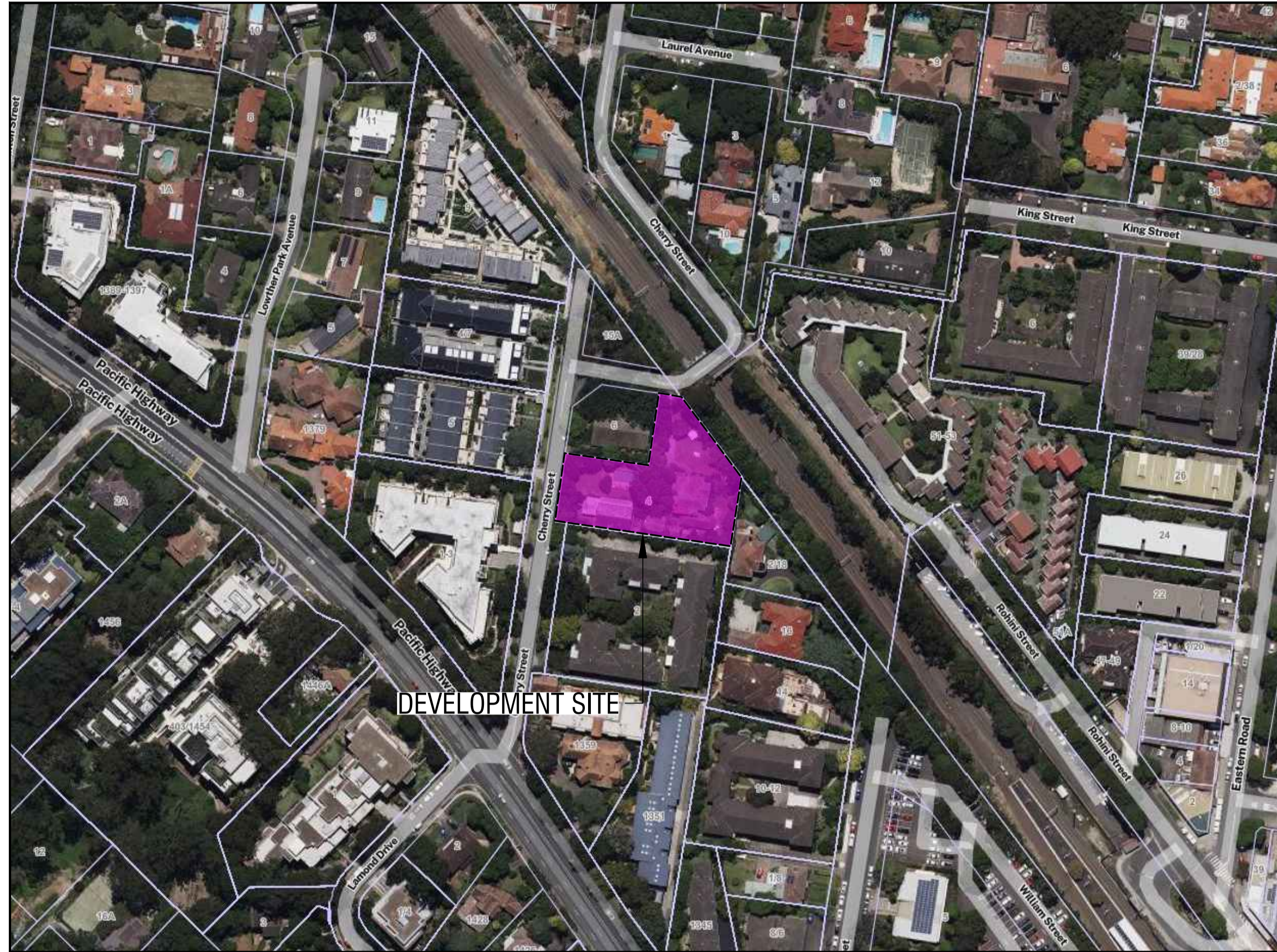


CONCEPT STORMWATER DRAWINGS FOR PROPOSED RESIDENTIAL FLAT BUILDING



DRAWING LIST	
DRAWING NUMBER	DRAWING NAME
D00	COVER SHEET, LEGEND & DRAWING SCHEDULE
D03	BASEMENT 3 STORMWATER DRAINAGE PLAN
D04	BASEMENT 2 STORMWATER DRAINAGE PLAN
D05	BASEMENT 1 STORMWATER DRAINAGE PLAN
D06	GROUND LEVEL STORMWATER DRAINAGE PLAN
D11	LEVEL 8 STORMWATER DRAINAGE PLAN
D12	ROOF STORMWATER DRAINAGE PLAN
D15	PRE AND POST DEVELOPMENT CATCHMENT PLAN
D16	CATCHMENT PLAN AND MUSIC RESULTS
D20	STORMWATER DRAINAGE SECTIONS AND DETAILS SHEET 1
D21	STORMWATER DRAINAGE SECTIONS AND DETAILS SHEET 2
D25	OSD AND RWT DESIGN CALCULATION AND DETAILS SHEET 1
D26	OSD AND RWT DESIGN CALCULATION AND DETAILS SHEET 2
D35	EROSION AND SEDIMENT CONTROL PLAN
D36	EROSION AND SEDIMENT CONTROL DETAILS

NOTES

- ALL LINES ARE TO BE MIN. 1000 UPVC @ MIN 1.0% GRADE UNLESS NOTED OTHERWISE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS. ALL DESIGN LEVELS SHOWN ON PLAN SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL PIPES TO HAVE MIN 200mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS BE HEAVY DUTY GRATES. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
- ALL WORK DO BE DONE IN ACCORDANCE WITH AS/NZ 3500.3 (CURRENT EDITION), COUNCIL SPECIFICATIONS, RELEVANT VOLUME OF NCC (NATIONAL CONSTRUCTION CODE)
- LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL STORMWATER LINES' JOINTS BE FULLY SEALED AND WATERTIGHT IN ACCORDANCE WITH AS3500.3:2021
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL AND ALL OTHER RELEVANT CONSULTANT'S PLANS.
- ALL RAINWATER TANKS TO BE FITTED WITH A FIRST FLUSH DEVICE TO PREVENT POTENTIAL CONTAMINANTS FROM ENTERING THE TANKS.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.
- ALL PITS OR GRATES IN TRAFFICABLE AREAS TO BE HEAVY DUTY.
- ALL LIFT PITS ARE TO BE FULLY TANKED UNLESS NOTED OTHERWISE.
- CHILD -PROOF LOCKING SYSTEM MUST BE EMPLOYED FOR ALL GRATES AND LIDS IN COMMON AREAS
- ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES
- PROVIDE EMERGENCY OVERFLOW TO ALL PLANTER BOX AND BALCONIES.
- ALL PITS WITH DEPTH MORE THAN 900mm MUST HAVE IRON STEPS AND TO BE BENCHED AND STREAMLINED
- PROVIDE STORMWATER GRATE 200Wx200D AT THE BASE OF ALL MECHANICAL SHAFTS AND UNCOVERED STAIRS OR OPENINGS.
- PRESSURIZED PIPES / RISING MAINS FROM PUMP OUT TANK TO BE CONNECTED DIRECTLY AND INDEPENDENTLY TO EITHER OSD TANK OR BOUNDARY PIT AS PER DESIGN PLANS.
- ENSURE ALL DRAINAGE WORKS ARE AWAY FROM TREE ROOTS
- SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED BY THE RELEVANT AUTHORITIES AND FIELD INVESTIGATION AND ARE NOT GUARANTEED COMPLETE NOR CORRECT. IT IS THE CLIENT AND CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PRIOR TO CONSTRUCTION.
- ALL VARIATIONS TO THE WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY SMART STRUCTURES AUSTRALIA PRIOR TO COMMENCEMENT OF WORKS.
- THE MINIMUM SIZES OF THE STORMWATER DRAINS SHALL NOT BE LESS THAN DN90 FOR CLASS 1 BUILDINGS AND DN100 FOR OTHER CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY
- ALL STORMWATER DRAINAGE PITS IN GARDEN OR TURFED AREAS TO BE FITTED WITH PERFORATED GALVANISED STEEL MESH UNDER THE LIDS TO PREVENT DEBRIS ENTERING STORMWATER NETWORK.
- PIPE INSTALLATION TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT AS3500.3 AND RELEVANT VOLUME OF NCC (NATIONAL CONSTRUCTION CODE). THIS IS CONTRACTOR'S RESPONSIBILITY TO CHECK IMPACT OF PIPE TRENCHING TO SURROUNDING STRUCTURAL AND NON STRUCTURAL ELEMENTS.

SYMBOLS

RL	PIT SURFACE LEVEL	PG	PLANTER GRATE
IL	INVERT LEVEL	DP	DOWN PIPE
TK	TOP OF KERB	CO	CLEAN OUT
B.O.W	BOTTOM OF WALL	IO	INSPECTION OPENING
T.O.W	TOP OF WALL	VD	VERTICAL DROP
sv	STORMWATER DRAINAGE PIPE	VR	VERTICAL RISER
svt	DOWNPIPE TO RAINWATER TANK	OF	OVERFLOW (DOME TYPE)
sv	OVERFLOW PIPE FROM RAINWATER TANK	CCJ	CONCRETE COVER JUNCTION PIT
0100	0100 SUBSOIL PIPE	GI	GRATED INLET PIT
0100	0100 SUBSOIL PIPE	GD	WIDE GRATED DRAIN
PW	FLOOR WASTE 150X150	OF	OVERLAND FLOW PATH
PW	FLOOR WASTE 1500	CS	CAST IN SLAB PIPE
RWO	RAINWATER OUTLET 3000		

AS 3500.3- TABLE 8.2
SIZE OF MINIMUM INTERNAL DIMENSIONS FOR
STORMWATER AND INLET PITS

DEPTH OF INVERT OF OUTLET	MINIMUM INTERNAL DIMENSIONS (mm)		
	RECTANGULAR WIDTH	RECTANGULAR LENGTH	CIRCULAR DIAMETER
≤450	350	350	
≤600	450	450	600
>600 ≤900	600	600	900
>900 ≤1200	600	900	1000
>1200	900	900	1000



IMPORTANT:
CONTRACTOR TO OBTAIN CURRENT SET OF
"DIAL BEFORE YOU DIG" PLANS ON SITE ALL
TIMES AND PRIOR TO CONSTRUCTION WORKS

DISCLAIMER:

THE DOCUMENTS PROVIDED HEREIN ARE INTENDED SOLELY FOR CIVIL AND STORMWATER DRAINAGE DESIGN PURPOSES. ANY REPRESENTATION OF ELEMENTS RELATED TO OTHER DISCIPLINES (E.G., ARCHITECTURAL, STRUCTURAL, HYDRAULIC, FAÇADE, AND OTHER SERVICES) IS BASED ON INFORMATION PROVIDED BY THE RESPECTIVE DESIGN TEAMS. THESE ELEMENTS ARE INCLUDED FOR COORDINATION PURPOSES ONLY AND DO NOT CONSTITUTE VERIFICATION OF THEIR DESIGN, COMPLIANCE, OR ADEQUACY, EXCEPT WHERE THEY INTERACT WITH THE CIVIL AND STORMWATER DRAINAGE ASPECTS. THIS INCLUDES, BUT IS NOT LIMITED TO, COMPONENTS SUCH AS FLOOR LEVELS, FALLS, SET-DOWNS, AND ANY OTHER NON-CIVIL OR NON-DRAINAGE-RELATED FEATURES.

CLIENT

ARCHITECT

GILES TRIBE

Address
**4-8 CHERRY STREET,
WARRAWEE NSW 2074**

Project Number
250235

Revision
A

Sheet Number
D00

CHERRY STREET

NORTH SHORE RAILWAY

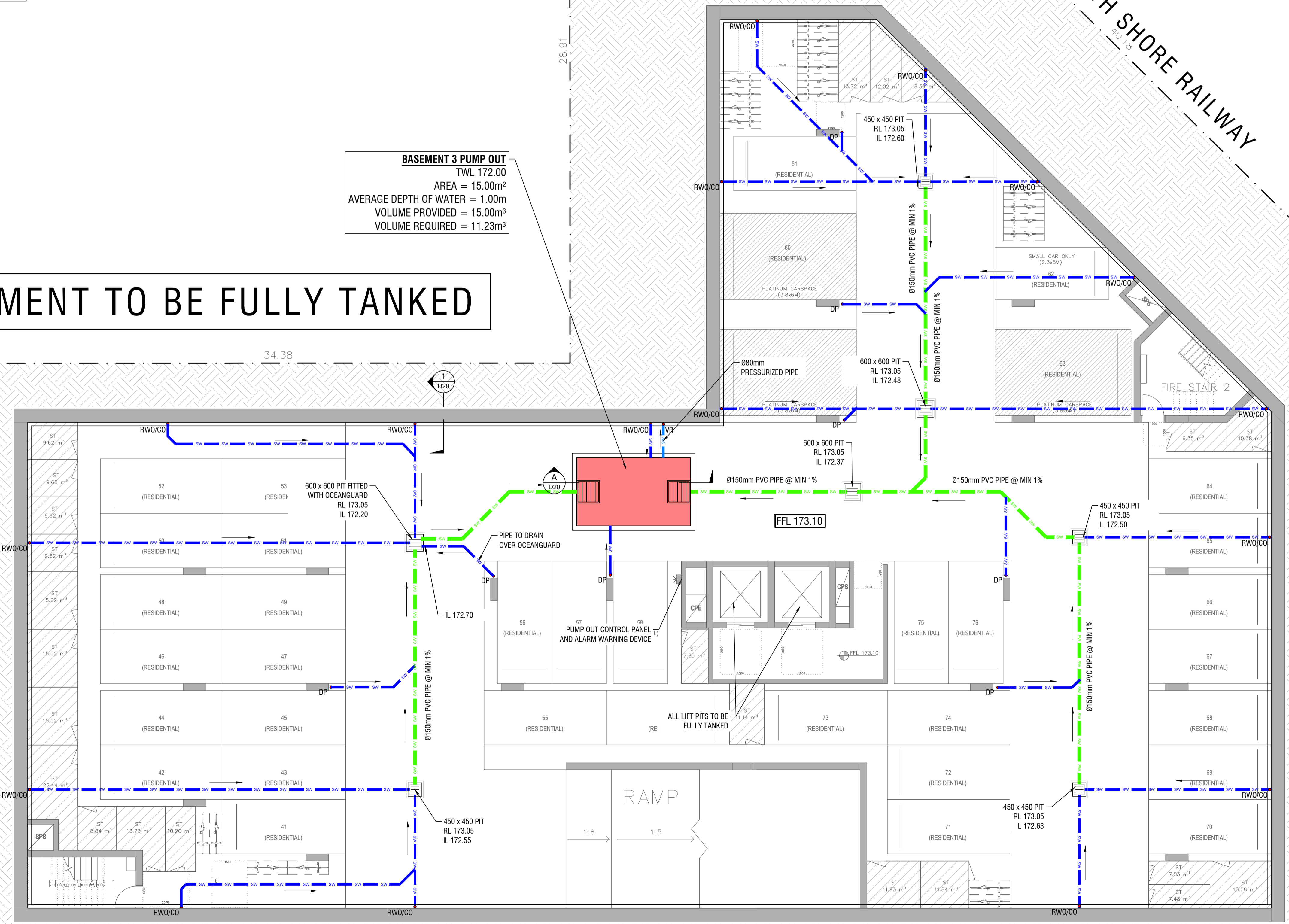
NOTE
ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O):

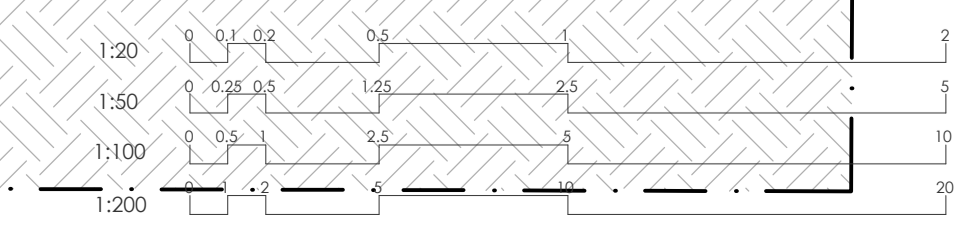
- Ø50mm STORMWATER PIPE (CAST IN SLAB)
- Ø100mm STORMWATER PIPE
- Ø150mm STORMWATER PIPE
- Ø225mm STORMWATER PIPE
- Ø300mm STORMWATER PIPE
- Ø100mm OVERFLOW PIPE LINE
- DENOTES Ø100mm PIPE/DP TRANSFER
- DENOTES Ø65mm PIPE OVERFLOW
- DENOTES DIRECTION OF FLOW

BASEMENT 3 PUMP OUT
TWL 172.00
AREA = 15.00m²
AVERAGE DEPTH OF WATER = 1.00m
VOLUME PROVIDED = 15.00m³
VOLUME REQUIRED = 11.23m³

BASEMENT TO BE FULLY TANKED



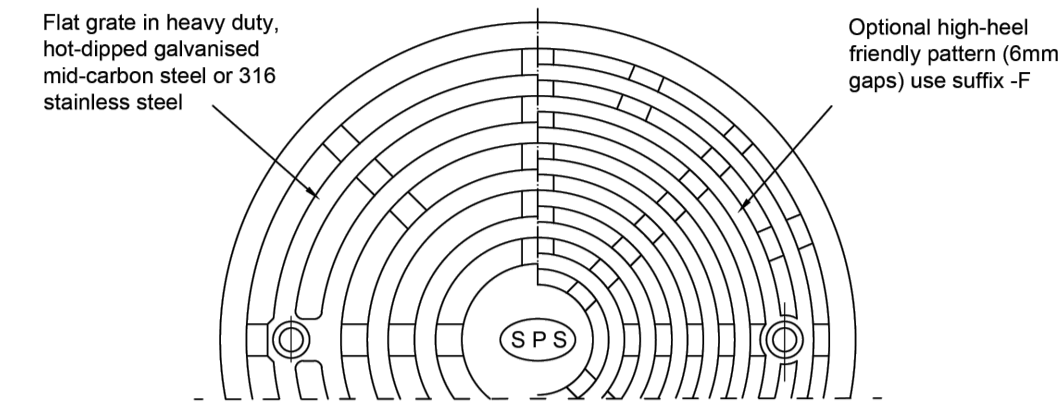
BASEMENT 3 STORMWATER DRAINAGE PLAN
SCALE 1: 100



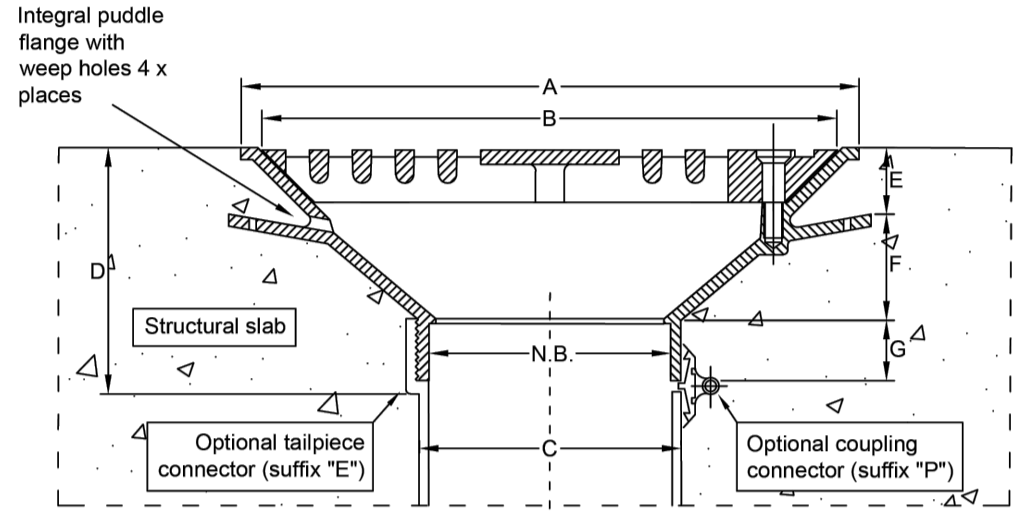
SPS Truflor 100mm & 150mm RWO with Class D Heavy-Duty Flat Grate

Specification codes:
 TIA100F (100mm CI body, galvanised flat grate)
 TIA150F (150mm CI body, galvanised flat grate)
 TBS100F (100mm bronze body, 316SS flat grate)
 TBS150F (150mm bronze body, 316SS flat grate)
 - for 80mm outlet, use "100/80" instead of "100"

Suggested applications:
 Car park decks
 Plant rooms



Load-tested to Class D of AS3996-2006



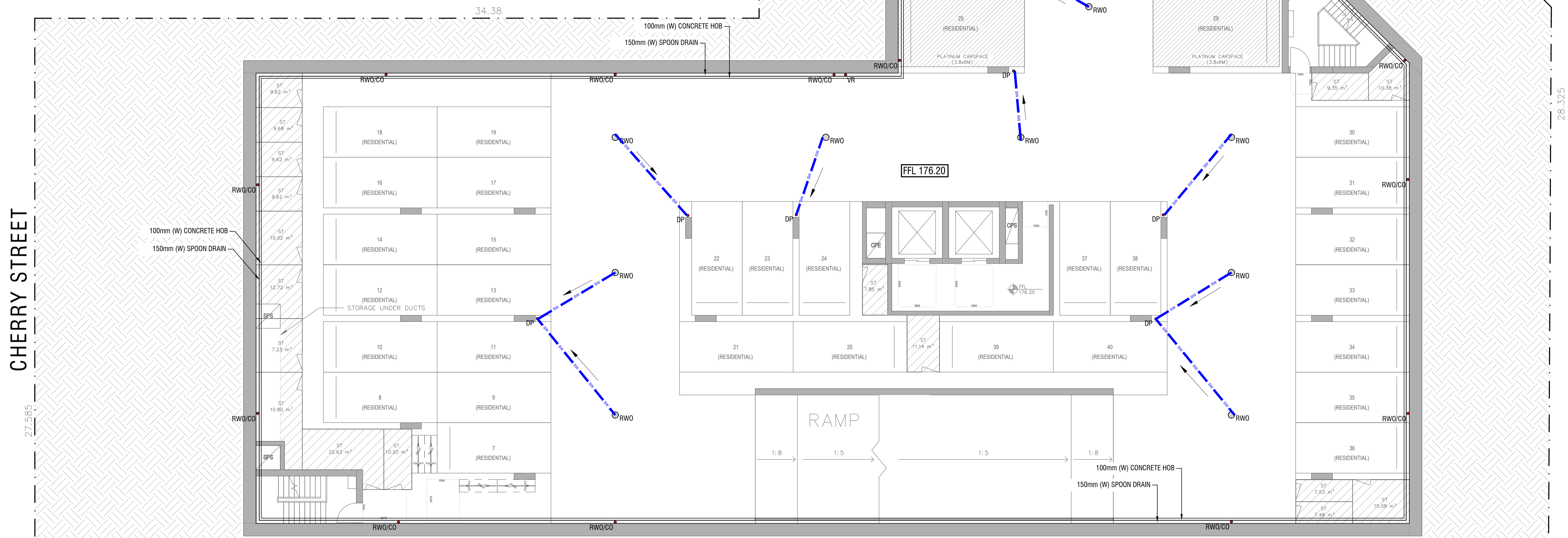
Dimensions (mm)

N.B.	A	B	C	D	E	F	G
80	260	240	82	106	28	45	25
100	260	240	103	106	28	45	25
150	260	240	151	86	28	37	25

*For flow rate data please refer to appendix.

