

RAINWATER RE-USE TANK - RWT

(AS PER BASIX REQUIREMENTS)

SIZE: 2,000 LITRES (MIN)
SLIMLINE TANK BY "KINGSPAN" OR SIMILAR
(2000L x 600W x 1785H)

INSTALL TO MANUFACTURES SPECIFICATIONS, AS3500 AND COUNCIL REQUIREMENTS

- FOR RE-USE AS SPECIFIED BY BASIX CERTIFICATE
- ENSURE TOP OF TANK IS MIN 1.0m BELOW ROOF GUTTERS TO ENSURE SUFFICIENT HEAD FOR THE SYSTEM
- TANK TO BE INSTALLED BY LICENSED PLUMBER IN ACCORDANCE WITH AS/NZS 3500:2003 AND NSW CODE OF PRACTICE PLUMBING AND DRAINAGE 2006

OSD WARRANT

LGA - NORTHERN BEACHES COUNCIL
SOURCE - WATER MANAGEMENT DEVELOPMENT POLICY

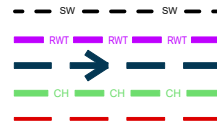
ONSITE STORMWATER DISPOSAL REQUIREMENTS REGION 2, SECTION 9.3.2

"ALL DEVELOPMENT APPLICATIONS FOR FOR ALTERATIONS AND ADDITIONS FOR SINGLE RESIDENTIAL DWELLINGS WILL NOT REQUIRE OSD THAT FALL NATURALLY TO THE PUBLIC ROAD"

THEREFORE OSD NOT REQUIRED

DRAINAGE PIPE LEGEND

- EXISTING STORMWATER PIPE
- DRAINAGE PIPES TO RAINWATER TANK
- DRAINAGE PIPES VIA GRAVITY
- CHARGED DRAINAGE PIPES
- 65mm DIA CLASS 12 PUMP LINE

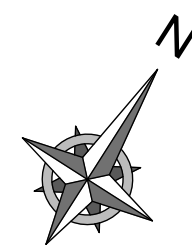
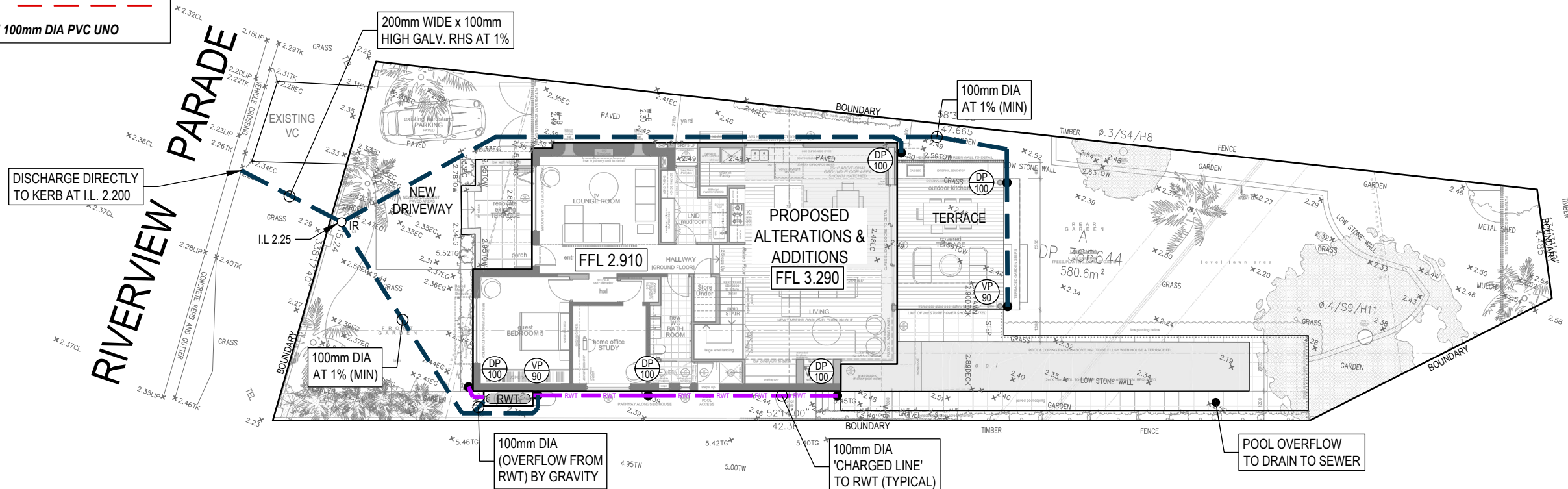


