JAYNE STEET

BM RL 86.02 (NAIL IN KERB)

DRIVEWAY

UNIT 1

UNIT 2

OSD TANK 1
MIN.DETENSION AREA 10M²
MAX.DEPTH 0.65M
TOP OF WATER LEVEL 79.90
UNDER GROUND OSD STORAGE=6.0M3
REFER TO SECTION A

OSD TANK 2
MIN.DETENSION AREA 8.9M²
MAX.DEPTH 0.75M
TOP OF WATER LEVEL 78.70
UNDER GROUND OSD STORAGE=6.2M3
REFER TO SECTION B

200MM WIDE GRATED DRAINAGE

600X600 SILT ARRESTOR PIT 2
RL 78.80 IL 77.80

600X600 SILT ARRESTOR PIT 1
RL 78.70 IL 77.70

PROPOSED DRAINAGE EASEMENT

150 UPVC @ MIN.1% FALL

100 UPVC CHARGED LINE TO R.W.TANK

100 UPVC @ MIN.1% FALL

CONNECT WITH PROPOSED DRAINAGE EASEMENT

No. 9
1 & 2 STOREY
BRICK HOUSE
(TILED ROOF)

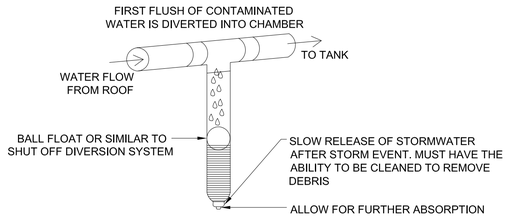
DP	DOWN PIPE
	ROOF SLOPE
RWO	RAINWATER OUTLET
R.W.TANK	RAINWATER TANK
	SURFACE FLOW
	SURFACE INLET PIT
RL	TOP OF PIT LEVEL
IL	INVERT LEVEL OF PIT
*	NEW LEVEL
+	EXISTING LEVEL

PROPOSED STORMWATER PLAN

SCALE 1:200 @ A3

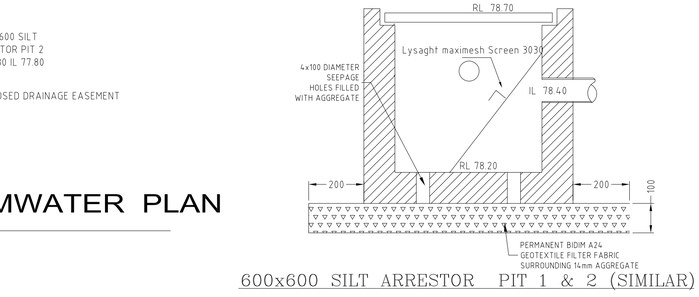
* NEW LEVEL
+ EXISTING LEVEL
ALL DP TO BE 100 UPVC

FIRST FLUSH OF CONTAMINATED WATER IS DIVERTED INTO CHAMBER



FIRST FLUSH WATER DIVERTER DETAIL

N.T.S.



600x600 SILT ARRESTOR PIT 1 & 2 (SIMILAR)

