

# PROPOSED SENIORS HOUSING 103-109 LAYCOCK STREET, CRANEBROOK STORMWATER CONCEPT DESIGN



LOCALITY PLAN  
NOT TO SCALE  
COPYRIGHT OF GOOGLE MAP, VERSION 3

DRAWINGS LIST			
SHEET No.	DWG No.	TITLE	REV
1	SW100	COVER SHEET	B
2	SW200	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN	B
3	SW201	STORMWATER CONCEPT DESIGN - ROOF PLAN	B
4	SW300	STORMWATER CONCEPT DESIGN - DETAILS SHEET	B
5	SW400	EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS	B
6	SW500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT AND OSD CATCHMENT PLAN	B



**PREPARED BY:**

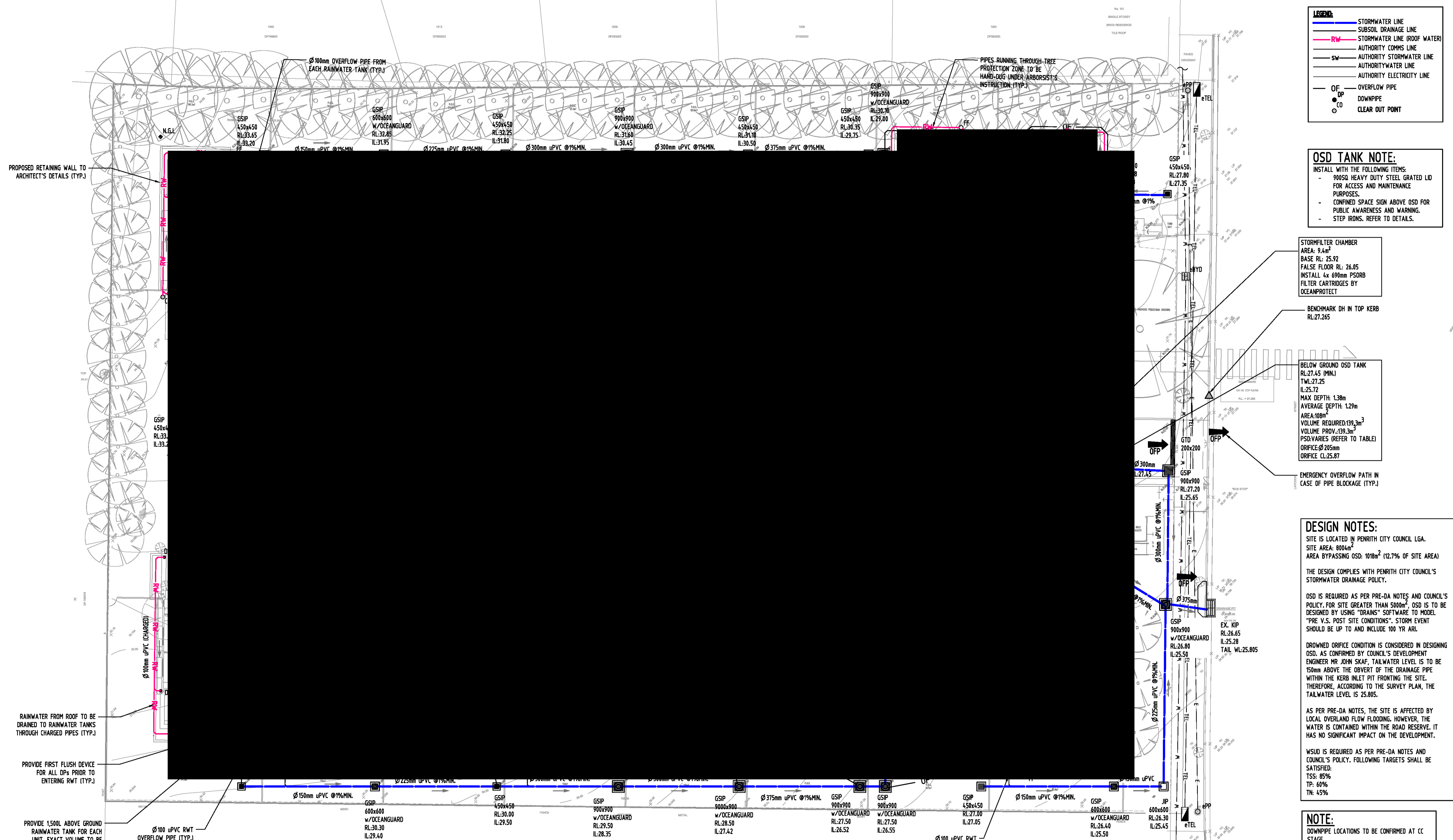
SGC Consulting Engineers  
Suite 5.03, Level 5  
156 Pacific Highway  
St Leonards, NSW 2065  
T: +61 2 8883 4239  
Email: office@sgce.com.au  
Web: www.sgce.com.au

**ARCHITECT:**



**CLIENT:**

**GREATER WESTERN  
GROUP P/L**

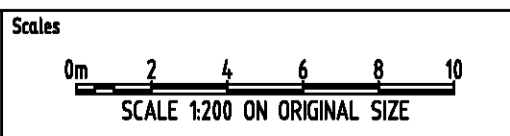
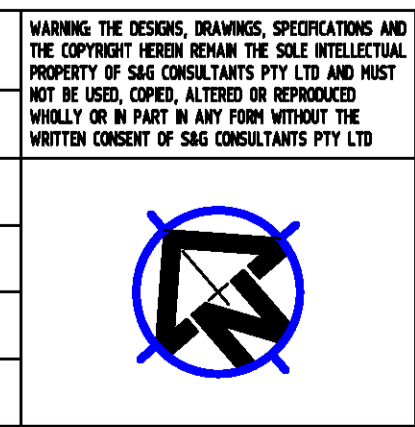


POST-DEVELOPMENT OSD CALCULATIONS TABLE:

LOT AREA (m <sup>2</sup> )	PRE-DEV IMPERVIOUS (%)	POST-DEV IMPERVIOUS (%)	STORM (YR)	PRE-DEV FLOW (m <sup>3</sup> /s)	POST-DEV FLOW UNDETAINED (m <sup>3</sup> /s)	PIPE OUTFLOW OSD TANK (m <sup>3</sup> /s)	WEIR OUTFLOW OSD TANK (m <sup>3</sup> /s)	BYPASSING (m <sup>3</sup> /s)	TOTAL PSD (m <sup>3</sup> /s)	OSD VOLUME (m <sup>3</sup> )
8004	6	80	5	0.107	0.107	0.072	N/A	0.030	0.102	TANK: 139.3
			10	0.157	0.232	0.081	N/A	0.037	0.118	
			100	0.325	0.394	0.101	0.159	0.061	0.321	

Discipline	Drawing Title and Number	Date	Rev.
ARCH	18.12.20	1	
ARCH	04.11.20	1	
ARCH	27.10.20	1	
MECH	29.10.2019	2	
ELEC	25.09.2019	1	
HYD	27.08.2019	1	
PREL			

Discipline	Checked	SH	DATE
DRAWN	MN	DATE	18.12.20
CHECKED	SH	DATE	18.12.20
DESIGNED	MN	DATE	18.12.20
VERIFIED	SH	DATE	18.12.20
APPROVED	SH	DATE	18.12.20