NOTE: ALL IN GROUND PIPES TO BE 100mm DIA PVC UNO

INSPECTION RISER (IR)

PROVIDE 'SCREW CAP' INSPECTION RISER AT LOWEST POINT OF 'CHARGED LINES'

NOTE: ENSURE ANY PROPOSED PAVING IS GRADED SO THAT IT IS NOT IMPACTING ADJOINING PROPERTIES.



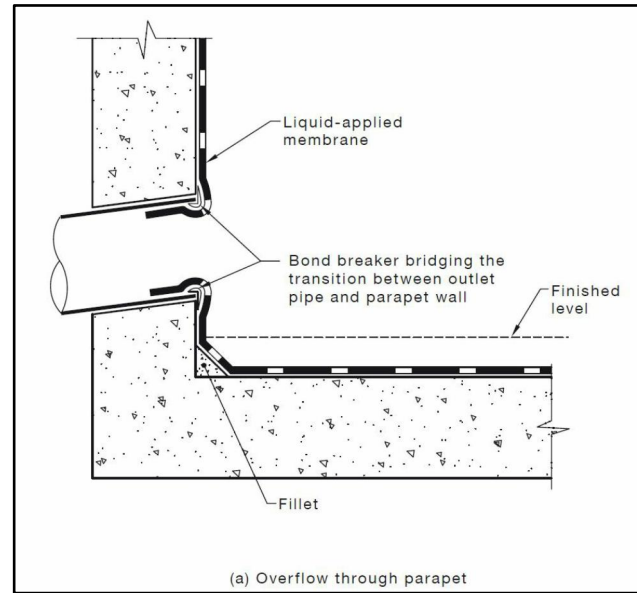
PLANS ARE FOR CONCEPT ONLY AND NOT FOR CONSTRUCTION



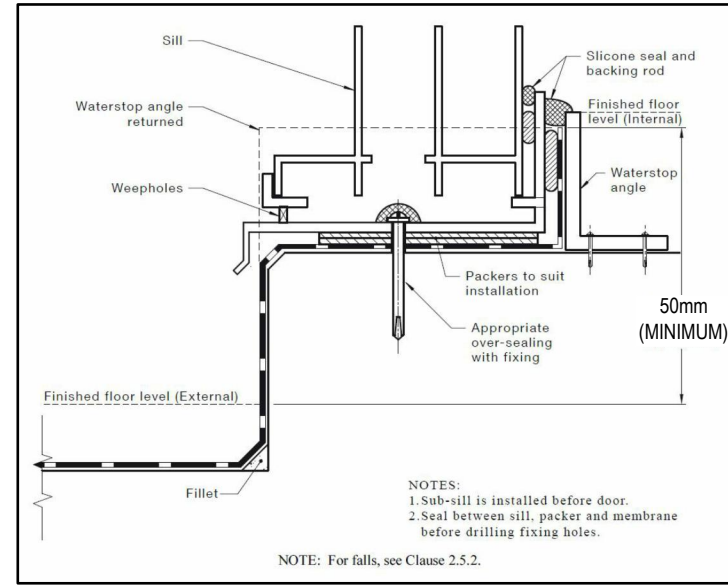
APPROVED BY	REVISION	DRAWN	DESCRIPTION	DATE
NADER ZAKI MIEAust CPEng NER 	A	MR	ISSUED FOR DA	21.10.2022
T 0413 942 613				
E admin@nycivilengineering.com.au				
W www.nycivilengineering.com.au				

DRAWING TITLE	
STORMWATER MANAGEMENT PLAN	
PROJECT TITLE	
PROPOSED ALTERATIONS & ADDITIONS No.15 RIVERVIEW PARADE NORTH MANLY	

