



# CONCEPT STORMWATER DRAINAGE PLANS

PROPOSED CHILD CARE  
**198 BENNETT ROAD, ST CLAIR NSW 2759**



REF | SW21052

REVISION | B

CLIENT | SAMER BACHOUR

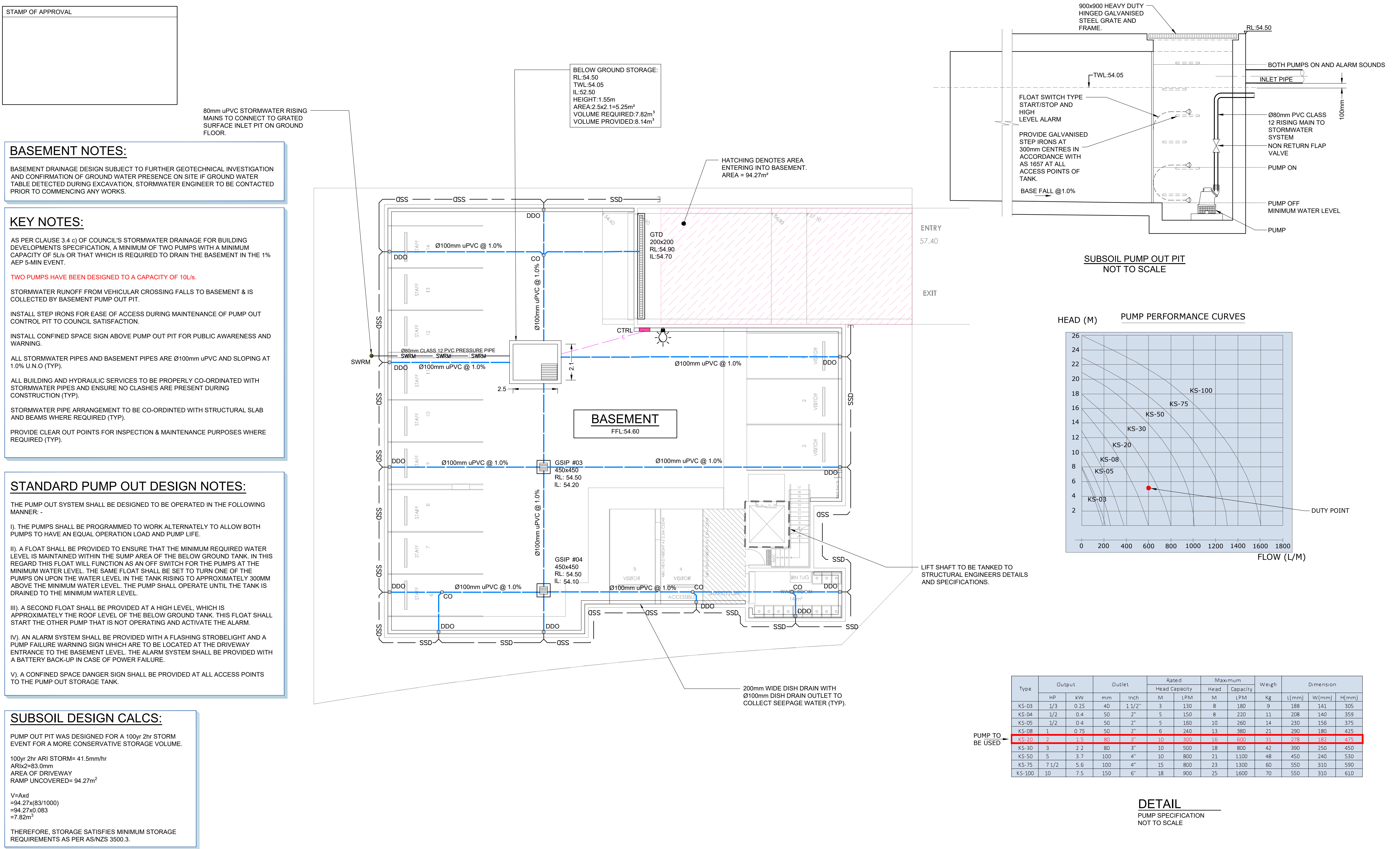
ARCHITECT | BAINI DESIGN

ENGINEERING CONSULTANTS









					E: admin@deboke.com.au W: www.deboke.com.au A: 65 Blaxcell Street, Granville NSW 2142 M: 0432 225 833 (A.A.), 0404 786 785 (J.D.)	<div>deboke</div> <div>ENGINEERING CONSULTANTS</div>	DRAWN: A.A.	DESIGNED: A.A.	<div>baini<b>design</b></div>	SAMER BACHOUR	PROJECT: PROPOSED CHILD CARE	TITLE: BASEMENT PLAN	ALL DIMENSIONS IN 'm' UNLESS OTHERWISE STATED						
							REVIEWED: J.D.	DATE: 28.01.2022			ARCHITECT: baini <b>design</b>			CLIENT: SAMER BACHOUR	ADDRESS: 198 BENNETT ROAD, ST CLAIR	PROJECT NO. SW21052			
							APPROVED: A.A.	DATE: 28.01.2022							APPLICATION: DEVELOPMENT APPLICATION (DA)		LGA: PENRITH COUNCIL	SCALE: <div><div><div></div><div></div><div></div><div></div><div></div></div><div>0m12345</div><div>SCALE 1:100 ON ORIGINAL SIZE</div></div>	DRAWING NO. S200
B	ISSUED FOR DA	2	A.A.	28.01.2022	COPYRIGHT THIS DRAWING AND THE INFORMATION SHOWN HEREON IS THE PROPERTY OF DEBOKE ENGINEERING CONSULTANTS AND MAY NOT BE USED FOR ANY PURPOSES THAN FOR WHICH SUPPLIED.	APPROVAL TYPE: 1. PRELIMINARY 2. DEVELOPMENT APPLICATION 3. COMPLYING DEVELOPMENT 4. CONSTRUCTION CERTIFICATE 5. FOR TENDER 6. OTHER	B.E CIVIL/STRUCTURAL Beng,MIEAust MEMB. NO: 5579488	ARCHITECT: baini <b>design</b>	CLIENT: SAMER BACHOUR	PROJECT: PROPOSED CHILD CARE ADDRESS: 198 BENNETT ROAD, ST CLAIR APPLICATION: DEVELOPMENT APPLICATION (DA) LGA: PENRITH COUNCIL	TITLE: BASEMENT PLAN	ALL DIMENSIONS IN 'm' UNLESS OTHERWISE STATED							
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REV	DESCRIPTION	APP.	DESIGN	DATE															



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CONNECT STORMWATER INTO EXISTING STORMWATER PIPE WITHIN DRAINAGE EASEMENT. CONTRACTOR TO DETERMINE THE EXACT DEPTH, LOCATION AND SIZE OF PIPE PRIOR TO ANY CONSTRUCTION WORKS.

