# PROPOSED RESIDENTIAL DEVELOPMENT TYPE: DUAL OCCUPANCY

**DRAWINGS SERIES TO BE PRINTED IN** COLOUR

**DEVELOPMENT APPLICATION ISSUE NOT FOR CONSTRUCTION** 

SITE SUMMARY OF COUNCIL SPECIFICATION

2.1. NORTHERN BEACHES COUNCIL WATER MANAGEMENT FOR DEVELOPMENT

THE DEVELOPMENT PROPOSES TO DRAIN THE MAJORITY OF THE SITE, BY

SYSTEM HAS ALSO BEEN PROPOSED FOR EACH BASEMENT AREA

THE DEVELOPMENT PROPOSES TO KEEP DRAINAGE FROM EACH UNIT

THE DEVELOPMENT PROPOSES A DUAL OCCUPANCY WITH THE SITES

IMPERVIOUS AREA > 40% CONSEQUENTLY THE DEVELOPMENT PROPOSES OSD.

A DRAINS HYDRAULIC AND HYDROLOGICAL MODEL WAS CREATED AND IS

CONDITIONS FOR ALL STORM EVENTS UP TO AND INCLUDING THE 1% AEP.

DEVELOPMENT FLOW RATES ARE SHOWN ON PAGE S6, COUNCIL CHECKLIST

EXPECTED TO RESTRICT SITES FLOWS TO LESS THAN PRE-DEVELOPMENT

RAINWATER REUSE TO BE IN ACCORDANCE BASIX CERTIFICATE.

THIS DRAWING SERIES HAS BEEN PREPARED IN GENERAL ACCORDANCE WITH THE

ON PAGE S7 AND OSD DETAILS ON PAGE S4

GRAVITY, TO EDGECLIFF BOULEVARD VIA NEW KERB OUTLETS . A PUMP OUT

COUNCIL: NORTHERN BEACHES COUNCIL

2. RELEVANT DOCUMENTS:

2.2. AS/NZS 3500.3

SEPARATE.

ON-SITE DETENTION

• RAINWATER REUSE

ABOVE DOCUMENTS.

TITLE PAGE & NOTES

3. ENGINEERING COMMENTS:

POLICY (FEB 2021)

STORMWATER DISCHARGE

No. 94 EDGECLIFFE BOULEVARD, COLLAROY PLATEAU ADDRESS:

TITLE: LOT C/DP341590

DRAWING SERIES: STORMWATER MANAGEMENT PLAN

#### **GENERAL NOTES**

- GN1 ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION. GN2 THE CONTRACTOR SHALL LOCATE AND DETERMINE LEVELS OF ALL EXISTING SERVICES PRIOR TO COMMENCING EXCAVATION WORK. ALL SERVICES SHOWN ON THIS DRAWING ARE INDICATIVE AND FOR GUIDANCE ONLY
- GN3 THIS DRAWING SERIES IS TO BE READ IN CONCURRENCE WITH RELEVANT DRAWINGS SERIES FROM OTHER CONSULTANTS, COUNCIL OR RELEVANT SPECIFICATIONS. WHERE DISCREPANCIES ARE DETECTED THE DESIGN ENGINEER IS TO BE CONTACTED IMMEDIATELY FOR VALIDATION/ RECTIFICATION
- GN4 BUILDER AND CONTRACTORS IS TO ENSURE THAT ALL COUNCIL DEVELOPMENT CONSENT CONDITIONS, CONSTRUCTION CERTIFICATE AND BASIX REQUIREMENTS ARE MET
- GN5 A STRUCTURAL ENGINEER IS TO DESIGN AND DETAIL SUBSOIL DRAINAGE. UNLESS APPROVED BY OUR OFFICE, SUBSOIL DRAINAGE IS NOT TO CONNECT INTO THE STORMWATER SYSTEM DISPLAYED WITHIN THIS DRAWING SERIES.
- GN6 PLANS ISSUED FOR DEVELOPMENT APPLICATION, SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE.
- GN7 PLANS ISSUED FOR DEVELOPMENT APPLICATION PURPOSES, SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.

## **RAINWATER RE-USE NOTES**

- THE RAINWATER TANK IS TO BE INSTALLED AND EMPLOYED AS PER BASIX. SYDNEY WATER, COUNCIL AND NSW HEALTH REQUIREMENTS FOR NON DRINKING USE ONLY.
- RN2 ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS/NZS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- RN3 BUILDER AND PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK (HB 230- 2008).
- RN4 DO NOT DIRECT CONNECT TOWN WATER SUPPLY AND THE RAIN WATER SUPPLY.
- RN5 THE RAINWATER TANK AND EVERY RAINWATER SUPPLY OUTLET POINT ARE TO BE LABELLED (RAINWATER) ON A METAL SIGN IN ACCORDANCE WITH AS1319.
- RN6 SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEANING.
- RN7 ROOF RUN-OFF ONLY IS BE DIRECTED TO THE RAINWATER TANK. SURFACE WATER SYSTEMS/INLETS ARE NOT TO BE CONNECTED.
- RN8 ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE DEVICES TO PREVENT MOSQUITO AND VERMIN ENTRY TO THE SATISFACTION OF THE REGULATORY AUTHORITY.
- RN9 PROVIDE APPROPRIATE FLOAT VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP INDICATED ON THE TYPICAL DETAIL
- RN10 PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN

# BEFORE YOU DIG AUSTRALIA



THE MOST UP TO DATE BEFORE YOU DIG AUSTRALIA (BYDA) PLANS MUST BE KEPT ON-SITE AT ALL TIMES. ANY PERSON ABOUT TO DIG OR EXCAVATE MUST READ BYDA PLANS PRIOR TO THE COMMENCEMENT OF WORK.