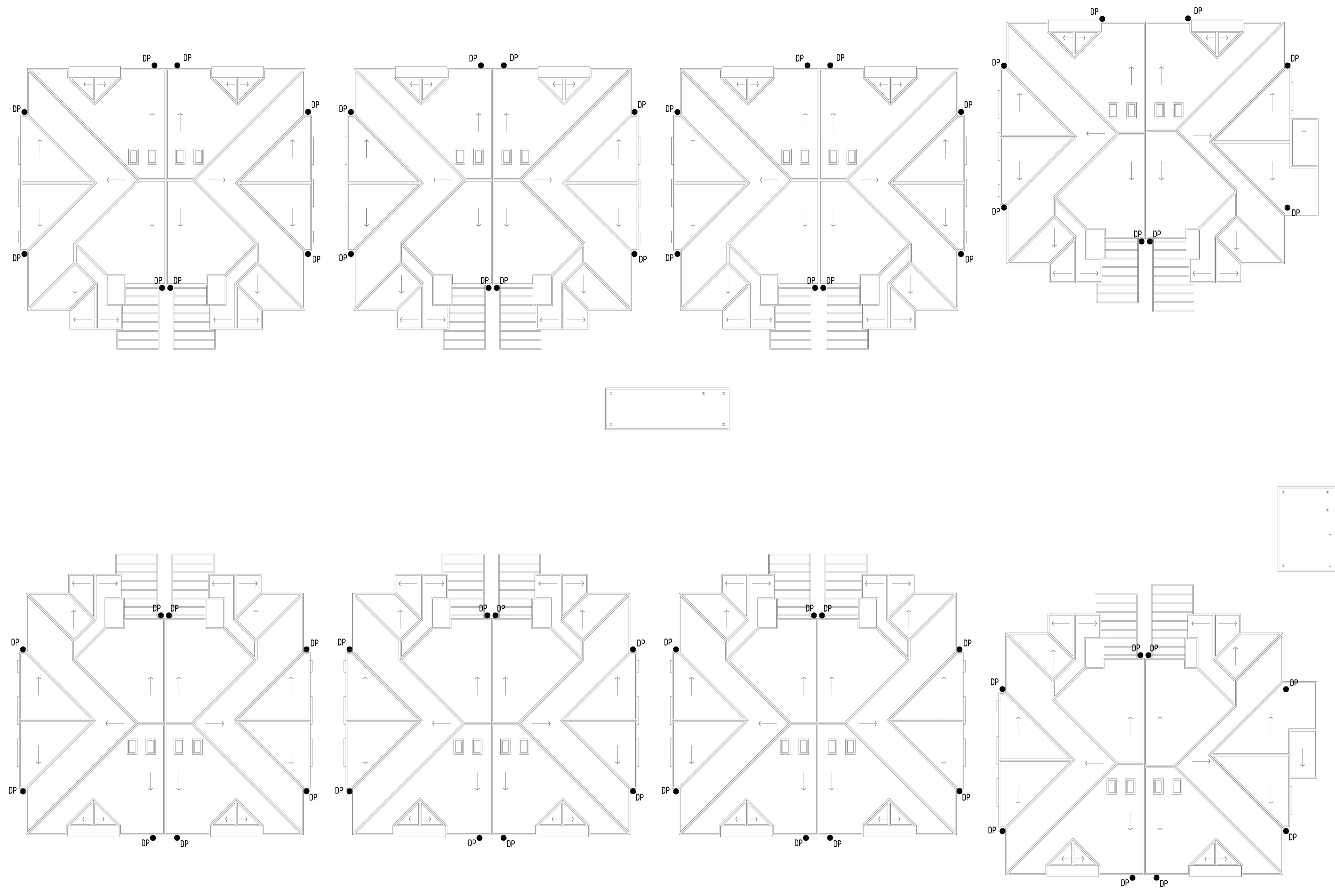
CLIENT  
 GREATER WESTERN GROUP P/L



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 SENIORS HOUSING  
 103-109 LAYCOCKS STREET, CRANEBROOK

Project No	Drawing No	Revision No
20190170	SW200	B



**NOTE:**  
DOWNPIPE LOCATIONS TO BE CONFIRMED AT CC STAGE

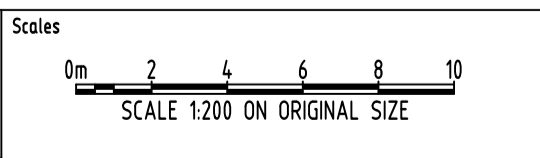
C:\Users\user\Documents\2019\20191017\_103-109\_Laycock\_Street\_Cranbrook\A1\cad\CAD\BOL\BOL.dwg

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH		18.12.20	1
ARCH		06.11.20	1
STRUCT		27.10.20	1
MEECH		25.09.2019	2
ELEC		27.08.2019	1
HYD			
FRG			
LANDS			
CIVIL			
SURVEY			

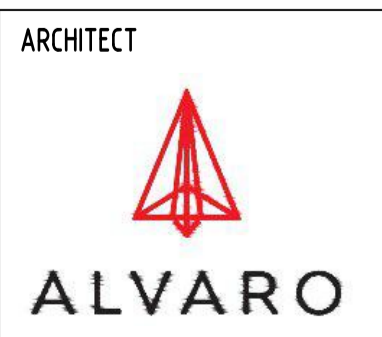
**ENGINEERS AUSTRALIA**  
Chartered Professional Engineer  
MEMBER

QUALITY CONTROL			
Discipline	Checked By	Date	Status
DRAWN	MN	18.12.20	
CHECKED	SH	18.12.20	
DESIGNED	MN	18.12.20	
VERIFIED	SH	18.12.20	
APPROVED	SH	18.12.20	