GSIP TO COLLECT SURFACE RAINWATER RUNOFF.

ENTIRE ROOF WATER TO ENTER INTO RAINWATER TANK (TYP).

15.0KL BELOW GROUND RAINWATER TANK MODELLED TO COLLECT ENTIRE ROOF AREA AND RE-USED FOR IRRIGATION (SPRINKLER SYSTEM).

NOTES:

'A' DENOTES AREA ENTERING EASEMENT PIT.

INSTALL Ø100mm OVERFLOW PIPE FROM RAINWATER TANK.

CONNECT 200X100X6MM HOT DIPPED GALVANISED RECTANGULAR HOLLOW SECTION TO KERB AND GUTTER AT INVERT LEVEL SHOWN.

REV	DESCRIPTION	APP. DESIGN	DATE
B	ISSUED FOR DA	2	A.A. 28.01.2022
A	ISSUED FOR DA	2	A.A. 01.03.2021

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DRAWN: A.A.	DESIGNED: A.A.
REVIEWED: J.D.	DATE: 28.01.2022
APPROVED: A.A.	DATE: 28.01.2022
B.E CIVIL/STRUCTURAL BEng,MIEAust MEMB. NO: 5579488	



SAMER BACHOUR

CLIENT:

PROJECT: PROPOSED CHILD CARE
ADDRESS: 198 BENNETT ROAD, ST CLAIR
APPLICATION: DEVELOPMENT APPLICATION (DA)
LGA: PENRITH COUNCIL

TITLE: <b>SITE STORMWATER MANAGMENT PLAN</b>	ALL DIMENSIONS IN 'm' UNLESS OTHERWISE STATED
SCALE:  SCALE 1:100 ON ORIGINAL SIZE	PROJECT NO. <b>SW21052</b>
	DRAWING NO. <b>S201</b>

## DESIGN NOTES:

SITE IS LOCATED IN PENRITH COUNCIL.

SITE AREA = 916m<sup>2</sup>

SITE IS GOVERNED BY PENRITH CITY COUNCIL.

OSD IS NOT REQUIRED IN ACCORDANCE WITH SECTION 4 OF PENRITH CITY COUNCIL STORMWATER DRAINAGE SPECIFICATION FOR BUILDING DEVELOPMENTS SINCE THE LOCAL CATCHMENT FALLS IN THE OSD EXCLUSION ZONE .

THE STORMWATER PIPE WITHIN EASEMENT WAS FOUND TO BE 150mm AS PER SITE INSPECTION FROM ONPOINT LOCATING ON 26.01.2022. THE PROPOSED SITE DRAINAGE HAS BEEN SPLIT TO ALLEVIATE THE DOWNSTREAM EASEMENT. THE ENTIRE ROOF WILL BE DRAINED TO THE RAINWATER TANK AND DISCHARGED VIA GRAVITY TO BENNETT ROAD. THE REMAINING LANDSCAPE AND HARDSTAND AREAS HAVE BEEN DIVERTED TO ACHIEVE DRAINAGE TO BENNETT ROAD AND UNDRAINED LANDSCAPED AREA IN THE SIDE AND REAR SETBACK TO DRAIN INTO THE EASEMENT. REFER TO CATCHMENT PLAN ON S201.