# STORMWATER NOTES

- ALL STORMWATER DRAINAGE PIPES AND ASSOCIATED DEVICES, ARE TO BE INSTALLED IN ACCORDANCE WITH THE RELEVANT STANDARDS, THE BUILDING CODE OF AUSTRALIA, MANUFACTURER'S RECOMMENDATIONS, SYDNEY CATCHMENT AUTHORITY RECOMMENDED PRACTICE, AND LOCAL COUNCIL, AS APPLICABLE.
- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE AS/NZS3500 AND THE REQUIREMENTS OF THE LOCAL GOVERNMENT AREAS POLICIES, CODES AND SPECIFICATIONS. ENSURE INSPECTION OPENINGS ARE INSTALLED TO DRAINAGE LINES AT REQUIRED LOCATIONS.
- SN3 STORMWATER PIPES UP TO DN150 SHALL BE LAID AT A MINIMUM 1% GRADE UNLESS OTHERWISE NOTED.
- SN4 WHERE NECESSARY PUBLIC UTILITY SERVICES ARE TO BE ALTERED AND AMENDED AT THE CLIENT'S EXPENSE.
- SN5 ALL NEW WORK MAKE SMOOTH TRANSITIONS AND CONNECTIONS WITH EXISTING WORK.
- LOCAL GOVERNMENT AREAS TREE PRESERVATION AND MANAGEMENT ORDERS TO BE ABIDED BY. A PERMIT IS REQUIRED BEFORE TREE/S CAN BE REMOVED.
- ALL PITS TO BE STREAMLINED AND BENCHED IN ACCORDANCE WITH LOCAL **GOVERNMENTS AREAS SPECIFICATIONS.**
- STEP IRONS ARE TO BE PROVIDED FOR ALL PITS OVER 1.2m DEEP IN ACCORDANCE WITH AS/NZS3500 AND LOCAL GOVERNMENT AREAS CODES AND POLICES.
- DOWNPIPES, RAINWATER LINES AND STORMWATER LINES TO BE FULLY SEALED **UNLESS OTHERWISE NOTED**
- SN10 ALL GRATE AND INVERT LEVELS PROVIDED ON THIS DRAWING ARE EXTRACTED FROM SURVEY AND REDUCED TO AHD. FOLLOWING EARTHWORKS, PIT INSTALLATION AND BENCHING THE LEVELS ARE TO BE VERIFIED OR ADJUSTED TO MEET THE DESIGN INTENT. IF EVER IN DOUBT CONTACT DESIGN ENGINEER.
- SN11 ALL SUSPENDED DRAINAGE PIPES ARE TO STRAPPED IN ACCORDANCE WITH AS/NZ 2032.
- SN12 LOW POINTS OF CHARGED DRAINAGE SYSTEMS REQUIRE DEVICES FOR FLUSHING AND MAINTENANCE.
- SN13 THE NUMBER AND LOCATION OF DOWNPIPES, ON THIS DRAWING SERIES, ARE SHOWN INDICATIVELY AND ARE TO BE CONFIRMED ON-SITE BY BUILDER PRIOR TO CONSTRUCTION. ROOF DRAINAGE, BY OTHERS, AND TO BE INSTALLED IN ACCORDANCE WITH AS/NZs 3500 SERIES.
- SN14 NEW WORKS SHALL NOT CREATE ANY TRAPPED SURFACE AREAS. IN SUCH CASES WHERE TRAPPED AREAS EXIST, A DRAINAGE NETWORK WITH ADEQUATE CAPACITY SHALL BE REQUIRED TO DRAIN STORMWATER TO AN APPROVED DISCHARGE POINT. A PUMP-OUT SYSTEM MAY BE REQUIRED IF THE TRAPPED AREA IS BELOW THE NATURAL SURFACE LEVEL. IN EACH INSTANCE, THE DESIGN ENGINEER MUST BE CONTACTED FOR DESIGN DETAILS (AS REQUIRED) BEFORE CONSTRUCTION.
- SN15 WHEN SURFACES FALL TOWARDS A BUILDING, INCLUDING LAND OUTSIDE OF THE SITE, GROUND SURFACE LEVELS ADJACENT TO THE BUILDING ARE TO BE RE-GRADED SUCH THAT THE FIRST METER HAS A MINIMUM 50mm FALL AWAY FROM THE BUILDING AS PER THE NATIONAL CONSTRUCTION CODE.
- SN16 BALCONY DRAINAGE AND WATERPROOFING TO BE INSTALLED IN STRICT ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARD AND NATIONAL CONSTRUCTION CODE, DESIGN IS TO BE BY OTHERS.

#### DRAWING LEGEND

#### INDICATES ESTIMATED EXTENT OF EXISTING DWELLING INDICATES ESTIMATED EXTENT OF PROPOSED WORKS INDICATES ESTIMATED EXTENT OF PROPOSED DRIVEWAY INDICATES PROPOSED ON-SITE DETENTION TANK/S INDICATES PROPOSED RAINWATER TANK/S INDICATES PROPOSED ABSORPTION SYSTEM INDICATES GRATED BOX DRAIN WITH OUTLET INDICATES LINEAR GRATE TO ARCHITECTURAL DETAIL TOW/H?? PROPOSED TOP OF WALL/HOB, TO ARCHITECTURAL DETAIL INDICATES DRAINAGE PIT WITH GRATED OPENING INDICATES DRAINAGE PIT WITH SEALED COVER INDICATES STORMWATER PIPE INVERT LEVELS. UNLESS OTHERWISE LLXX NOTED PIT BASE IS TO EQUAL PIPE BASE INDICATES PIPE DIRECTION, DIAMETER, AND MIN FALL **→** DN100@1% **INDICATES EAVES GUTTER ORIFICE** INDICATES PROPOSED DOWNPIPE/RISER INDICATES EXISTING DOWNPIPE/RISER INDICATES PROPOSED PIPE DROPPER INDICATES INSPECTION OPENING WITH SCREW DOWN LID INDICATES GUTTER HIGH POINT INDICATES PROPOSED SCUPPER/SPITTER OVERFLOW/S INDICATES PROPOSED PLANTER DRAIN OUTLET/S, INDICATES PROPOSED BALCONY DRAIN OUTLET/S INDICATES PROPOSED ROOF DRAIN OUTLET/S INDICATES PROPOSED LINEAR DRAIN OUTLET/S ○ **←** BG1 INDICATES PROPOSED BOX GUTTER FLOW DIRECTION **←** EG1 INDICATES PROPOSED EAVE GUTTER FLOW DIRECTION INDICATES PROPOSED VALLEY GUTTER FLOW DIRECTION INDICATES BOX GUTTER SUMP/RAINWATER HEAD SUMP INDICATES PROPOSED DOWNPIPE SPREADER INDICATES ESTIMATED ROOF PITCH