SAMPLE OF RAINWATER OUTLET (RWO)

BASEMENT TO BE FULLY TANKED



BASEMENT 2 STORMWATER DRAINAGE PLAN
 SCALE 1: 100

CHERRY STREET

NOTE
 ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O):

- Ø50mm STORMWATER PIPE (CAST IN SLAB)
- Ø100mm STORMWATER PIPE
- Ø150mm STORMWATER PIPE
- Ø225mm STORMWATER PIPE
- Ø300mm STORMWATER PIPE
- Ø100mm OVERFLOW PIPE LINE
- DENOTES Ø100mm PIPE/DP TRANSFER
- DENOTES Ø65mm PIPE OVERFLOW
- DENOTES DIRECTION OF FLOW



SUITE 2.04, L2, BLDG 3,
 35-41 WATERLOO RD., MACQUARIE PARK, NSW 2113
 info@smartstructs.com.au | T: (02) 9052 6467

Address
**4-8 CHERRY STREET,
 WARRAWEE NSW 2074**

Start Date: JUNE 2025
 Project No: 250235

Client:
 Architect: GILES TRIBE

Approved by: K.E.

Internal Revisions:

Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25

ISSUE FOR D.A.

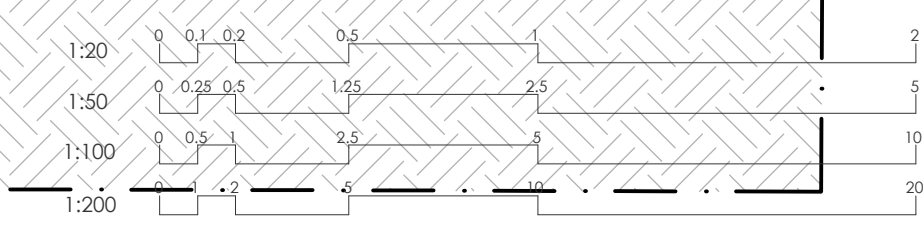
- Notes
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 2. Refer to architectural drawings for all setout levels.
 3. Do not scale any dimensions
 4. Drawings to be read & printed in colour.

PRELIMINARY
 NOT FOR CONSTRUCTION

Project North
 Scale @ A1: AS SHOWN

Sheet Name:
**BASEMENT 2
 STORMWATER
 DRAINAGE PLAN**

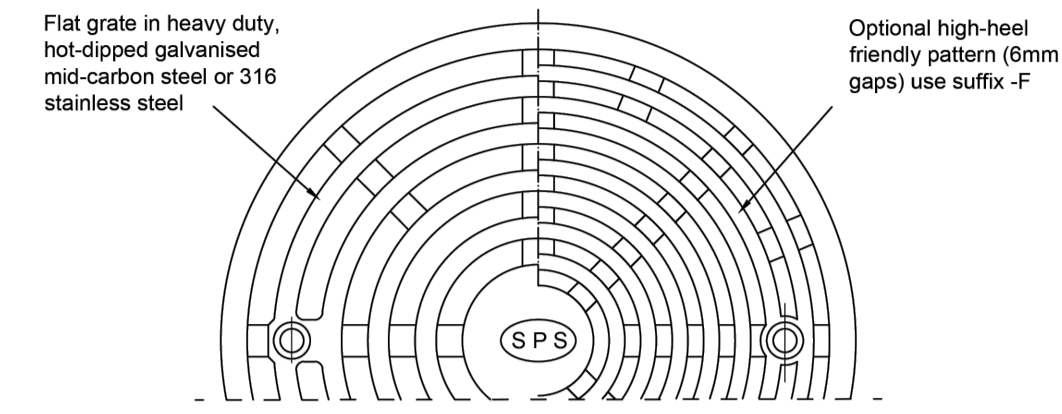
Sheet Number:
D04
 Revision: A



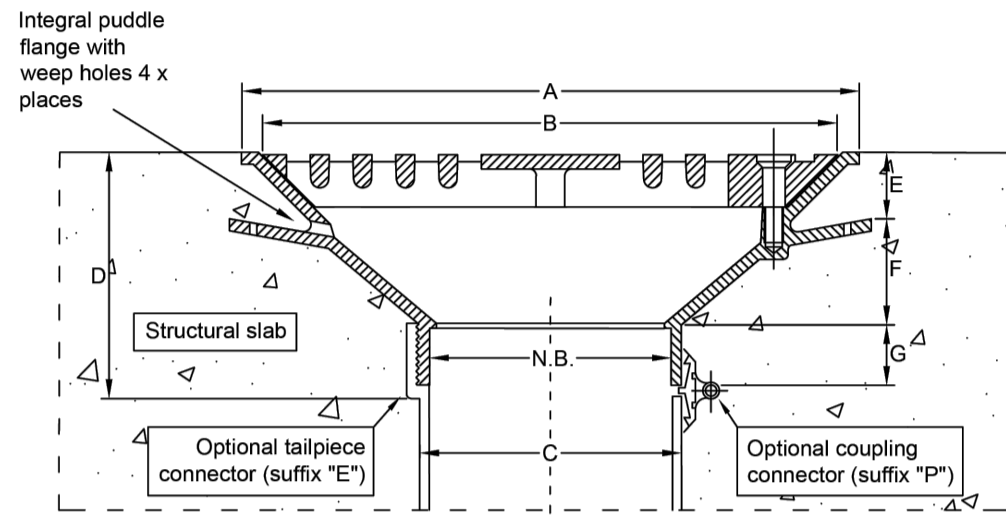
**SPS Truflor 100mm & 150mm RWO
with Class D Heavy-Duty Flat Grate**

Specification codes:
TIA100F (100mm CI body, galvanised flat grate)
TIA150F (150mm CI body, galvanised flat grate)
TBS100F (100mm bronze body, 316SS flat grate)
TBS150F (150mm bronze body, 316SS flat grate)
- for 80mm outlet, use "100/80" instead of "100"

Suggested applications:
Car park decks
Plant rooms



Load-tested to Class D of AS3996-2006



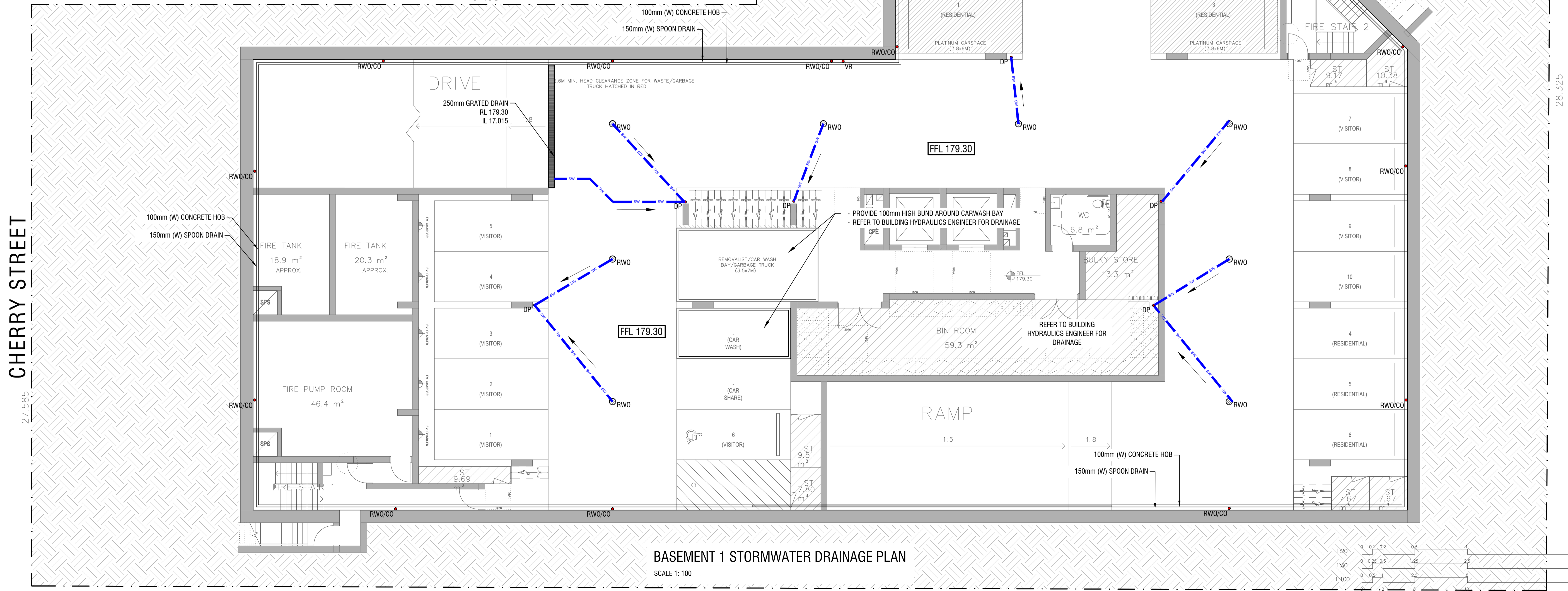
Dimensions (mm)

N.B.	A	B	C	D	E	F	G
80	260	240	82	106	28	45	25
100	260	240	103	106	28	45	25
150	260	240	151	86	28	37	25

*For flow rate data please refer to appendix.

SAMPLE OF RAINWATER OUTLET (RWO)

BASEMENT TO BE FULLY TANKED



BASEMENT 1 STORMWATER DRAINAGE PLAN
SCALE 1: 100

CHERRY STREET

NOTE
ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O):

- Ø50mm STORMWATER PIPE (CAST IN SLAB)
- Ø100mm STORMWATER PIPE
- Ø150mm STORMWATER PIPE
- Ø225mm STORMWATER PIPE
- Ø300mm STORMWATER PIPE
- Ø100mm OVERFLOW PIPE LINE
- DENOTES Ø100mm PIPE/DP TRANSFER
- DENOTES Ø65mm PIPE OVERFLOW
- DENOTES DIRECTION OF FLOW



SUITE 2.04, L2, BLDG 3,
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Address
**4-8 CHERRY STREET,
WARRAWEE NSW 2074**

Start Date: JUNE 2025
Project No: 250235

Client:

Architect: GILES TRIBE

Approved by: K.E.

Internal Revisions:

Rev. #	Drafter	Engineer	Date	Revision Description
A	N.E.	K.E.	02.07.25	ISSUE FOR D.A.

- Notes**
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 2. Refer to architectural drawings for all setout levels.
 3. Do not scale any dimensions
 4. Drawings to be read & printed in colour.

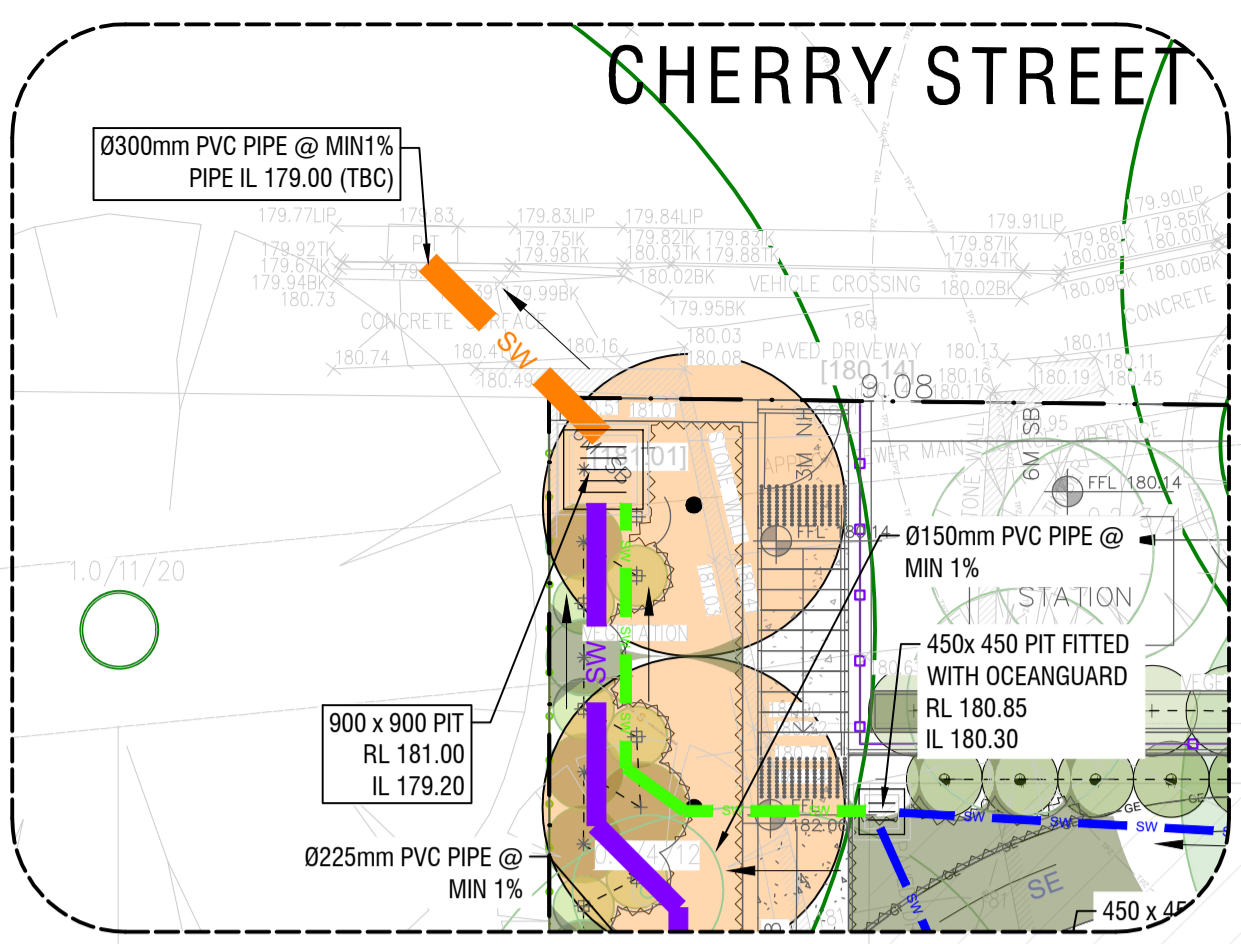
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NOT FOR CONSTRUCTION**

Project North

Scale @ A1: AS SHOWN

Sheet Name:
**BASEMENT 1
STORMWATER
DRAINAGE PLAN**

Sheet Number:
D05
Revision:
A



INSET PLAN

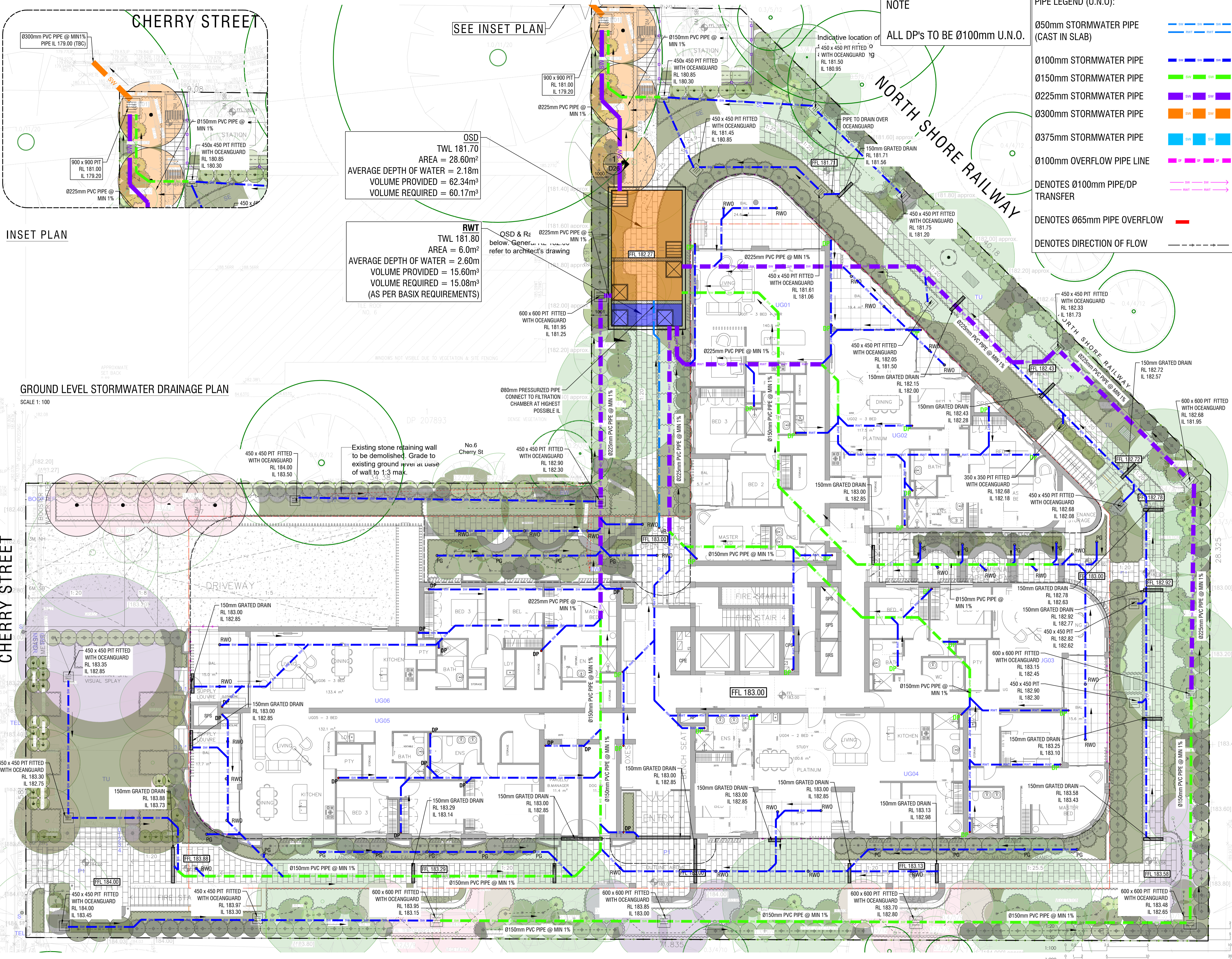
OSD
 TWL 181.70
 AREA = 28.60m²
 AVERAGE DEPTH OF WATER = 2.18m
 VOLUME PROVIDED = 62.34m³
 VOLUME REQUIRED = 60.17m³

RWT
 TWL 181.80
 AREA = 6.0m²
 AVERAGE DEPTH OF WATER = 2.60m
 VOLUME PROVIDED = 15.60m³
 VOLUME REQUIRED = 15.08m³
 (AS PER BASIX REQUIREMENTS)

GROUND LEVEL STORMWATER DRAINAGE PLAN

SCALE 1: 100

CHERRY STREET



NOTE
 ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O.):

- Ø50mm STORMWATER PIPE (CAST IN SLAB)
- Ø100mm STORMWATER PIPE
- Ø150mm STORMWATER PIPE
- Ø225mm STORMWATER PIPE
- Ø300mm STORMWATER PIPE
- Ø375mm STORMWATER PIPE
- Ø100mm OVERFLOW PIPE LINE
- DENOTES Ø100mm PIPE/DP TRANSFER
- DENOTES Ø65mm PIPE OVERFLOW
- DENOTES DIRECTION OF FLOW



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Address
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Start Date: JUNE 2025
 Project No: 250235

Client:
 Architect: GILES TRIBE

Approved by: K.E.

Internal Revisions:

Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25
B	N.E.	K.E.	08.07.25
C	N.E.	K.E.	09.07.25

- Notes
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 - Refer to architectural drawings for all setout, levels.
 - Do not scale any dimensions
 - Drawings to be read & printed in colour.

PRELIMINARY
 NOT FOR CONSTRUCTION

Project North
 Scale @ A1: AS SHOWN
 Sheet Name: GROUND LEVEL STORMWATER DRAINAGE PLAN

Sheet Number:
D06

Revision:
C

CHERRY STREET

NOTE

ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O):

Ø50mm STORMWATER PIPE (CAST IN SLAB)	
Ø100mm STORMWATER PIPE	
Ø150mm STORMWATER PIPE	
Ø225mm STORMWATER PIPE	
Ø300mm STORMWATER PIPE	
Ø375mm STORMWATER PIPE	
Ø100mm OVERFLOW PIPE LINE	
DENOTES Ø100mm PIPE/DP TRANSFER	
DENOTES Ø65mm PIPE OVERFLOW	
DENOTES DIRECTION OF FLOW	



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Start Date: JUNE 2025
Project No. 250235

Client:
Architect:
GILES TRIBE

Approved by: K.E.

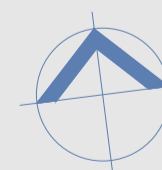
Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25
ISSUE FOR D.A.			

