐
3.2	does any land disturbance occurs in a BCC mapped waterway corridor	☐	☐
3.3	is there any slope on site (longer than three metres in length) before, during or after construction that is steeper than 15%	☐	☐

	Yes	*No*	
Have you answered 'yes' to any of the questions in Table 3?	☐	☐	**If '*No*' then site is <u>medium risk</u> with respect to erosion and sediment control**

If '*Yes*' then site is <u>high risk</u> with respect to erosion and sediment control