INDICATES PROPOSED SURFACE FALL DIRECTION INDICATES PROPOSED REDUCED LEVEL/S OR PIPE INVERT LEVEL/S +RL?? +IL?? PROPOSED STEP HEIGHT PAGE S??> PIPE LINE CONTINUES TO REFERENCED PAGE

PENETRATION/FLOW DIRECTION DP-RW 🔫 - SERVICE TYPE: SW (STORMWATER), RW (RAINWATER) – SIZE 100

PENETRATION/FLOW DIRECTION INDICATES 100mm DIA. STORMWATER PIPE, U.N.O

e.SW — INDICATES EXISTING STORMWATER PIPE e.RW — INDICATES EXISTING RAINWATER PIPE s.SW — INDICATES 100mm DIA. SEWER GRADE CHARGED STORMWATER PIPE.

w.rm — INDICATES INDICATIVE LOCATION OF PROPOSED RISING MAIN

ESTIMATED LOCATION OF EXISTING SEWER MAINS ESTIMATED LOCATION OF EXISTING ELECTRICITY LINE ESTIMATED LOCATION OF EXISTING TELECOMMUNICATION

— W — W — ESTIMATED LOCATION OF EXISTING WATER MAINS ESTIMATED LOCATION OF EXISTING GAS MAINS **INDICATES SITE BOUNDARY** INDICATES EASEMENT WITHIN SITE, REFER TO DETAILED SURVEY

> INDICATES INDICATIVE ROOF OUTLINE INDICATES SIZE & DIRECTION OF RAINWATER PIPE GREATER THAN 100mm DIA. INDICATES SIZE & DIRECTION OF STORMWATER PIPE GREATER THAN

100mm DIA → DN150 INDICATES SIZE & DIRECTION OF EXISTING STORMWATER PIPE

GREATER THAN 100mm DIA.

**PROPOSED DUAL OCCUPANCY** No. 94 EDGECLIFFE BOULEVARD

COLLAROY PLATEAU

TITLE PAGE & NOTES

MANAGEMENT OF STORMWATER PLAN - BASEMENT

MANAGEMENT OF STORMWATER DETAILS PAGE 1

MANAGEMENT OF STORMWATER DETAILS PAGE 2

MANAGEMENT OF STORMWATER CALCULATIONS

MANAGEMENT OF STORMWATER CHECKLIST

MANAGEMENT OF STORMWATER PLAN - GROUND FLOOR

Project No.