Notes

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Project North



Scale @ A1: AS SHOWN

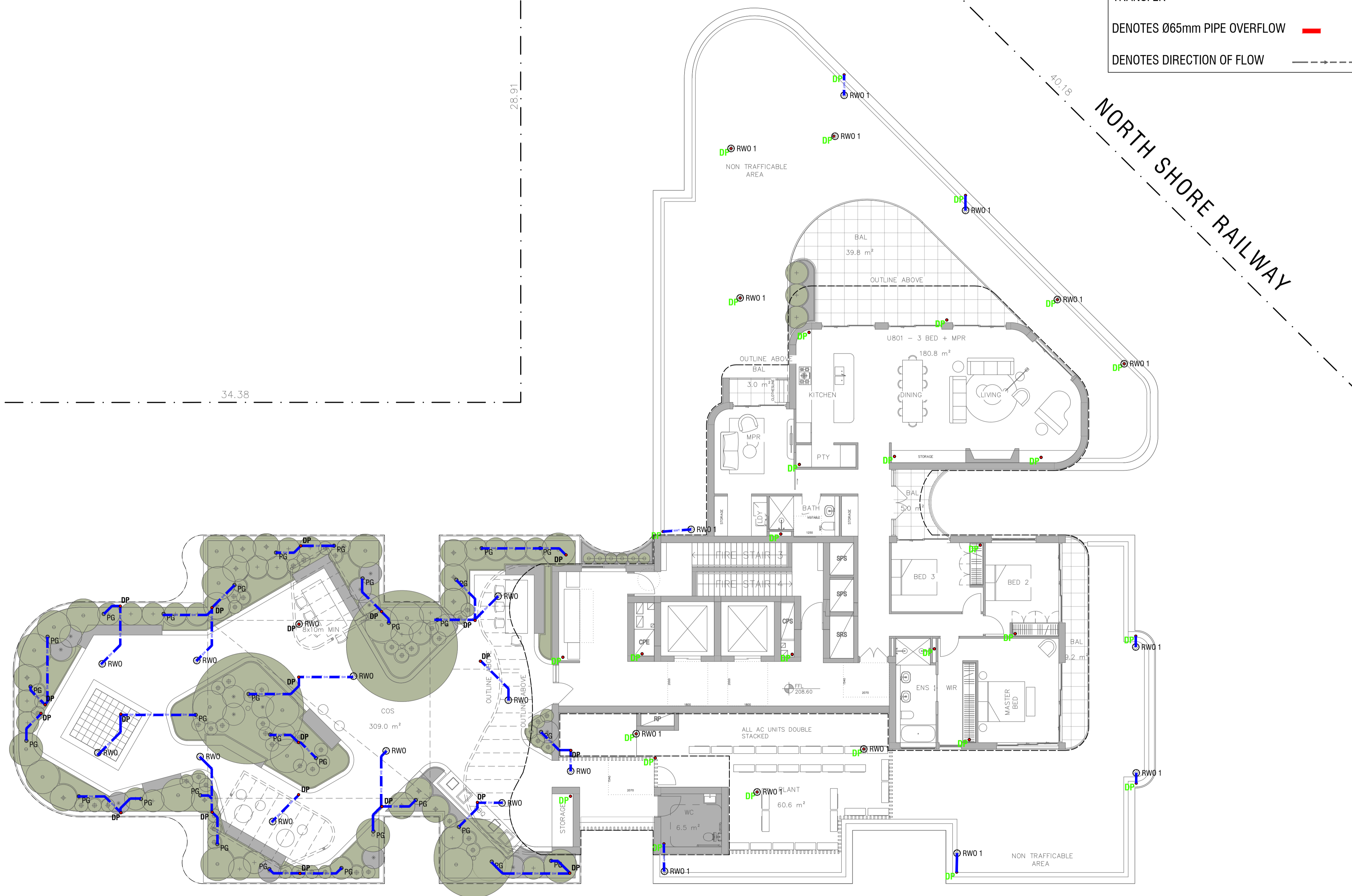
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**LEVEL 8
STORMWATER
DRAINAGE PLAN**

Sheet Number:

D11

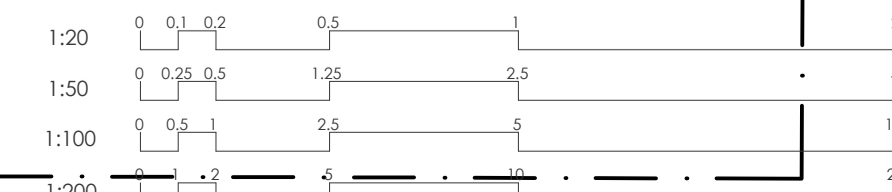
Revision:

A



LEVEL 8 STORMWATER DRAINAGE PLAN

SCALE 1: 100



CHERRY STREET

NOTE

ALL DP's TO BE Ø100mm U.N.O.

PIPE LEGEND (U.N.O):

Ø50mm STORMWATER PIPE (CAST IN SLAB)	
Ø100mm STORMWATER PIPE	
Ø150mm STORMWATER PIPE	
Ø225mm STORMWATER PIPE	
Ø300mm STORMWATER PIPE	
Ø375mm STORMWATER PIPE	
Ø100mm OVERFLOW PIPE LINE	
DENOTES Ø100mm PIPE/DP TRANSFER	
DENOTES Ø65mm PIPE OVERFLOW	
DENOTES DIRECTION OF FLOW	



Address
**4-8 CHERRY STREET,
WARRAWEE NSW 2074**

Start Date:	JUNE 2025		
Project No.	250235		
Client:	-		
Architect:	GILES TRIBE		
Approved by:	K.E.		
Internal Revisions:			
Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25
			ISSUE FOR D.A.

- Notes
1. Drawings to be read in conjunction with architectural drawings.
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 3. Do not scale any dimensions
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**PRELIMINARY
NOT FOR CONSTRUCTION**

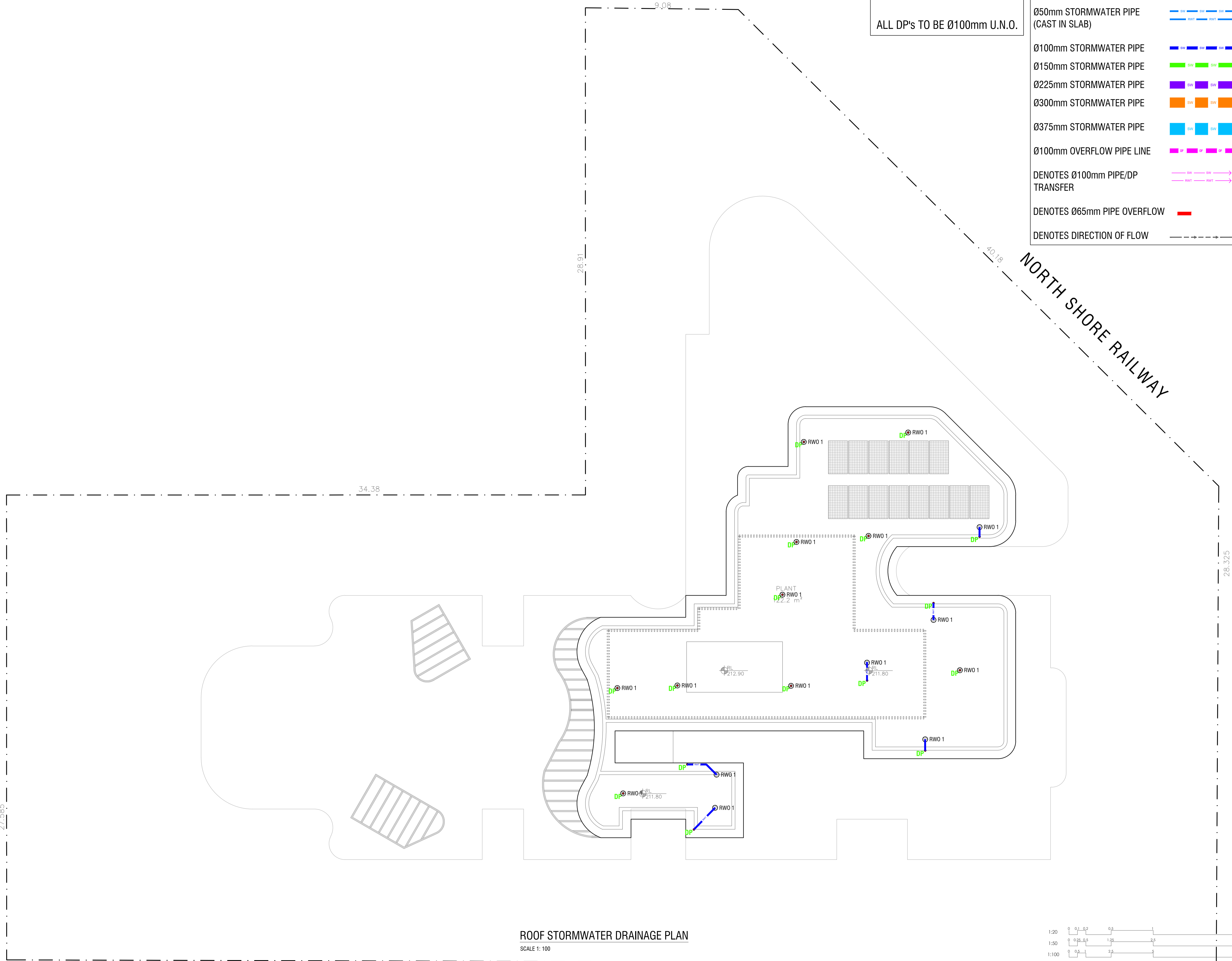
Project North

Scale @ A1: AS SHOWN

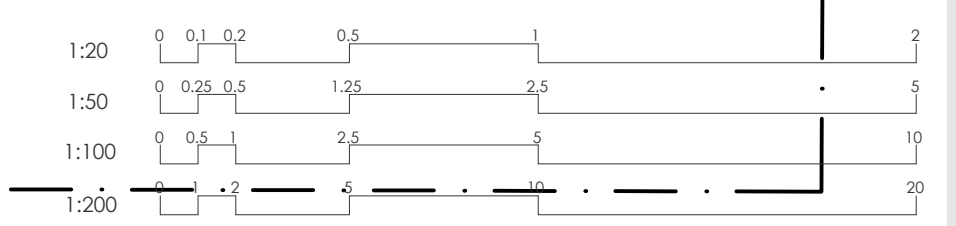
Sheet Name:
**ROOF STORMWATER
DRAINAGE PLAN**

Sheet Number:
D12

Revision:
A



ROOF STORMWATER DRAINAGE PLAN
SCALE 1:100



Internal Revisions:

Rev. #	Drafter	Engineer	Date	Revision Description
A	N.E.	K.E.	02.07.25	ISSUE FOR D.A.

- Notes
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 4. Drawings to be read & printed in colour.

**PRELIMINARY
NOT FOR CONSTRUCTION**

Project North
Scale @ A1: AS SHOWN

Sheet Name:
**PRE AND POST
DEVELOPMENT
CATCHMENT PLAN**

Sheet Number:

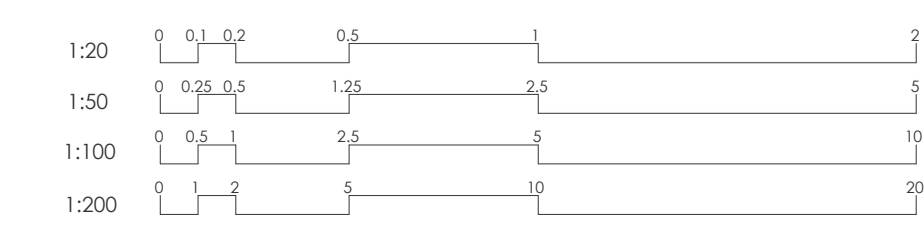
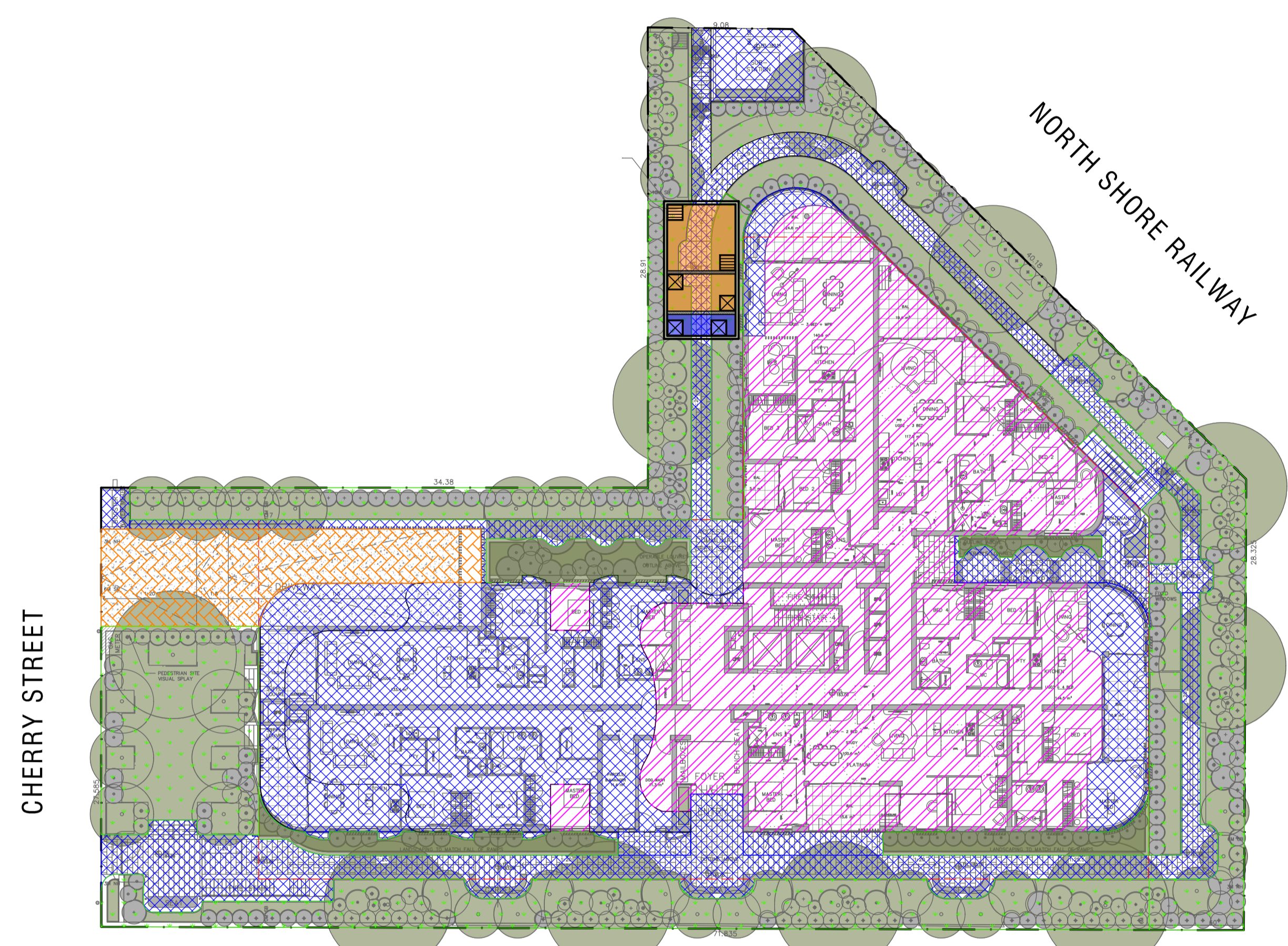
D15
Revision:
A

PRE DEVELOPMENT CATCHMENT ANALYSIS:

TOTAL SITE AREA:	2,672.77m²
HARDSTAND	284.70 m ²
LANDSCAPE	2,388.07 m ²

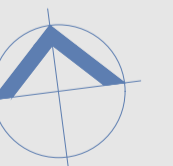
POST DEVELOPMENT CATCHMENT ANALYSIS:

TOTAL SITE AREA:	2,672.77m²
ROOF	789.67 m ²
DRIVEWAY	109.84 m ²
HARDSTAND	885.89 m ²
LANDSCAPE	791.52 m ²
SUSPENDED LANDSCAPE	95.85 m ²



Rev. #	Drafter	Engineer	Date	Revision Description
A	N.E.	K.E.	02.07.25	ISSUE FOR D.A.
B	N.E.	K.E.	08.07.25	ISSUE FOR D.A.

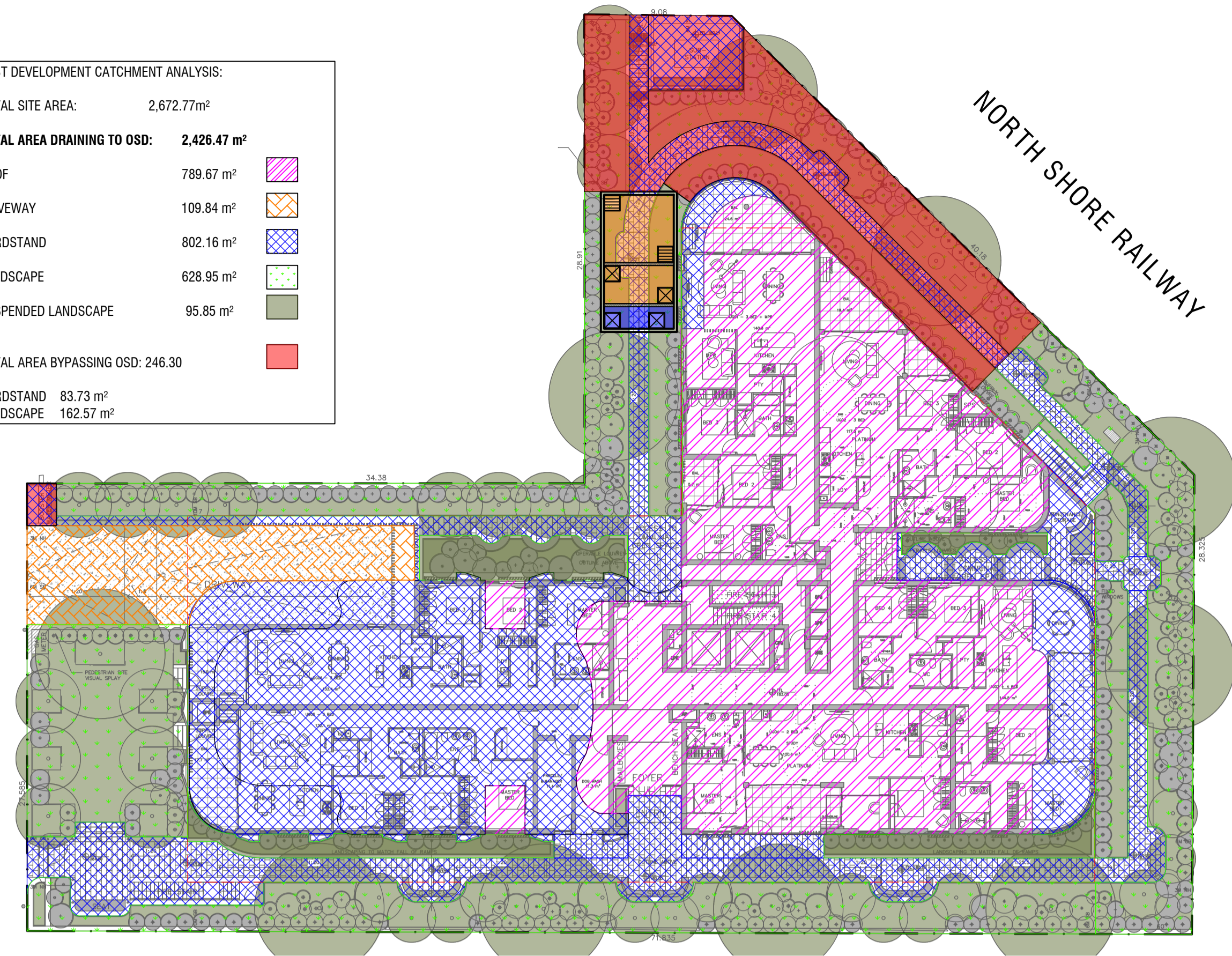
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POST DEVELOPMENT CATCHMENT ANALYSIS:

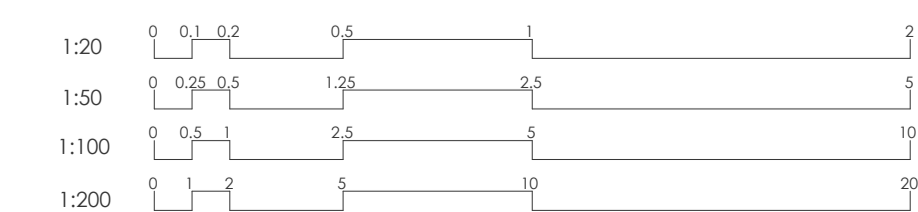
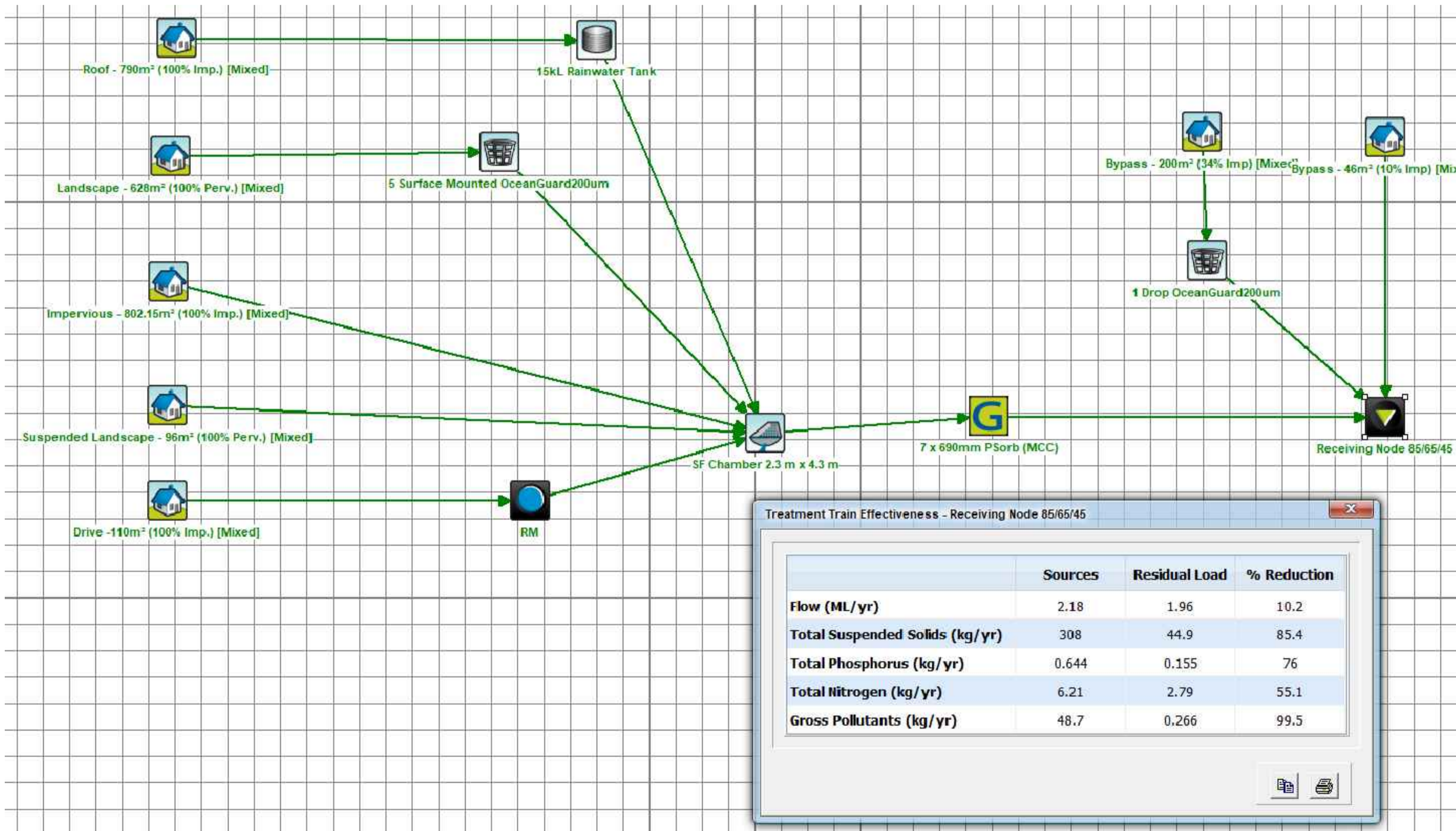
TOTAL SITE AREA:	2,672.77m ²	
TOTAL AREA DRAINING TO OSD:	2,426.47 m²	
ROOF	789.67 m ²	
DRIVEWAY	109.84 m ²	
HARDSTAND	802.16 m ²	
LANDSCAPE	628.95 m ²	
SUSPENDED LANDSCAPE	95.85 m ²	
TOTAL AREA BYPASSING OSD:	246.30	
HARDSTAND	83.73 m ²	
LANDSCAPE	162.57 m ²	

CHERRY STREET



CATCHMENT PLAN

SCALE 1: 250

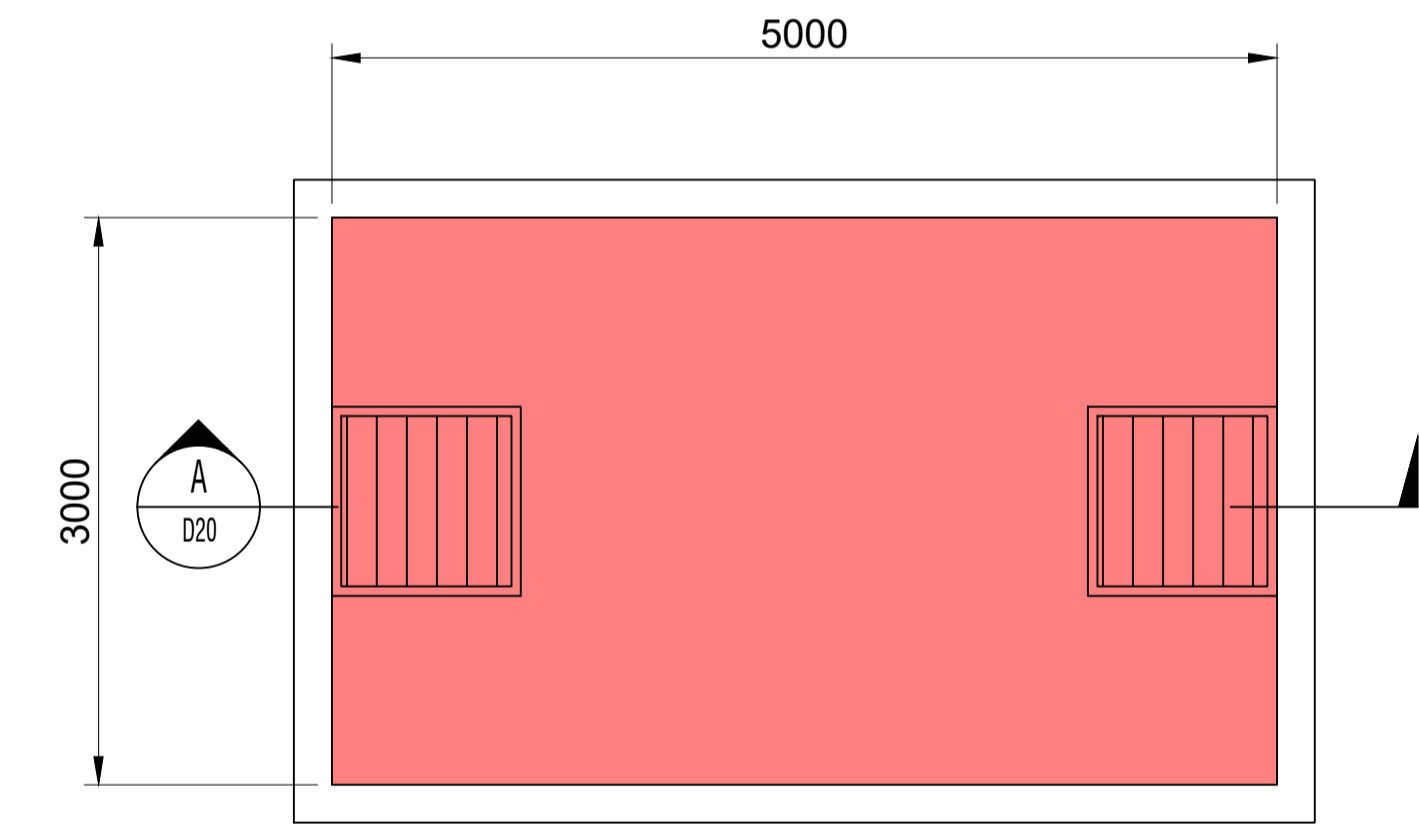


PUMP SPECIFICATIONS STANDARD PUMP-OUT NOTES

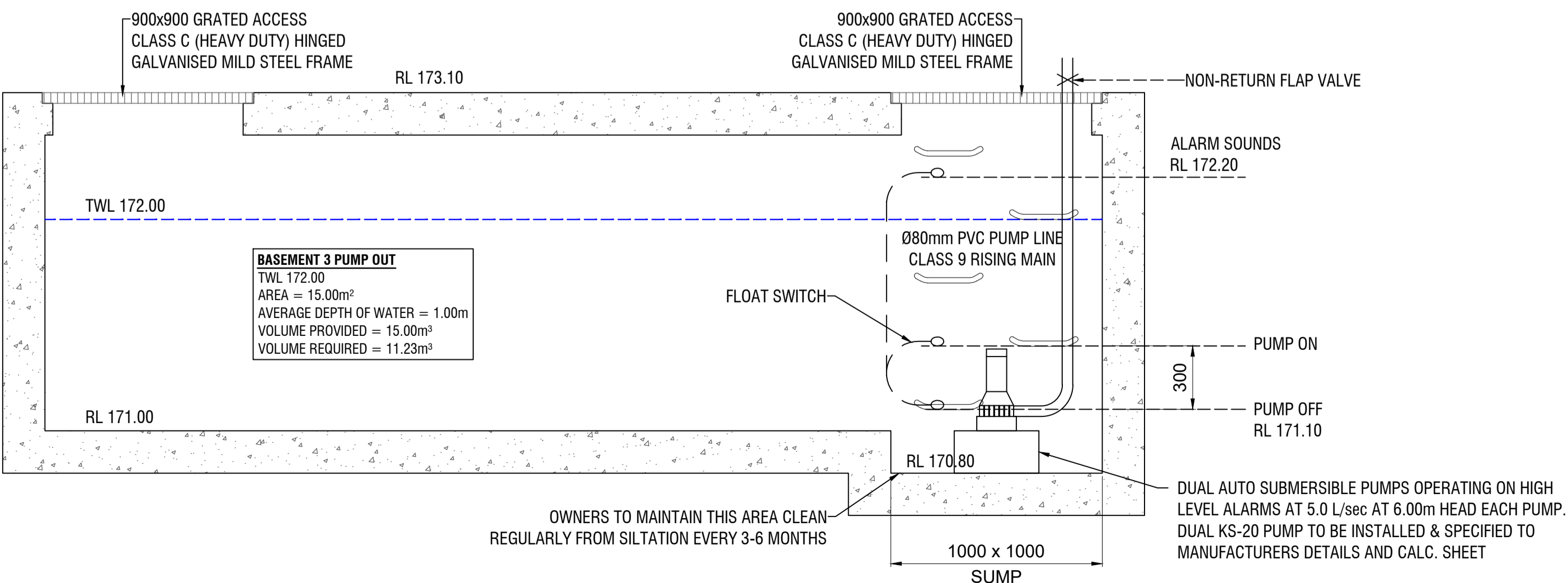
THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -

- A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD LOW LEVEL FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMP AND TO SET 100mm ABOVE BOTTOM OF TANK TO ALLOW 100mm DEPTH OF WATER MAINTAINED AT ALL TIMES.
- A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL (I.E. 300mm ABOVE LOWER LEVEL FLOAT), WHEREBY THE PUMP WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
- A THIRD FLOAT SHALL BE SET NOT HIGHER THAN 100mm ABOVE THE INVERT OF THE INLET PIPE. THIS FLOAT SHOULD ACTIVATE THE ALARM.
- AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT ALARM AND AN AUDIBLE ALARM WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
- THE PUMP CONTROLS SHALL BE SET UP TO ENABLE ALTERNATE PUMP OPERATION AT EACH START. IN THE EVENT A PUMP FAILS TO OPERATE WHEN THE WATER LEVEL IN THE WET WELL REACHES THE PUMP START, THE OTHER PUMP SHALL BE ACTIVATED, AND A FLASHING STROBE LIGHT ALARM INITIATED. IN THE EVENT THAT BOTH PUMPS FAIL TO OPERATE, AN AUDIBLE ALARM SHALL BE INITIATED.
- PUMPS SHALL BE FITTED WITH A GATE VALVE AND NON-RETURN VALVE ON THE DELIVERY SIDE OF EACH PUMP. THE VALVES SHOULD BE ACCESSIBLE WITHOUT HAVING TO ENTER THE WELL.

PUMP WELL DETAILS
 AREA DRAINING TO SUMP = 109.84m²
 VOLUME BASED ON 100 YEAR ARI 2 HOUR INTENSITY
 INTENSITY = 51.20mm/hr
 $Q = 1 \times 51.20\text{mm/hr} \times 109.84\text{m}^2 / 3600 = 1.56\text{L/s}$
 VOLUME REQUIRED = 1.56 x (60x60x2) = 11.25 m³
 STORAGE PROVIDED 5.0 x 3.0 x 1.0m = 15.00 m³
 PUMP OUT RATE BASED ON 100 YEAR ARI 5 MIN
 INTENSITY = 271mm/hr
 $Q = 1 \times 271\text{mm/hr} \times 109.84\text{m}^2 / 3600 = 8.27\text{L/s}$
 DUAL ZSS-220 PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO OPERATE SIMULTANEOUSLY ON HIGH LEVEL ALARMS AT 5.0L/sec (PER PUMP) AT 14.0m HEAD

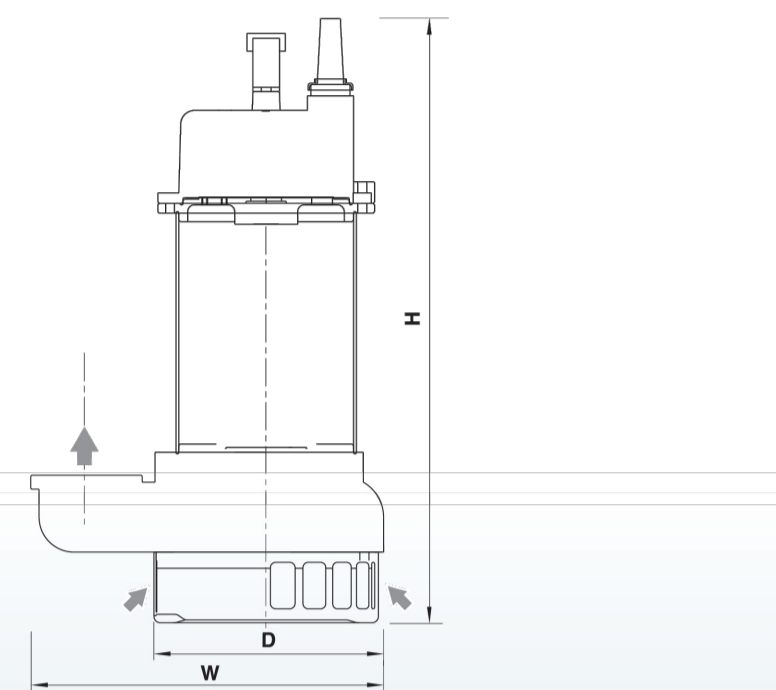
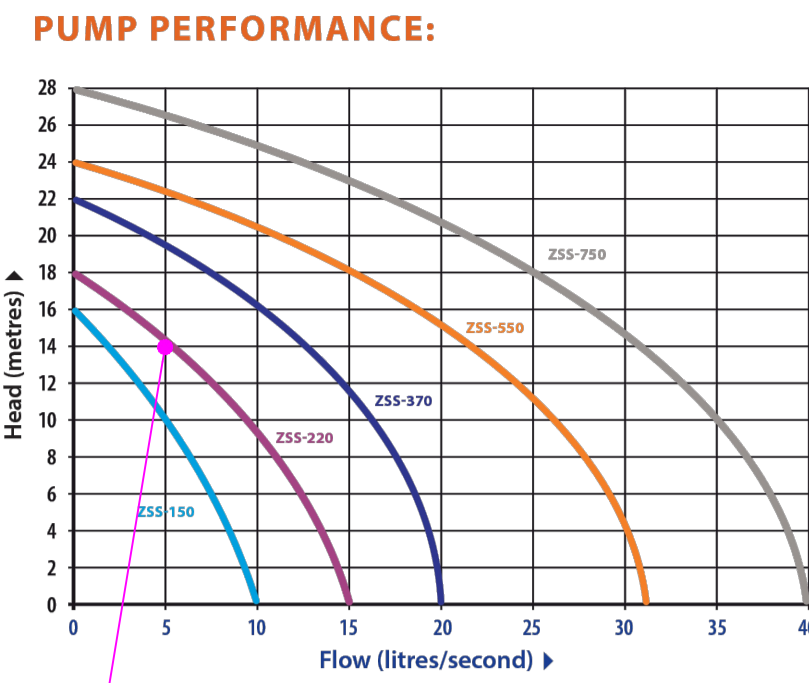


PUMP OUT PIT PLAN VIEW
SCALE: NTS



A SECTION THROUGH PUMP OUT PIT
SCALE: NTS

- Heavy duty submersible drainage pumps for pumping drainage and stormwater
 - High efficiency pump design
 - Suited to industrial and municipal applications
 - Ideal for stormwater pump stations and contractor dewatering
- Four Models Available:**
ZSS-150-3 415 volt, 1.5 kW, Manual
ZSS-220-3 415 volt, 2.2 kW, Manual
ZSS-370-3 415 volt, 3.7 kW, Manual
ZSS-550-3 415 volt, 5.5 kW, Manual
ZSS-750-3 415 volt, 7.5 kW, Manual
- FEATURES:**
- Stainless steel, cast iron industrial construction
 - Stainless steel motor shaft
 - Double mechanical shaft seal
 - ZSS-150 suits Guide Rail Kit ZGRK-80
 - ZSS-220 and ZSS-370 suit Guide Rail Kit ZGRK-80/100
 - ZSS-550 and ZSS-750 suit Guide Rail Kit ZGRK-100

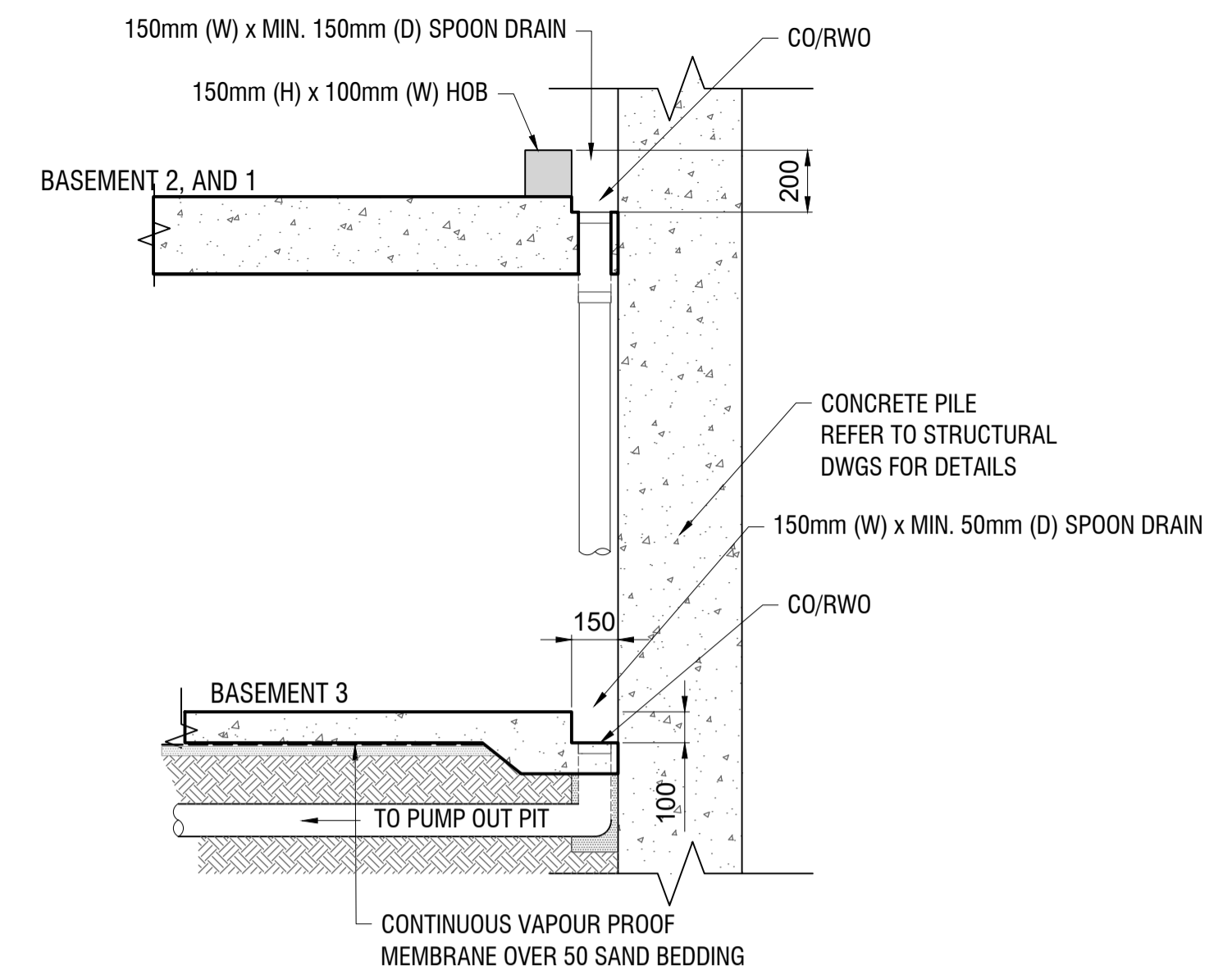


DUTY POINT FOR BASEMENT 3 PUMP-OUT

SPECIFICATION:

Model Name	Outlet Size	Maximum Flow rate	Maximum Head	Motor Size	Weight	Dimensions W x D x H
ZSS-150	80 mm	10 L/sec	16 m	1.5 kW	31 kg	278 x 182 x 475 mm
ZSS-220	80 mm	15 L/sec	18 m	2.2 kW	42 kg	390 x 250 x 450 mm
ZSS-370	100 mm	20 L/sec	22 m	3.7 kW	48 kg	450 x 240 x 530 mm
ZSS-550	100 mm	31 L/sec	24 m	5.5 kW	60 kg	550 x 310 x 590 mm
ZSS-750	100 mm	40 L/sec	28 m	7.5 kW	70 kg	550 x 310 x 610 mm

