

PROPOSED MIXED USE DEVELOPMENT 14-22 MARY STREET, AUBURN STORMWATER CONCEPT DESIGN



LOCALITY PLAN
NOT TO SCALE

DRAWINGS LIST			
SHEET No.	DWG No.	TITLE	REV
1	SW100	COVER SHEET	C
2	SW200	STORMWATER CONCEPT DESIGN - BASEMENT 4 PLAN	C
3	SW201	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN	C
4	SW202	STORMWATER CONCEPT DESIGN - ROOF PLAN	C
5	SW201	STORMWATER CONCEPT DESIGN - TRUNK MAIN DIVERSION - ULTIMATE STAGE	C
6	SW300	STORMWATER CONCEPT DESIGN - DETAILS - SHEET 1 OF 2	C
7	SW301	STORMWATER CONCEPT DESIGN - DETAILS - SHEET 2 OF 2	C
8	SW400	EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS	C



PREPARED BY:
SGC Consulting Engineers
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156 Pacific Highway
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T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au

ARCHITECT:



CLIENT :

ROLZ GROUP PTY LTD

PUMP-OUT PIT NOTE:

INSTALL WITH THE FOLLOWING ITEMS:
- 900SD HEAVY DUTY STEEL GRATED LID FOR ACCESS AND MAINTENANCE PURPOSES.
- CONFINED SPACE SIGN ABOVE PUMP OUT PIT FOR PUBLIC AWARENESS AND WARNING.
- STEP IRONS. REFER TO DETAILS.
- PUMPOUT PIT CONTROL BOX (CTRL) TO MANUFACTURERS SPECIFICATIONS. LOCATIONS TO BE CONFIRMED WITH ARCHITECT.
- PUMPS TO OPERATE IN ALTERNATE MODE TO INCREASE LIFESPAN
- INSTALL VISIBLE FLASHING LIGHT SYSTEM IN CASE OF PUMP FAILURE

SUBSOIL DESIGN CALCS:

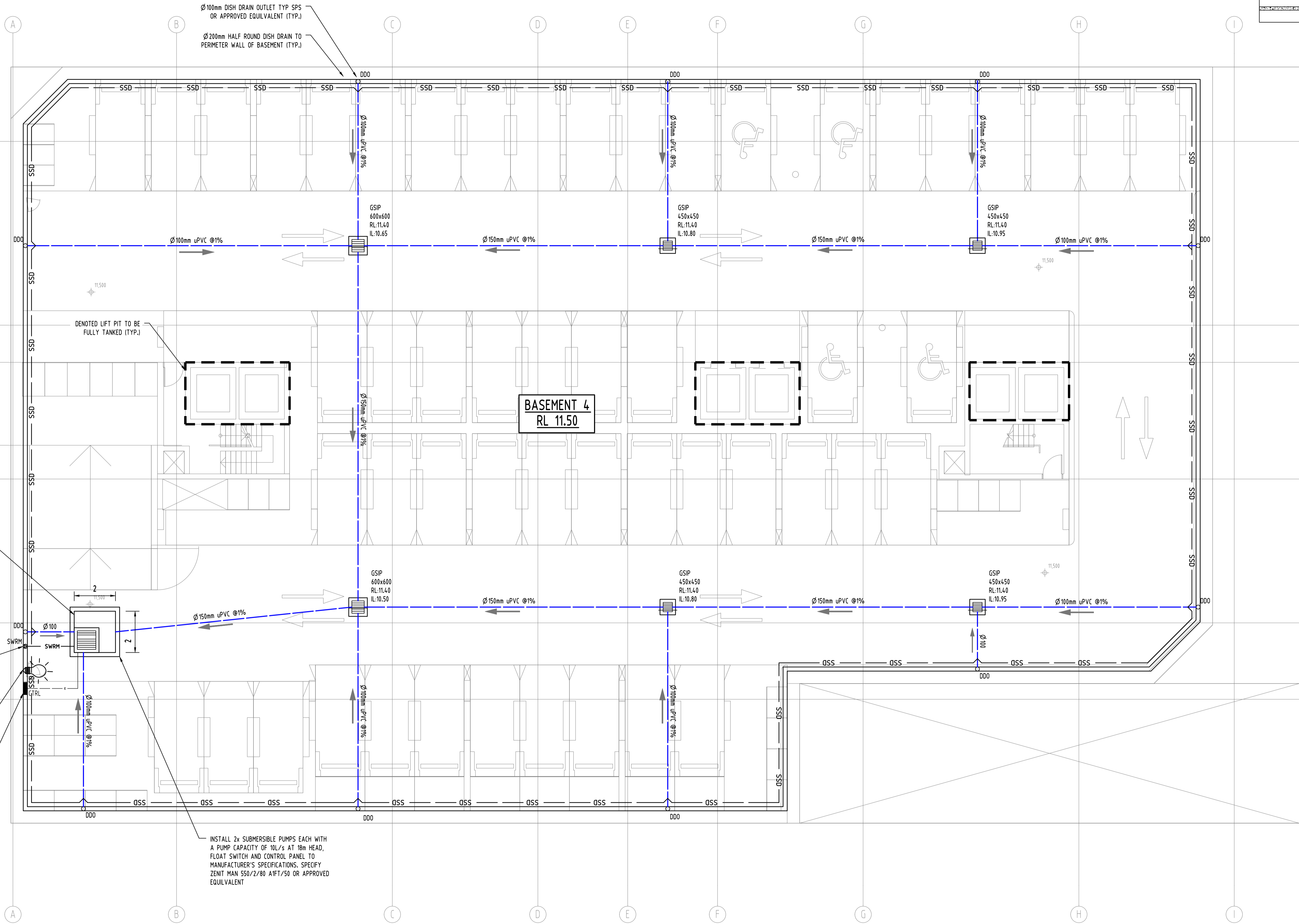
THE AREA OF DRIVEWAY RAMP IS COVERED THEREFORE IN ACCORDANCE WITH AS3500, THE MINIMUM PUMPOUT PIT SIZE IS 3m³.