WARNING: THE DESIGN, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD



CLIENT  
**GREATER WESTERN GROUP P/L**



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

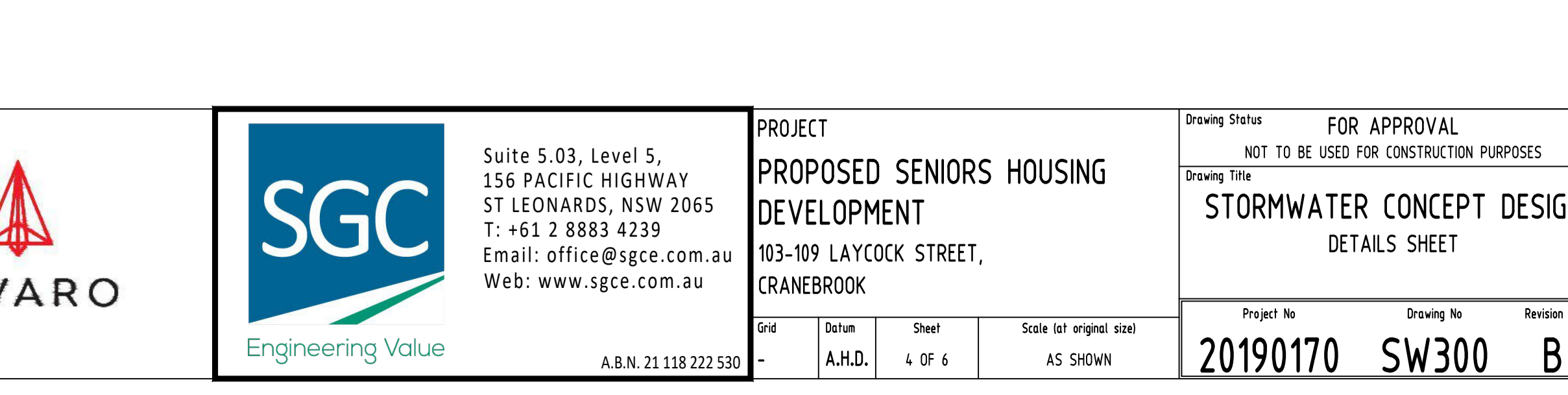
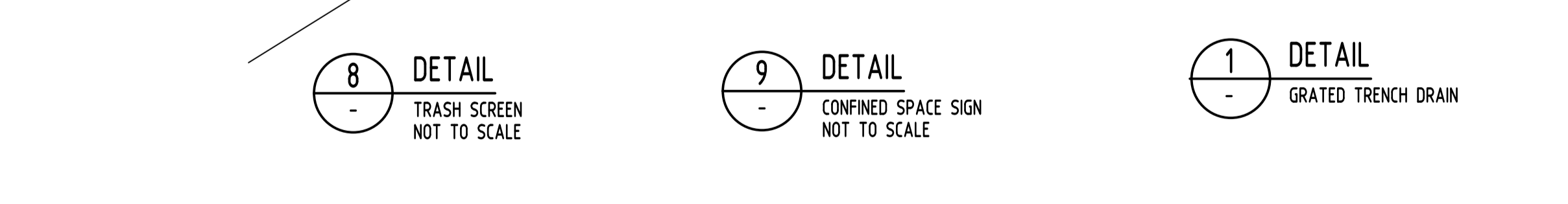
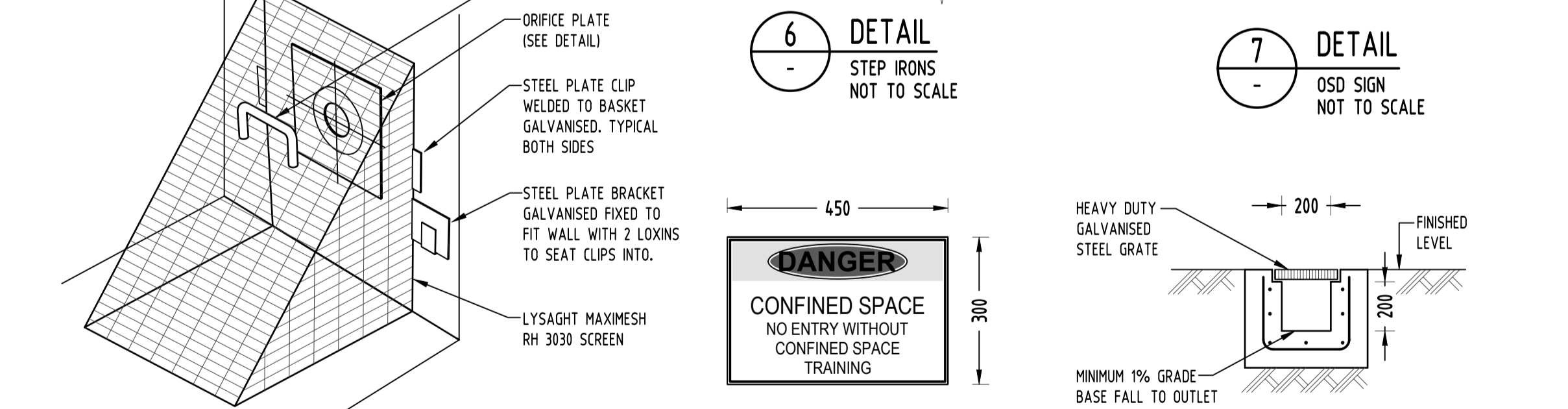