BASEMENT 3 PUMP

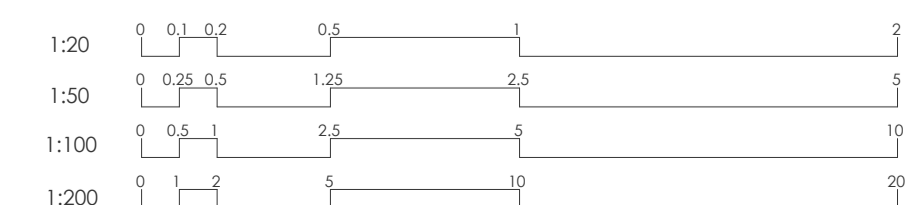


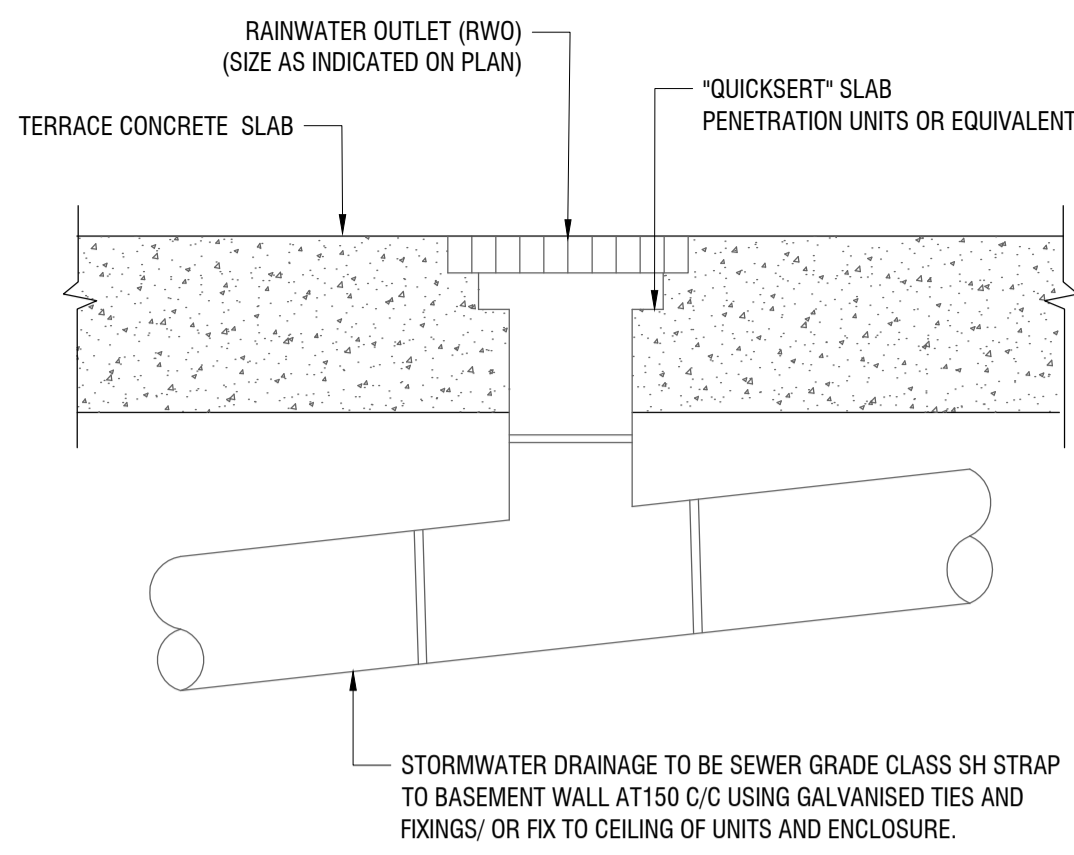
1 TYPICAL BASEMENT SECTION - RWO/CO AT LOW POINT
SCALE: NTS

Internal Revisions:

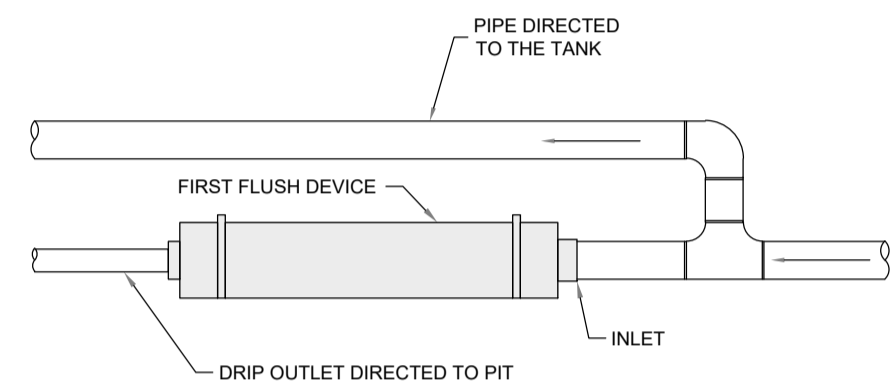
Rev. #	Drafter	Engineer	Date	Revision Description
A	N.E.	K.E.	02.07.25	ISSUE FOR D.A.

- Notes
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 - Refer to architectural drawings for all setout levels.
 - Do not scale any dimensions
 - Drawings to be read & printed in colour.

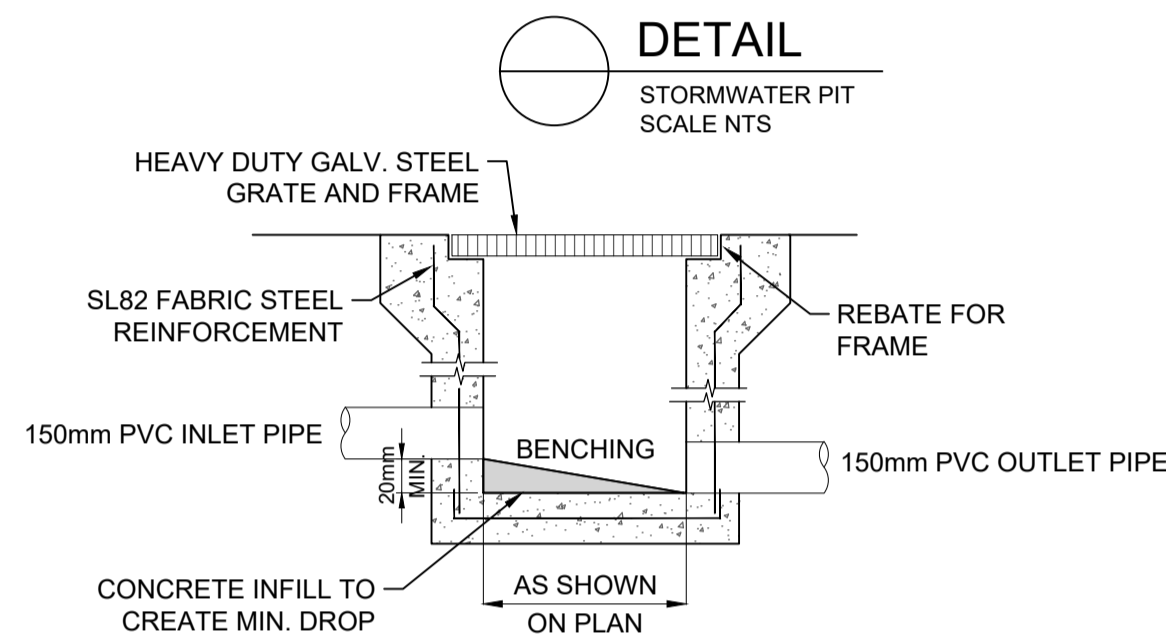
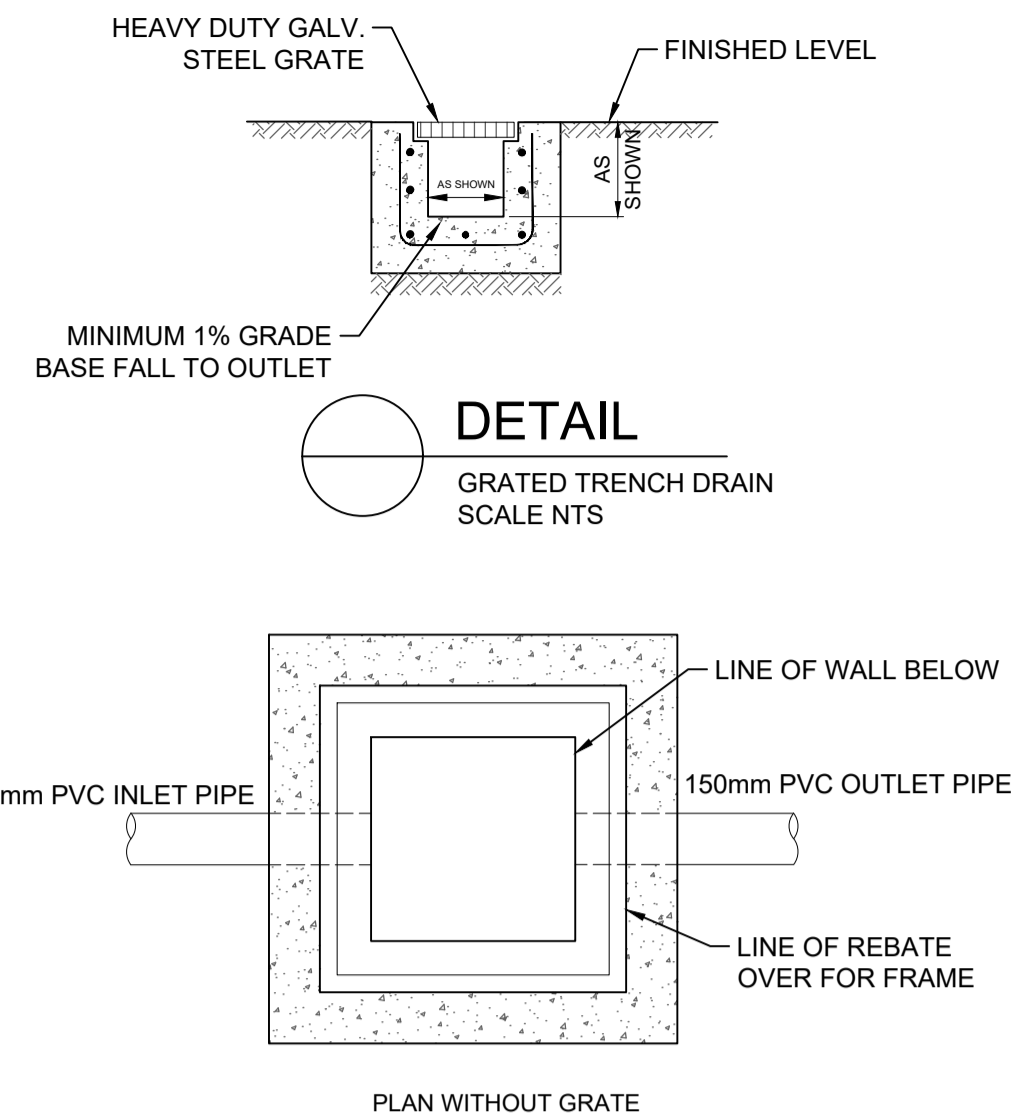




TYPICAL RAINWATER OUTLET DETAIL
SCALE NTS

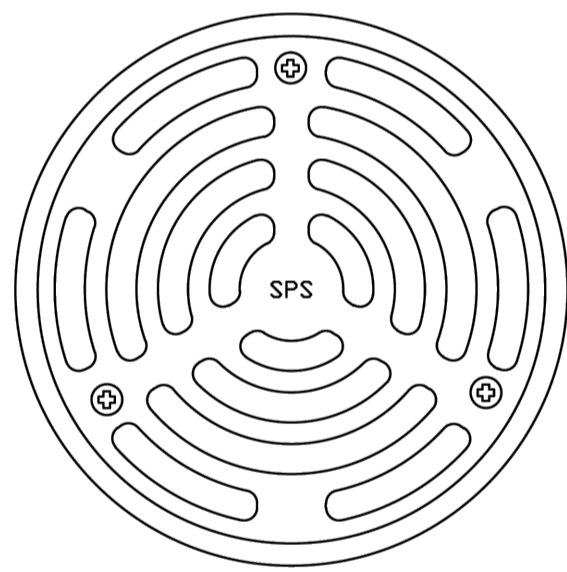


TYPICAL FIRST FLUSH DETAIL
N.T.S.

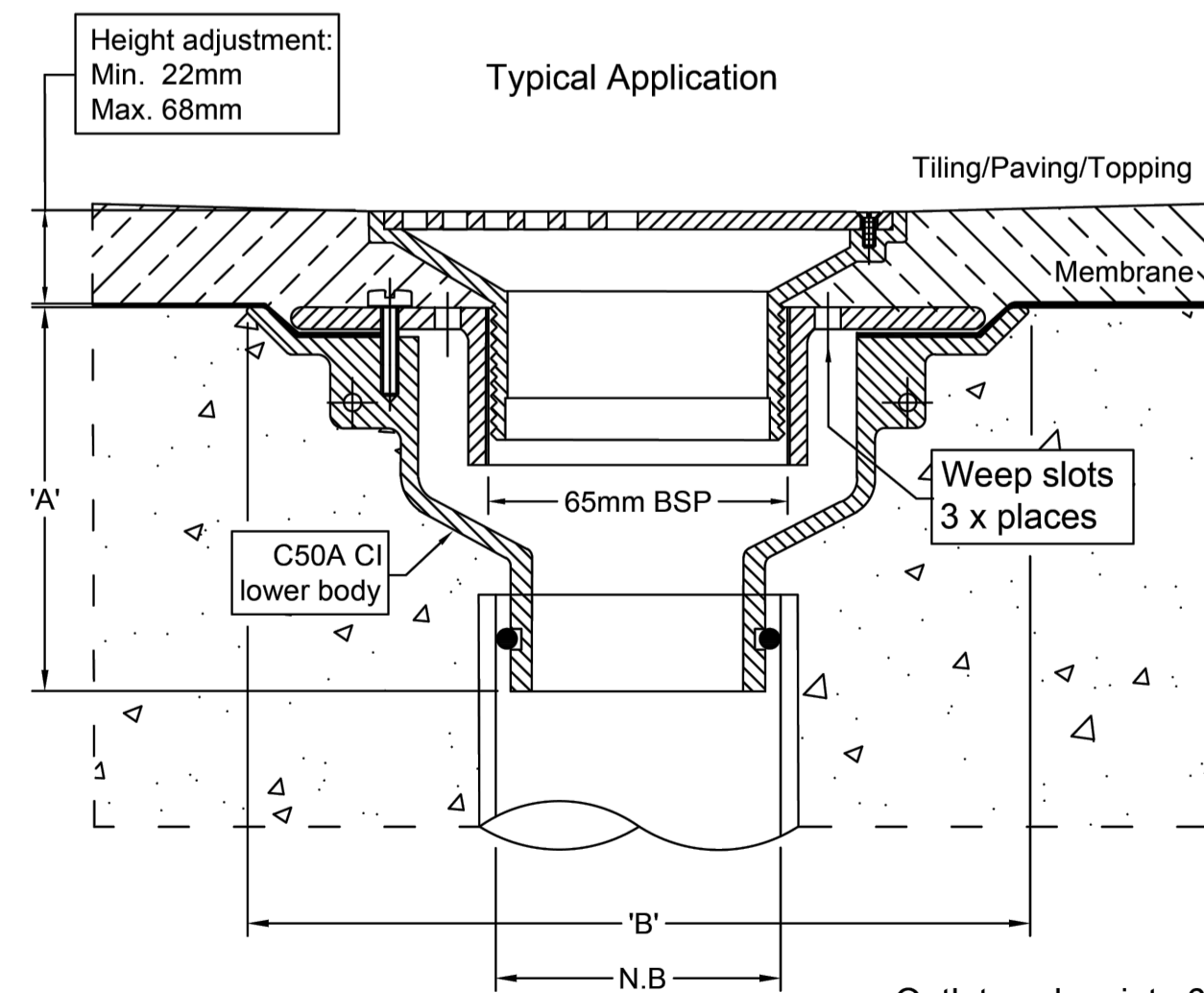


SPS 130mm Round Vari-Level Vertical Drain
65/50mm Outlet

Specification code:
R130S/C65 (satin 316 stainless steel grate, CI lower body)
R130S4/C65 (polished 304 stainless steel grate, CI lower body)



- Round grate available in polished 304 or satin 316 stainless steel.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.



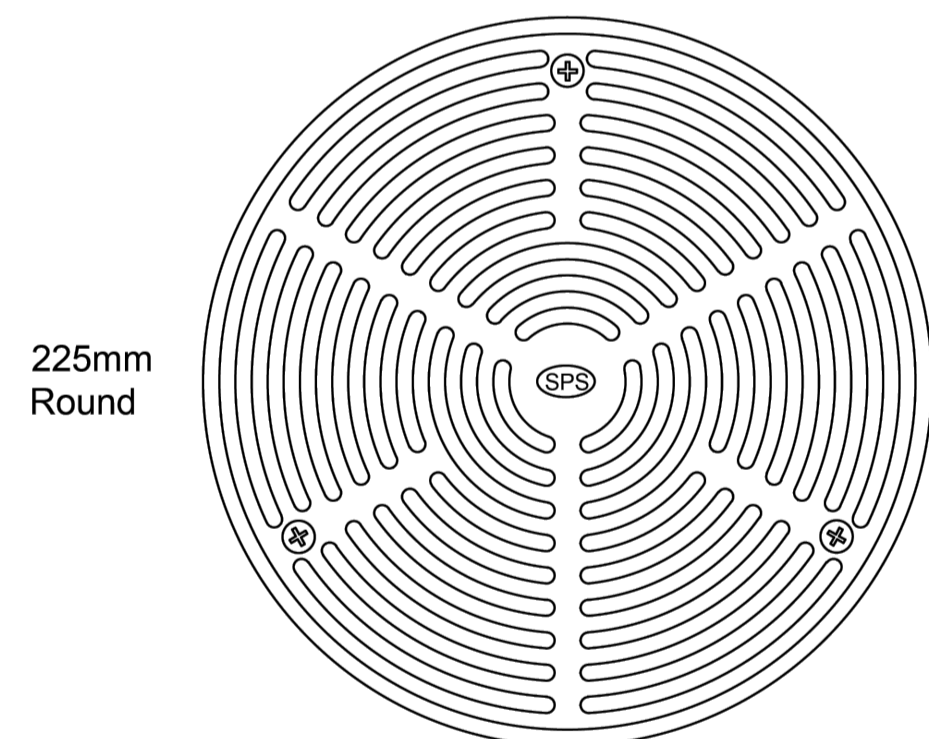
N.B.	A	B
50	90	180
65	60	180

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.

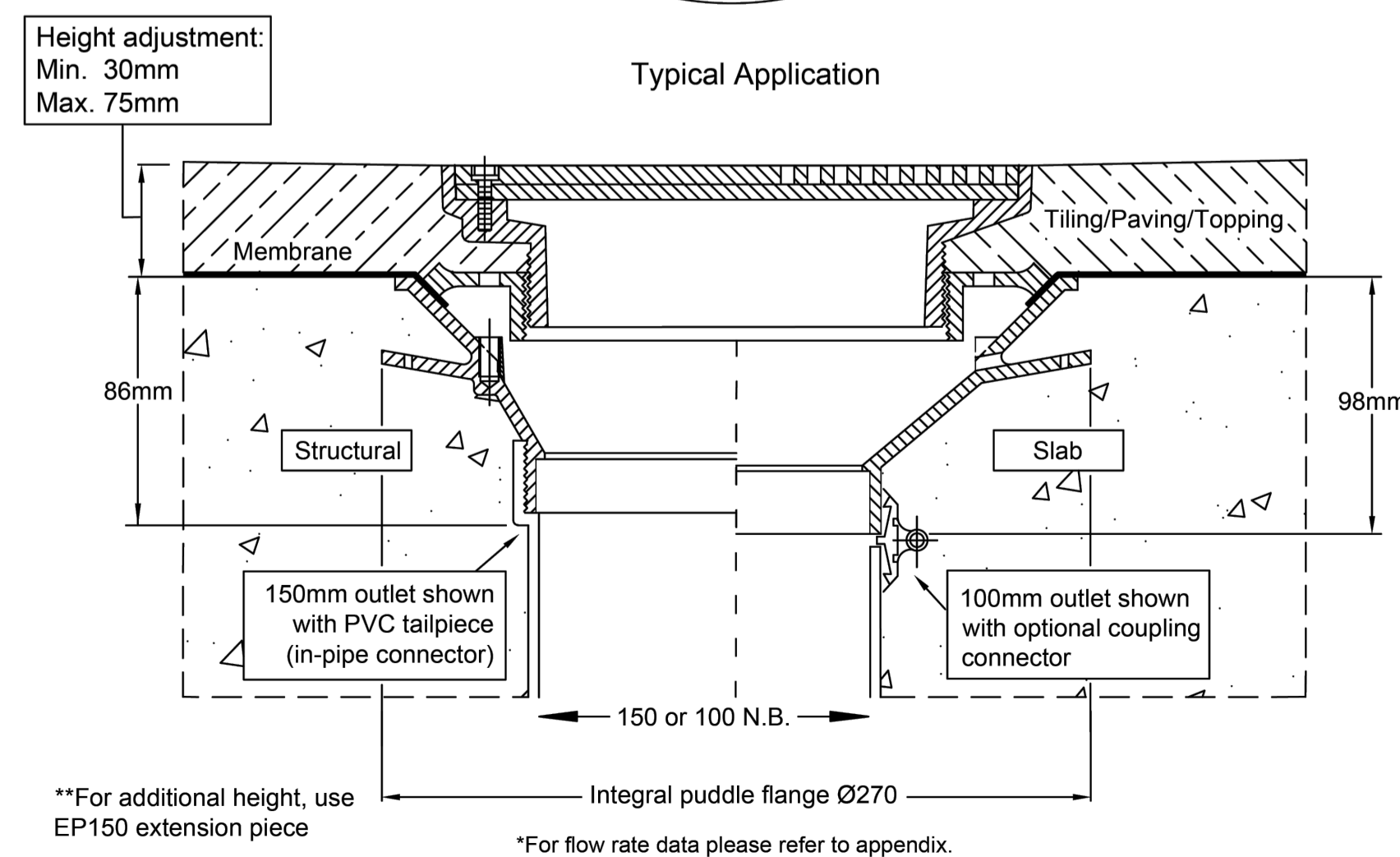
SPS 225mm Round Vari-Level Vertical Drain
150mm Outlet or 100mm Outlet

Specification code:
R225N/C150 (nickel-bronze grate, CI lower body) *special order*
R225S4/C150 (Polished 304SS grate, CI lower body) *special order*
R225S/C150 (Satin 316SS grate, CI lower body)
For a 100mm outlet, use suffix "C100" not "C150"

Load Class C per AS3996-2006
High-heel friendly pattern (5.5mm gaps)



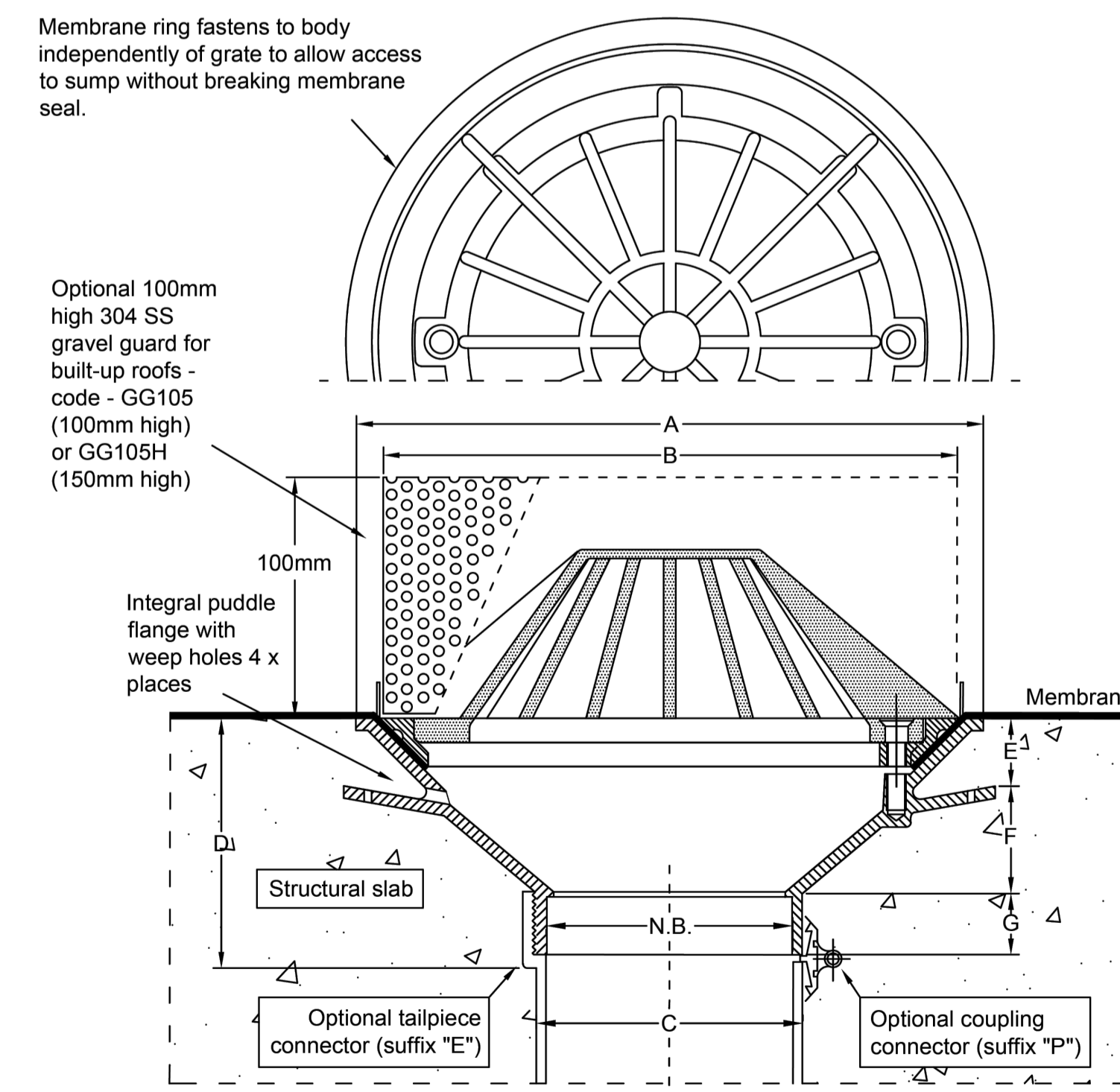
- Height-adjustable high heel-friendly grate assembly.
- Grate assembly available 316 stainless steel. Polished 304SS and nickel-bronze available only by special order.
- 150mm or 100mm Truflor CI lower body with 150mm BSP reversible clamp collar.