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AMUNA

Revision Drawn Date

SSD 06.06.25 ISSUED FOR CLIENT REVIEW

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Description

Checked Approved

SSD

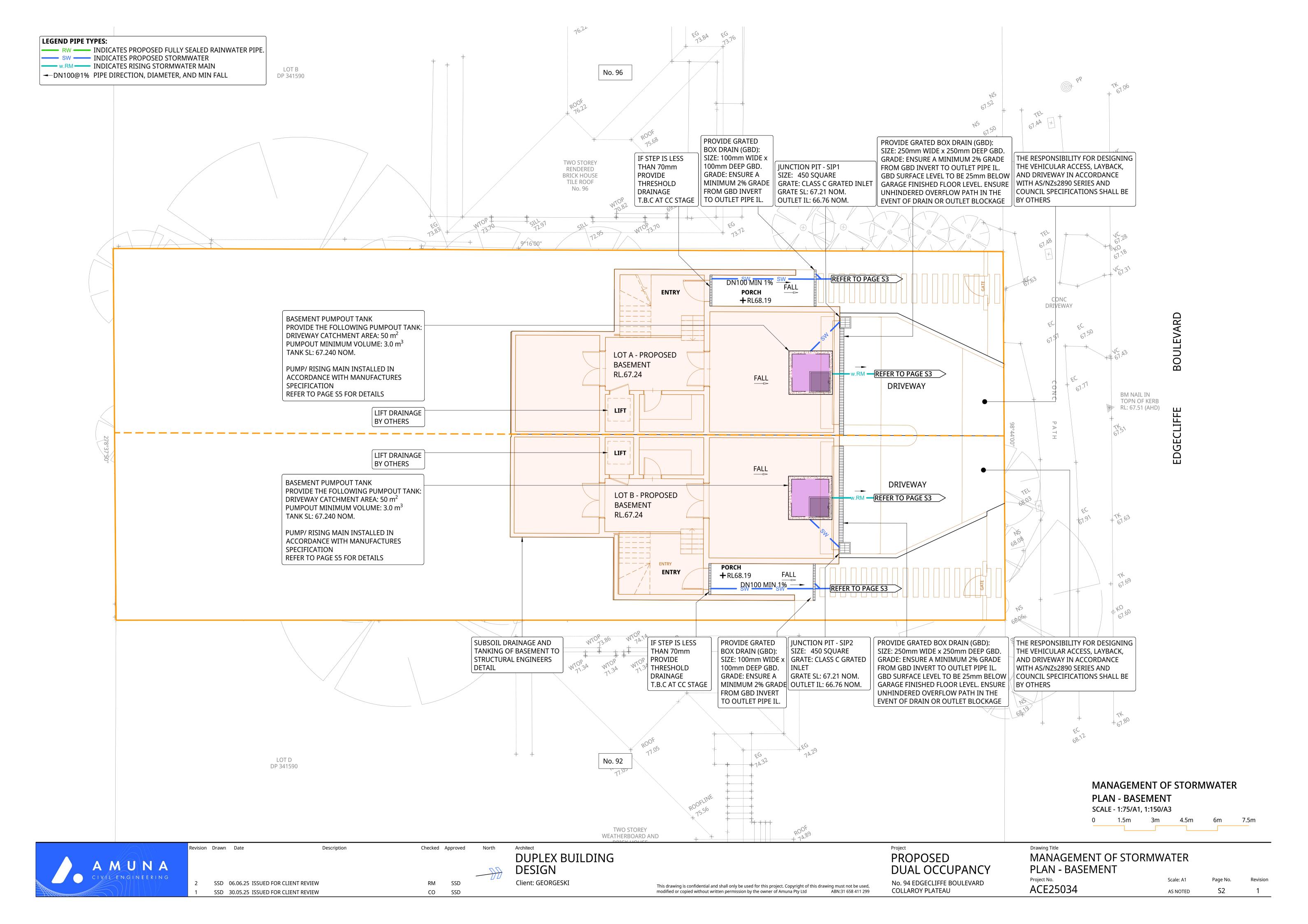
CO SSD

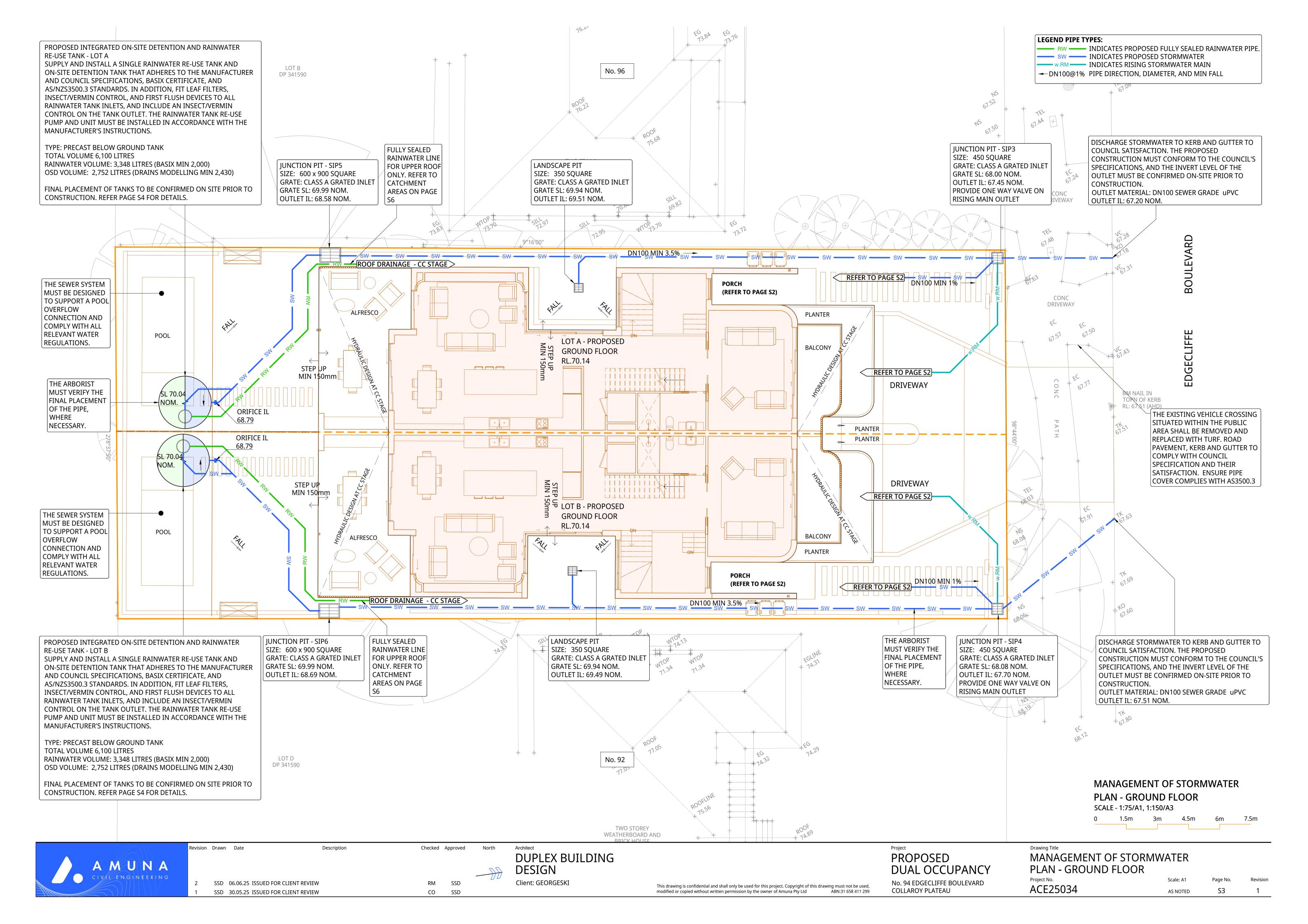
**DUPLEX BUILDING** DESIGN

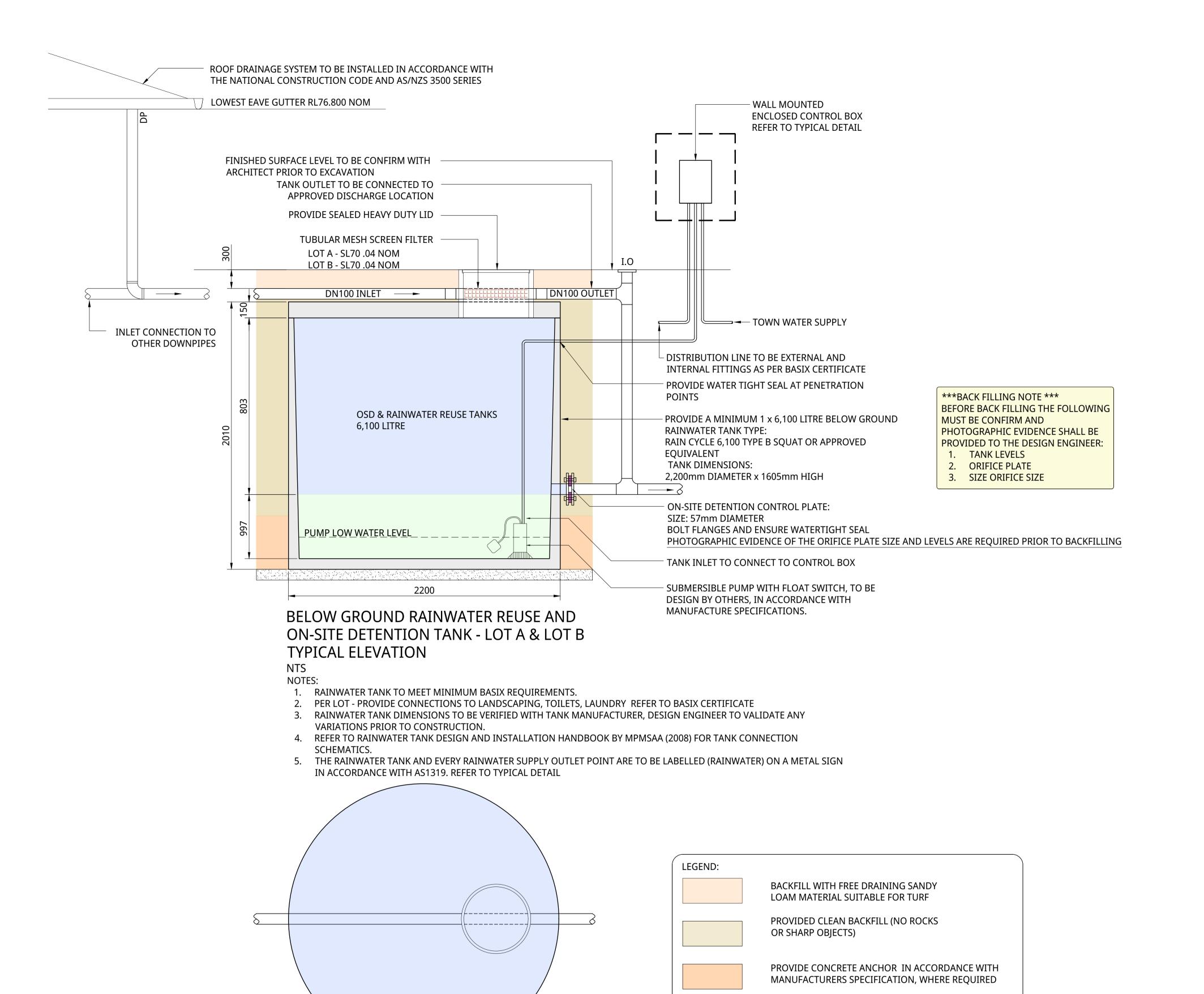
Client: GEORGESKI

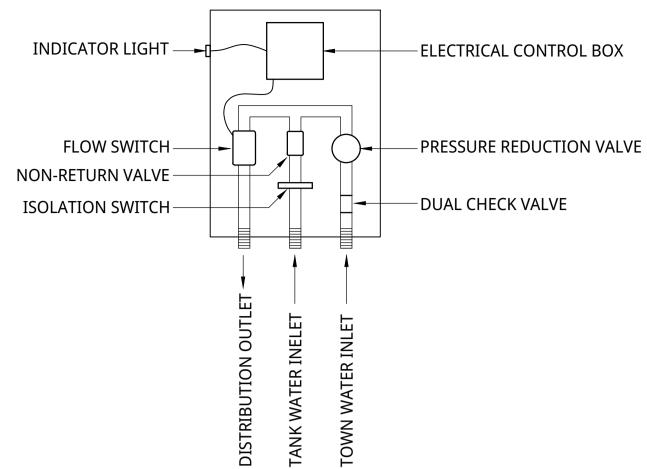
FALL

??mm









TYPICAL CONTROL BOX **DETAIL** 



TYPICAL WARNING SIGN **DETAIL** NTS

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Revision Drawn Date Description **DUPLEX BUILDING** DESIGN Client: GEORGESKI