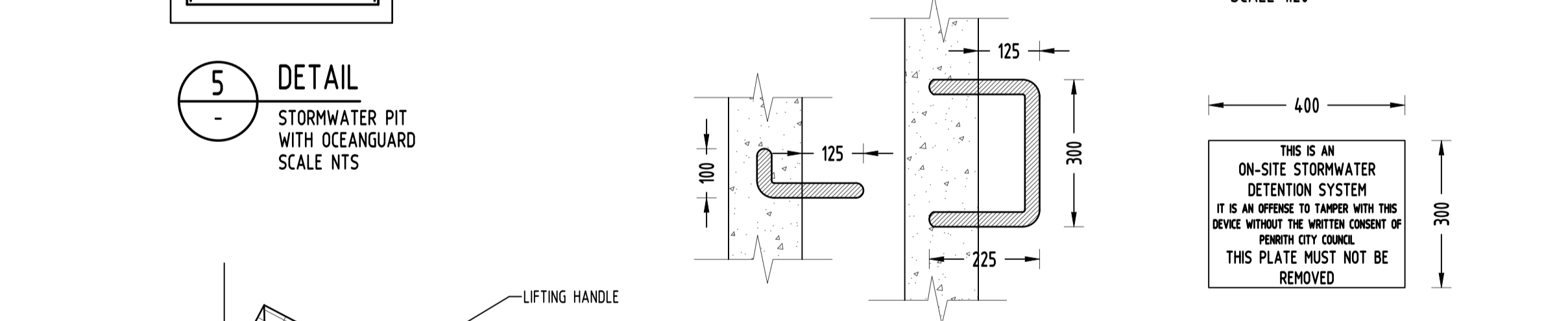
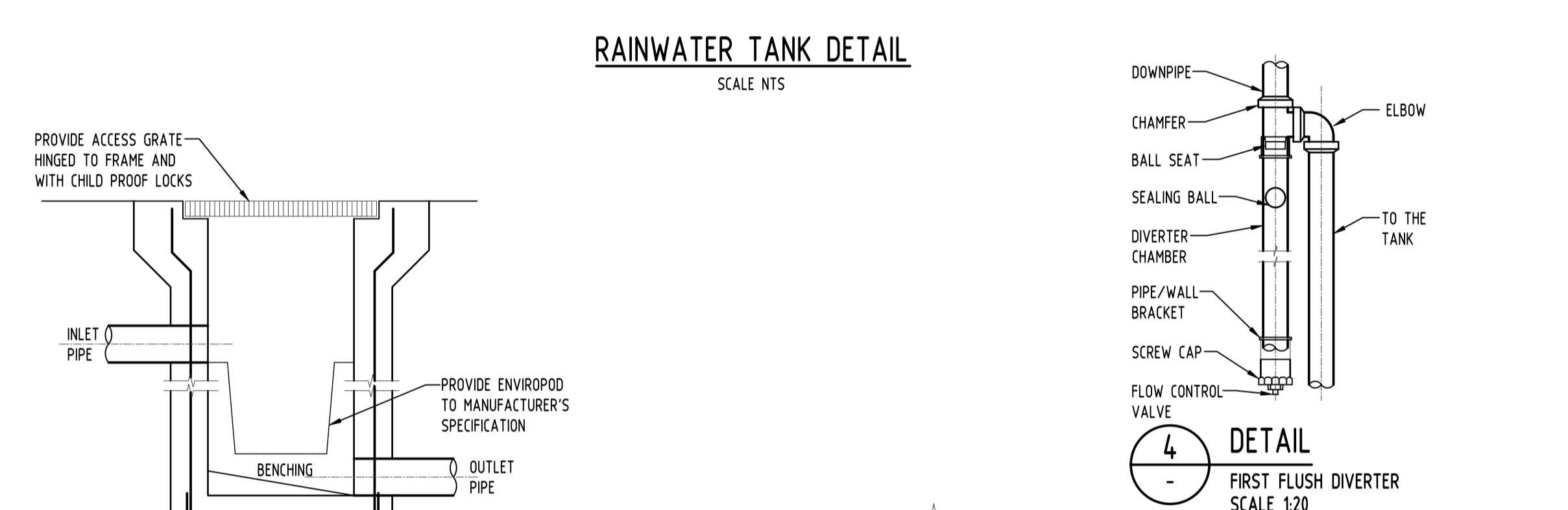
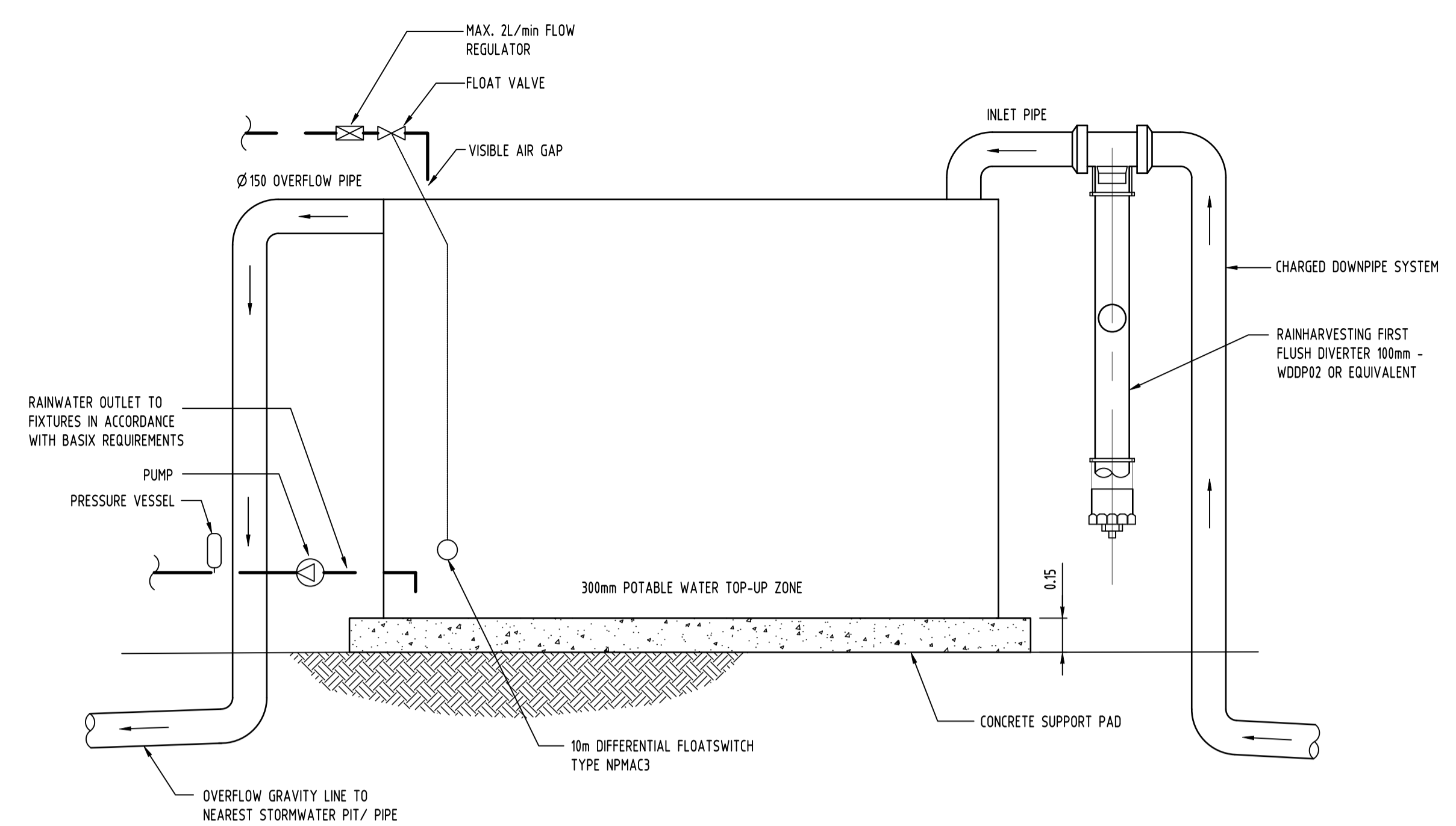
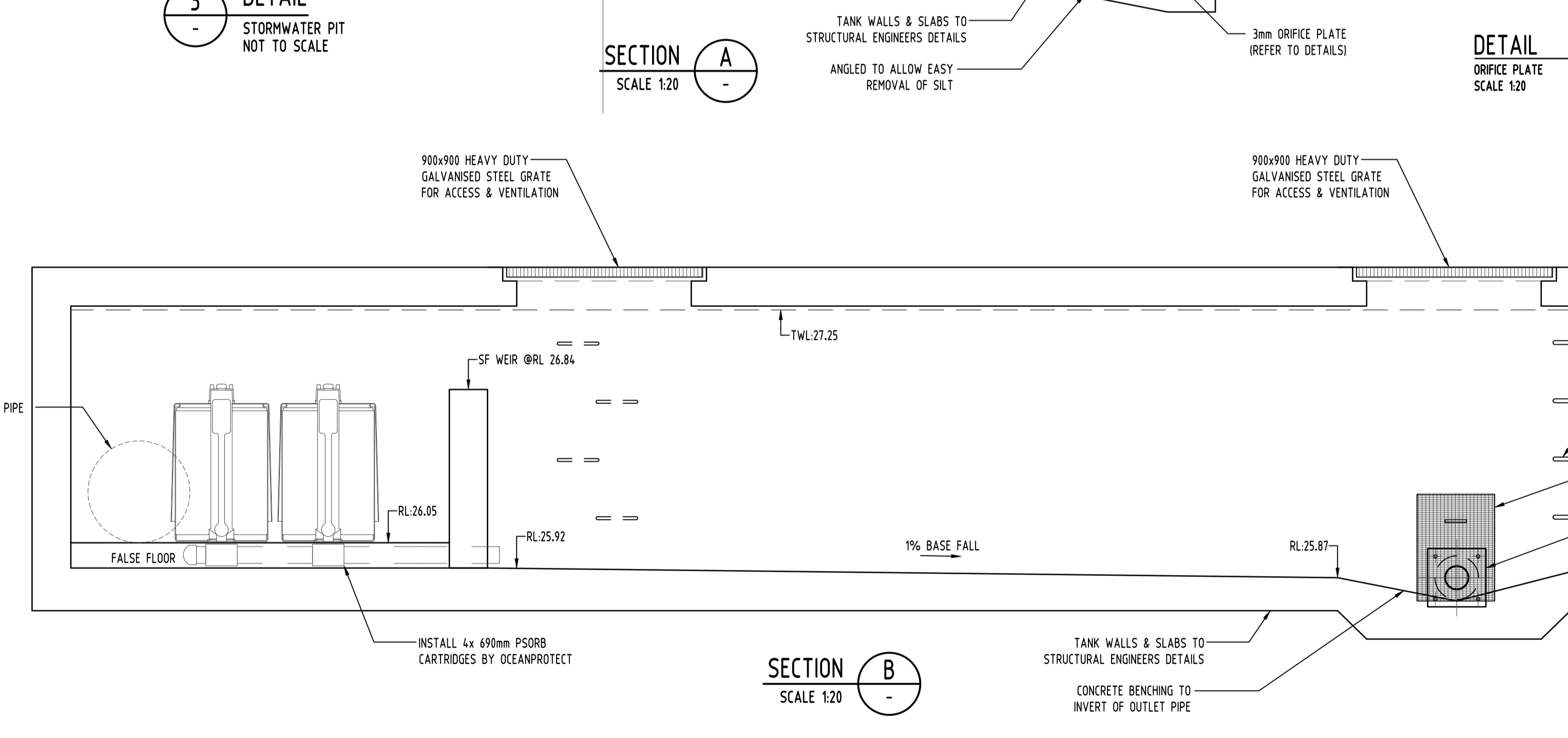
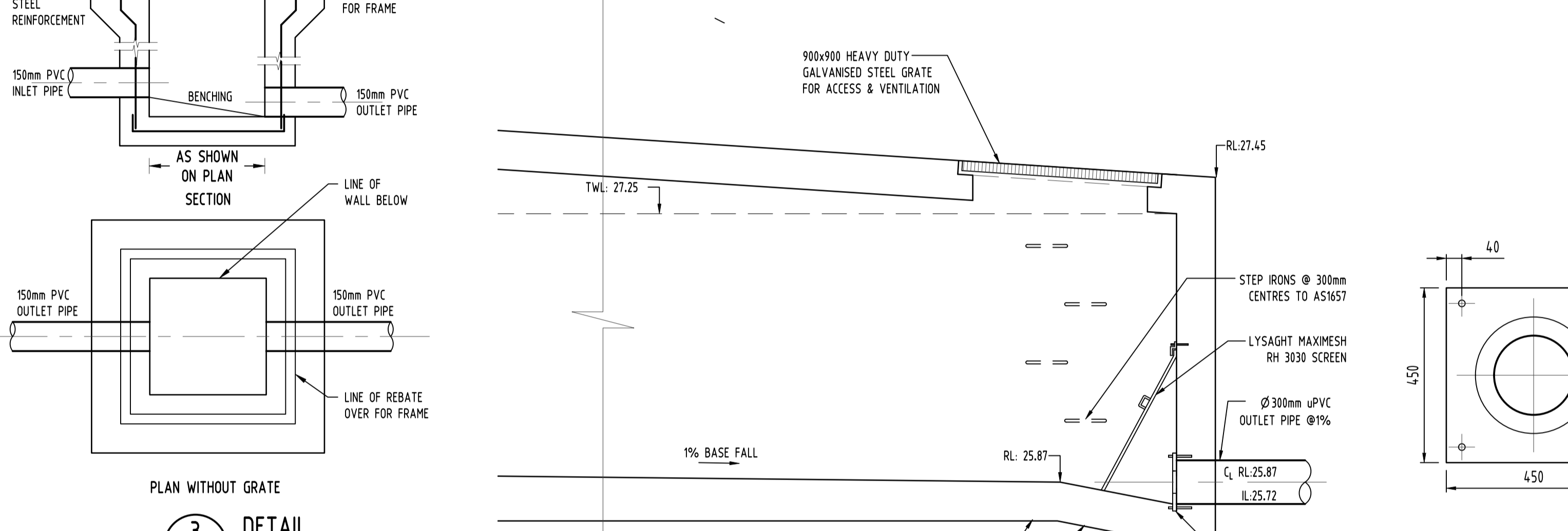
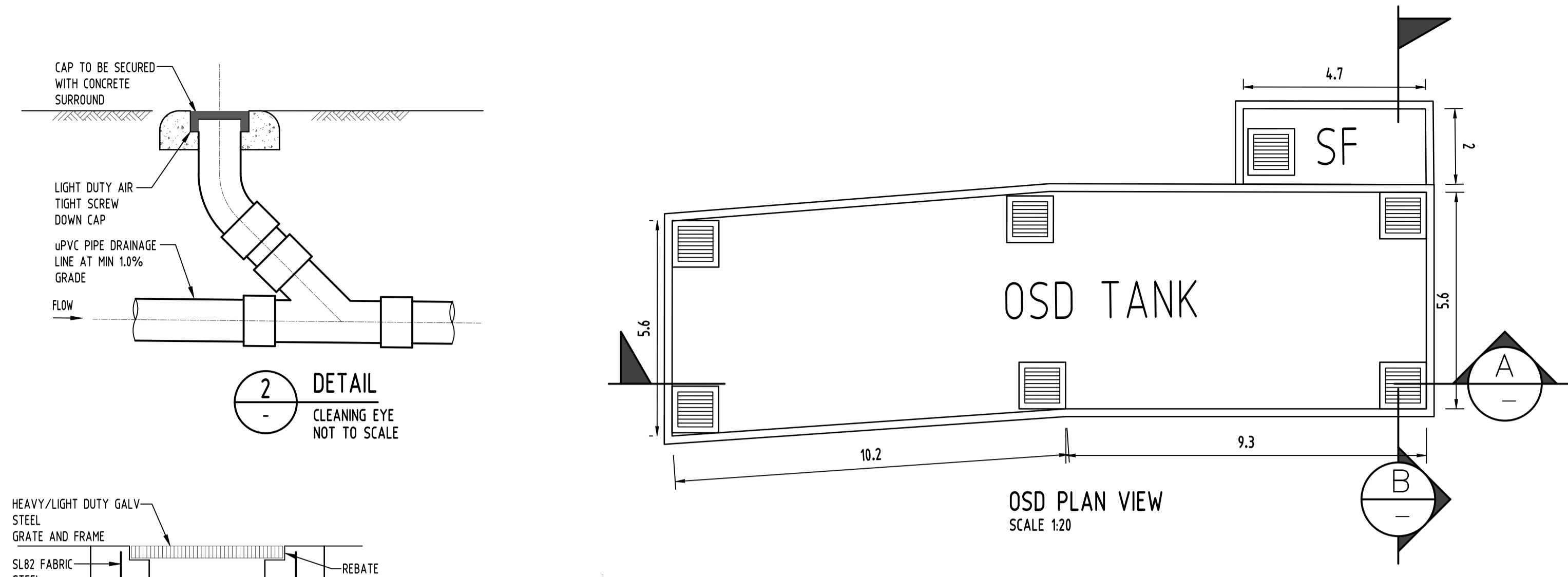
PROJECT  
**PROPOSED SENIORS HOUSING**  
103-109 LAYCOCKS STREET, CRANEBROOK