AS PUMP-OUT TANK IS NOT ACCEPTING ANY RUN-OFF FROM UNCOVERED DRIVEWAY RAMP, ABOVE GROUND PUMP-OUT STORAGE IS NOT REQUIRED.

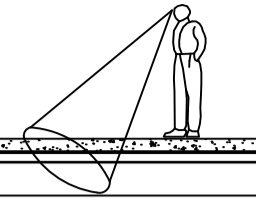
NOTES

BASEMENT DRAINAGE DESIGN SUBJECT TO GEOTECHNICAL INVESTIGATION AND STRUCTURAL DESIGN OF WALLS AND SLABS IN CC STAGE.

ALL SUBSOIL DRAINAGE (SSD) TO BE 100AG AND ALL DISH DRAIN OUTLETS (DDO) TO BE Ø100mm U.N.O



SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O

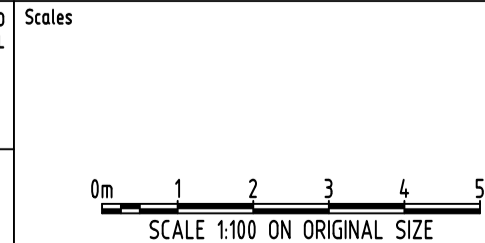


Reference Coordination Drawing				
Discipline	Drawing Title and Number	Date	Rev.	
ARCH				
ARCH				
STRUCT				
MECH				
ELEC				
HYD				
FIRE				
LANDS				
CIVIL				
SURVEY				

Issue internal sequence and revision history				
Issue	Last revision title	by	Date	Status
1-preliminary				
2-development application				
3-construction certificate				
4-tender				
5-construction				
6-other				

QUALITY CONTROL				
DRAWN	MN	DATE	25.02.21	
CHECKED	SH	DATE	25.02.21	
DESIGNED	MN	DATE	25.02.21	
VERIFIED	SH	DATE	25.02.21	
APPROVED	SH	DATE	25.02.21	

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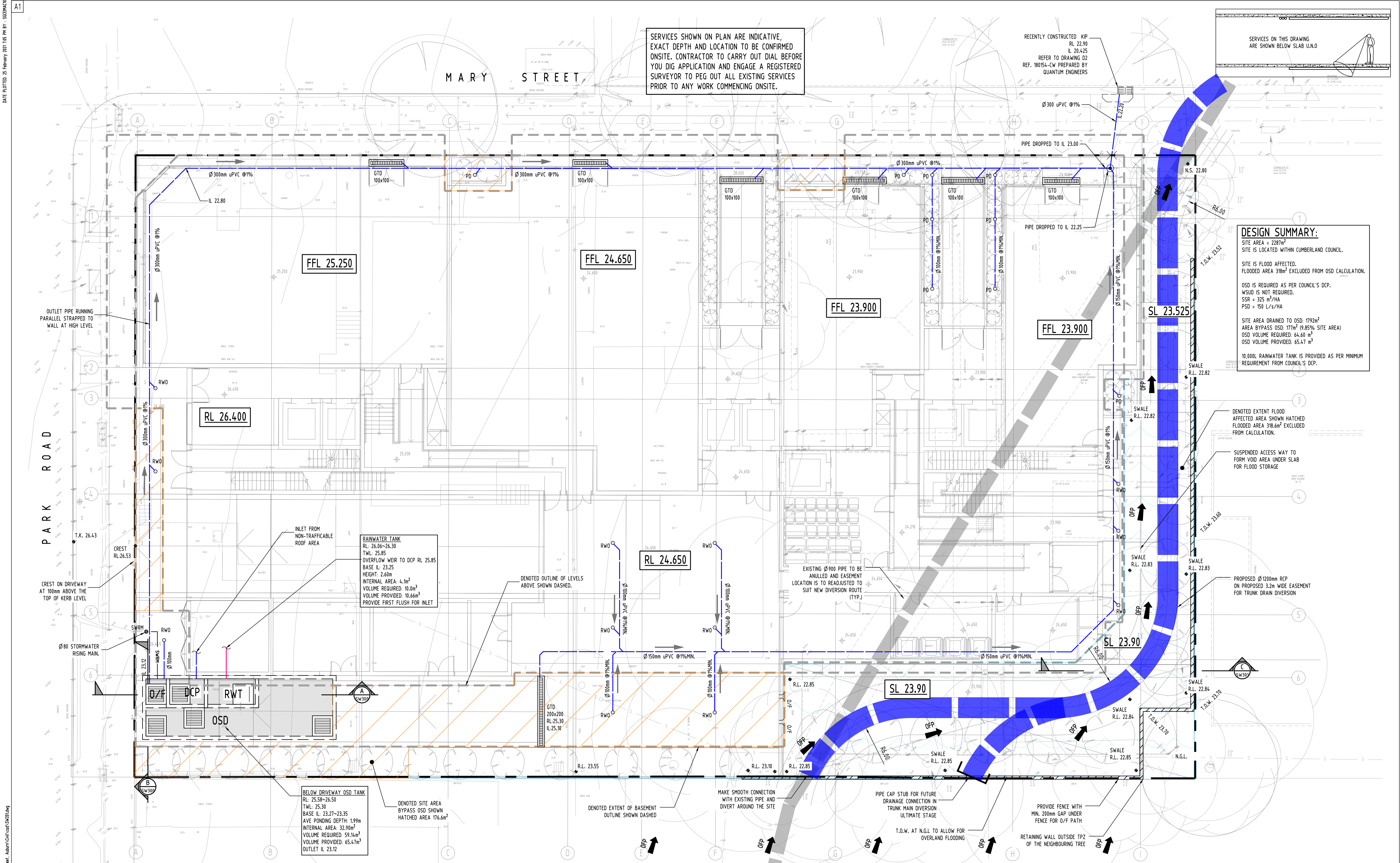
ARCHITECT
URBANLINK