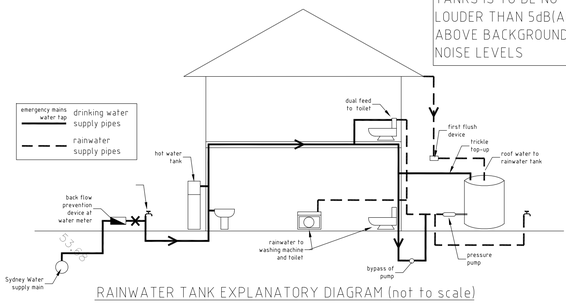
NOTES

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS, STRUCTURAL DRAWINGS AND THE SPECIFICATON.
2. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR SHALL SATISFY HIMSELF OF THE CORRECT LOCATION OF EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
3. TRAFFIC MANAGEMENT MEASURES HAVE TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTON, ALL IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS. THE CONTRACTOR SHALL MAINTAIN SAFE PEDESTRIAN ACCESS ALONG THE FOOTPATH.
4. THE CONTRACTOR SHALL EFFECT TEMPORARY DRAINAGE MEASURES TO AVOID LOCALISED PONDING OF SURFACE RUN-OFF.
5. REFER TO ARCHITECT'S DRAWINGS FOR ALL DETAILS (LEVELS, GRADING ETC.) OF DRIVEWAYS, CONCRETE AND PAVED AREAS, AND RETAINING WALL TYPES. ADN LOCATIONS.
6. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS AND EXTENT OF ALL LANDSCAPED AREAS.
7. ALL SWD PIPES ARE UPVC AT 1.0% MINIMUM GRADE (UNO).
8. SWD PITS CAN BE PRE-CAST SIZED AS FOLLOWS:
   450mm SQ. UP TO 600mm DEEP
   600mm SQ. UP TO 1000mm DEEP
9. ALL PITS LOCATED IN TRAFFICABLE AREAS, (IE, DRIVEWAYS) TO HAVE MEDIUM DUTY GRATED COVERS SUITABLE FOR WITHSTANDING LOADS ASSOCIATED WITH SMALL TRUCKS.
10. PROVIDE STEP IRONS TO ALL PITS GREATER THAN 1.2m DEEP.
11. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF WORKS.
12. TOPSOIL SHALL BE STRIPPED ON STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL IS TO BE RESPREAD LATER ON AREAS TO BE REVEGETATED.
13. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES. ALL SILT REMOVED SHALL BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
14. THE CONTRACTOR SHALL MAINTAIN DUST CONTROL UNTIL FINAL COMPLETION OF WORKS.
15. CLEANING EYES SHALL BE INSTALLED AT ALL JUNCTIONS, CHANGES OF GRADIENT AND CHANGES OF DIRECTION OF STORMWATER DRAINA, AND AT MAXIMUM SPACING OF 30M ALONG A LENGTH OF PIPE, DIRECTLY ABOVE ANY REFLUX VALVES,ORFICE PLATES OR DEBRIS SCREENS.

NOTE:
1.TANK WATER IS NOT RECOMMENDED FOR HUMAN CONSUMPTION.

2.A SIGN STATING NOT FOR DRINKING MUST BE AFFIXED TO THE TANK AND OR TAP FIXTURE

NOTE:
ANY PUMP INSTALLED FOR THE RAINWATER TANKS IS TO BE NO LOUDER THAN 5dB(A) ABOVE BACKGROUND NOISE LEVELS



RAINWATER TANK EXPLANATORY DIAGRAM (not to scale)

ISSUE	DATE	REVISION & AMENDMENT	DRAWN
6	08/07/2022	ISSUED FOR DA APPROVAL	JZ
5	20/04/2022	ISSUED FOR DA APPROVAL	JZ
4	20/01/2022	ISSUED FOR DA APPROVAL	JZ
3	06/01/2022	ISSUED FOR DA APPROVAL	JZ
2	23/10/2021	ISSUED FOR DA APPROVAL	JZ
1	19/10/2021	ISSUED FOR DA APPROVAL	JZ

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PO BOX 269, PARRAMATTA
EMAIL:mbcconsulting@live.com
MOBILE: 0432546227

PROPOSED RESIDENTAIL AT:

8 JAYNE ST, WEST RYDE

TITLE:

STORMWATER DRAINAGE PLAN

DRAWN BY :

DATE : 19/10/2021

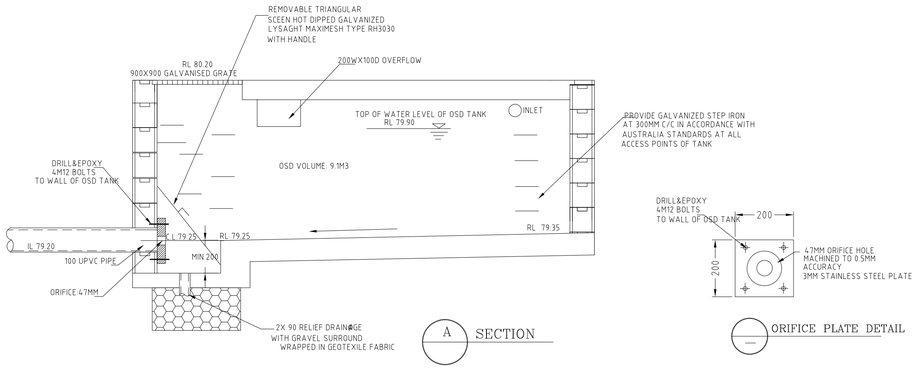
JOB No : 2021749

SET OF :