SHEET SIZE	A3	JOB REFERENCE	E220211
DESIGNED	MR	DRAWING No.	D2
CHECKED	YR	No. IN SET	7
ISSUE	A		
SCALE	1:200		

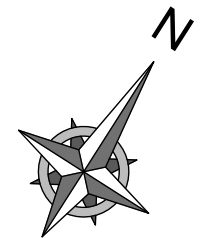
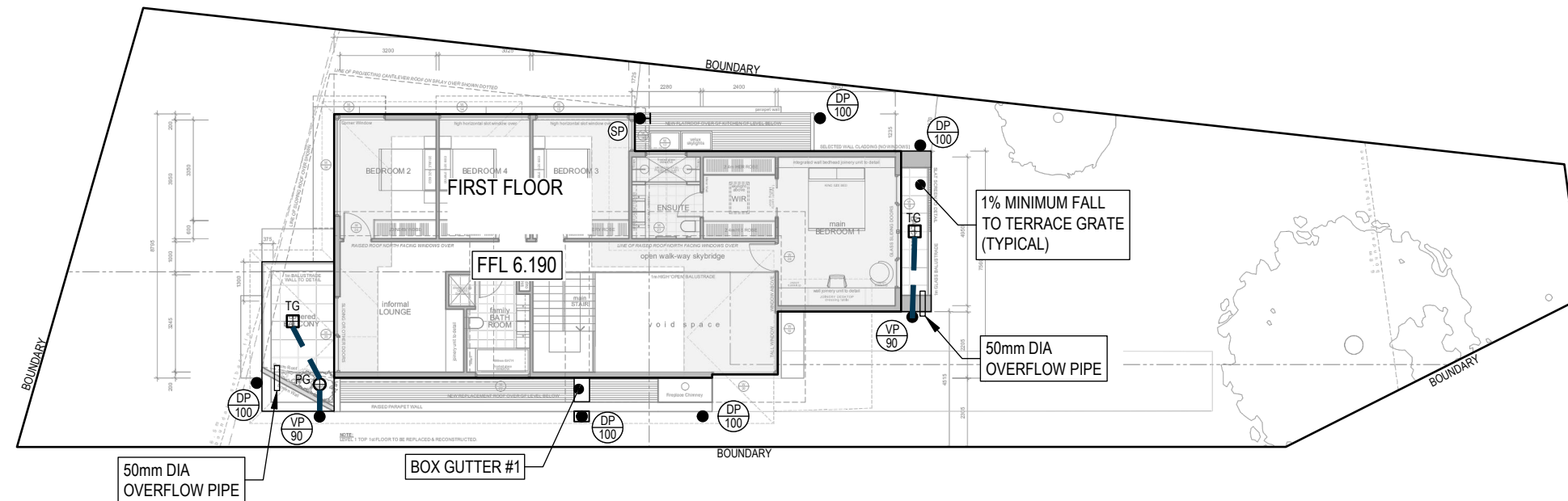
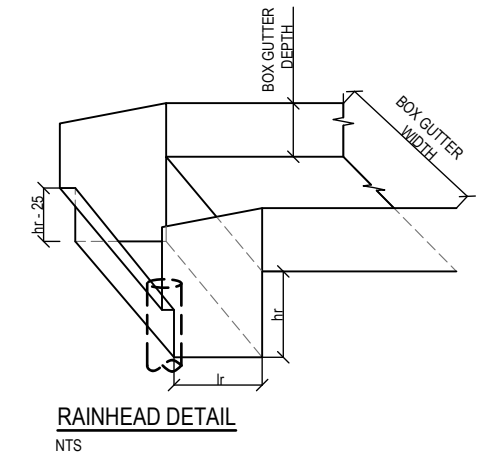


BALCONY PARAPET OVERFLOW - AS4654.2
NTS



BALCONY MEMBRANE TERMINATION - AS4654.2
NTS

DIMENSIONS (mm)	
	BOX GUTTER #1
CATCHMENT AREA TO DOWNPIPE	20m ²
BOX GUTTER WIDTH	200
DEPTH OF BOX GUTTER (AT HP)	95
DEPTH OF BOX GUTTER (AT RAIN HEAD)	100
SLOPE OF BOX GUTTER	1:200
DEPTH OF RAINHEAD (hr)	125
LENGTH OF RAINHEAD (lr)	120
DOWNPIPE DIA	100
ROOF DRAINAGE DESIGNED FOR 100 YEAR ARI STORM EVENT (I = 278 mm/hr)	