IN ACCORDANCE WITH PENRITH COUNCIL WSUD POLICY 2013, WATER QUALITY AND WATER QUANTITY IS NOT REQUIRED FOR THIS DEVELOPMENT, HOWEVER WATER CONSERVATION MUST BE CONSIDERED.

A MUSIC MODEL HAS BEEN PROVIDED TO MODEL THE RAINWATER TANK TO PROVIDE A MINIMUM OF 80% RE-USE FOR THE CHILDCARE DEVELOPMENT. THE FOLLOWING PARAMETERS WERE CONSIDERED WHEN MODELLING THE RAINWATER TANK:

- INTERNAL RE-USE (TOILETS): 0.1kL/day PER TOILET
- IRRIGATION OF LANDSCAPE: 0.4kL/year/m<sup>2</sup> (SPRINKLER SYSTEMS)  
0.3kL/year/m<sup>2</sup> (SUBSURFACE)

FOR THE PURPOSE OF THIS DEVELOPMENT A TOTAL OF 318.28m<sup>2</sup> ROOF AREA IS COLLECTED INTO THE RAINWATER TANK AND NOMINATED FOR RE-USE TO 227.5m<sup>2</sup> OF LANDSCAPED AREA. NO TOILETS HAVE BEEN CONSIDERED FOR RE-USE AND ALL LANDSCAPE HAS BEEN ASSUMED TO HAVE A SPRINKLER SYSTEM. PLEASE REFER TO MUSIC MODEL.

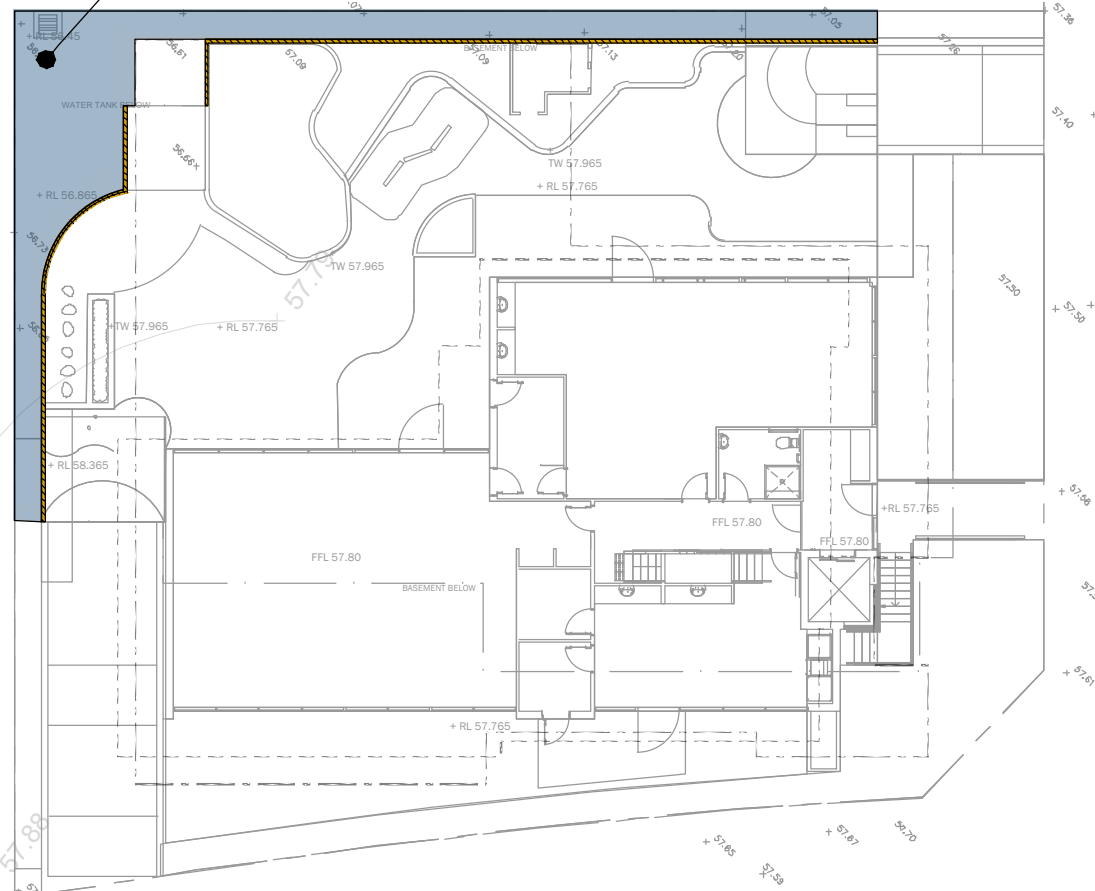
CONTRACTOR TO INSTALL ABOVE GROUND RAINWATER TANK TO COLLECT REQUIRED ROOF AREA IN ACCORDANCE WITH BASIX CERTIFICATE.