DESIGNED: C.Z.(BE, MIEAust 3928680)

SCALE : 1:100 1:20

SHEET No : S1



CITY OF RYDE

ON-SITE DETENTION CALCULATION SHEET

DEVELOPMENT TYPE: DUPLEX
ADDRESS: 8 JAYNE ST, WEST RYDE -U1

	(Zone 1)	(Zone 2)	(Eastwood)	
Catchment Zone				
Site Area		437.3		m² (A)
65% Site Area		284.2		m²
Total Proposed Impervious Area (roofs, driveways, hardstand etc)		208.4		m² (B)
% of site Impervious		47.7		%
Impervious area draining to the Storage Facility		178.9		m2 (C)
Pervious area draining to the Storage Facility		0		m² (D)
Total area draining to the Storage Facility (Impervious and pervious areas)		178.9		m² (E)
Pervious area bypassing the Storage Facility		228.9		m² (F)
Impervious area bypassing the Storage Facility		29.5		m² (G)

$\frac{(C)+(G)_m}{(C)}$ 1. 1.16 (L)

must not be greater than 1.25.

Permitted Site Discharge (PSD) rate per m²
Catchments in Zones 1 & 2
If (G)=0 then PSD = 0.0265 l/sec/m²
If (G)≠0 then PSD = 0.0265x(L)−1.37 l/sec/m2
Eastwood Catchment
If (G)=0 then PSD = 0.0210 l/sec/m²
If (G)≠0 then PSD = 0.0210x(L)−1.37 l/sec/m2 0.0216 (J)

PERMITTED SITE DISCHARGE (E) x (J) 178.9 x 0.0216 **3.87**

Storage Volume per m²
(K) = 0.0275 m3/m² for zone 1 or
(K) = 0.0255 m3/m² for zone 2 or
(K) = 0.0300 m3/m² for Eastwood Catchment 0.0275 (K)

SITE STORAGE REQUIREMENT ((E) + (G)) x (K)x(4.2)* (178.9+29.5)x 0.0275(x1.2) * 5.73

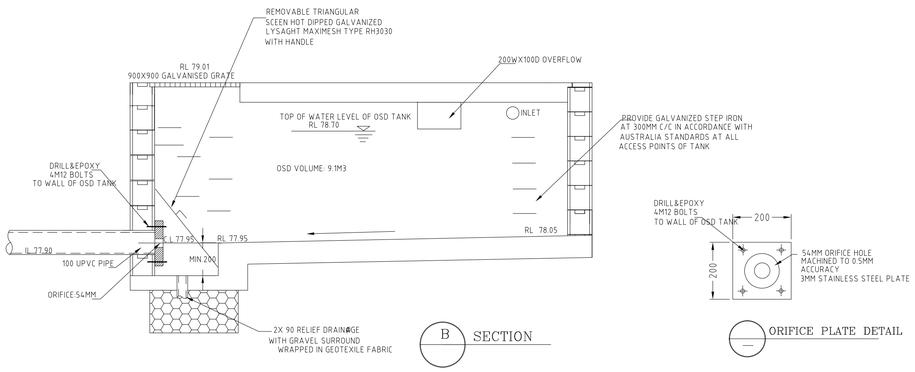
Allowance for Rainwater Tank offset (5000 litre Max, see clause 3.1.8) - _____

NOTE * **If OSD is provided in a landscaped surface basin the volume must be increased by 20%** **m3**

OUTLET CONTROL - using a Sharp Edged Orifice Plate
Height Difference between top water level and Centre of Orifice (m) 0.65 (H)

ORIFICE DIAMETER (mm) =21.9 $\frac{PSD}{\sqrt{(H)}}$ **47mm**

Should pipe and pit losses be used to control outflow, the calculations are to be attached.