Drawing Status <b>FOR APPROVAL</b> NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title <b>STORMWATER CONCEPT DESIGN ROOF PLAN</b>		
Project No <b>20190170</b>	Drawing No <b>SW201</b>	Revision No <b>B</b>

Grid	Datum	Sheet	Scale (at original size)
-	A.H.D.	3 OF 6	1:200 @ A1

A.B.N. 21 118 222 530

DATE PLOTTED: 18 December 2020 10:57 AM BY: USER  
 2020 File Path: C:\Production\2019\2019170\_103-109 Laycock Street, Cranebrook\Com\CAD\DWG\A1.dwg  
 Issue internal sequence and revision history  
 1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other  
 Document Set ID: 9450263  
 Version: 1, Version Date: 22/01/2021



Discipline	Drawing Title and Number	Date	Rev.
B	ISSUE FOR DA	MN 18.12.20	1
P4	ISSUE FOR DA	MN 06.11.20	1
P3	ISSUE FOR DA	MN 27.10.20	1
A	ISSUE FOR DA	FZ 29.10.2019	2
P2	PRELIMINARY	FZ 25.09.2019	1
P1	PRELIMINARY	FZ 27.08.2019	1

Discipline	Drawing Title and Number	Date	Rev.
ARCH		18.12.20	
STRUCT		18.12.20	
MEEH		18.12.20	
ELEC		18.12.20	
HYD		18.12.20	
FRG		18.12.20	
LANDS		18.12.20	
CIVIL		18.12.20	
SURVEY		18.12.20	

Discipline	Checked	SH	DATE
DRAWN	MN	DATE	18.12.20
CHECKED	SH	DATE	18.12.20
DESIGNED	MN	DATE	18.12.20
VERIFIED	SH	DATE	18.12.20
APPROVED	SH	DATE	18.12.20

Scale	Scale
0m 1 2 3 4 5	SCALE 1:100 ON ORIGINAL SIZE

CLIENT  
**GREATER WESTERN GROUP P/L**

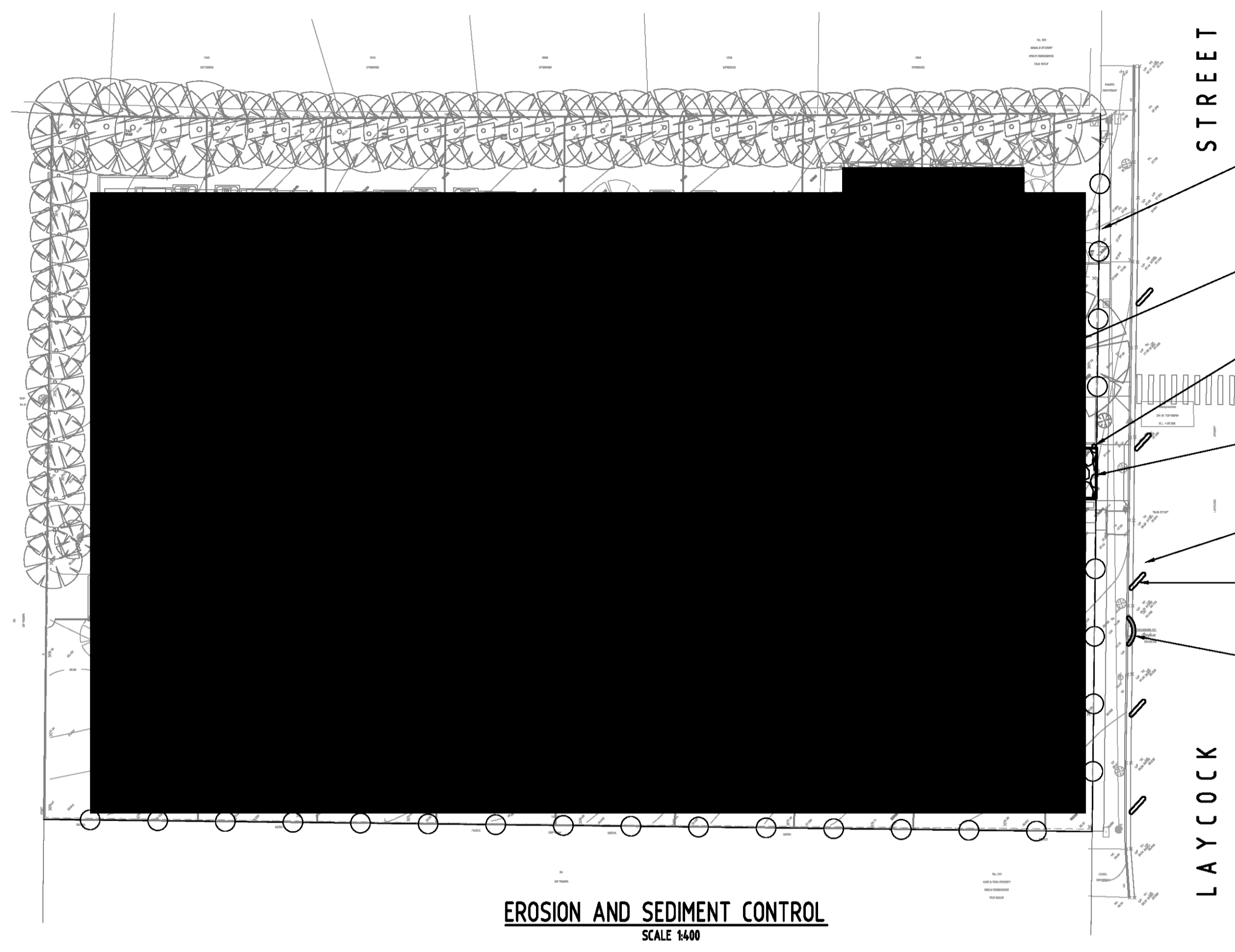
ARCHITECT  
**ALVARO**

**SGC**  
 Engineering Value  
 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 SENIORS HOUSING DEVELOPMENT**  
 103-109 LAYCOCK STREET,  
 CRANEBROOK