RAINWATER TANK TO BE EQUIPPED WITH FIRST FLUSH AND MOSQUITO PREVENTION DEVICES.

ALL DOWNPIPES SHOWN ON PLAN ARE Ø100mm uPVC U.N.O.

ALL NEW STORMWATER PIPES TO HAVE A MINIMUM OF 100mm CONCRETE OR 300mm TOPSOIL COVER U.N.O.

HATCHING DENOTES AREA ENTERING EASEMENT PIT. AREA 58.2m<sup>2</sup>.

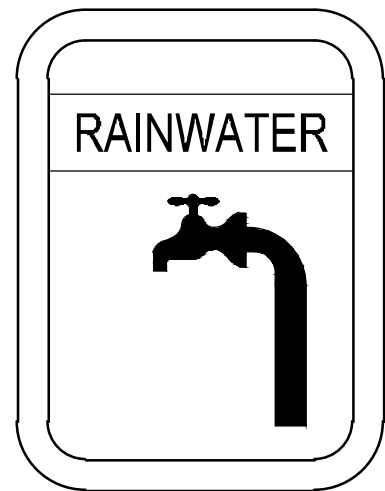


CATCHMENT ENTERING  
EASEMENT  
SCALE 1:250

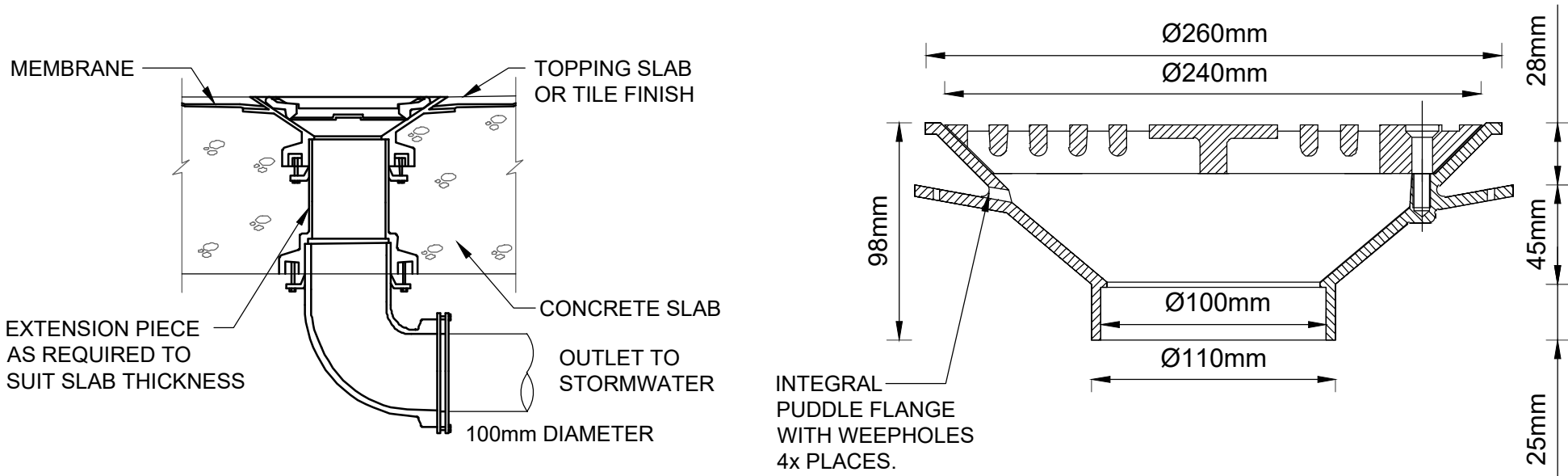


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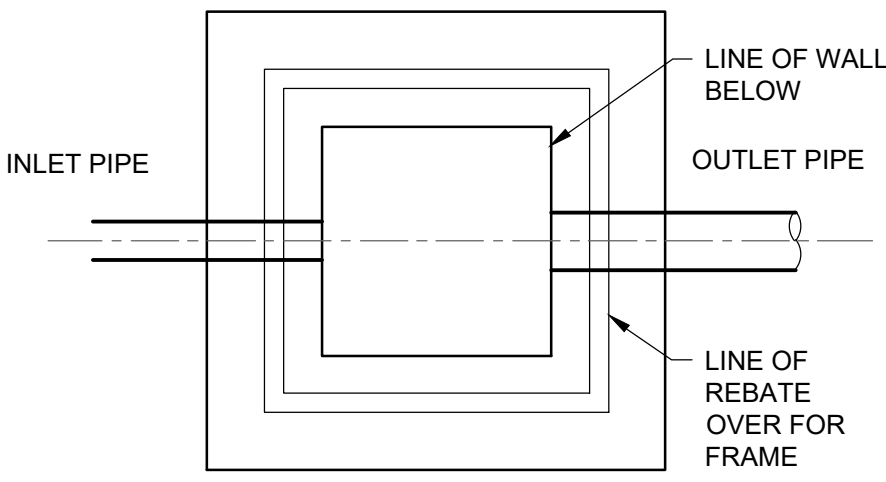
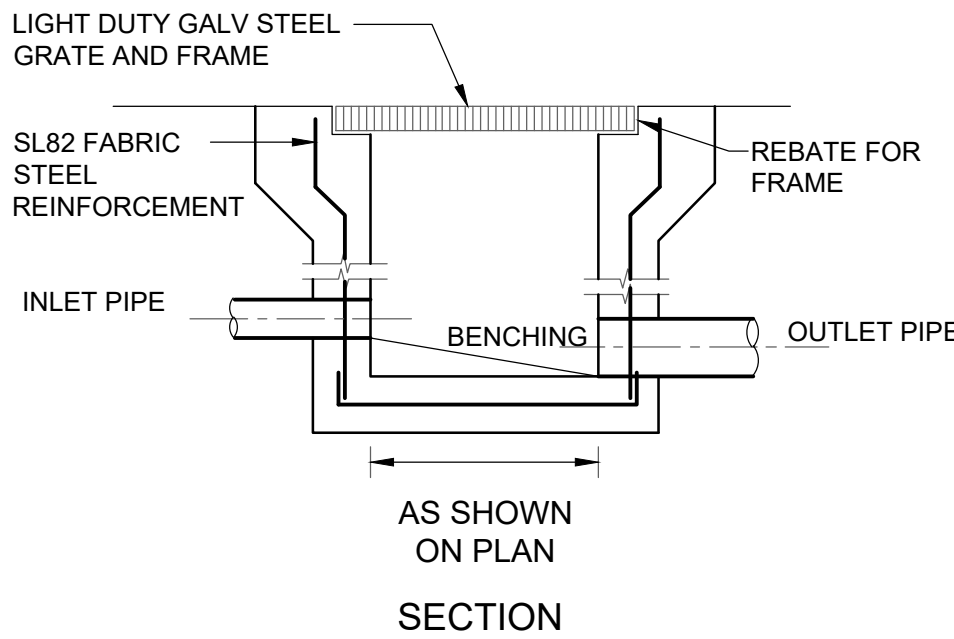
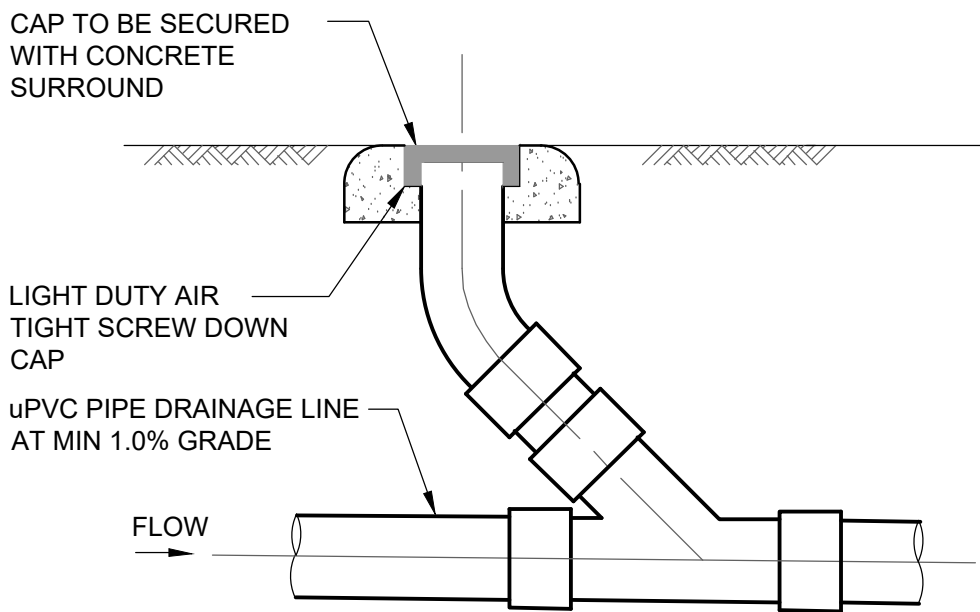
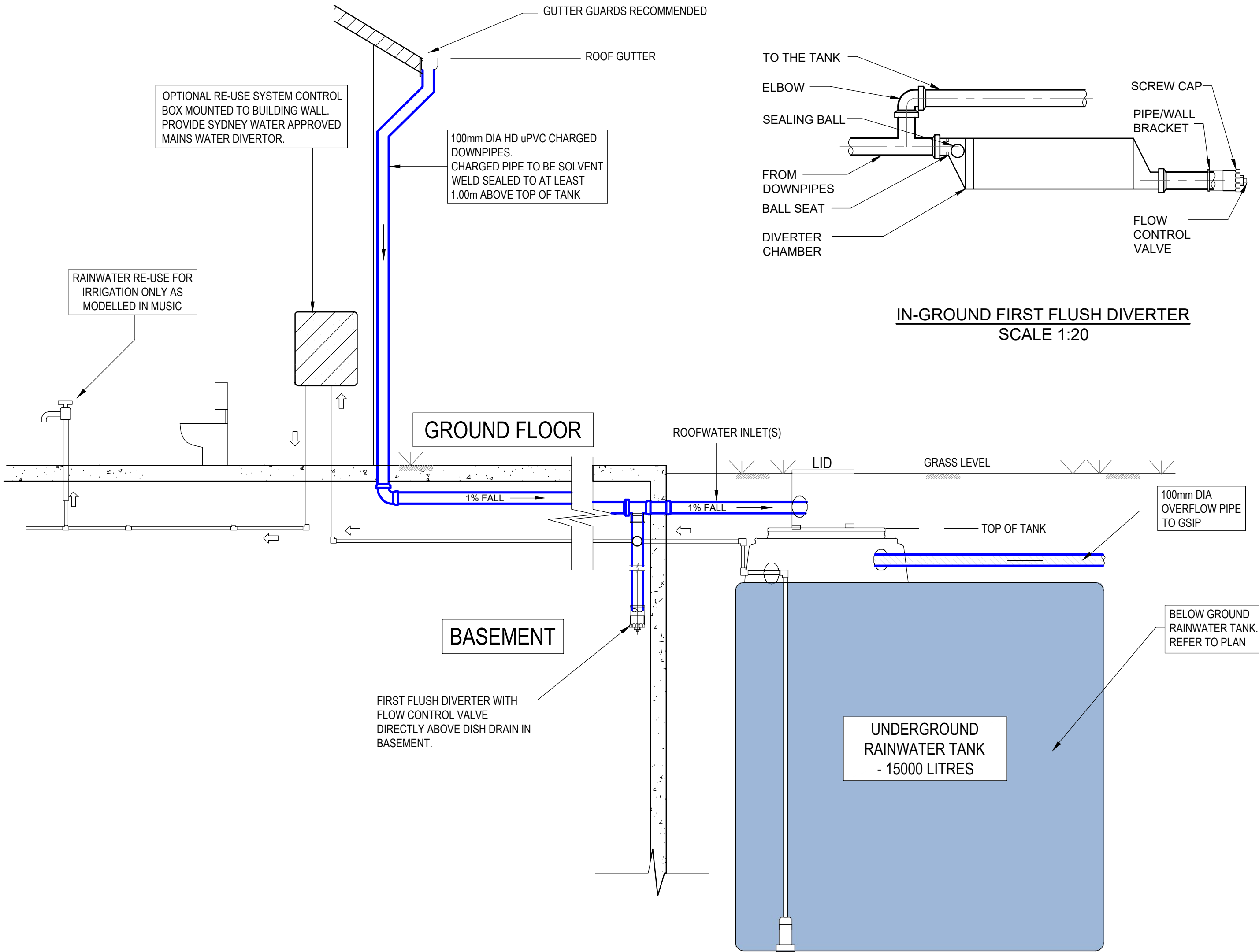
LEGEND:  
BACKGROUND IS YELLOW  
TEXT IS WHITE ON BLACK  
BACKGROUND