SPS Truflor 100mm & 150mm RWO
with Dome Grate & Membrane Clamp

Specification codes:
TIA100D2 (CI body, aluminium dome grate & membrane ring)
TIB100D2 (CI body, bronze dome grate & membrane ring)
TBA100D2 (all-bronze assembly)
- for 80mm outlet, use "100/80" instead of "100"
- for 150mm outlet, use "150" instead of "100"

Suggested application:
Roof decks



Dimensions (mm)

N.B.	A	B	C	D	E	F	G
80	260	240	82	106	28	45	25
100	260	240	103	106	28	45	25
150	260	240	103	106	28	37	25

SAMPLE OF RAINWATER OUTLETS (RWO 1)
NON TRAFFICABLE ROOF

SAMPLE OF RAINWATER OUTLETS (RWO)

ON SITE DETENTION CALCULATION SHEET FOR KU-RING GAI COUNCIL		
PROJECT	PROPOSED RESIDENTIAL FLAT BUILDING	
SITE ADDRESS	4 + 8 Cherry St, Warrawee NSW	
JOB NUMBER	250235	
DESIGNER	KAMYAR EIVAZZADEH	
TELEPHONE	02 9052 6466	
CATCHMENT DETAILS		
	CATCHMENT NAME	LOVERS JUMP CREEK (LJ1)
A	CATCHMENT DISCHARGE RATE	94 L/sec/ha
B	CATCHMENT STORAGE RATE	417 m3/ha
SITE DETAILS		
	SITE AREA	2672.77 m2
C	60% OF SITE AREA	1603.662 m2
	AREA(S) NOT DRAINING TO DETENTION SYSTEM	246.3 m2
D	TOTAL IMPERVIOUS AREA (ROOF, DRIVEWAYS, PAVING, ETC)	1797.52 m2
E	IMPERVIOUS AREA BYPASSING DETENTION SYSTEM	83.73 m2
PERMITTED SITE DISCHARGE		
FLOW 1	A X C	15.07 L/sec
F	ADJUSTMENT FOR ANY UNCONTROLLED IMPERVIOUS FLOW E/D	0.047
FLOW 2	FLOW 1 X F	0.70 L/sec
	PSD = FLOW 1 - FLOW 2	14.37 L/sec
SITE STORAGE REQUIREMENT		
SSR1	C x B	66.87 m3
SSR2	IF THE STORAGE IS IN A LANDSCAPED BASIN SSR1 x 1.2	80.25 m3
RWT	RWT STORAGE	15 m3
ADJ SSR	10% DEDUCTION FOR RAINWATER TANK	60.19 m3
OUTLET CONTROL		
G	HEIGHT DIFFERENCE BETWEEN TOP WATER SURFACE LEVEL AND THE CENTRE OF ORIFICE	2.2 m
OD	ORIFICE DIAMETER	68.11 mm



SUITE 2.04, L2, BLDG 3,
35-41 WATERLOO RD., MACQUARIE PARK, NSW 2113
info@smartstructs.com.au | T: (02) 9052 6467

Address
**4-8 CHERRY STREET,
WARRAWEE NSW 2074**

Project Number: 230643
Site Address: 7-9 Merriwa Street, Gordon
BoM Station: Turrumurra [Kissing Point Rd] - Daily Rainfall (66158) 1990 - 2018

Assumptions
* Wet day = greater than 0mm of daily rain
* Total water usage is calculated in m3/day and subtracted on each day
* Target is 50% reduction in runoff days
* Assume that if rainwater tank does not overflow on a wet day, this is no longer a 'runoff day'. OF = Overflow Day
* %Reduction in wet days = (wet days - OF days) / wet days

References
[a] Blacktown Council WSUD guidelines
[b] AW / Sydney Water
[c] Melbourne Household Water Use calculator

Rainfall loss	1	mm
Roof area	789.67	m2
Rainwater tank size	15	m3
%Full at start	0	%
Total# days	10531	days
Total# wet days	4188	days
Total# OF days	1845	days
%reduction in wet days	55.9	%
%of time tank is empty	6	%
%of time tank is full	20	%

Water Usage - Landscape Watering		
Area to be watered	724.8	m2
Watering rate	0.4	m3/yr/m2 [a]
Total water used	0.794	m3/day
Water Usage - Car Wash Bay		
Number units	0	
% of units using car wash	100	%
Average washes	4	washes/yr/unit
Usage Rate	100	L/wash [b]
Total water used	0.000	m3/day
Total Water usage	0.794	m3/day

Water Usage - AAA Toilets		
No. of Toilets	0	
AAA Toilet flush rate	15	L/flush [c]
Flushes	5	flush/pers/day [c]
Total water used	0	m3/day
Water Usage - 4A Washing Machines		
No. of units w. machines	0	
Water use	60	L/wash
Washes per week	3	
Total water used	0.00	m3/day

Raw Data	Date	Daily_rain_mm	Inc_loss_mm	Runoff_m3	Wet_day	Delta-V_m3	Tank_Vol_m3	Overflow_day
IDCJAC0009	66158 1990	1	1	1.6	1 Y	1/1/1990	0.474	0
IDCJAC0009	66158 1990	1	2	0	0 Y	2/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	3	0	0 Y	3/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	4	0	0 Y	4/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	5	0	0 Y	5/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	6	0.2	1 Y	6/1/1990	0.000	0
IDCJAC0009	66158 1990	1	7	4	1 Y	7/1/1990	2.369	0
IDCJAC0009	66158 1990	1	8	14.6	1 Y	8/1/1990	10.740	0
IDCJAC0009	66158 1990	1	9	8.6	1 Y	9/1/1990	6.001	1
IDCJAC0009	66158 1990	1	10	40.8	1 Y	10/1/1990	31.429	1
IDCJAC0009	66158 1990	1	11	6	1 Y	11/1/1990	3.948	1
IDCJAC0009	66158 1990	1	12	1.4	1 Y	12/1/1990	0.316	1
IDCJAC0009	66158 1990	1	13	0	0 Y	13/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	14	6.4	1 Y	14/1/1990	4.264	1
IDCJAC0009	66158 1990	1	15	3.2	1 Y	15/1/1990	1.737	1
IDCJAC0009	66158 1990	1	16	0.8	1 Y	16/1/1990	0.000	0
IDCJAC0009	66158 1990	1	17	0	0 Y	17/1/1990	-0.794	0
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IDCJAC0009	66158 1990	1	21	6	1 Y	21/1/1990	3.948	1
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IDCJAC0009	66158 1990	1	23	0	0 Y	23/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	24	0	0 Y	24/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	25	0	0 Y	25/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	26	3.4	1 Y	26/1/1990	1.895	0
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IDCJAC0009	66158 1990	1	28	0	0 Y	28/1/1990	-0.794	0
IDCJAC0009	66158 1990	1	29	0.4	1 Y	29/1/1990	0.000	0
IDCJAC0009	66158 1990	1	30	1	1 Y	30/1/1990	0.000	0
IDCJAC0009	66158 1990	1	31	0	0 Y	31/1/1990	-0.794	0
IDCJAC0009	66158 1990	2	1	3	1 Y	1/2/1990	1.579	0
IDCJAC0009	66158 1990	2	2	16.2	1 Y	2/2/1990	12.003	1
IDCJAC0009	66158 1990	2	3	231.8	1 Y	3/2/1990	182.256	1
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IDCJAC0009	66158 1990	2	5	20	1 Y	5/2/1990	15.003	1

THERE ARE ANOTHER 195 SHEETS OF CALCULATION BELOW THIS SHEET WHICH CAN BE SUPPLIED UPON REQUEST

Start Date: JUNE 2025
Project No: 250235

Client:
Architect: GILES TRIBE

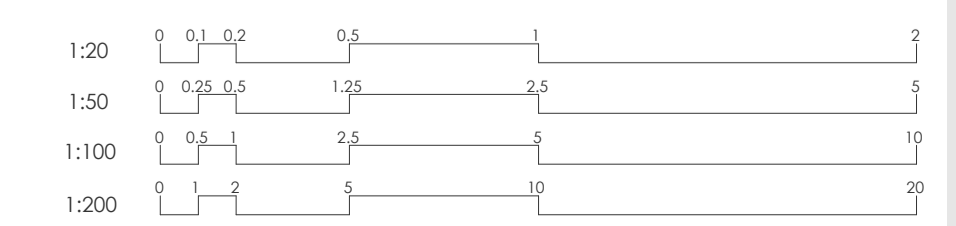
Approved by: K.E.
Internal Revisions:
Rev. # Drafter Engineer Date
Revision Description
A N.E. K.E. 02.07.25
ISSUE FOR D.A.

Notes
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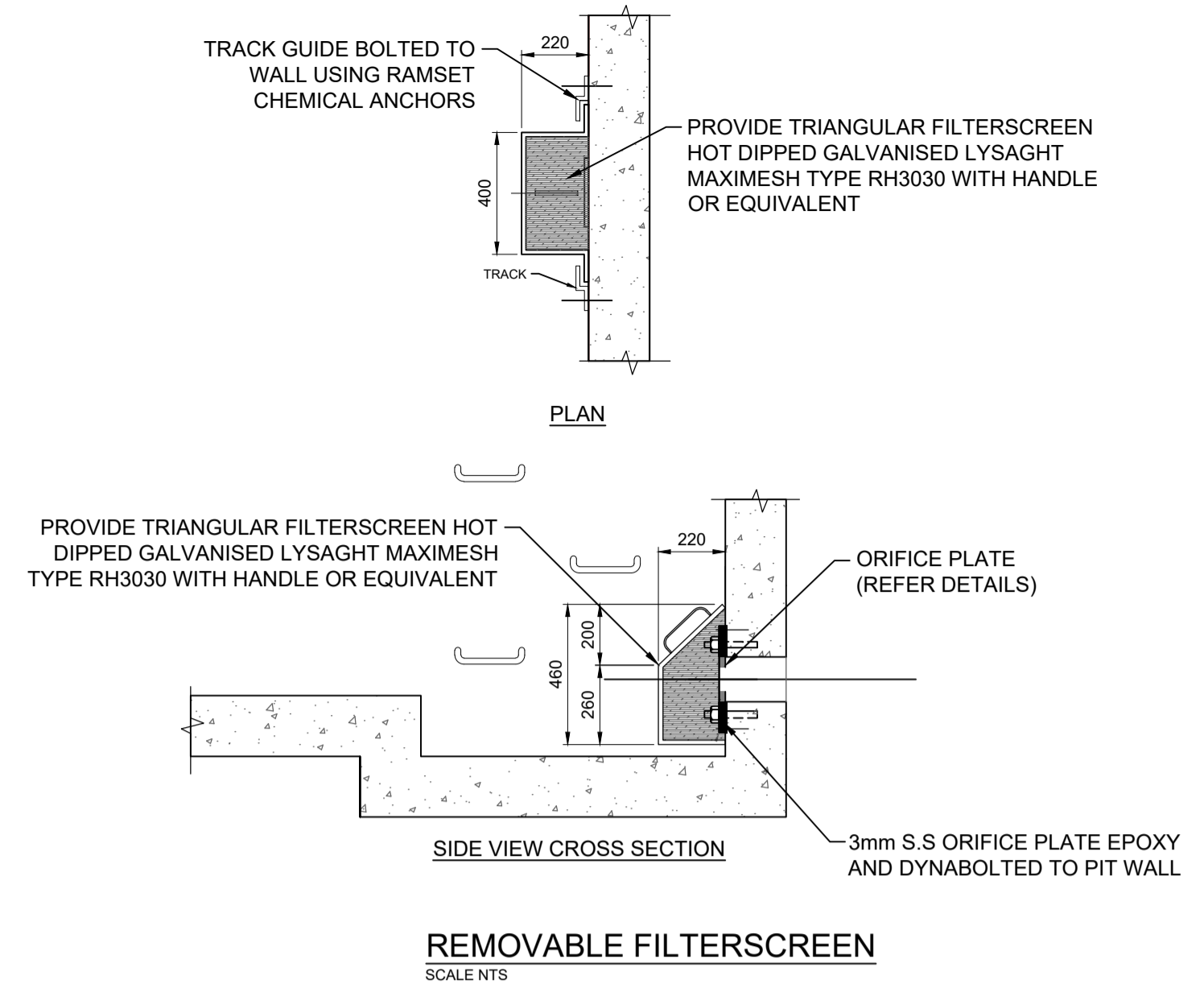
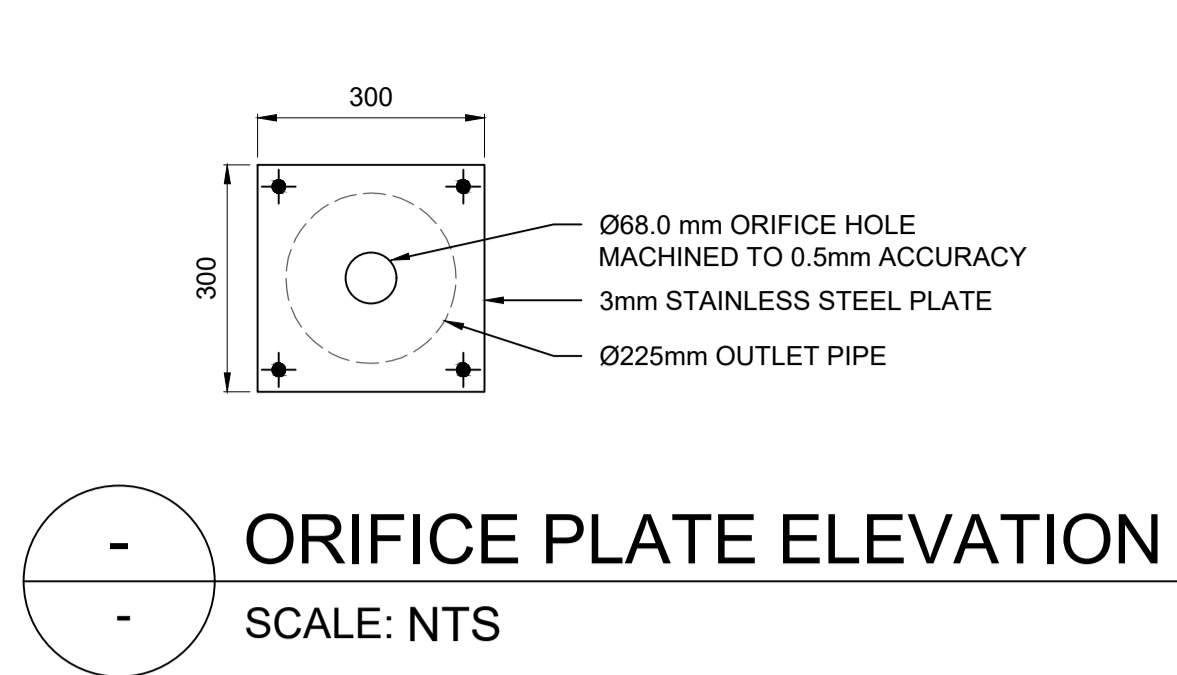
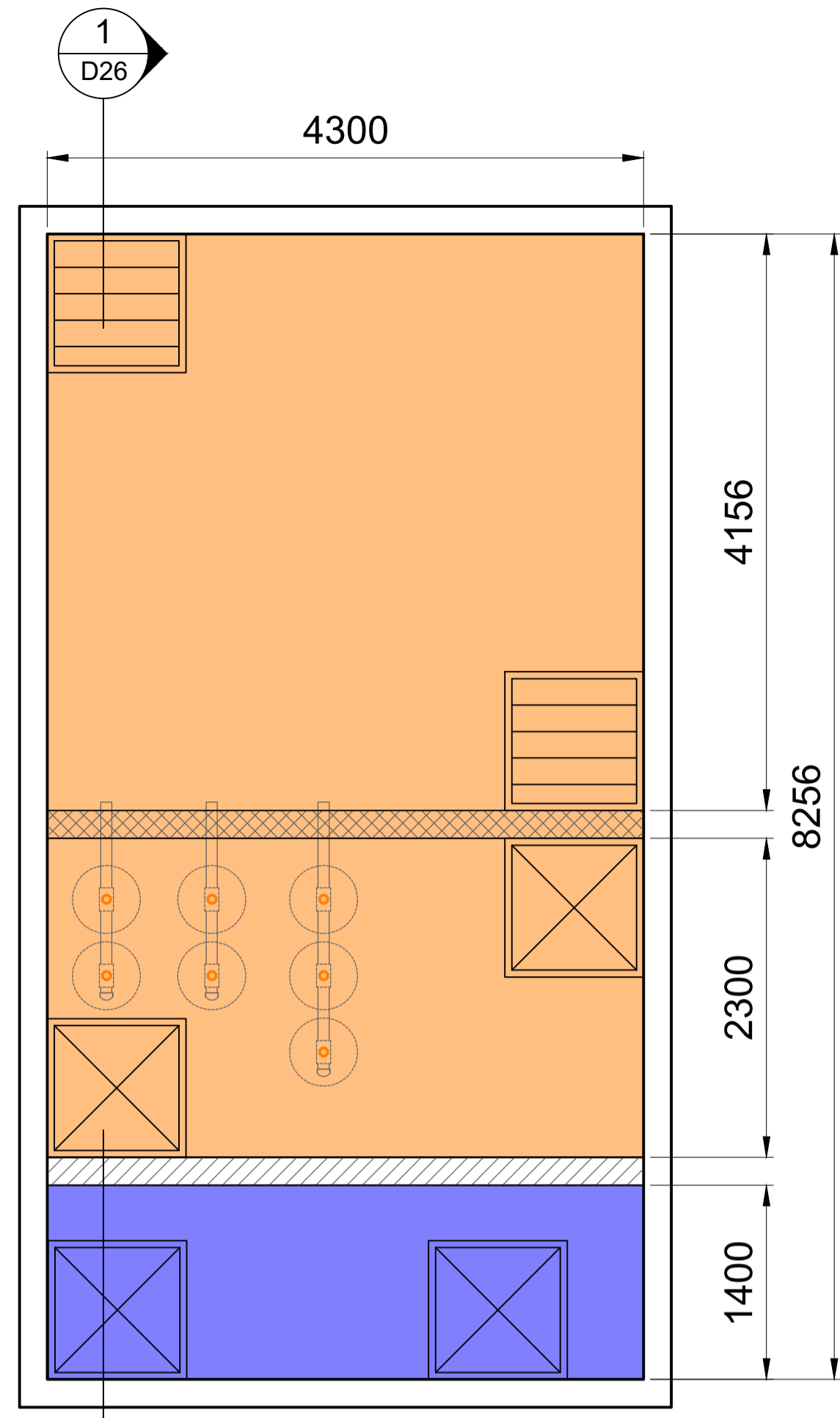
**PRELIMINARY
NOT FOR CONSTRUCTION**