SGC
Engineering Value

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A.B.N. 21 118 222 530

PROJECT		
PROPOSED RESIDENTIAL DEVELOPMENT		
14-22 MARY STREET, AUBURN		
Grid	Datum	Sheet
-	A.H.D.	2 OF 8
Scale (at original size)		
1:100 @ A1		
Drawing Status		
FOR APPROVAL		
NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title		
STORMWATER CONCEPT DESIGN		
BASEMENT 4 PLAN		
Project No	Drawing No	Revision No
20200151	SW200	C



DESIGN SUMMARY:
SITE AREA = 2287m²
SITE IS LOCATED WITHIN CUMBERLAND COUNCIL.
SITE IS FLOOD AFFECTED.
FLOODED AREA 318m² EXCLUDED FROM OSD CALCULATION.
OSD IS REQUIRED AS PER COUNCIL'S DCP.
WSUD IS NOT REQUIRED.
SSR = 325 m³/HA
PSD = 150 L/s/HA
SITE AREA DRAINED TO OSD: 1792m²
AREA BYPASS OSD: 177m² (9.85% SITE AREA)
OSD VOLUME REQUIRED: 64.60 m³
OSD VOLUME PROVIDED: 65.47 m³
10,000L RAINWATER TANK IS PROVIDED AS PER MINIMUM REQUIREMENT FROM COUNCIL'S DCP.

Reference Coordination Drawing				ENGINEERS AUSTRALIA		QUALITY CONTROL		WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF SGC CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF SGC CONSULTANTS PTY LTD		CLIENT		ARCHITECT		PROJECT		Drawing Status			
Discipline	Drawing Title and Number	Date	Rev.	Discipline	Drawing Title and Number	Date	Rev.	Discipline	Drawing Title and Number	Date	Rev.	Discipline	Drawing Title and Number	Date	Rev.	Discipline	Drawing Title and Number	Date	Rev.
ARCH	ARCH	25.02.21	2	STRUCT	STRUCT	25.02.21	2	CHECKED	SH	DATE	25.02.21	ROLZ GROUP PTY LTD	URBAN LINK	Suite 5.03, Level 5, 156 PACIFIC HIGHWAY ST. LEONARDS, NSW 2065	FOR APPROVAL	NOT TO BE USED FOR CONSTRUCTION PURPOSES	Project No	Drawing No	Revision No
ARCH	ARCH	25.02.21	2	MECH	MECH	25.02.21	2	DESIGNED	MN	DATE	25.02.21			T. LEONARDS, NSW 2065			20200151	SW201	C
ELEC	ELEC	25.02.21	2	ELEC	ELEC	25.02.21	2	VERIFIED	SH	DATE	25.02.21			Email: office@sgce.com.au					
HYD	HYD	25.02.21	1	HYD	HYD	25.02.21	1	APPROVED	SH	DATE	25.02.21			Web: www.sgce.com.au					
FIRE	FIRE	25.02.21	1	FIRE	FIRE	25.02.21	1												
LANDS	LANDS	25.02.21	1	LANDS	LANDS	25.02.21	1												
CIVIL	CIVIL	25.02.21	1	CIVIL	CIVIL	25.02.21	1												
SURVEY	SURVEY	25.02.21	1	SURVEY	SURVEY	25.02.21	1												

Issue internal sequence and revision history

1-preliminary	2-development application	3-construction certificate	4-tender	5-construction	6-other
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Scale: 1:100 ON ORIGINAL SIZE

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SGC Engineering Value

A.B.N. 21 118 222 530

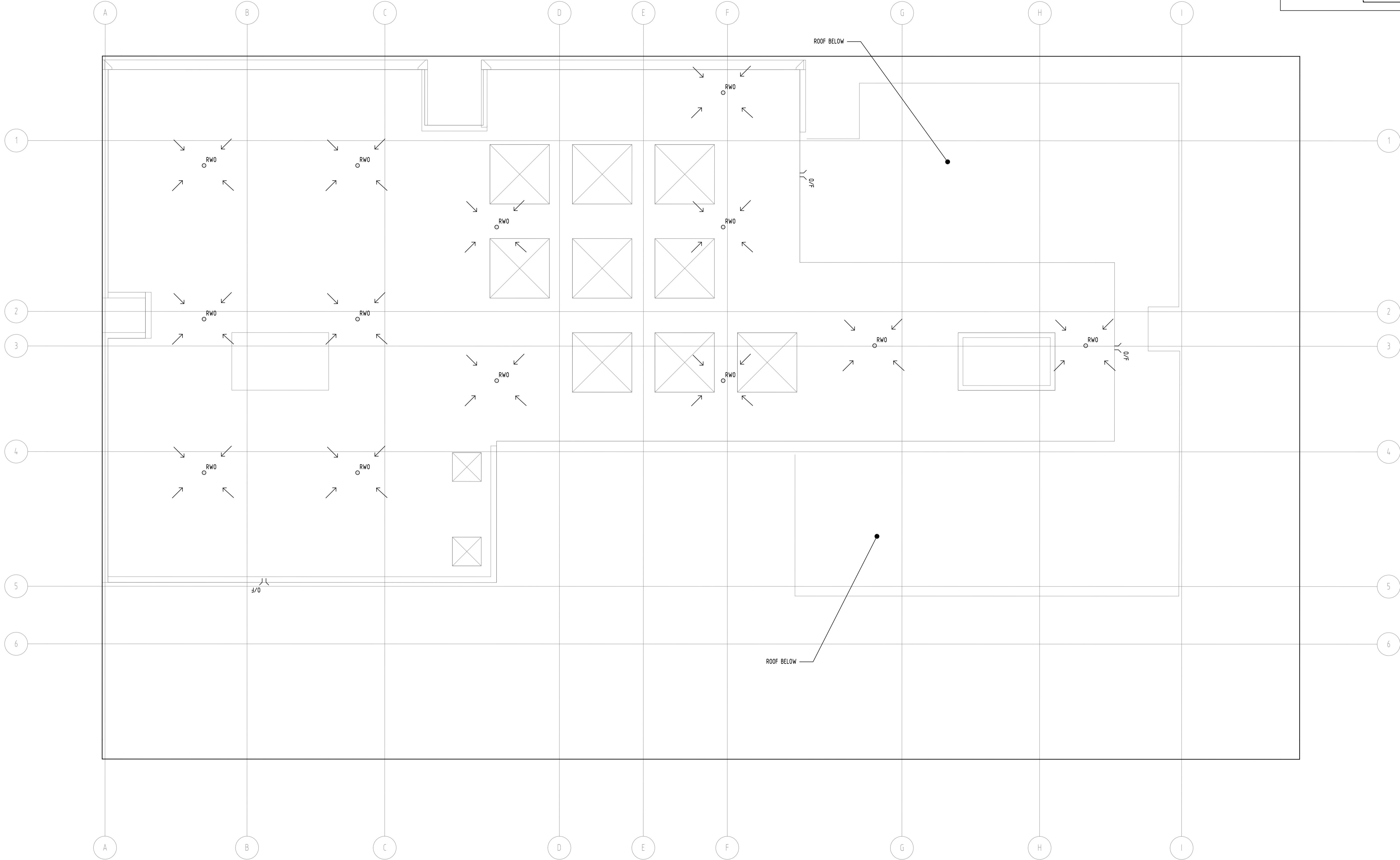
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT

14-22 MARY STREET, AUBURN

Grid: A.H.D. Datum: 3 of 8 Sheet: 1:100 @ A1

A1

SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O



Reference Coordination Drawing					
Discipline	Drawing Title and Number		Date	Rev.	
ARCH					
ARCH					
STRUC					
MECH					
ELEC					
HYD					
FIRE					
LANDS					
CIVIL					
SURVEY					

Issuer internal sequence and revision history					
1-preliminary	2-development application	3-construction certificate	4-tender	5-construction	6-other
C	ISSUE FOR APPROVAL	MN	25.02.21	2	
B	ISSUE FOR APPROVAL	MN	12.08.20	2	
A	ISSUE FOR APPROVAL	MN	04.08.20	2	
P1	ISSUE FOR PRELIMINARY	MN	26.06.20	1	
Issue	Last revision title	by	Date	Status	

ENGINEERS AUSTRALIA
Chartered Professional Engineer
MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MANS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DESIGN/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL			
DRAWN	MN	DATE	25.02.21
CHECKED	SH	DATE	25.02.21
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APPROVED	SH	DATE	25.02.21

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Scales

SCALE 1:100 ON ORIGINAL SIZE

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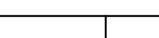

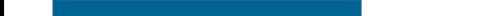

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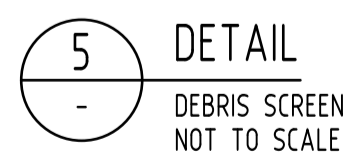
PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
14-22 MARY STREET,
AUBURN

Grid: -
Datum: A.H.D.
Sheet: 4 OF 8
Scale (at original size): 1:100 @ A1

Drawing Status: **FOR APPROVAL**
NOT TO BE USED FOR CONSTRUCTION PURPOSES
Drawing Title: **STORMWATER CONCEPT DESIGN ROOF PLAN**
Project No: **20200151**
Drawing No: **SW202**
Revision No: **C**