RM

SSD

CO SSD

BELOW GROUND RAINWATER REUSE TANK AND

ON-SITE DETENTION TANK - LOT A & LOT B

TYPICAL PLAN

NTS

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PROPOSED **DUAL OCCUPANCY** No. 94 EDGECLIFFE BOULEVARD

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MANAGEMENT OF STORMWATER **DETAILS PAGE 1** Project No.

ACE25034 AS NOTED

PROVIDE A MINIMUM 100mm WELL COMPACTED BEDDING IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION. EACH SIDE OF THE TANK SHOULD HAVE EXCAVATION

CLEARANCE 300mm

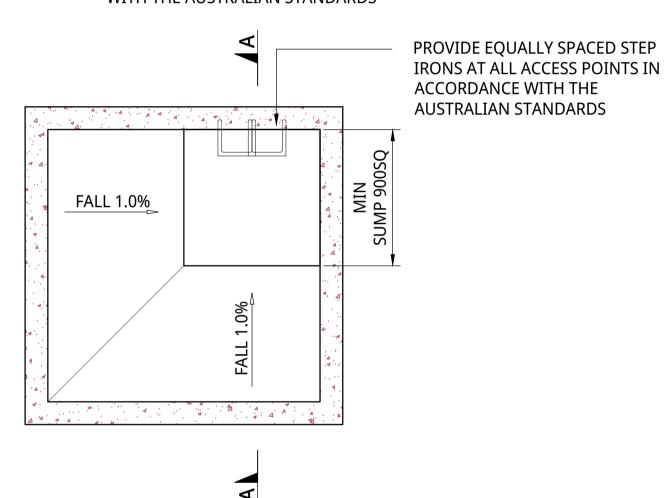
**BOLTED DOWN SEALED ACCESS LID** SIZE: 900x900 HEAVY DUTY 1800