Grid	Datum	Sheet	Scale (at original size)
-	A.H.D.	4 OF 6	AS SHOWN

Project No	Drawing No	Revision No
20190170	SW300	B



**EROSION AND SEDIMENT CONTROL**  
SCALE 1:400

**EROSION & SEDIMENTATION CONTROL NOTES**

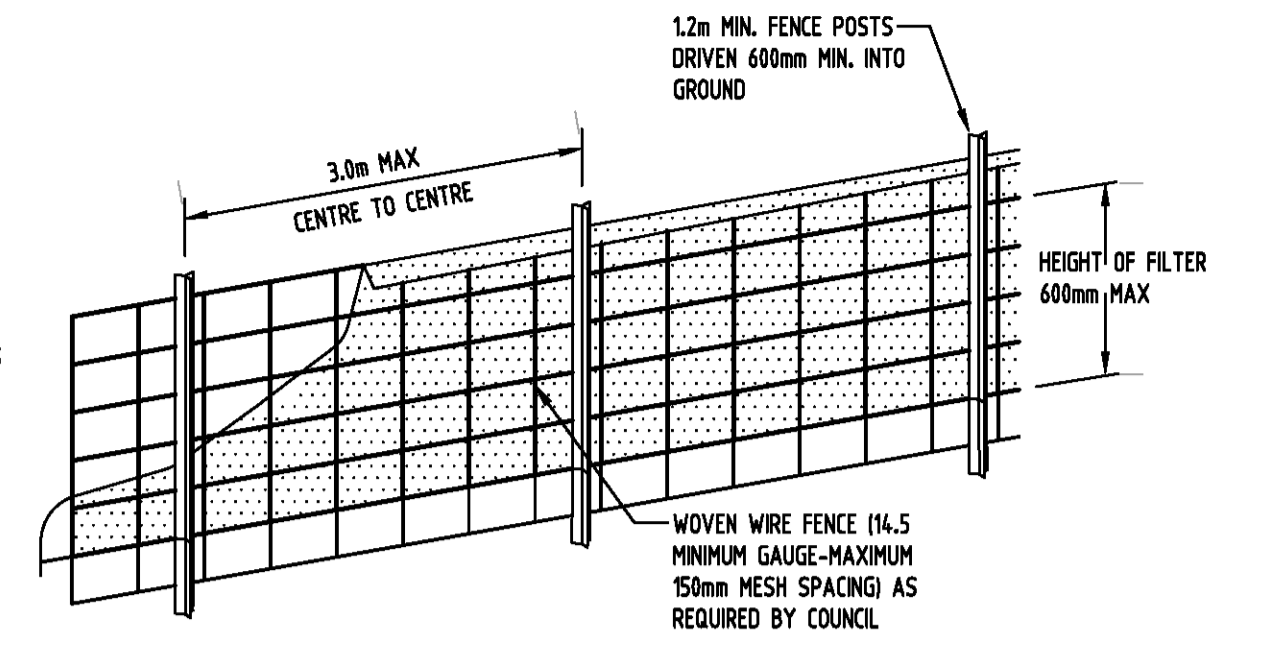
- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

**GENERAL NOTES**

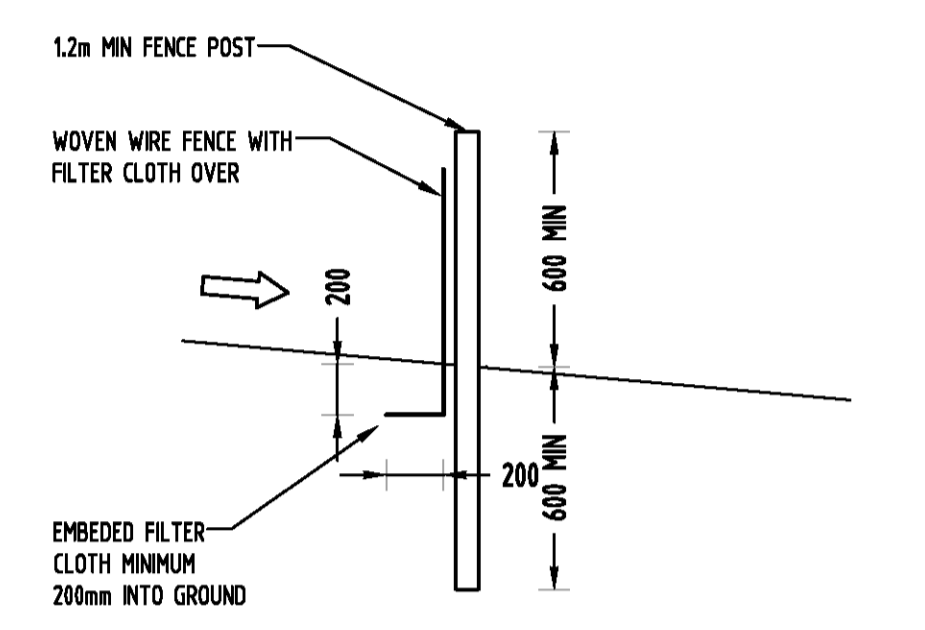
- THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
- ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

**CLAY SOILS**

- A SYSTEM SHALL BE INSTALLED TO EITHER:
- TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
  - 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 POED 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.