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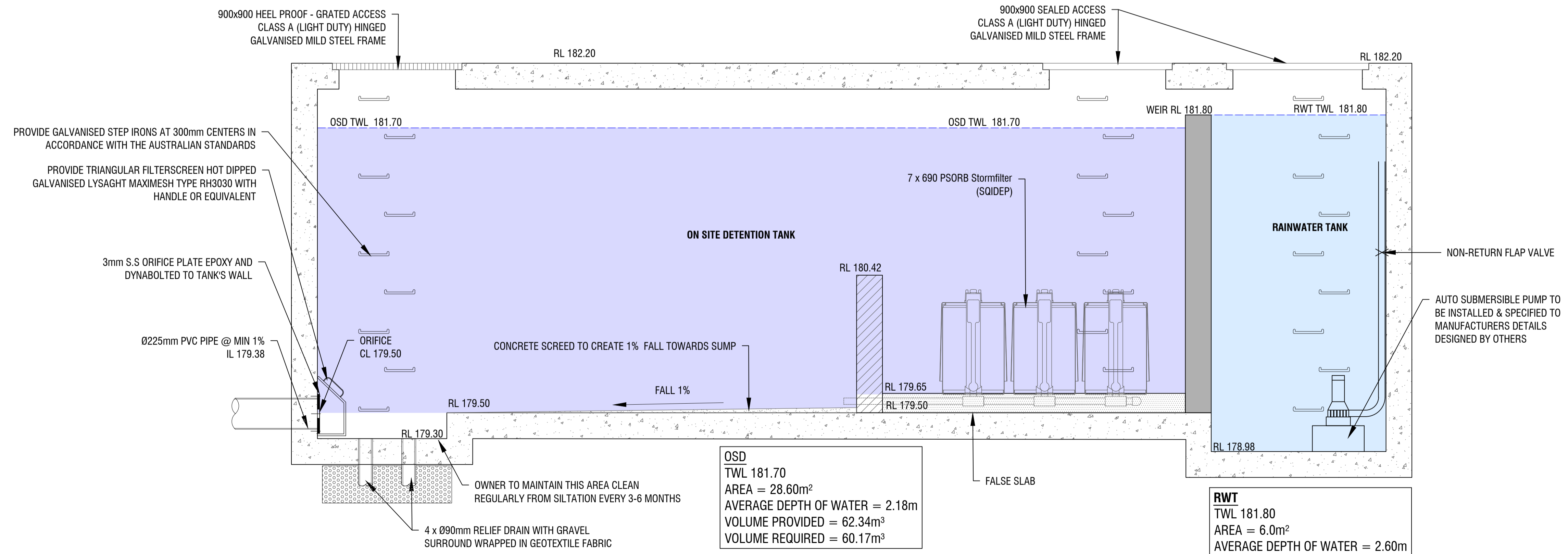
Sheet Number:



Revision: **D25**
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RWT / OSD TANK PLAN VIEW
SCALE: NTS



SECTION THROUGH OSD / RWT TANK
SCALE: NTS

Internal Revisions:

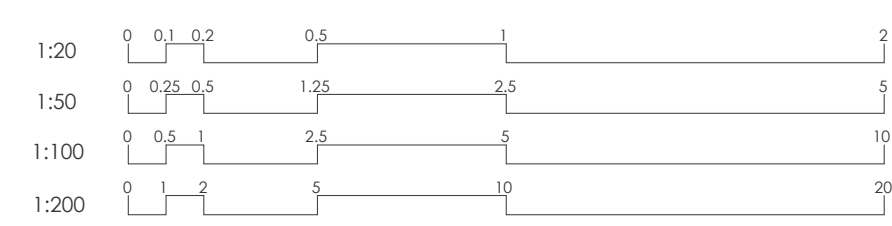
Rev. #	Drafter	Engineer	Date	Description
A	N.E.	K.E.	02.07.25	ISSUE FOR D.A.
B	N.E.	K.E.	08.07.25	ISSUE FOR D.A.

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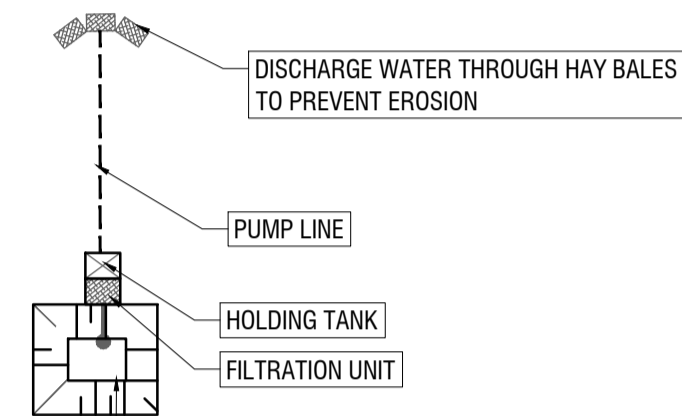
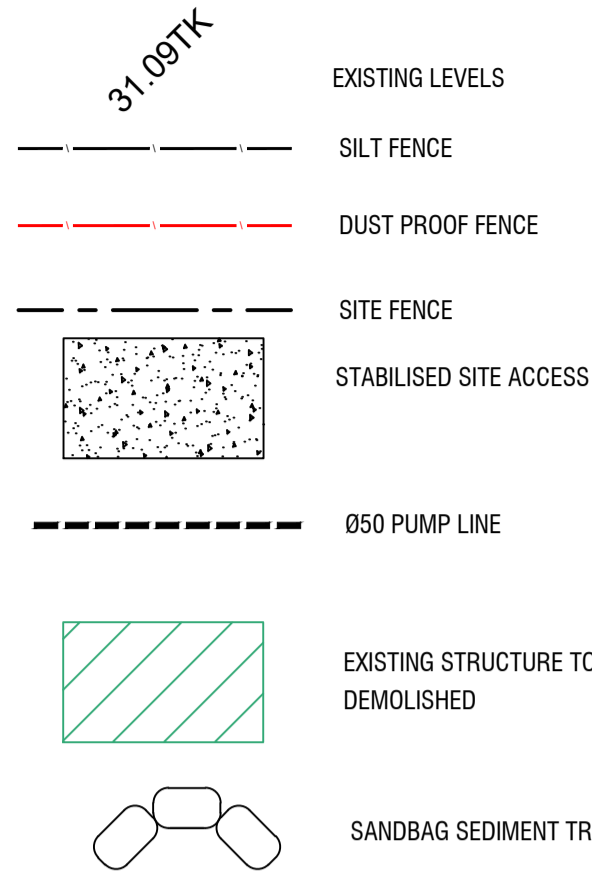
PRELIMINARY NOT FOR CONSTRUCTION
Project North

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Sheet Name: **OSD AND RWT DESIGN CALCULATION AND DETAILS SHEET 2**

Sheet Number:



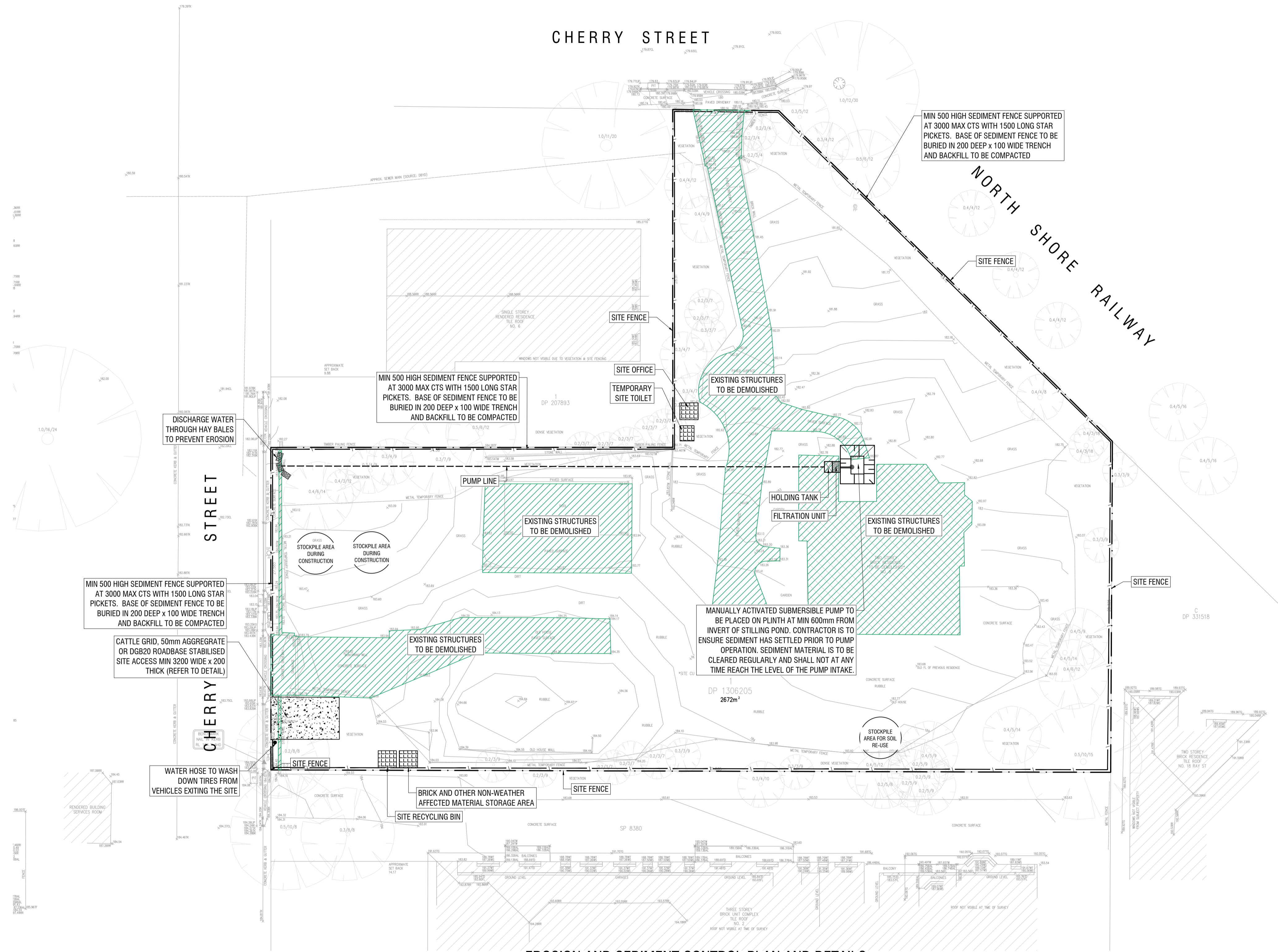
SYMBOLS



MANUALLY ACTIVATED SUBMERSIBLE PUMP TO BE PLACED ON PLINTH AT MIN 600mm FROM INVERT OF STILLING POND. CONTRACTOR IS TO ENSURE SEDIMENT HAS SETTLED PRIOR TO PUMP OPERATION. SEDIMENT MATERIAL IS TO BE CLEARED REGULARLY AND SHALL NOT AT ANY TIME REACH THE LEVEL OF THE PUMP INTAKE.

EROSION CONTROL NOTES

1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 'MANAGING URBAN STORMWATER, 3RD EDITION' PRODUCED BY THE NSW DEPARTMENT OF HOUSING.
2. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION AND REMOVED REGULARLY DURING CONSTRUCTION.
3. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEARED FOR BUILDINGS, PAVEMENTS ETC- CONTRACTOR TO MINIMISE DISTURBED AREAS.
4. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER.
5. NOT WITHSTANDING DETAILS SHOWN, IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT.
6. ALL DISTURBED AREAS AND STOCKPILES TO BE STABILISED WITHIN 14 DAYS. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
7. TOPSOIL TO BE STRIPPED, STOCKPILED AND RE-SPREAD ON COMPLETION OF EARTHWORKS. NONE TO BE REMOVED.
8. NO DISTURBANCE OF SITE PERMITTED OTHER THAN IMMEDIATE AREA OF THE WORKS.
9. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE. NON-COMPLIANCE MAY RESULT IN A \$1500 FINE.



EROSION AND SEDIMENT CONTROL PLAN AND DETAILS

SCALE 1:200

Internal Revisions:

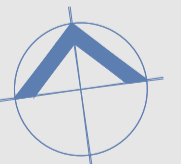
Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25

ISSUE FOR D.A.

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**PRELIMINARY
NOT FOR CONSTRUCTION**

Project North



Scale @ A1: **AS SHOWN**

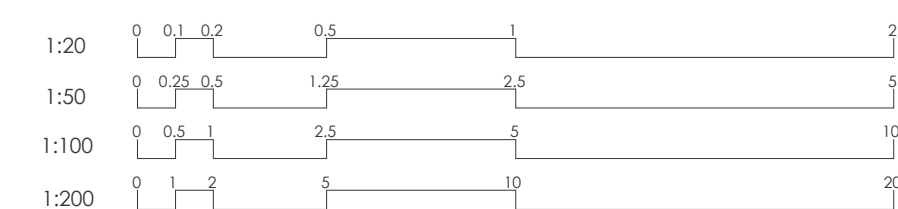
Sheet Name:
**EROSION AND
SEDIMENT
CONTROL PLAN**

Sheet Number:

D35

Revision:

A



GENERAL INSTRUCTIONS:

SWM01
THESE PLANS PRESENT A CONCEPTUAL SOIL AND WATER MANAGEMENT PLAN (SWMP) ONLY AND SHOWS A POSSIBLE WAY OF MANAGING SOIL AND EROSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT AND MANAGEMENT OF THE SITE AND PREPARING A DETAILED PLAN AND OBTAINING APPROVAL FROM THE RELEVANT AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY WORKS.

SWM02
THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS AND ANY OTHER PLANS, WRITTEN INSTRUCTIONS, SPECIFICATION OR DOCUMENTATION THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT OF THE SUBJECT SITE.

SWM03
THE CONTRACTOR WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE CONSISTENT WITH 'MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION - ALSO KNOWN AS 'THE BLUE BOOK'.

SWM04
ALL BUILDERS AND SUB-CONTRACTORS SHALL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

EROSION CONTROL:

SWM05
WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNTIL SEDIMENT CONCENTRATION IS LESS THEN OR EQUAL TO 50MG/L. IF THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/ OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AND APPROVED STRUCTURE.

SWM06
ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD THE SURFACE WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.

SWM07
ACCEPTABLE RECEPTORS WILL BE CONSTRUCTED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.

SWM08
'SEDIMENT' FENCING WILL BE INSTALLED AS INDICATED ON THE PLANS AND AT THE DIRECTION OF SITE SUPERINTENDENT TO ENSURE CONTAINMENT OF SEDIMENT. THE SEDIMENT FENCING WILL OUTLET OR OVERFLOW UNDER STABILISED CONDITIONS INTO THE SEDIMENT BASIN, TO SAFELY CONVEY WATER INTO A SUITABLE FILTERING SYSTEM SHOULD THE PORES IN THE FABRIC BLOCK.

SWM09
THE SEDIMENT BASINS WILL BE CONSTRUCTED WITH THE MINIMUM WET SEDIMENT CAPACITY OF CUM CUBIC METERS AND DESIGNED TO REMAIN STABLE IN AT LEAST THE 1 IN COSE YEAR CRITICAL DURATION STORM EVENT. ARTIFICIAL FLOCCULATION OF THE FINER PARTICLES MAY NOT BE NECESSARY IN THIS INSTANCE.

SWM10
STOCKPILES SHOULD NOT BE LOCATED WITHIN 5M OF TREES AND HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS, DRAINAGE LINES, PAVED AREAS AND DRIVEWAYS. WHERE THEY ARE WITHIN 5M FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSTREAM WATERS. MEASURE SHOULD ALSO BE APPLIED TO PREVENT THE EROSION OF THE STOCKPILE.

SWM11
ALL CUT AND FILL BATTERS ARE TO BE SEEDED AND MULCHED WITHIN 14 DAYS OF COMPLETION OF FORMATION.

SWM12
ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY -
A. PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE,
B. ENSURING THAT NOTHING IS NAILED TO THEM,
C. PROHIBITING PAVING GRADING SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:
1. ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER,
2. A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH,
3. CARE IS TAKEN.

SWM13
DURING WINDY WEATHER, LARGE DISTURBED UNPROTECTED AREAS SHOULD BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

SWM14
TEMPORARY PROTECTION FROM EROSION FORCES WILL BE UNDERTAKEN ON LANDS WHERE FINAL SHAPING HAS NOT BEEN COMPLETED BUT WORKS ARE UNLIKELY TO PROCEED FOR PERIODS OF TWO MONTHS OR MORE (EG. ON TOP SOIL STOCKPILES). THIS MAY BE ACHIEVED WITH A VEGETATIVE COVER. A RECOMMENDED LISTING OF PLANT SPECIES FOR SOIL AND WATER MANAGEMENT NOTES:
TEMPORARY COVER IS -
I) AUTUMN/WINTER SOWING -OATS/RYECORN AT 20KG/HA
-JAPANESE MILLET AT 10KG/HA
II) SPRING/SUMMER SOWING -JAPANESE MILLET AT 20KG/HA
-OATS/RYECORN AT 10 KG/HA

SWM15
DIVERSION BANKS/ CHANNELS WILL BE REHABILITATED AS SOON AS POSSIBLE AND WITHIN 5 WORKING DAYS FROM THEIR FINAL SHAPING. OTHER THAN IN THE WINTER MONTHS, SUITABLE MATERIALS INCLUDE TURF GRASSES SUCH S COUCH OR KIKUYU. DURING WINTER, OR AT OTHER TIMES WHEN TEMPORARY REHABILITATION (MORE THAN 3 MONTHS) IS REQUIRED, IT IS SUGGESTED THAT HESSIAN CLOTH IS USED BUT ONLY IF TACKED WITH APPROPRIATE PEGS AND AN ANIONIC BITUMEN EMULSION. FOOT AND VEHICULAR TRAFFIC SHOULD BE KEPT AWAY FROM THESE AREAS.

SWM16
UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS, WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

CONSTRUCTION SEQUENCE

SWM17
WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHOULD BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE -
I) INSTALL INLET SEDIMENT TRAPS TO ALL GULLY PITS FRONTING THE SITE,
II) INSTALL A 1.8M CHAIN WIRE FENCE AROUND THE BOUNDARIES AND ATTACH HESSIAN CLOTH OR AS INSTRUCTED BY THE SUPERINTENDENT),
III) INSTALL GEOFABRIC SEDIMENT FENCE AND SEDIMENT TRAPS AROUND ALL PERMANENT STORMWATER RETICULATION STRUCTURES AS SHOWN ON THE PLAN,
IV) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN OR TO LOCATION AS DETERMINED BY SUPERINTENDENT,
V) INSTALL DIVERSION BANKS ALONG THE BOUNDARY WHERE REQUIRED, REHABILITATE DISTURBED LANDS DOWNSLOPE FROM THE BASINS WITHIN 20 WORKING DAYS,
VI) ENSURE THAT THE SEDIMENT BASIN IS DIRECTED ONTO A TURFED AREA AND DRAINS TO A SUITABLE LOCATION. A TEMPORARY STORMWATER LINE MAY BE NECESSARY TO CONVEY THE FLOWS TO THIS LOCATION. CONSTRUCT DIVERSION CHANNELS AT THE BOUNDARY TO DRAIN INTO THE SEDIMENT BASIN AS SHOWN ON PLANS.
VII) AT COMPLETION STABILISE SITE AND DECOMMISSION SEDIMENT BASIN AND ALL EROSION CONTROL DEVICES.