# PUMP OUT TANK CEILING PLAN

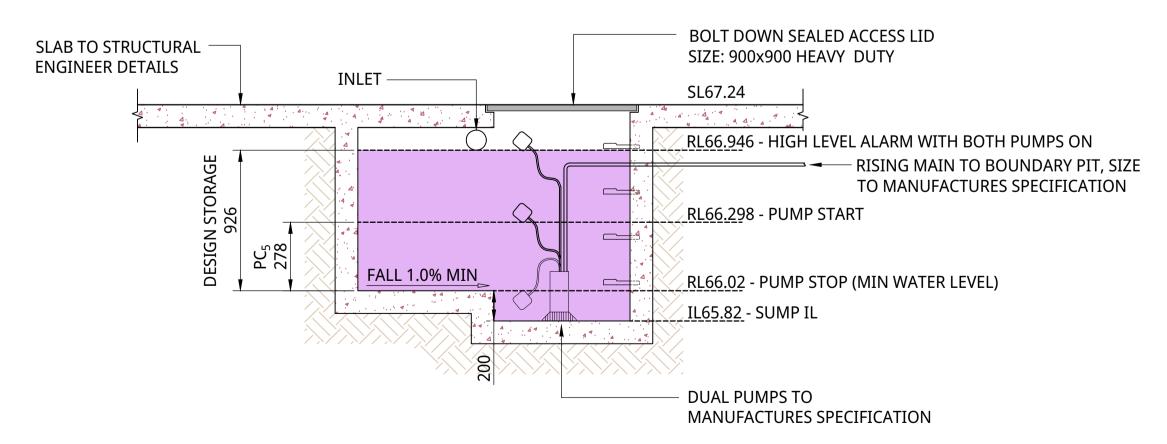
SCALE - NTS

#### NOTES:

- 1. CAST IN SITU PUMP OUT TANK TO STRUCTURAL ENGINEERS DETAIL
- 2. BASEMENT DRAINAGE SUBJECT TO GEOTECHINCAL ENGINEERS INVESTIGATION AND STRUCTURAL ENGINEERS DESIGN OF SLAB AND WALLS.
- 3. ALTERNATIVE PROPRIETY PRODUCT TO MANUFACTURES DESIGN PROVIDED IT COMPLIES WITH AS/NZs3500.3 SECTION 8 PUMPED SYSTEM REQUIREMENTS
- 4. PROVIDE EQUALLY SPACED STEP IRONS AT ALL ACCESS POINTS IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS



PUMP OUT TANK BASE PLAN SCALE - NTS



PUMP OUT TANK SECTION (A - A) SCALE - NTS

# STORMWATER BASEMENT PUMP OUT TANK CALCULATIONS

WET WELL STORAGE:

CATCHMENTS DRAINING TO PUMP OUT TANK (A)  $33m^2 \times 1.5$  (FACTOR OF SAFETY) =  $50m^2$ 

STORM EVENT 10% AEP 2 HOUR STORM PERIOD (T) 40 mm/hr RAINFALL INTENSITY (I) COEFFICIENT RUNOFF (C)

PEAK DISCHARGE Q =  $(C \times I \times A) / 3600$ 0.556L/S

ACCUMULATED VOLUME  $V = (Q \times T \times 3600) / 1000 + 4.00 \text{ m} (2 \text{HR}, 10\% \text{ AEP})$ 

2. PUMPED VOLUME:

ASSUMED PUMPED CAPACITY (PC) 3L/S  $5.40 {\rm m}^3$  $PC_{30} = (PC \times (30/60) \times 3600) / 1000$  $PC_5 = (PC \times (5/60) \times 3600) / 1000$  $0.90 {\rm m}^{3}$ 

3. MINIMUM WET WELL STORAGE:

 $V - PC_{30} = 4.00 - 5.40 = -1.40 \text{m}^3$  THEREFORE ADOPT 3m<sup>3</sup> AS PER AS/NZs3500.3 CLAUSE 8.3.6

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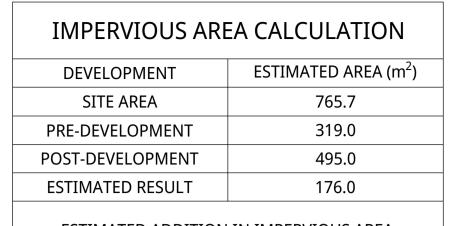
ABN:31 658 411 299

PROPOSED **DUAL OCCUPANCY** No. 94 EDGECLIFFE BOULEVARD

COLLAROY PLATEAU

MANAGEMENT OF STORMWATER DETAILS - PAGE 2

Project No. ACE25034 Scale: A1 S5 AS NOTED



ESTIMATED ADDITION IN IMPERVIOUS AREA

LOT 33 SEC A1 DP33000

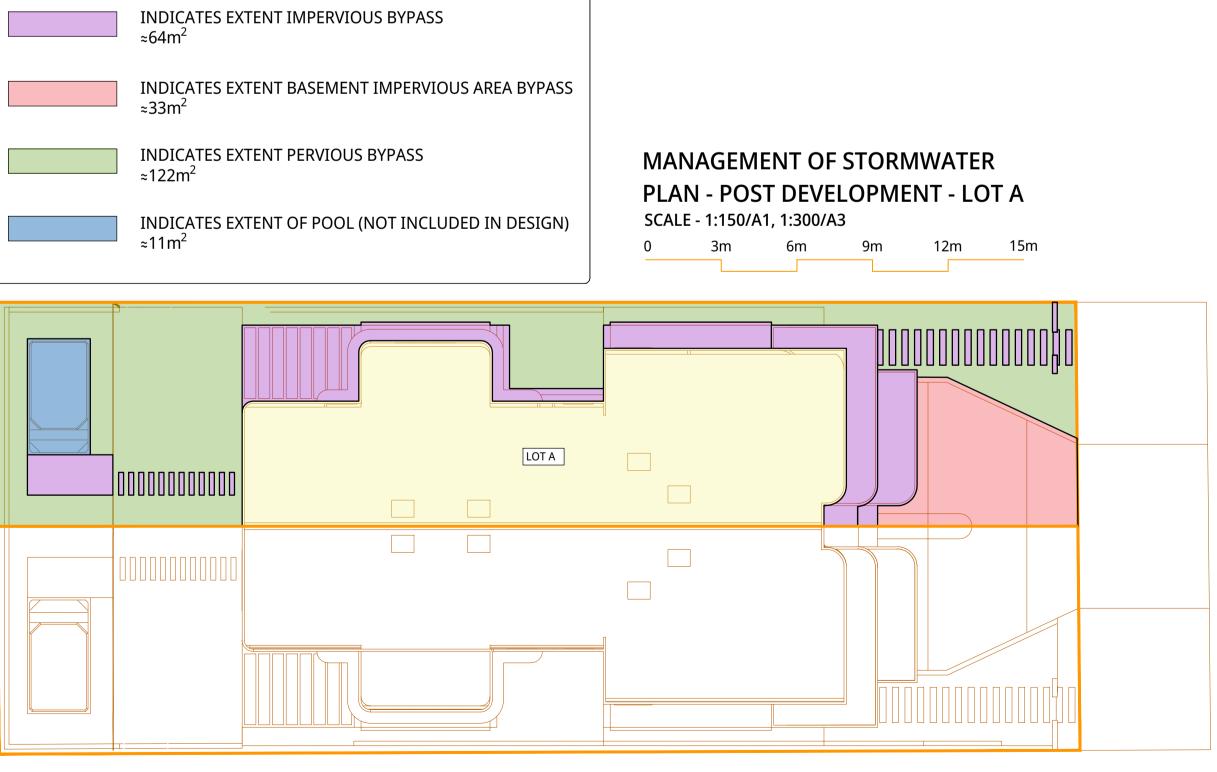
TABLE 1 - SITE DISCHARGE CALCULATIONS								
STORMEVENT	PRE-DEVELOPMENT (I/S)	STATE OF NATURE FLOW (I/S)	LOT A - OSD FLOW (I/s)	LOT A - BYPASS FLOW (I/S)	LOT B - OSD FLOW (l/s)	LOT B - BYPASS FLOW (I/S)	TOTAL DISCHARGE FLOW (I/S)	
ESTIMATED CATCHMENT AREA & IMPERVIOUS PERCENTAGE	766m <sup>2</sup> & 41.6%	766m <sup>2</sup> & 0.0%	151m <sup>2</sup> & 100%	219m <sup>2</sup> & 44.2%	151m <sup>2</sup> & 100%	222m² & 43%	-	
20% AEP	21.00	17.00	3.00	6.00	3.00	6.00	18	
5% AEP	34.00	31.00	4.00	10.00	4.00	10.00	28	
1% AEP	45.00	41.00	5.00	13.00	5.00	13.00	36	