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DRAWING TITLE	
STORMWATER MANAGEMENT FIRST FLOOR PLAN	
PROJECT TITLE	
PROPOSED ALTERATIONS & ADDITIONS No.15 RIVERVIEW PARADE NORTH MANLY	

SHEET SIZE	A3	JOB REFERENCE	E220211
DESIGNED	MR	DRAWING No.	D3
CHECKED	YR	No. IN SET	7
ISSUE	A		
SCALE	1:200		

AS3500.3:2021 BOX GUTTER REQUIREMENTS				
MATERIALS	BASE METAL THICKNESS (mm)	MAXIMUM LENGTH BETWEEN EXPANSION JOINTS (m)		MINIMUM EXPANSION SPACE (mm)
		ONE END FIXED AND ONE END FREE TO MOVE	BOTH ENDS FREE TO MOVE	
ALUMINIUM	0.90	12	24	50
	1.00	12	24	
COPPER	0.60	9	18	50
	0.80	15	30	
STEEL	0.80	26	52	50
	0.55	20	40	
STAINLESS STEEL	0.75	25	50	50
	0.55	20	40	
PVC		10	20	30
ZINC	0.80	10	20	50

LAP JOINTS: FOR METAL GUTTERS WITH LAPS BETWEEN 20 mm TO 25 mm THE LAP SHALL BE FULLY SEALED. WIDER LAPS SHALL BE SEALED AND FASTENED AT EACH END OF THE LAP RATHER THAN FILLING THE TOTAL AREA.

GRADIENTS: GRADIENTS SHALL BE NOT FLATTER THAN 1:200 FOR SOLE WIDTHS EQUAL TO OR LESS THAN 600 mm WIDE. DEVIATIONS FROM THESE GRADIENTS SHALL BE SMOOTH AND NOT CAUSE PERMANENT PONDING.

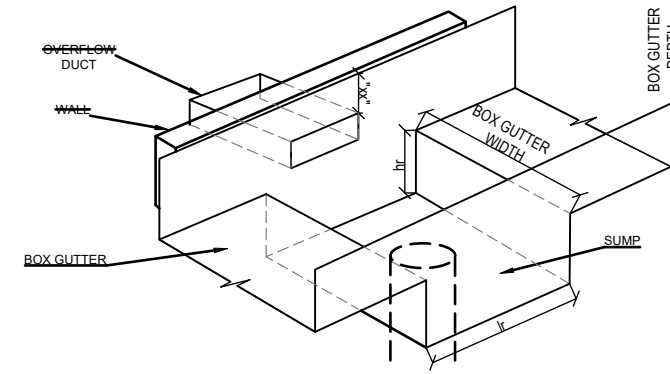
OUTLETS: OUTLETS SHALL DISCHARGE THROUGH EITHER A RAINHEAD OR A SUMP.

DIMENSIONS (mm)	
CATCHMENT AREA TO DOWNPIPE	11m ²
WIDTH OF BOX GUTTER	300
DEPTH OF BOX GUTTER (AT HP)	95
DEPTH OF BOX GUTTER (AT SUMP)	115
SLOPE OF BOX GUTTER	1:200
SUMP WIDTH	300
SUMP LENGTH (lr)	400
SUMP DEPTH (hr)	50
OVERFLOW WIDTH	200
OVERFLOW DEPTH	50
DOWNPIPE DIA	100

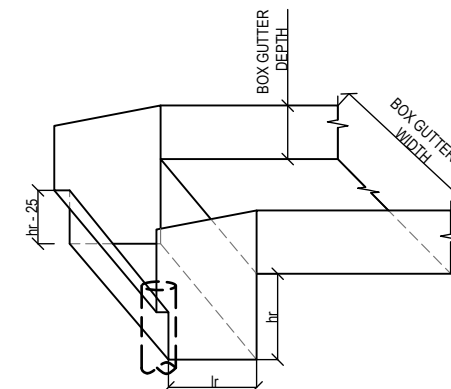
ROOF DRAINAGE DESIGNED FOR 100 YEAR ARI STORM EVENT (I = 278 mm/hr)