CITY OF RYDE

ON-SITE DETENTION CALCULATION SHEET

DEVELOPMENT TYPE: DUPLEX
ADDRESS: 8 JAYNE ST, WEST RYDE -U2

	(Zone 1)	(Zone 2)	(Eastwood)	
Catchment Zone				
Site Area		500.7		m² (A)
65% Site Area		325.5		m²
Total Proposed Impervious Area (roofs, driveways, hardstand etc)		199.4		m² (B)
% of site impervious		39.8		%
Impervious area draining to the Storage Facility		199.4		m2 (C)
Pervious area draining to the Storage Facility		0		m² (D)
Total area draining to the Storage Facility (impervious and pervious areas)		199.4		m² (E)
Pervious area bypassing the Storage Facility		301.3		m² (F)
Impervious area bypassing the Storage Facility		0		m² (G)

$\frac{(C)+(G)_m}{(C)}$ 1. 1.00 (L)

must not be greater than 1.25.

Permitted Site Discharge (PSD) rate per m²
Catchments in Zones 1 & 2
If (G)=0 then PSD = 0.0265 l/sec/m²
If (G)≠0 then PSD = 0.0265x(L)−1.37 l/sec/m2
Eastwood Catchment
If (G)=0 then PSD = 0.0210 l/sec/m²
If (G)≠0 then PSD = 0.0210x(L)−1.37 l/sec/m2 0.0265 (J)

PERMITTED SITE DISCHARGE (E) x (J) 199.4 x 0.0265 **5.28**

Storage Volume per m²
(K) = 0.0275 m3/m² for zone 1 or
(K) = 0.0255 m3/m² for zone 2 or
(K) = 0.0300 m3/m² for Eastwood Catchment 0.0275 (K)

SITE STORAGE REQUIREMENT ((E) + (G)) x (K)x(4.2)* (199.4+0) x 0.0275(x1.2) * 5.48

Allowance for Rainwater Tank offset (5000 litre Max, see clause 3.1.8) - _____

NOTE * **If OSD is provided in a landscaped surface basin the volume must be increased by 20%** **m3**

OUTLET CONTROL - using a Sharp Edged Orifice Plate
Height Difference between top water level and Centre of Orifice (m) 0.75 (H)

ORIFICE DIAMETER (mm) =21.9 $\frac{PSD}{\sqrt{(H)}}$ **54mm**

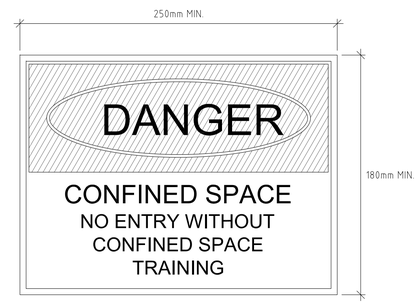
Should pipe and pit losses be used to control outflow, the calculations are to be attached.

THIS IS AN
ON-SITE STORMWATER DETENTION SYSTEM
REQUIRED BY CITY OF RYDE

IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE TANK OR BASIN OR TO INTERFERE WITH THE ORIFICE PLATE THAT CONTROLS THE OUTFLOW

THE BASE OF THE OUTLET CONTROL PIT AND THE DEBRIS SCREEN MUST BE CLEANED OF DEBRIS AND SEDIMENT ON A REGULAR BASIS BY THE OWNER

THIS PLATE MUST NOT BE REMOVED



COLOURS:
'DANGER' AND BACKGROUND - WHITE
ELLIPTICLE AREA - RED
RECTANGULE CONTAINING ELLIPSE - BLACK
OTHER LETTERING AND BORDER - BLACK