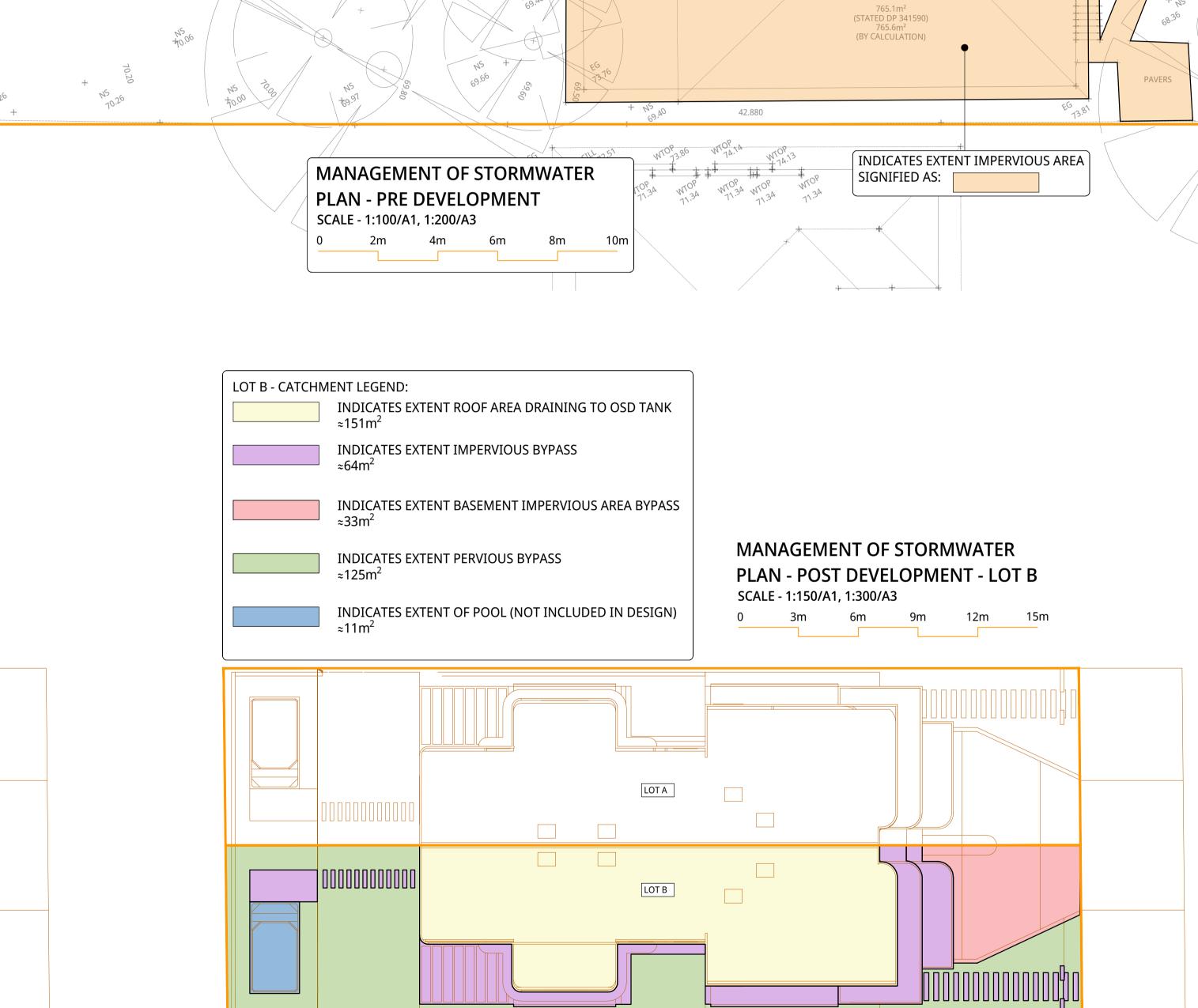
SITE DISCHARGE RESTRICTED TO PRE-DEVELOPED SITE FLOWS FOR THE 5, 20 AND 100 YEAR STORM EVENTS

INDICATES EXTENT ROOF AREA DRAINING TO OSD TANK

2. ROOF DRAINAGE TO OSD TANKS TO BE DESIGNED TO THE 100 YEAR STORM EVENT

LOT A - CATCHMENT LEGEND:







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PROPOSED **DUAL OCCUPANCY** No. 94 EDGECLIFFE BOULEVARD COLLAROY PLATEAU

MANAGEMENT OF STORMWATER CALCULATIONS

Project No.