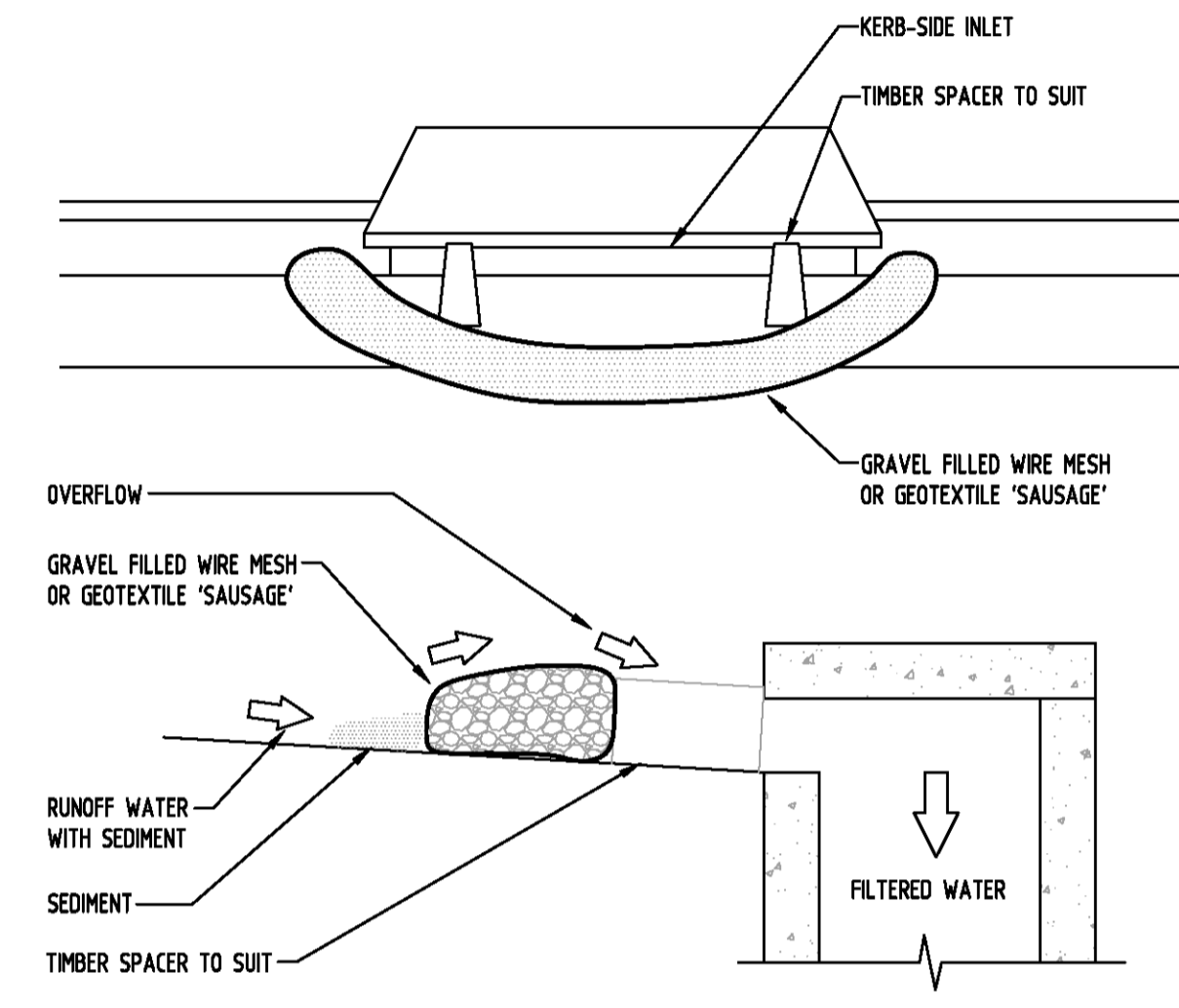


DIAGRAMMATIC VIEW



TYPICAL SECTION

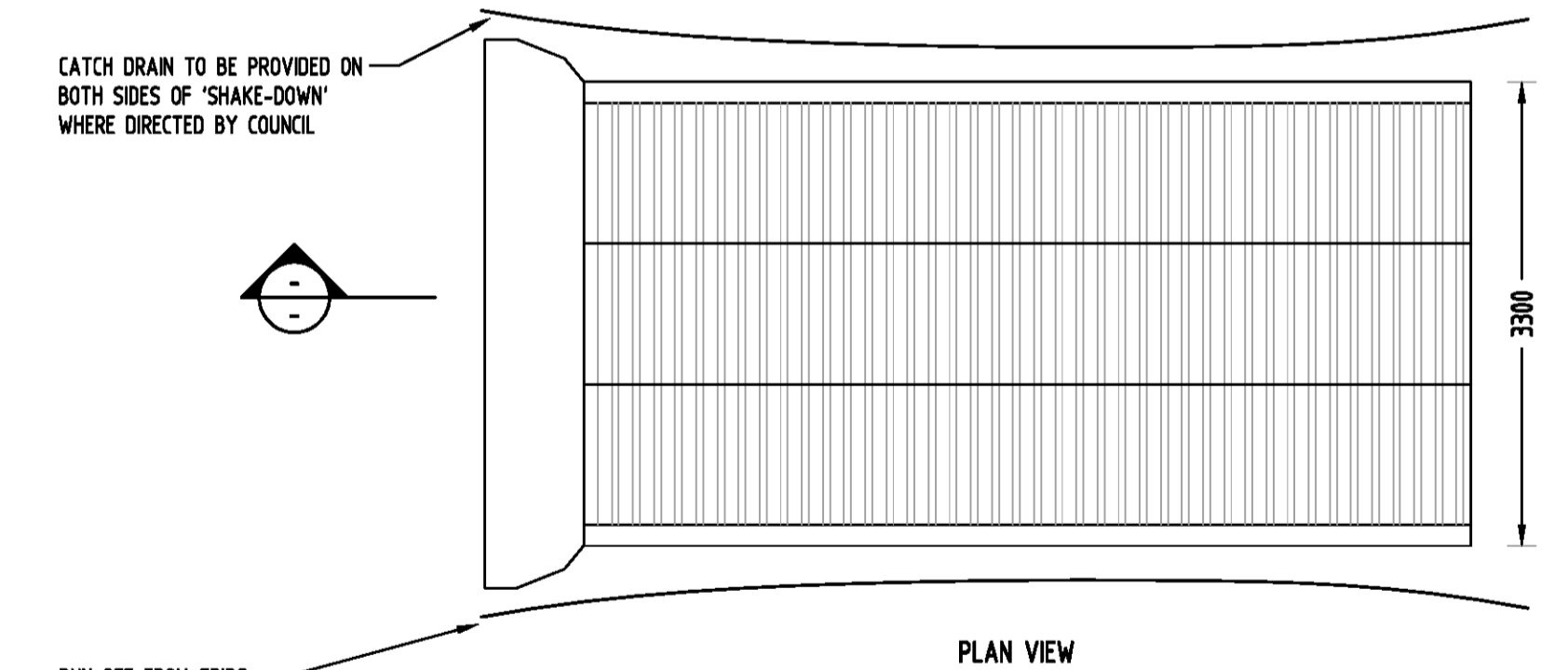
**SEDIMENT FENCE**  
NOT TO SCALE



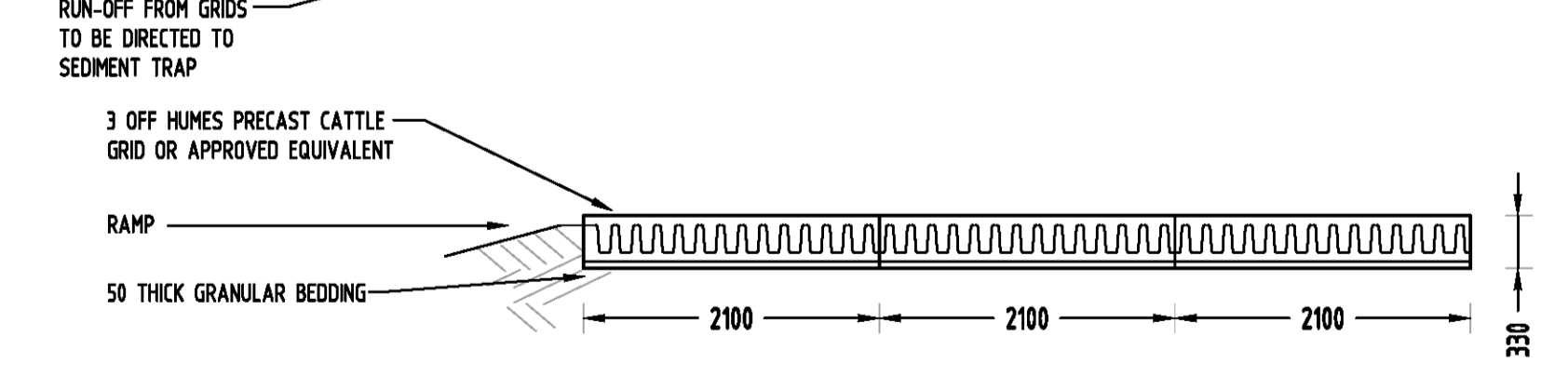
**CONSTRUCTION NOTES:**

- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT
- FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL
- FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY
- MAINTAIN THE OPENING WITH SPACER BLOCKS
- FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER
- FIT TO ALL KERB INLETS AT SAG POINTS

**GRAVEL INLET FILTER (SAUSAGE)**  
NOT TO SCALE



PLAN VIEW

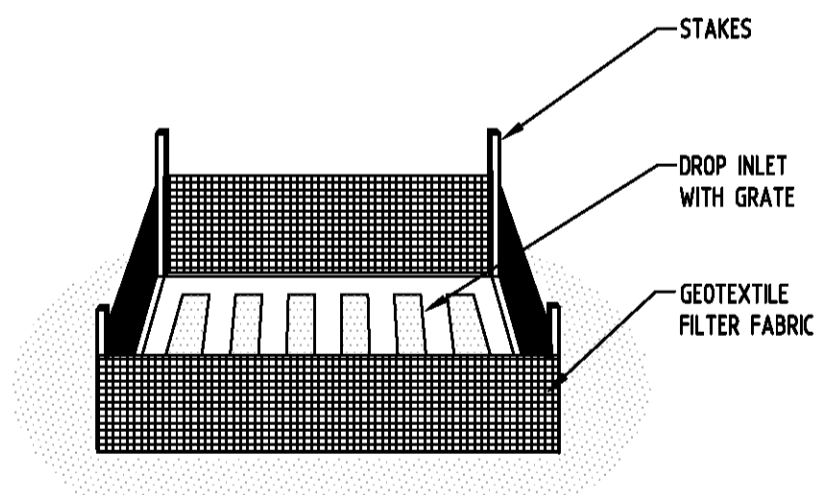


TYPICAL SECTION

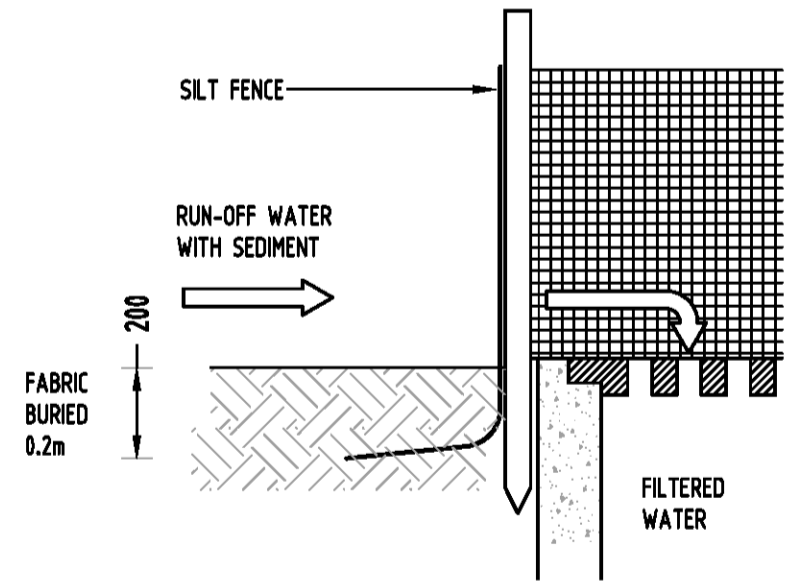
**'CATTLE GRID' ALTERNATIVE**  
TEMPORARY CONSTRUCTION EXIT  
NOT TO SCALE

**LEGEND**

- ○ ○ ○ ○ SEDIMENT FENCE
- ▨ STABILISED SITE ACCESS
- ▭ SANDBAGS
- ⤵ SAUSAGE FILTER



**GEOTEXTILE INLET FILTER**  
NOT TO SCALE



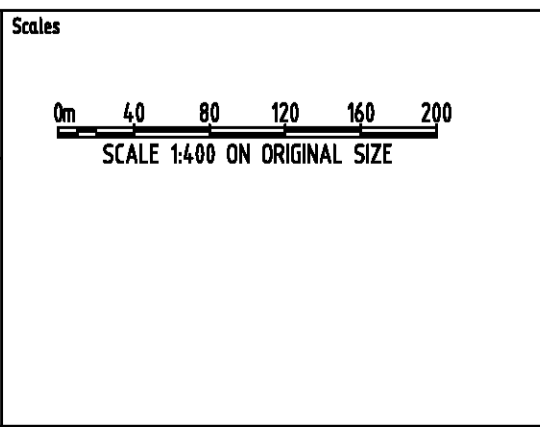
Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH		18.12.20	1
ARCH		04.11.20	1
STRUCT		27.10.20	1
MECH		29.10.2019	2
ELEC		25.09.2019	1
HYD		27.08.2019	1
FRG			
LANDS			
CIVIL			
SURVEY			