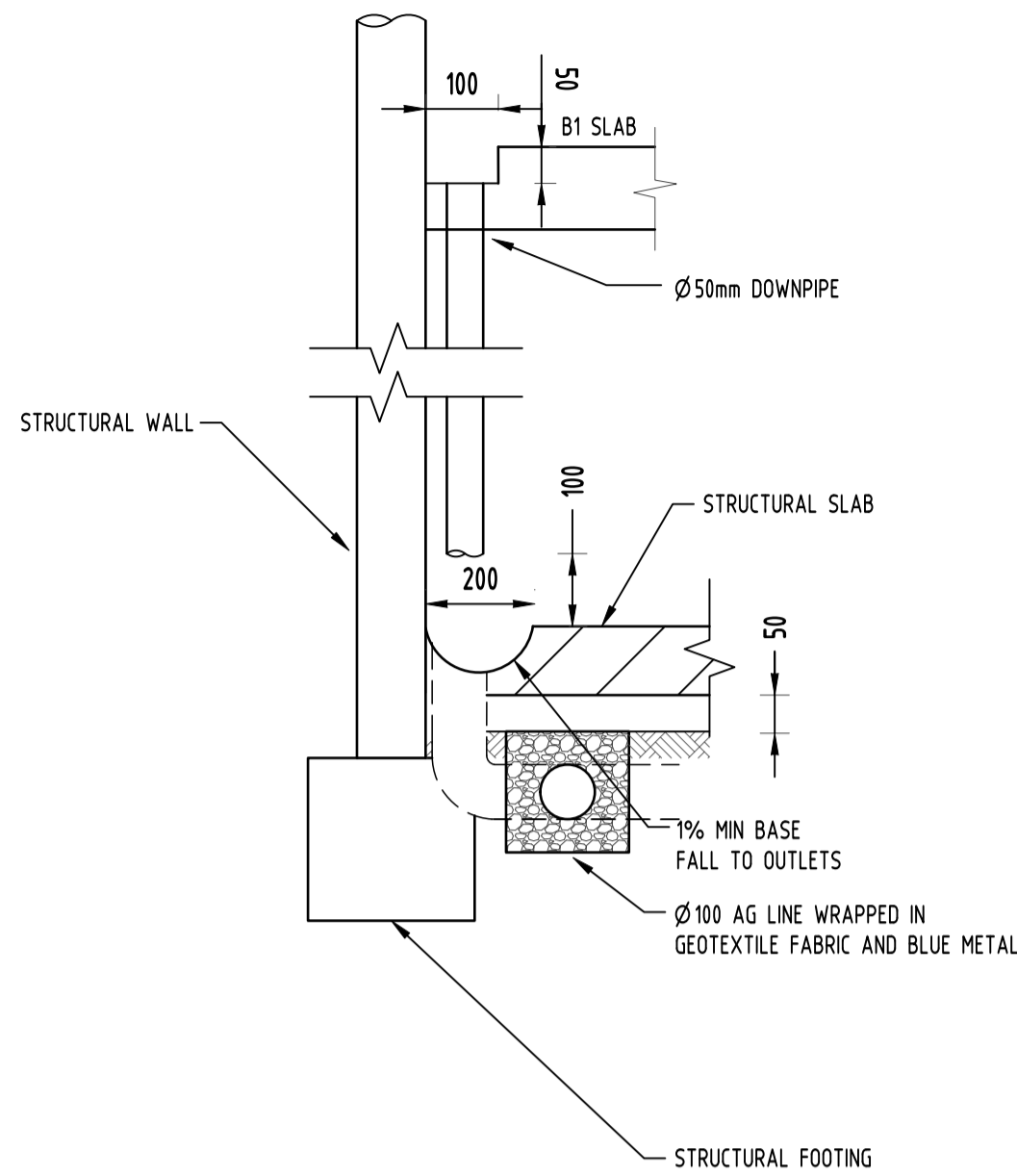
				Reference Coordination Drawing				 ENGINEERS AUSTRALIA Professional Engineer Member				QUALITY CONTROL				WARNING: THE DESIGN, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF SGC CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF SGC CONSULTANTS PTY LTD.				CLIENT ROLZ GROUP PTY LTD				ARCHITECT URBANLINK				 Suite 5.03, Level 5, 156 PACIFIC HIGHWAY ST. LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au				PROJECT PROPOSED RESIDENTIAL DEVELOPMENT 14-22 MARY STREET, AUBURN				Drawing Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES				Drawing Title STORMWATER CONCEPT DESIGN TRUNK MAIN DIVERSION ULTIMATE STAGE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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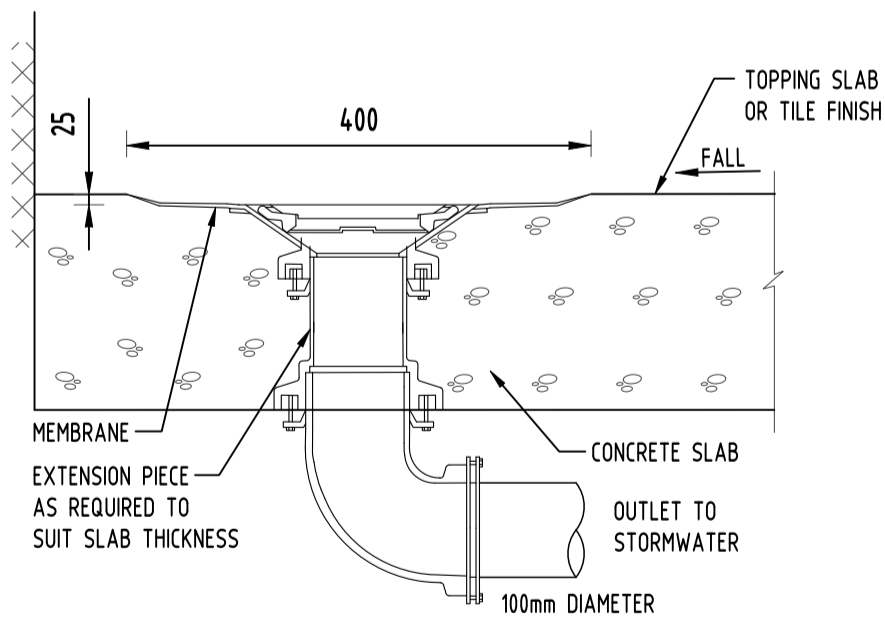
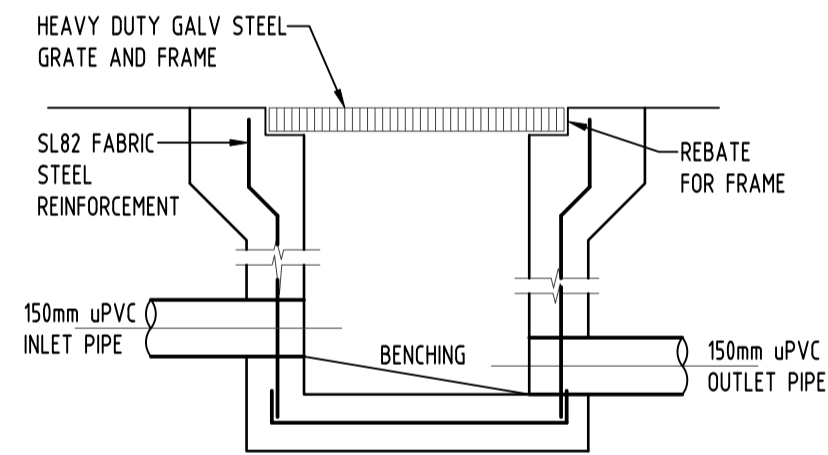
Drawing Status	FOR APPROVAL		
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Drawing Title	STORMWATER CONCEPT DESIGN DETAILS SHEET 1 OF 2		
Project No	Drawing No	Revision No	
20200151	SW300	C	