DIMENSIONS (mm)	
CATCHMENT AREA TO DOWNPIPE	33m ²
BOX GUTTER WIDTH	300
DEPTH OF BOX GUTTER (AT HP)	110
DEPTH OF BOX GUTTER (AT RAIN HEAD)	135
SLOPE OF BOX GUTTER	1:200
DEPTH OF RAINHEAD (hr)	125
LENGTH OF RAINHEAD (lr)	120
DOWNPIPE DIA	100

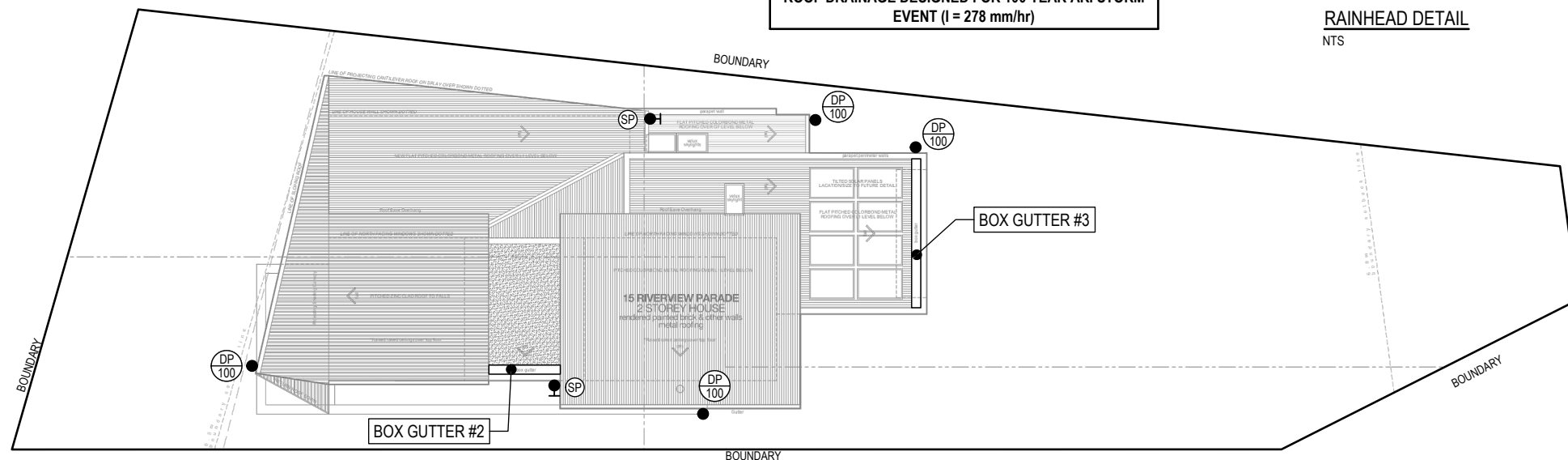
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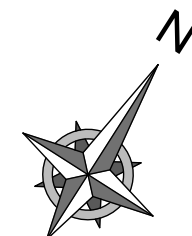
SUMP DETAIL
NTS



RAINHEAD DETAIL
NTS



- ROOF DRAINAGE**
- GUTTERING - CROSS SECTIONAL AREA OF GUTTER TO BE GREATER THAN 7500mm²
 - DOWN PIPES - 100mm DIA PVC OR COLORBOND
- NOTE: ROOF DESIGNED TO 5% AEP INTENSITY 209 mm/hr