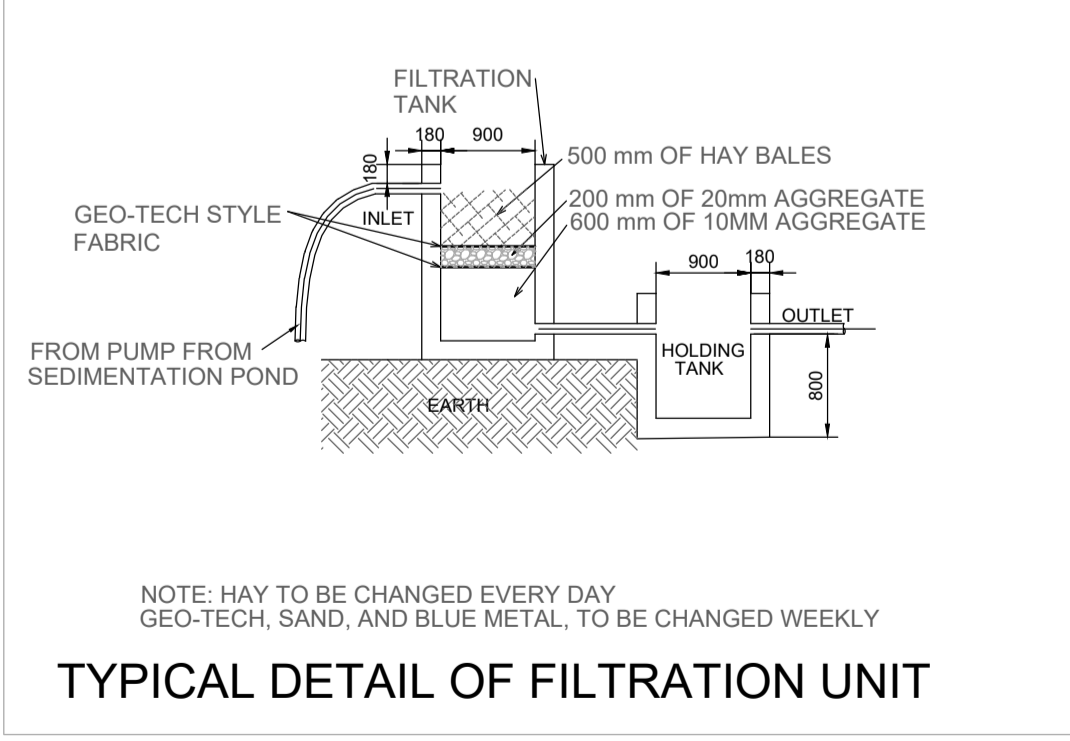
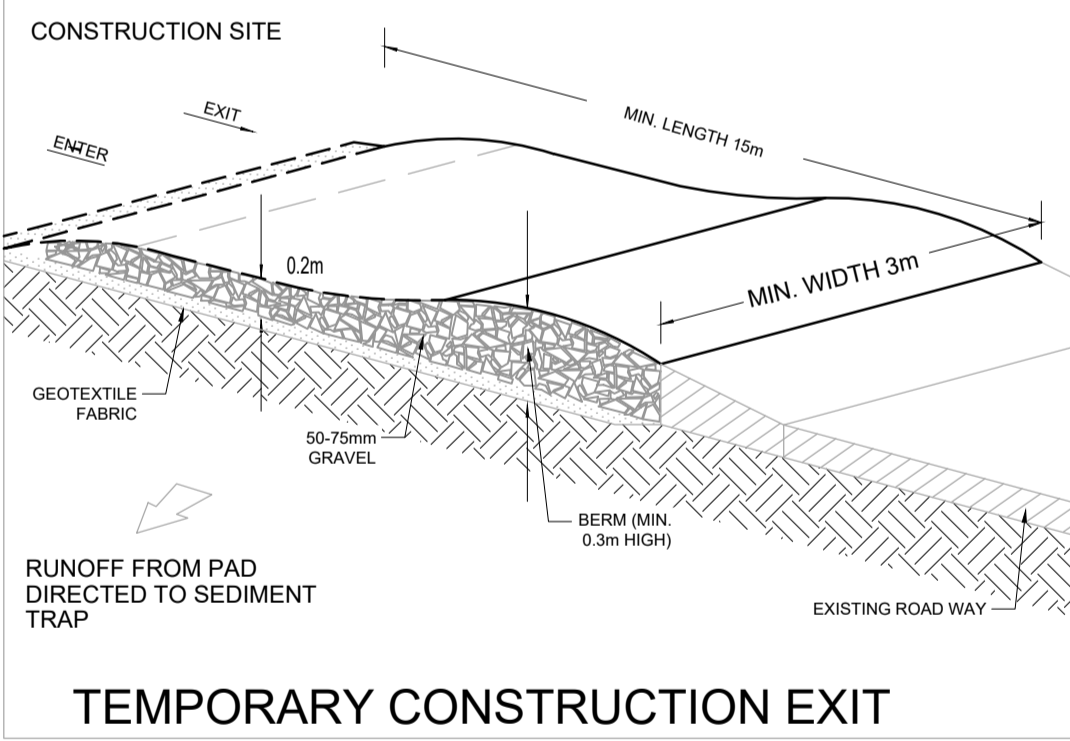
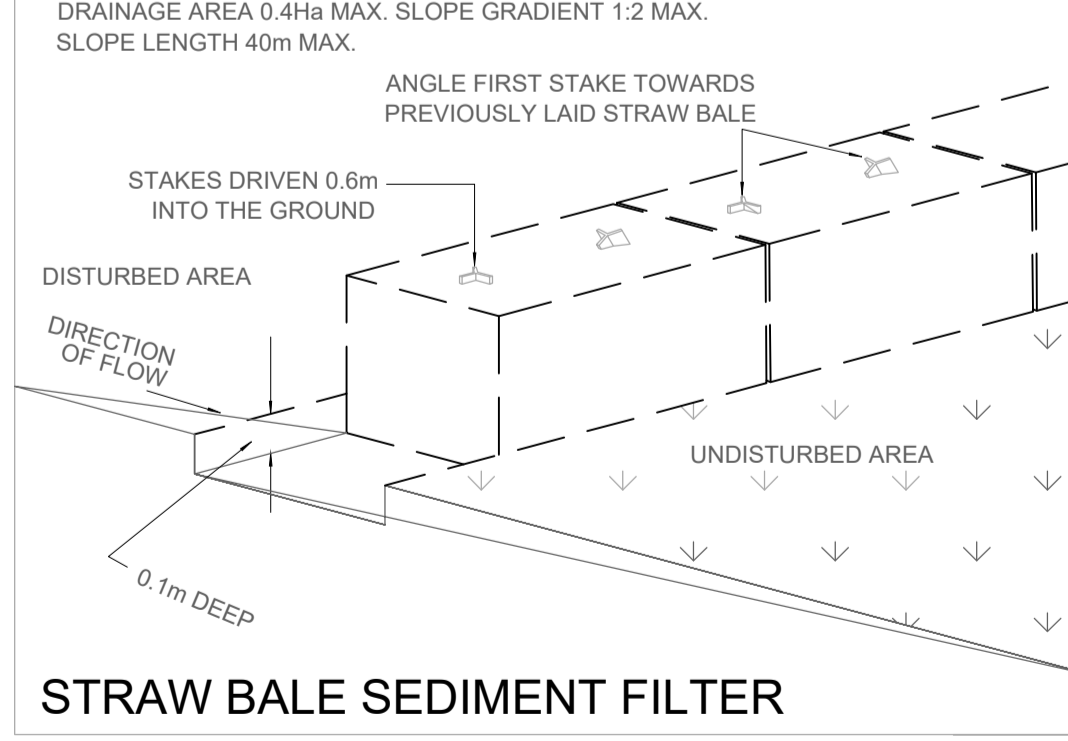
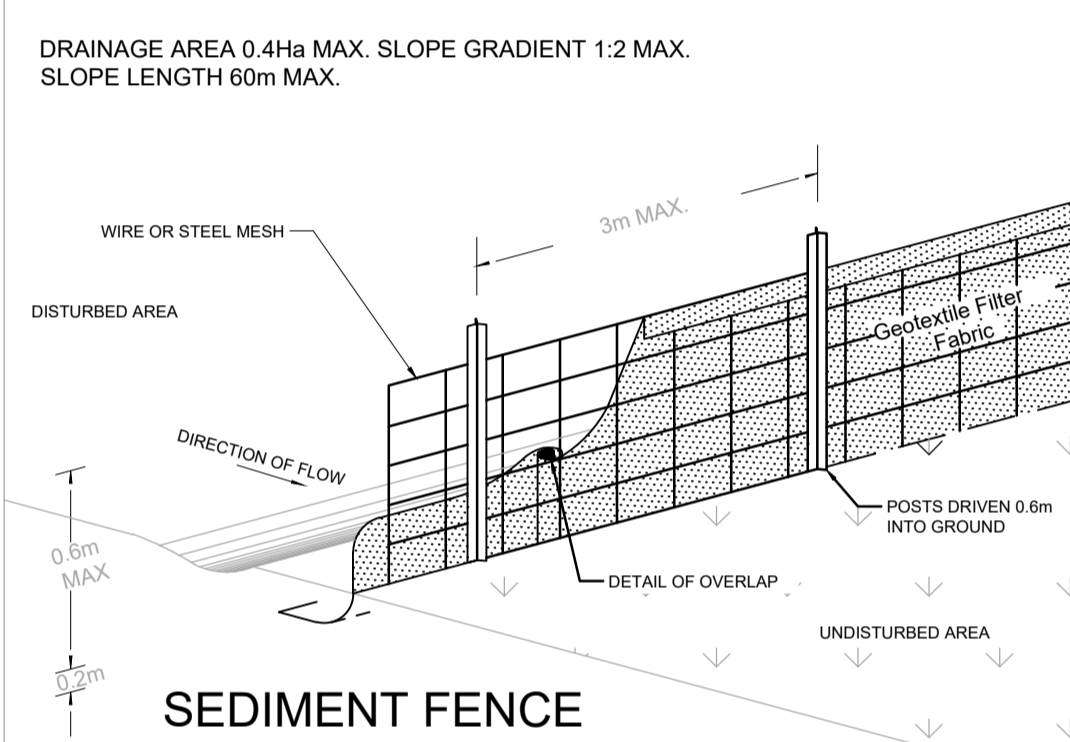
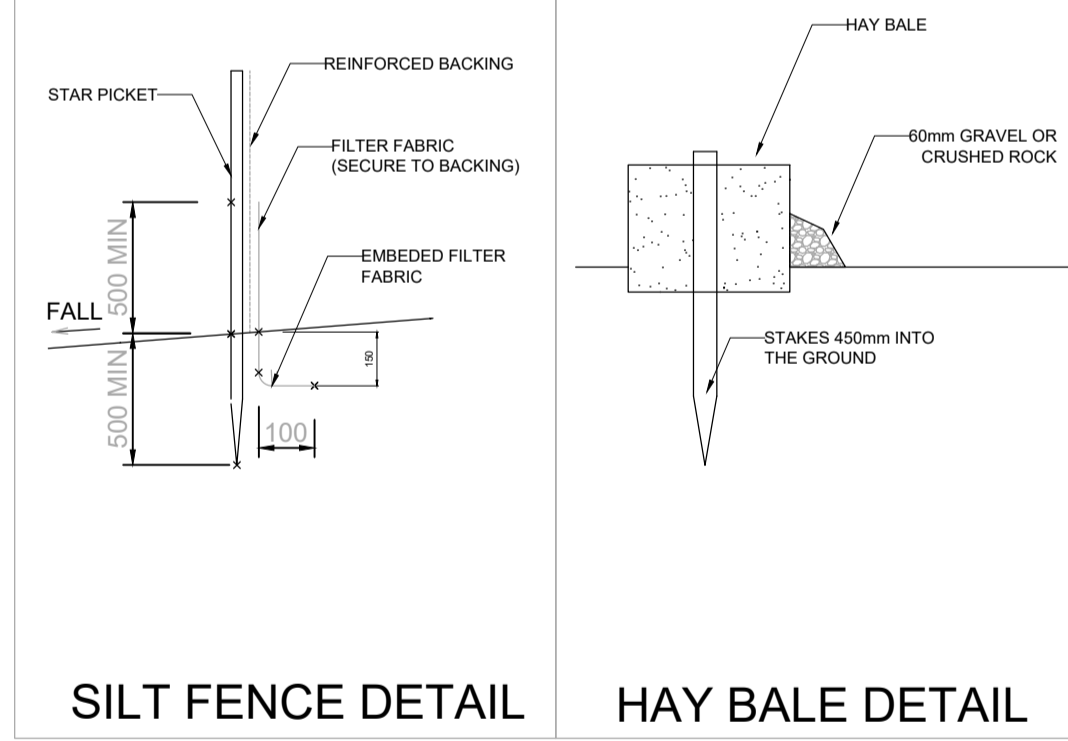
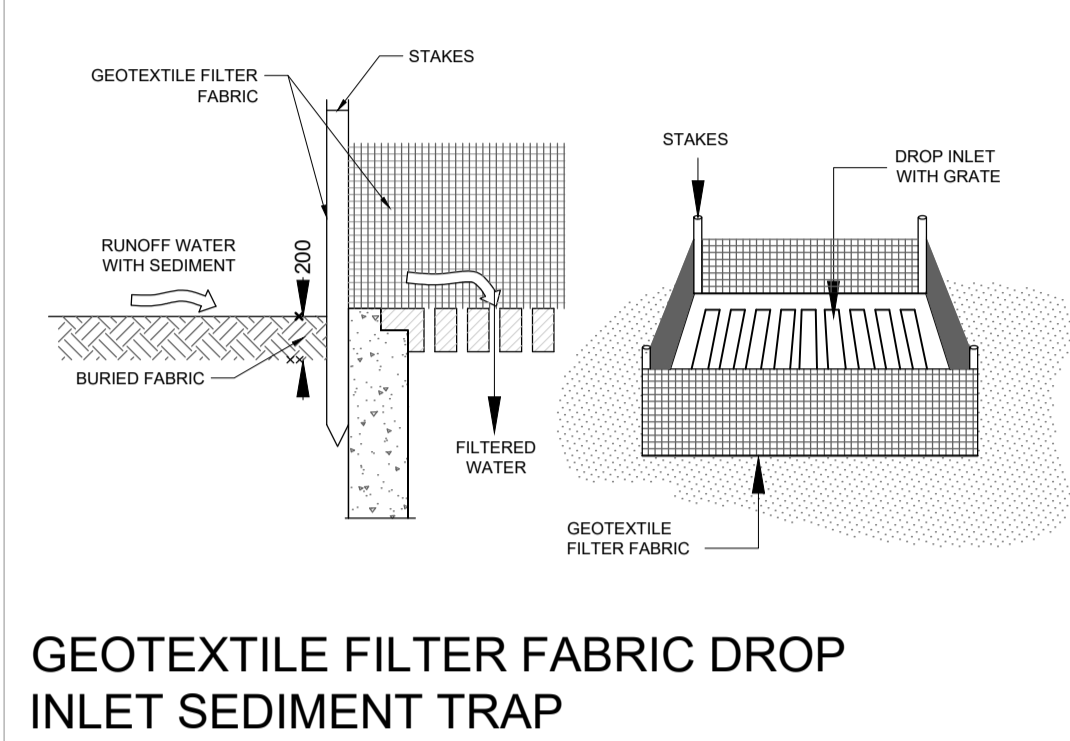
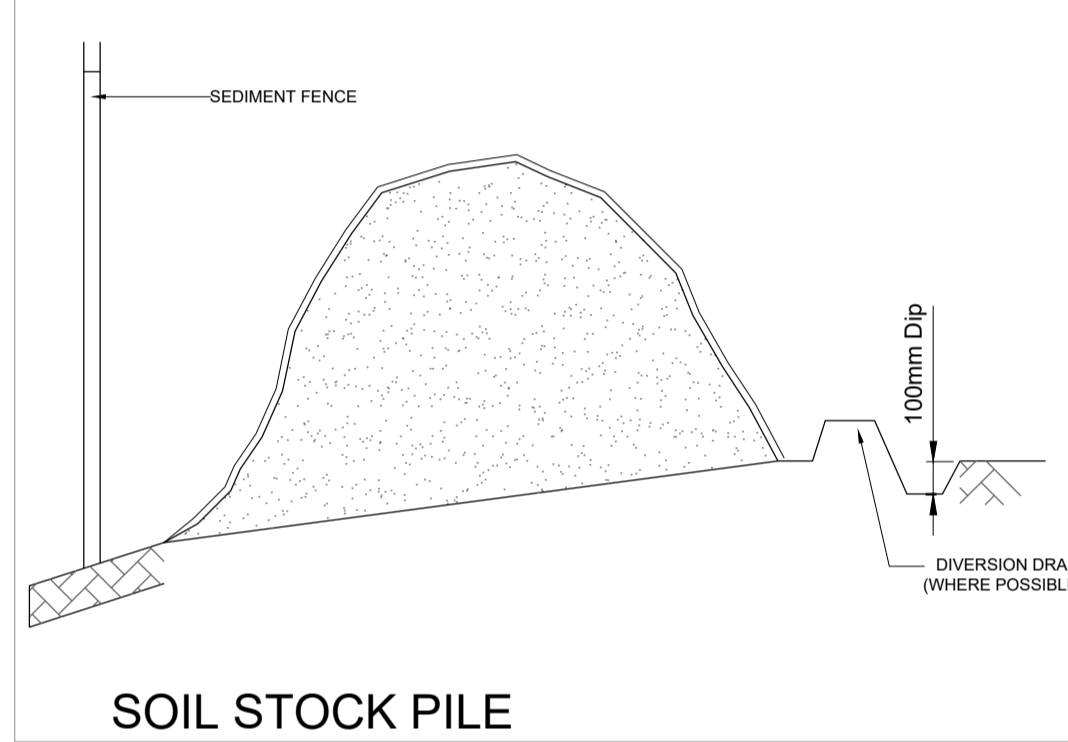
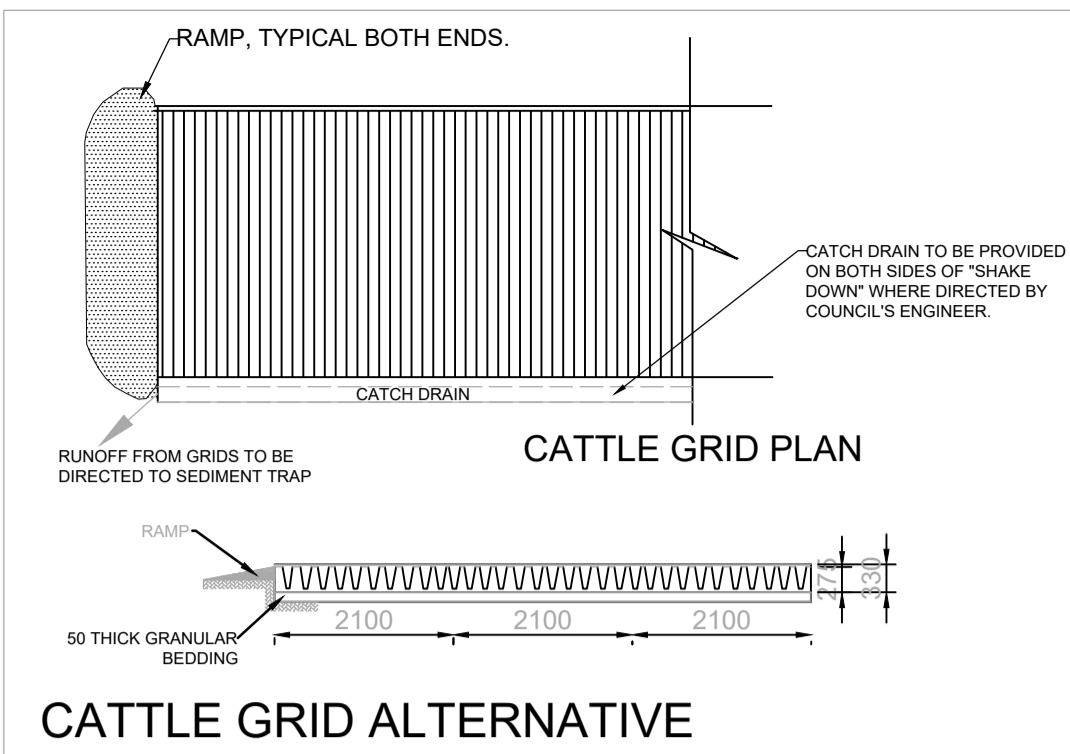
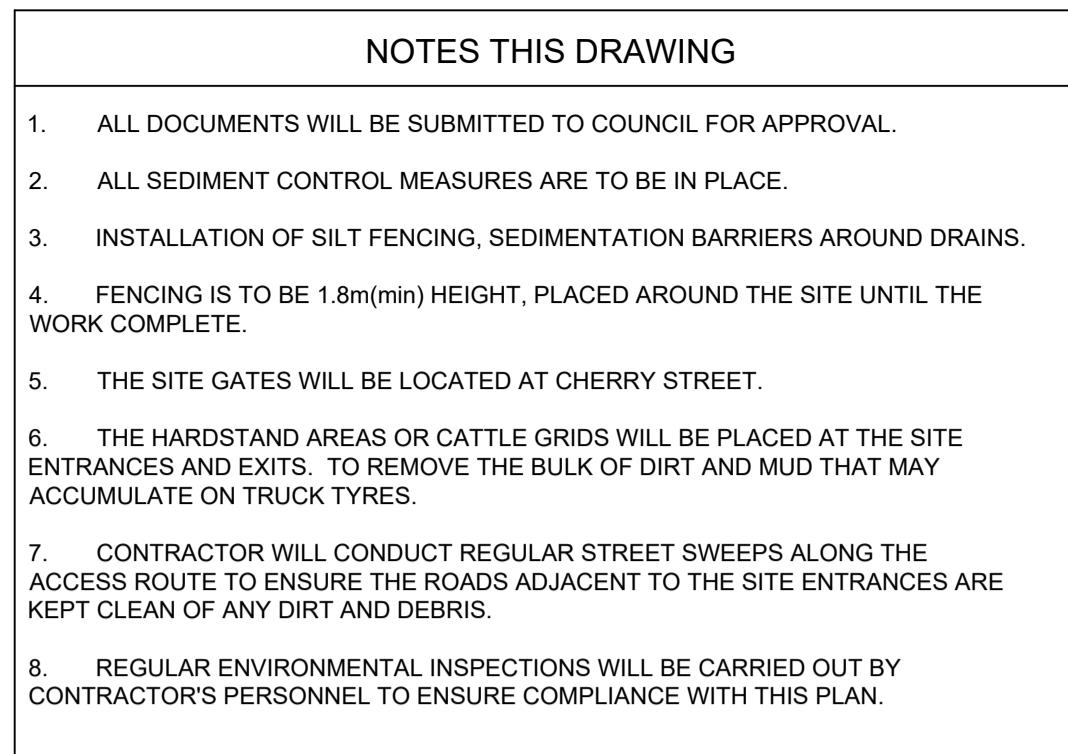
SWM18
TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

SWM19
FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SITE INSPECTION AND MAINTENANCE

SWM 20
AT LEAST WEEKLY AND AFTER EVERY RAIN FALL EVENT, THE CONTRACTOR WILL INSPECT THE SITE AND ENSURE THAT -
I) DRAINS AND ALL SEDIMENT CONTROL DEVICES OPERATE EFFECTIVELY AND INITIATE REPAIR OR MAINTENANCE AS REQUIRED,
II) RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANOR APPROVED BY THE SUPERINTENDENT,
III) SPILL SAND (OR OTHER MATERIALS) IS REMOVED FROM HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS, GUTTERS, PAVED AREAS AND DRIVEWAYS,
IV) SEDIMENT IS REMOVED FROM BASINS AND / OR TRAPS WHEN LESS THAN 20M³ OF TRAPPING CAPACITY REMAIN PER 1000M² OF DISTRIBUTED LANDS, AND OR LESS THAN 500 DEPTH REMAINS IN THE SETTLING ZONE. ANY COLLECTED SEDIMENT WILL BE DISPOSED IN AREAS WHERE FURTHER POLLUTION TO DOWN SLOPE LANDS AND WATERWAYS IS UNLIKELY,
V) REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND INITIATE UPGRADING OR REPAIR AS APPROPRIATE.

SWM 21
THE CONTRACTOR SHALL PROVIDE ALL MONITORING CONTROL AND TESTING.



SUIT 2.04, L2, BLDG 3,
35-41 WATERLOO RD., MACQUARIE PARK, NSW 2113
info@smartstruc.com.au | T: (02) 9052 6467

Address
**4-8 CHERRY STREET,
WARRAWEE NSW 2074**

Start Date:	JUNE 2025		
Project No.	250235		
Client:			
Architect:	GILES TRIBE		
Approved by:	K.E.		
Internal Revisions:			
Rev. #	Drafter	Engineer	Date
A	N.E.	K.E.	02.07.25
			ISSUE FOR D.A.

- Notes**
- Drawings to be read in conjunction with architectural drawings.
 - Refer to architectural drawings for all setout levels.
 - Do not scale any dimensions
 - Drawings to be read & printed in colour.

**PRELIMINARY
NOT FOR CONSTRUCTION**



Scale @ A1: AS SHOWN
Sheet Name: **EROSION AND SEDIMENT CONTROL DETAILS**
Sheet Number:

D36
Revision: **A**