UPRCT OSD Calculation Sheet

Drainage Design Summary		S&G Pty Ltd		
Project		Location		
14-22 Mary Street		Auburn		
Catchment Name:				
SSR (m3/Ha) =		325		
PSD (l/s/Ha) =		150		
Total Site Area		0.1969	Ha	(A)
Basic Storage Volume SSRx(A)		63.99	m3	(B)
Basic Discharge PSDx(A)		0.0295	m3/s	(C)
Area of Site Drained to OSD ie Area -Bypass		0.1792	Ha	(D)
Percentage of Area diverted to Storage (should be greater than 75%)		91.01	%	(E)
Storage / Ha of contributing Area		357.10	m3/Ha	(F)
PSD Adjustment for Parramatta SSR=74.66xPSD ^{-0.731}		131.87	l/s/Ha	(G)
Determine PSD		23.63	l/s	(H)
Maximum Head to Orifice Centre		2.03	m	(K)
Height of Water over weir to Storage		0.102	m	(I)
Required Orifice Diameter		88	mm	(J)
Maximum Discharge		23.65	l/s	(L)
Head for High Early Discharge		1.93	m	(M)
HED		23.03	l/s	(N)
Approximate Mean Discharge		23.33	l/s	(P)
Average PSD / Ha of contibuting Area		130.18	l/s/Ha	(Q)
PSD Adjustment (fig 5.1)		360	m3/Ha	(R)
Final SSR		64.60	m ³	(S)
Primary Storage		64.60	m ³	(T)
Secondary Storage		0	m ³	(U)
Tertiary Storage		0	m ³	(V)
Total		64.60	m ³	(W)
Signature		M.N.	Date:	4/08/2020