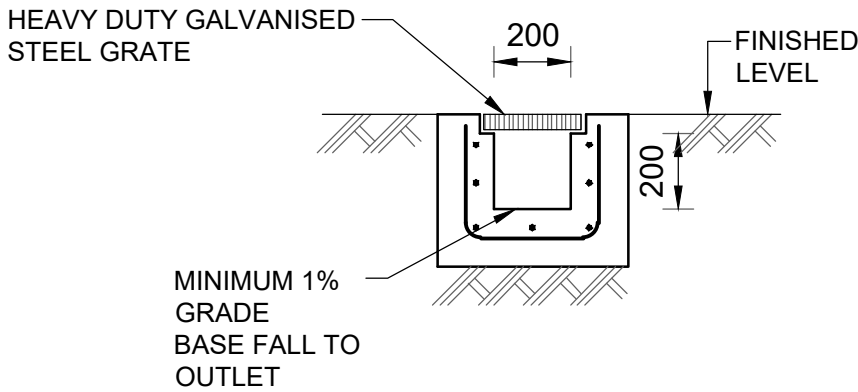
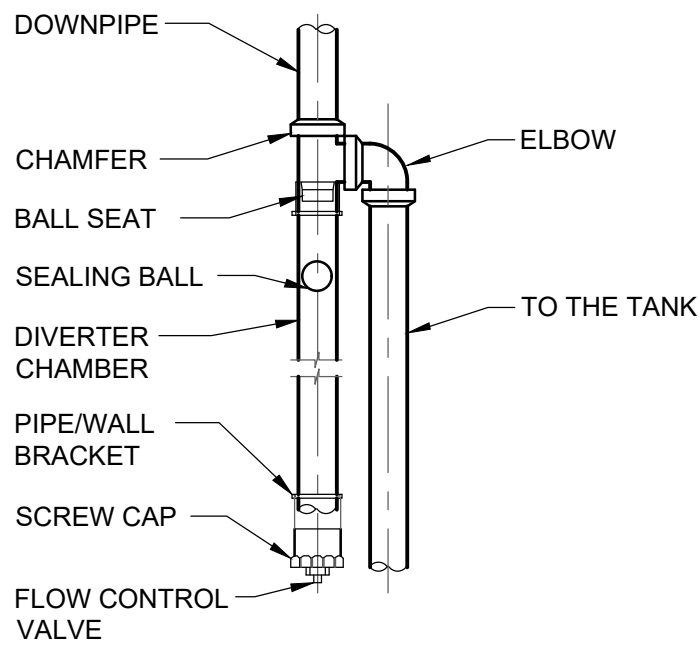
RAINWATER SIGN  
SCALE 1:10