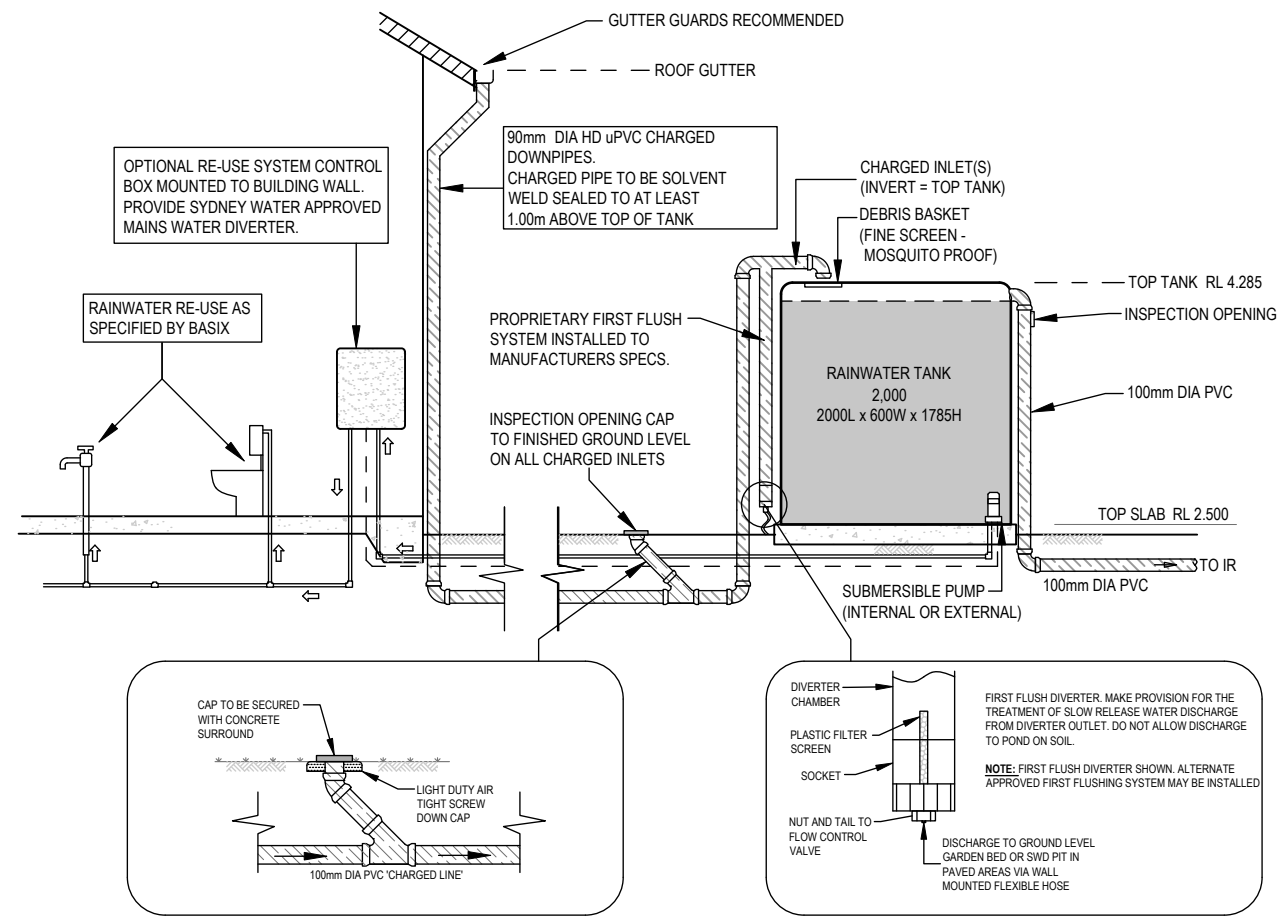
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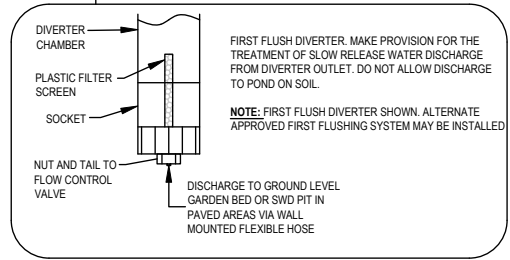
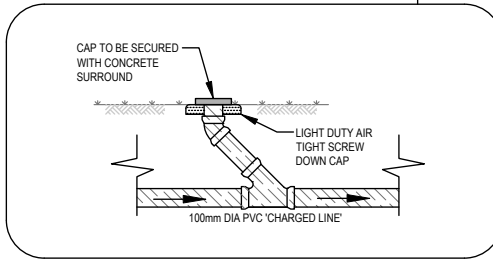
DRAWING TITLE	
STORMWATER MANAGEMENT ROOF PLAN	
PROJECT TITLE	
PROPOSED ALTERATIONS & ADDITIONS No.15 RIVERVIEW PARADE NORTH MANLY	