SUBSOIL DRAINAGE
N.T.S

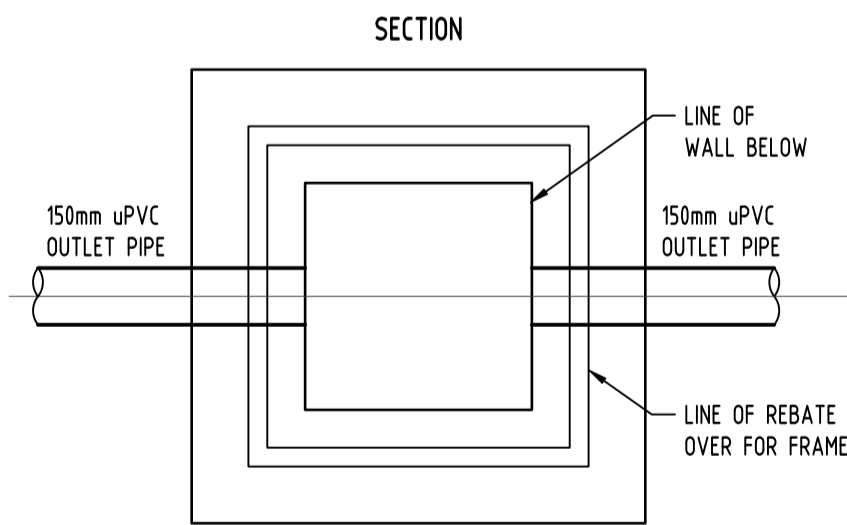


6
-
DETAIL
RAINWATER OUTLET
NOT TO SCALE

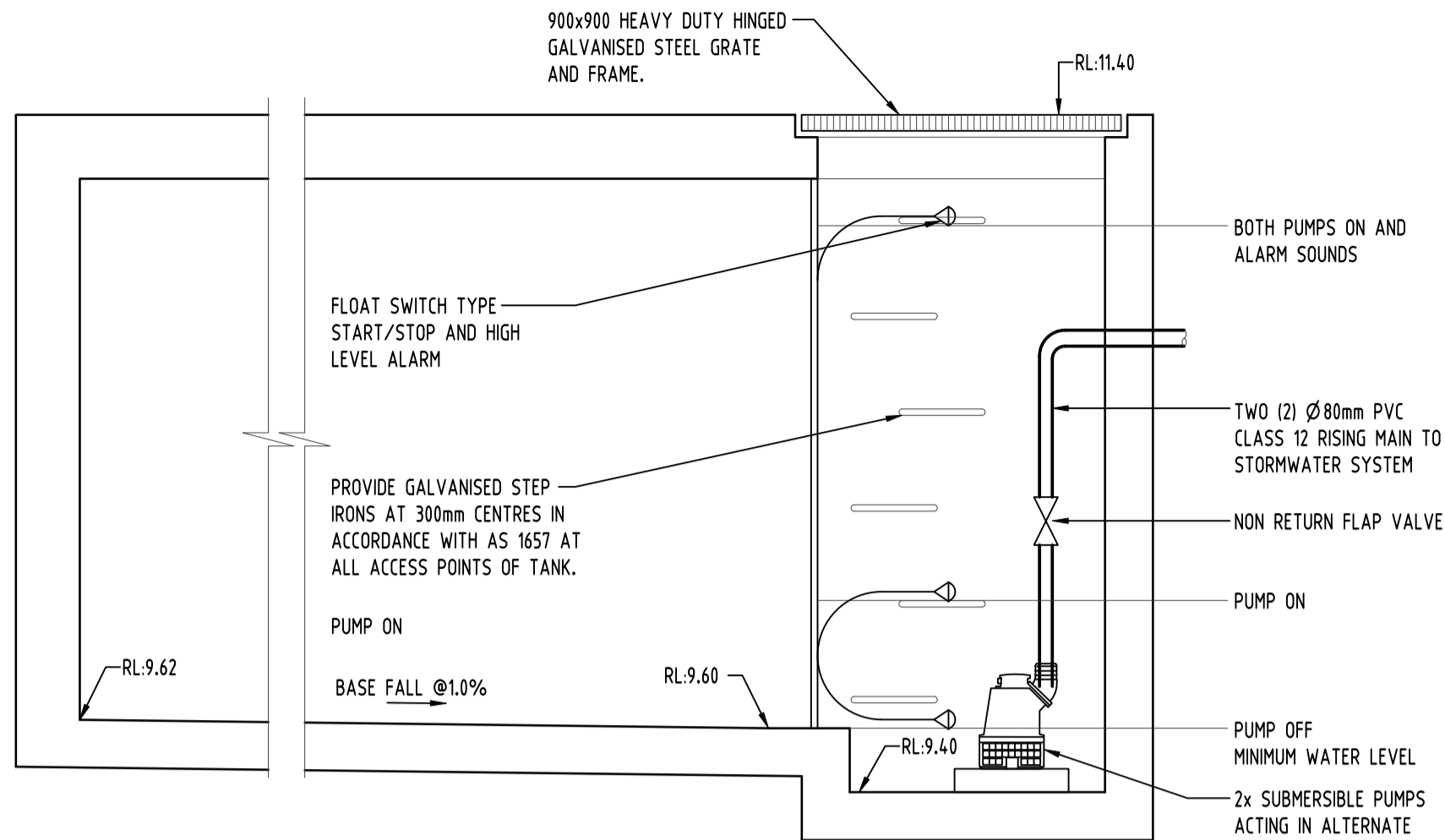


7
-
DETAIL
RAINWATER SIGN
SCALE 1:20

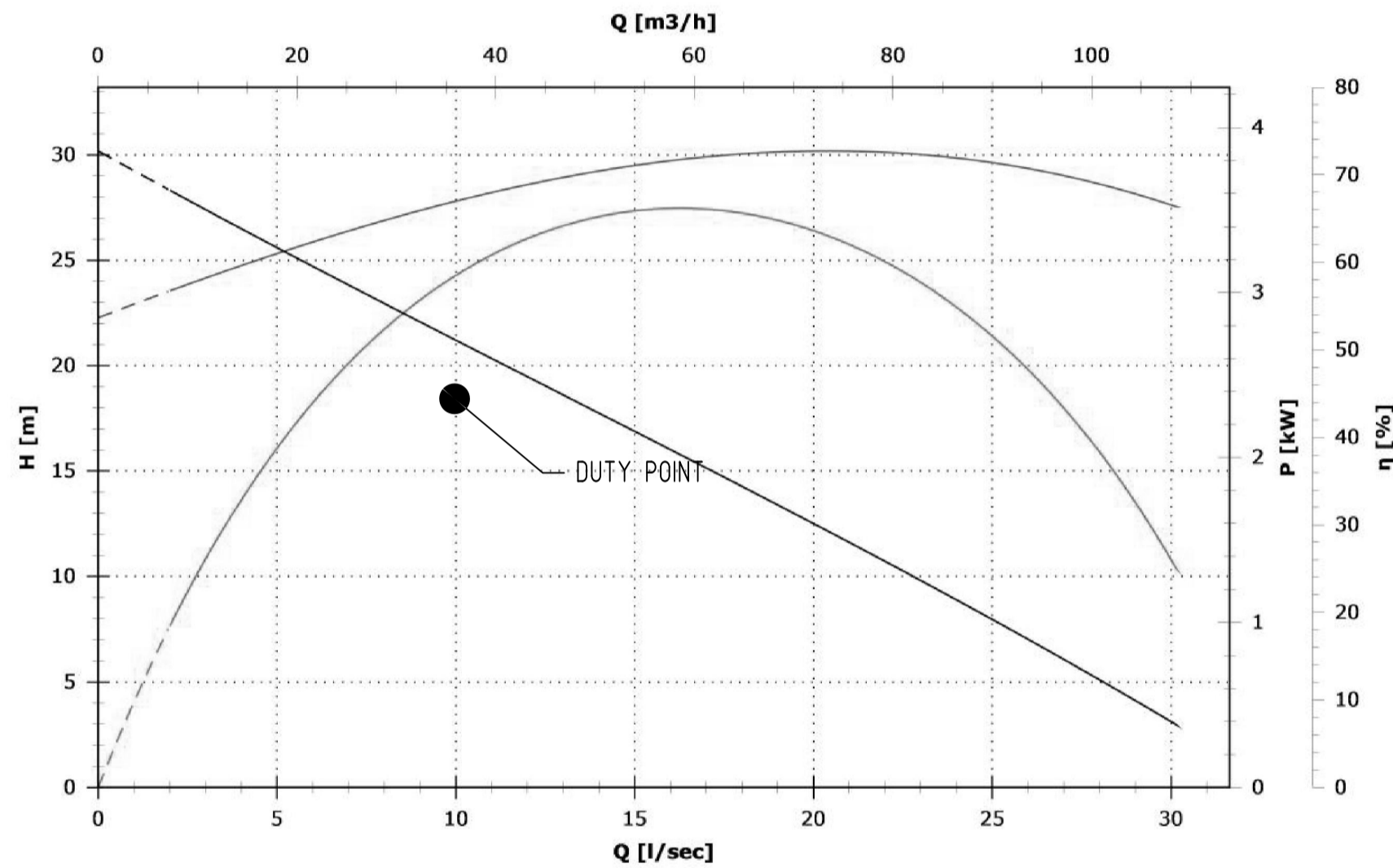
LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND



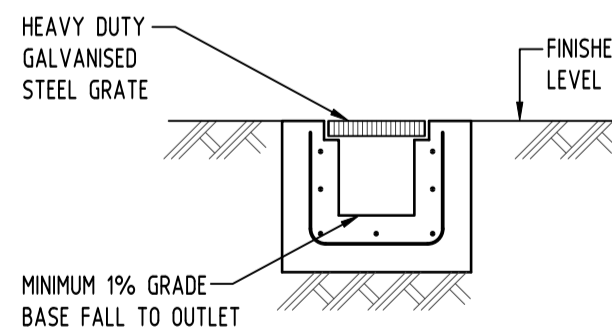
8
-
DETAIL
STORMWATER PIT
SCALE N.T.S.