RAINWATER OUTLET TYPE "SPS"  
SCALE 1:20



STORMWATER PIT  
SCALE 1:20



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B	ISSUED FOR DA	2	A.A.	28.01.2022										
A	ISSUED FOR DA	2	A.A.	01.03.2021										
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EROSION AND SEDIMENT CONTROL  
FENCE TO BE INSTALLED AROUND THE  
LOWER SIDES OF PROPERTY BOUNDARY  
WHERE REQUIRED (REFER TO DETAIL).



NTS



NTS



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- The diagram shows a site layout with four labeled components:
- SITE FENCE**: Represented by a horizontal line with three small squares at the top.
  - RUBBLE ENTRY**: Represented by a large rectangle filled with a pattern of small circles.
  - STOCKPILE AREA**: Represented by two adjacent rectangles with diagonal hatching, one orange and one blue.
  - SAUSAGE FILTER**: Represented by a horizontal oval shape at the bottom.

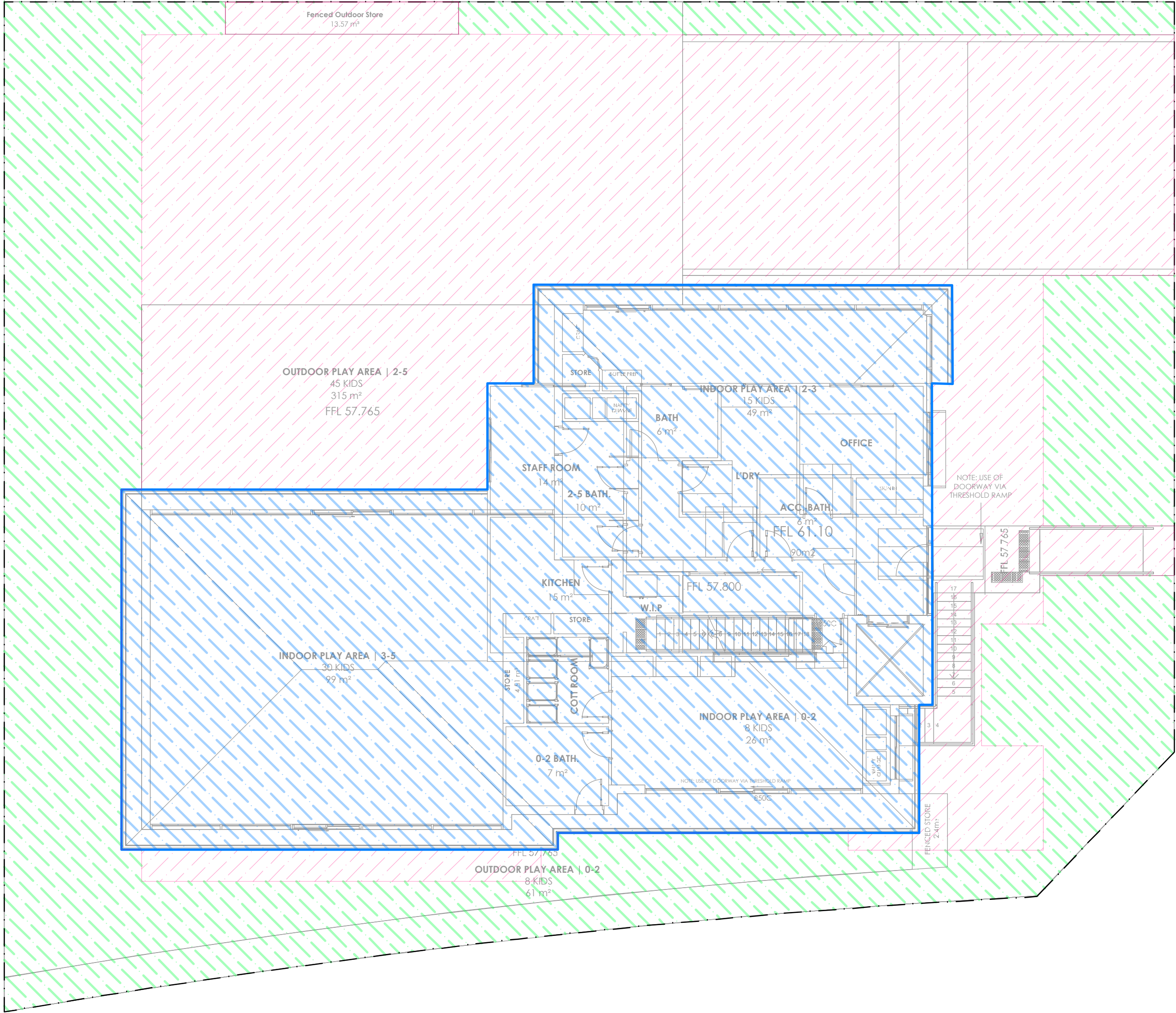
1. INSTALL KERB INLET FILTERS TO KERB INLETS ONLY AT SAG POINTS OR AS SHOWN ON PLAN
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET.
5. MAINTAIN THE OPENING WITH SPACER BLOCKS.
6. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
7. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.