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#### Appendix 16 – On-site Detention Checklist

This checklist is to be used to determine the on-site stormwater disposal requirement for developments and must be completed and included with the submission of any development application for these works. Please read this form carefully for its notes, guidelines, definition and relevant policies.

For assistance and support, please contact Council's Development Engineering and Certification team on 1300 434 434.

Part 1 Location of the Property REFER TO TITLE				
House Humber		Legal Property Description		
Street		Lot		
Suburb		Section		
Postcode		DP		

#### Part 2 Site Details

Northern Beaches Stormwater Regions (refer to Map 2 of Northern Beaches Council's Water Management for Development policy)	2	Total Site Area	766m <sup>2</sup>	
Pre-Development Impervious Area	319m <sup>2</sup>	Post-Development Impervious Area	495m <sup>2</sup>	
Is the site of the development located with referred to Council's Local Environmental	Yes □ No ■			
If yes, On-site stormwater Detention system (OSD) is not required and please proceed to part 5 of this checklist				

Part 3: Northern Beaches Stormwater Regions (refer to Map 2 of Northern Beaches Council's Water Management for Development policy)

If no, please proceed to part 3 of this checklist.

If the site of the development located within Region 1, please proceed to the part 4.1 of this checklist If the site of the development located within Region 2, please proceed to the part 4.2 of this checklist

If the site of the development ocated within Region 3, please proceed to the part 4.3 of this checklist

If the site of the development located within Region 4, please refer to Council's Warriewood Valley Water

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#### Part 4 Determination of OSD Requirements

#### Part 4.1 Northern Beaches Stormwater Region 1

Is the additional impervious area of the development more than 50 m<sup>2</sup> cumulative basis since February 1996? If yes, OSD is required and pleasurerer to section 9.3.1 of Council's Water Management for Development

not required and please proceed to the part 5 of this checklist

#### Part 4.2 Northern Beaches Stormwater Region 2

#### Part 4.2.1 Description of Work

Residential flat building, commercial, industrial, multiple occupancy development and subdivisions resulting in the creation of three lots or more, will require OSD in all case. Please provide a design in accordance with the section 9.3.2 of Council's Water Management for Development Policy.

Any single residential building development, please proceed to part 4.2.2 of this checklist. Part 4.2.2 Exemption Yes □ No ■ Is the site area less than 450m<sup>2</sup>? Does the site of the development drain directly to the ocean without the need Yes □ No ■ to pass through a drainage control structure such as pipe, bridge, culvert, kerb and gutter or natural drainage system? Is it an alternation and addition development to the existing dwellings? Yes □ No ■ If yes to any of the above questions, OSD is not required. If no to all the above questions, proceed to part 4.2.3

#### Part 4.2.3 Determination of OSD Requirements

a) Site area  $m^2 \times 0.40$  (40%) =  $\frac{306m^2}{495m^2}$   $m^2$  b) Post- development impervious area =  $\frac{495m^2}{m^2}$ 

OSD will not be required when (a) is greater than (b) Is OSD required for this development (tick one only) Yes ■ No □

If yes, provide a design in accordance with the section 9.3.2 of Council's Water Management for Development Policy. If no, OSD is not required and please proceed to part 5 of this checklist.

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## Part 4.3 Northern Beaches Stormwater Region 3

## Part 4.3.1 Stormwater Zone

Management Specification.

In the region, the method of stormwater control to be applied shall depend on the location of the site. Please refer to Map 3 of Northern Beaches Council's Water Management for Development policy.

If the site of the development located within stormwater zone 2, please provide a design accordance

If the site of the development located within stormwater zone 1, please proceed to the part 4.3 7 of this

If the site of the development located within stormwater zone 3, please provide a resign in accordance with the section 9.3.3.4 of Council's Water Management for Development Policy

with the section 9.3.3.3 of Council's Water Management for Development Policy.

If the site of the development located within stormwater zone 4, please provide a design in accordance with the section 9.3.3.5 of Council's Water Management for Development

## Part 4.3.2 Determination of OSD requirements in Stormwater Zone 1

## Part 4.3.2.1 For A New Building

1) Exemption a) Is the site area less than 400? Yes □ No □ b) Is the post-development impervious area less than 190 m<sup>2</sup>? If yes to both questions, OSD is not required. If no to any of the above questions, please process to calculation 2) Calculation  $m^2 \times 0.35 = ____m^2 + 50 = ___m^2$ a) Site area \_ b) Post- development impervious area \_\_\_\_\_m² OSD will not be required when (b) is less than 250 m² and (a) is greater than (b) Is OSD required or this development? If yes, provide a design in accordance with the section 9.3.3.2 of Council's Water Management for Development Policy. If no, O5D is not required and please proceed to part 5.

## Part 4.3.2.2 For Alterations and Additions

If the current impervious area of the site is more than 60% of the site area, OSD will be required.

9.3.3.2 of Council's Water Management for Development Policy

Alternatively, please proceed to the next calculation section.

Is the post development impervious area increased by less than 50 m $^2$ ? Yes  $\square$  No  $\square$ Is the post development impervious area less than 60% of the site area? Yes  $\square$  No  $\square$ If yes to both questions, OSD is not required. If no to any of the above questions, provide a design in accordance with section

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## Part 5 Disposal of Stormwater

Yes No 🗆 Does the site fall naturally towards the street?

If yes, provide a design in accordance with section 5.1 of Council's Water Management for Development If no, provide a design in accordance with section 5.5 of Council's Water Management for Development

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## **Definitions**

Designed to help you fill out this application

**Site area:** This refers to the area of the land bounded by its existing or proposed boundaries. Impervious area: This refers to driveways, parking spaces, pathways, paved areas, hardstand areas, roofed areas, garages and outbuildings. Pre Development Impervious area: This refers all impervious areas of the site before the development. Post Development Impervious areas: This refers all the impervious areas within the site after the development is completed.

Revision Drawn Date

Description

Checked Approved

DESIGN

**DUPLEX BUILDING** 

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COLLAROY PLATEAU

MANAGEMENT OF STORMWATER CHECKLIST Project No.

ACE25034