10
-
DETAIL
SUBSOIL PUMP OUT PIT
NOT TO SCALE



MAN 550/2/80 A1FT/50 PERFORMANCE CURVE



9
-
DETAIL
GRADED TRENCH DRAIN
SCALE N.T.S.

- LEGEND:
- STORMWATER LINE
 - SSD SUBSOIL LINE
 - SWRM SWRM STORMWATER RISING MAIN
 - RW RW STORMWATER LINE TO RAINWATER TANK
 - EXISTING STORMWATER LINE
 - SW SW AUTHORITY STORMWATER LINE
 - S AUTHORITY SEWER LINE
 - W AUTHORITY WATER LINE
 - G AUTHORITY GAS LINE
 - E AUTHORITY ELECTRICITY LINE
 - UE AUTHORITY UNDERGROUND ELECTRICITY LINE
 - FO AUTHORITY FIBRE OPTIC LINE
 - TEL AUTHORITY COMMS LINE
 - FENCE LINE
 - GRADED SURFACE INLET PIT
 - GRADED SURFACE INLET PIT WITH ENVIROPOD INSERT
 - EXISTING KERB INLET PIT
 - OFF OVERLAND FLOW PATH
 - RWO RAINWATER OUTLET
 - DDO DISH DRAIN OUTLET
 - PD PLANTER DRAIN
 - CAP
 - DP DOWNPIPE

Reference Coordination Drawing				
Discipline	Drawing Title and Number	Date	Rev.	
ARCH				
STRUC				
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FIRE				
LANDS				
CIVIL				
SURVEY				

Issue Last revision title by Date Status

1-preliminary
4-tender

2-development application
5-construction

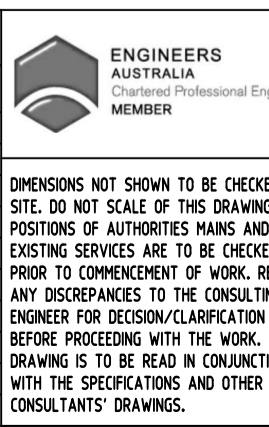
3-construction certificate
6-other

Issue internal sequence and revision history

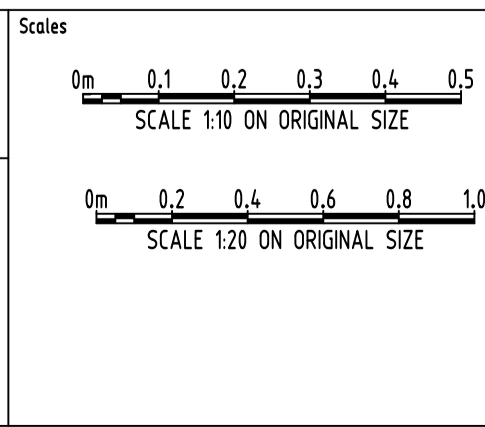
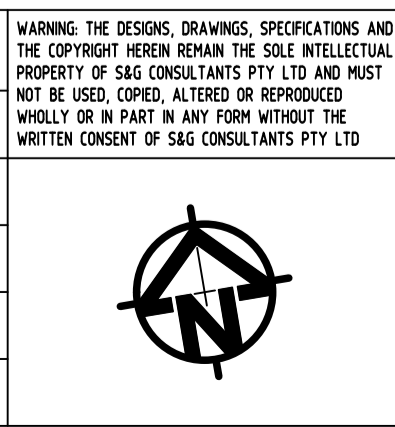
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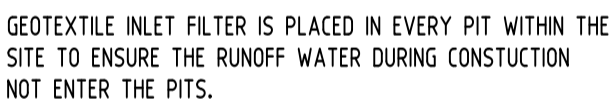
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PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
14-22 MARY STREET,
AUBURN

Drawing Status	FOR APPROVAL
Drawing Title	NOT TO BE USED FOR CONSTRUCTION PURPOSES
Drawing Title	STORMWATER CONCEPT DESIGN
Drawing Title	DETAILS
Drawing Title	SHEET 2 OF 2
Project No	20200151
Drawing No	SW301
Revision No	C



A SYSTEM SHALL BE INSTALLED TO EITHER

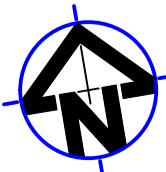
1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL

 SANDBAGS

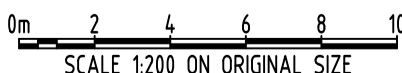
				Reference Coordination Drawing			
				Discipline	Drawing Title and Number	Date	Rev.
				ARCH			
C	ISSUE FOR APPROVAL	MN	25.02.21	2	STRUCT		
B	ISSUE FOR APPROVAL	MN	12.08.20	2	MECH		
A	ISSUE FOR APPROVAL	MN	04.08.20	2	ELEC		
PI	ISSUE FOR PRELIMINARY	MN	26.06.20	1	HYD		
Issue	Last revision title	by	Date	Status	PRE		
<p align="center">Issuer internal sequence and revision history</p> <p>1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other</p>							
				LANDS			
				CIVIL			
				SURVEY			

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o	Scales
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Web: www.sgce.com.au

A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL
DEVELOPMENT
14-22 MARY STREET,
AUBURN

Grid	Datum	Sheet	Scale (at original size)
-	A.H.D.	8 OF 8	1:200 @ A1

Drawing Status **FOR APPROVAL**
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
EROSION AND SEDIMENT CONTROL
PLAN AND DETAILS

Project No	Drawing No	Revision No
20200151	SW400	C