Document Set ID: 9901170  
Version: 1, Version Date: 04/02/2022



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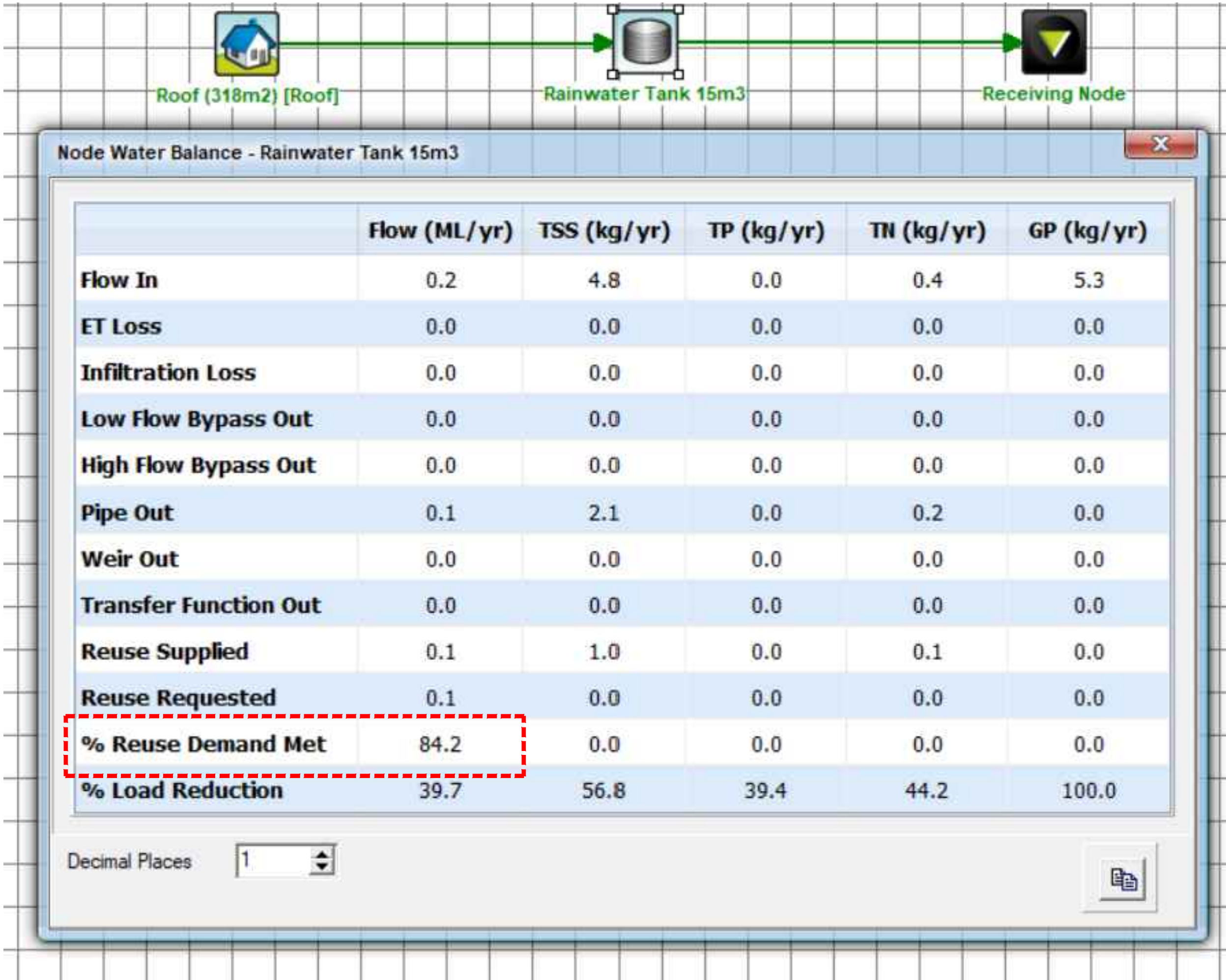
LEGEND

SITE AREA = 916.65m²

ROOF AREA DRAINING TO RWT  
AREA=314.59m² (34.32%)

IMPERVIOUS AREA BYPASSING RWT  
AREA=350.94m² (38.29%)

LANDSCAPE AREA FOR IRRIGATION  
AREA=251.13m² (27.40%)



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A	ISSUED FOR DA	2	A.A.	01.03.2021												
REV	DESCRIPTION	APP. DESIGN	DATE													