CONFINED SPACE DANGER SIGN N.T.S

1. A CONFINED SPACE DANGER SIGN SHAL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.

2. MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
- 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

3. THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPELINE.

4. SIGN SHALL BE AFIXED USING SCREWS AT EACH CORNER OF THE SIGN.

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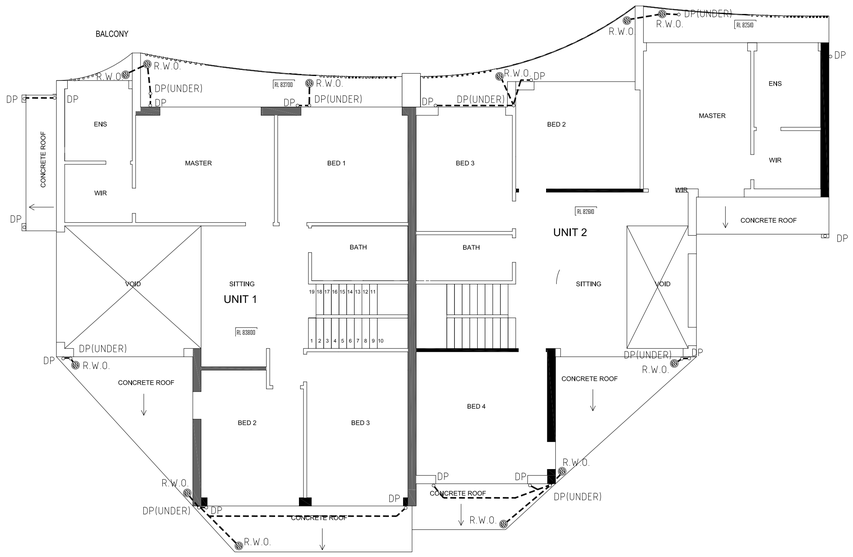
DATE : 19/10/2021
JOB No : 2021749
SET OF :
DESIGNED: C.Z.(BE, MIEAust 3928680)
SCALE : 1:100 1:20
SHEET No : S3

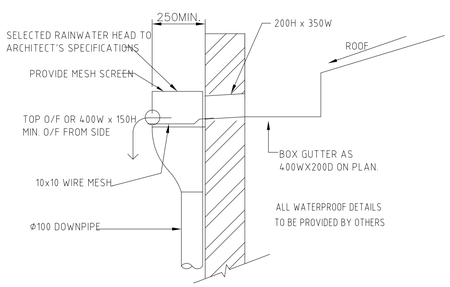


FIRST FLOOR

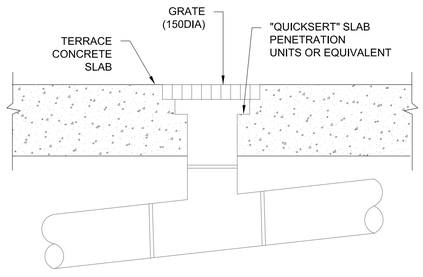
ALL DP TO BE 100 UPVC,UNO

ROOF FLOOR

ALL DP TO BE 100 UPVC,UNO

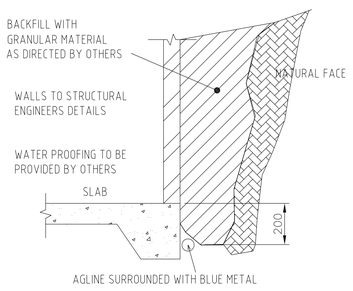


ROOF OUTLET/RAINHEAD DETAIL N.T.S

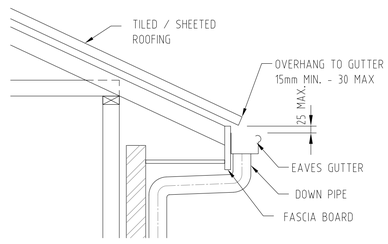


RAINWATER OUTLET DETAIL

N.T.S.

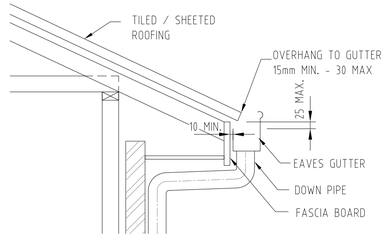


TYPICAL RETAINING WALL DRAINAGE DETAIL



TYPICAL EAVE GUTTER DETAIL N.T.S.

WITH LOW FRONT



TYPICAL EAVE GUTTER DETAIL N.T.S.

WITH HIGH FRONT & 10mm GAP TO FACIA

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