SHEET SIZE	A3	JOB REFERENCE	E220211
DESIGNED	MR	DRAWING No.	D4
CHECKED	YR	No. IN SET	7
ISSUE	A		
SCALE	1:200		



TYPICAL WARNING SIGN

NTS
 EVERY EXTERNAL SUPPLY OUTLET FROM RAINWATER RE-USE TANK TO BE LABELED WITH METALLIC WARNING SIGN

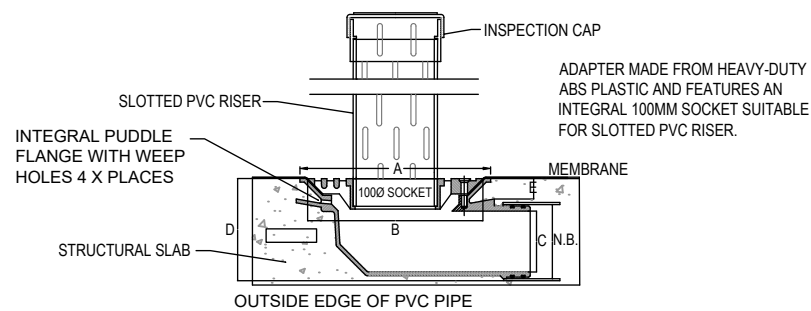


RAINWATER RE-USE TANK - ABOVE GROUND

NTS

SPS TRUFLO 80MM & 100MM 90° RWO WITH ALL-PURPOSE PLANTER BOX ADAPTER

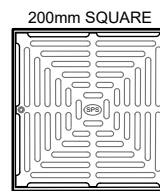
SPECIFICATION CODE:
 TIA80/90PB (80MM CI BODY WITH PLANTER BOX INSERT)
 TIA100/90PB (100MM CI BODY WITH PLANTER BOX INSERT)



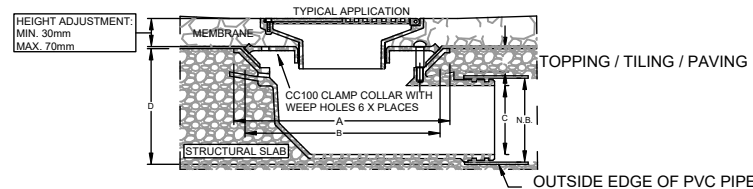
N.B.	A	B	C	D	E	FLOW RATE L/S
80	260	240	62	115	28	N/A
100	260	240	83	140	28	N/A

PLANTER GRATE (SPS) - PG

NTS



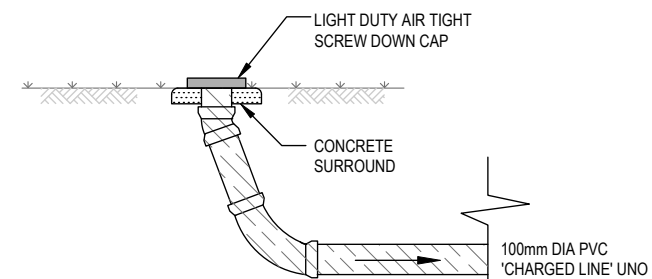
SPECIFICATION CODES:
 Q200G/C109 (bronze grate, CI lower body)
 Q200N/C109 (nickel bronze grate, CI lower body)
 Q200S4/C109 (polished 304SS grate, CI lower body)
 Q200S/C109 (satin 316 SS grate, CI lower body)
 For 80mm outlet, use suffix "C89" not "C109"



N.B.	A	B	C	D	E
80	260	240	62	115	28
100	260	240	83	140	28

TERRACE GRATE (SPS) - TG

NTS



INSPECTION RISER - IR

NTS



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REVISION	DRAWN	DESCRIPTION	DATE
A	MR	ISSUED FOR DA	21.10.2022

DRAWING TITLE
STORMWATER DETAILS
 PROJECT TITLE
**PROPOSED ALTERATIONS & ADDITIONS
 No.15 RIVERVIEW PARADE
 NORTH MANLY**

SHEET SIZE	A3	JOB REFERENCE	E220211
DESIGNED	MR	DRAWING No.	D5
CHECKED	YR	No. IN SET	7
ISSUE	A		
SCALE	AS NOTED		