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

QUALITY CONTROL			
DRAWN	DATE	CHECKED	DATE
MN	18.12.20	SH	18.12.20
MN	18.12.20	SH	18.12.20
SH	18.12.20	SH	18.12.20
SH	18.12.20	SH	18.12.20

WARNING: THE DESIGN, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD



CLIENT  
**GREATER WESTERN GROUP P/L**

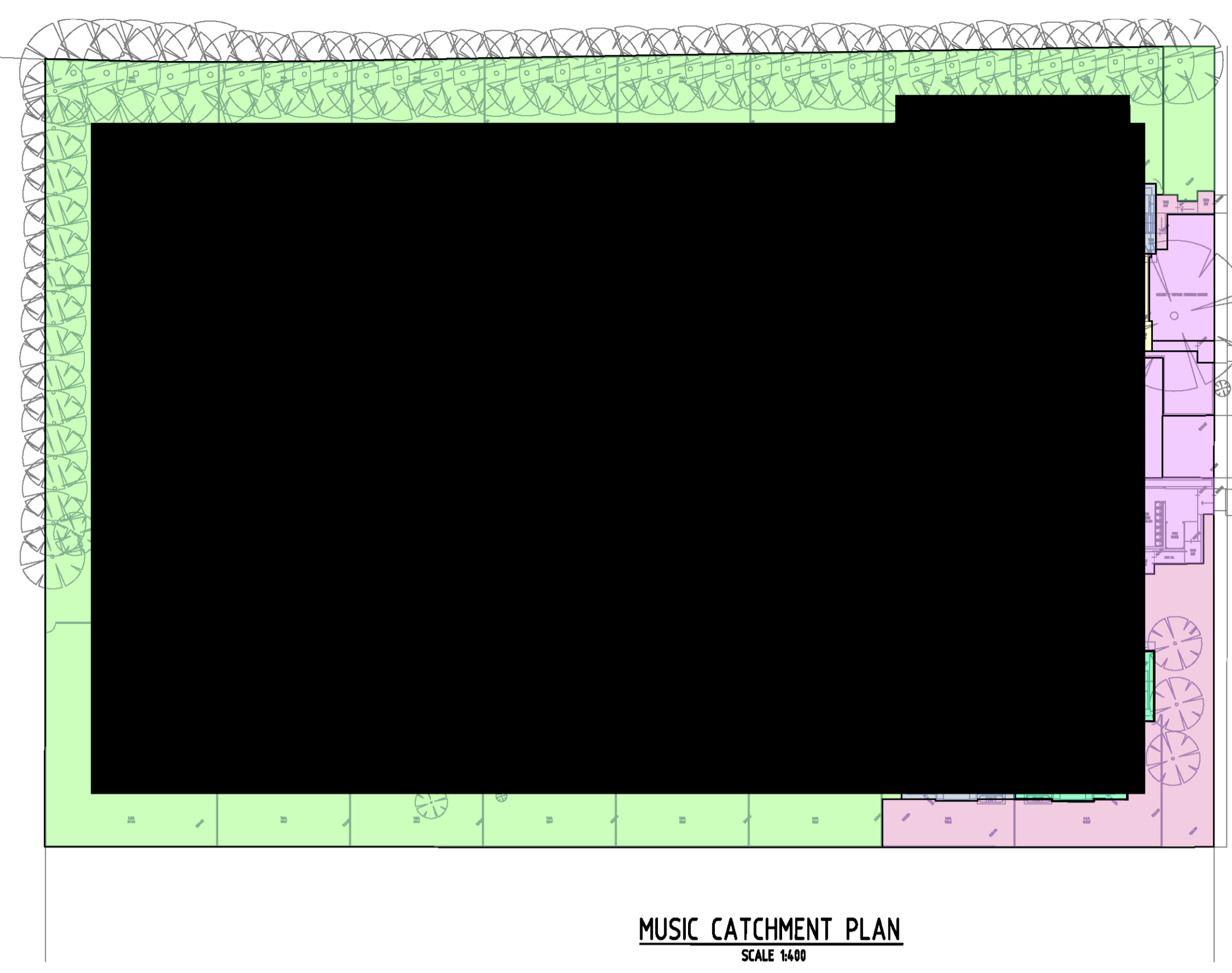
ARCHITECT  
**ALVARO**

**SGC**  
Engineering Value

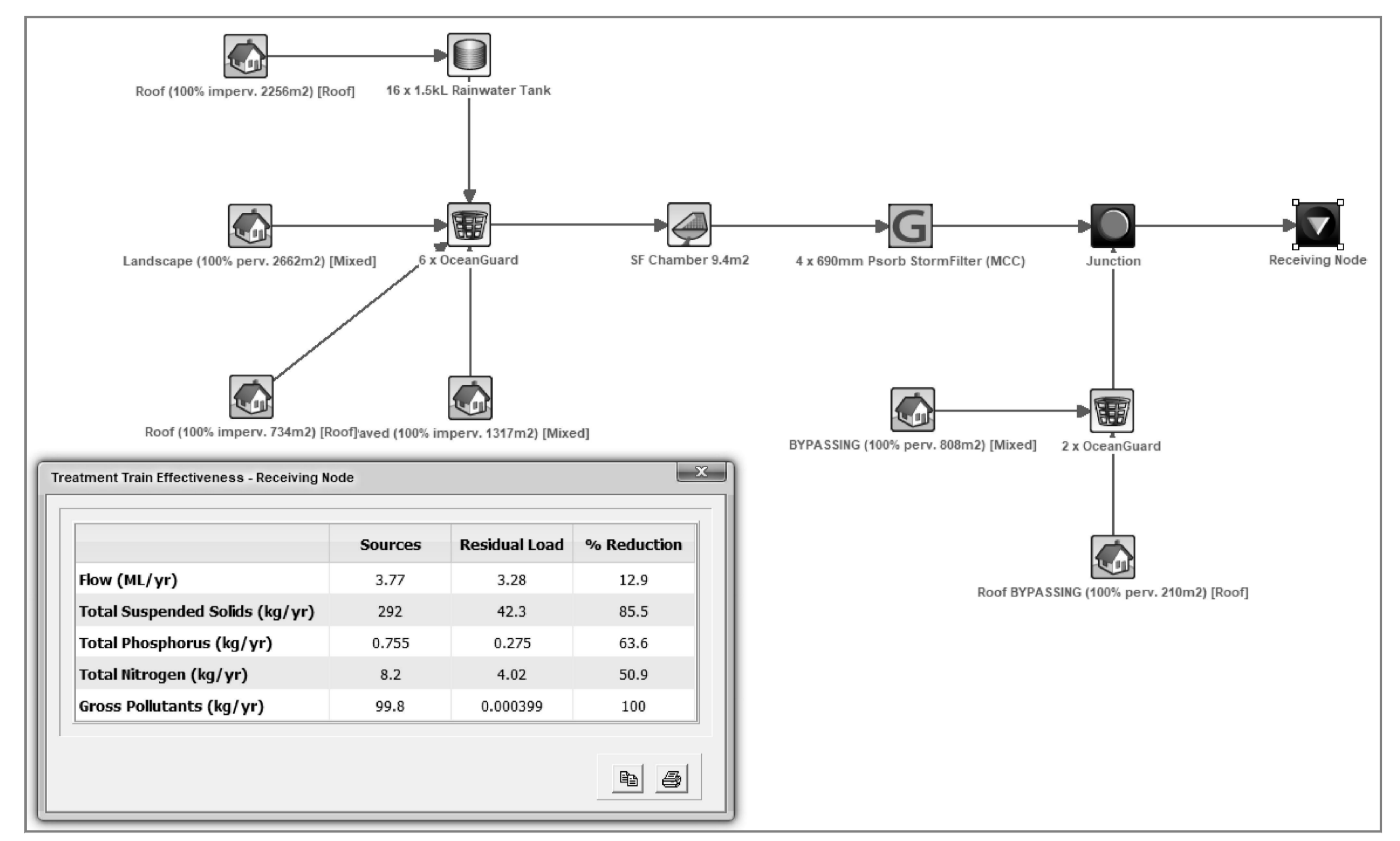
Suite 5.03, Level 5,  
156 PACIFIC HIGHWAY  
ST LEONARDS, NSW 2065  
T: +61 2 8883 4239  
Email: office@sgce.com.au  
Web: www.sgce.com.au

PROJECT  
**PROPOSED SENIORS HOUSING DEVELOPMENT**  
103-109 LAYCOCK STREET,  
CRANEBROOK

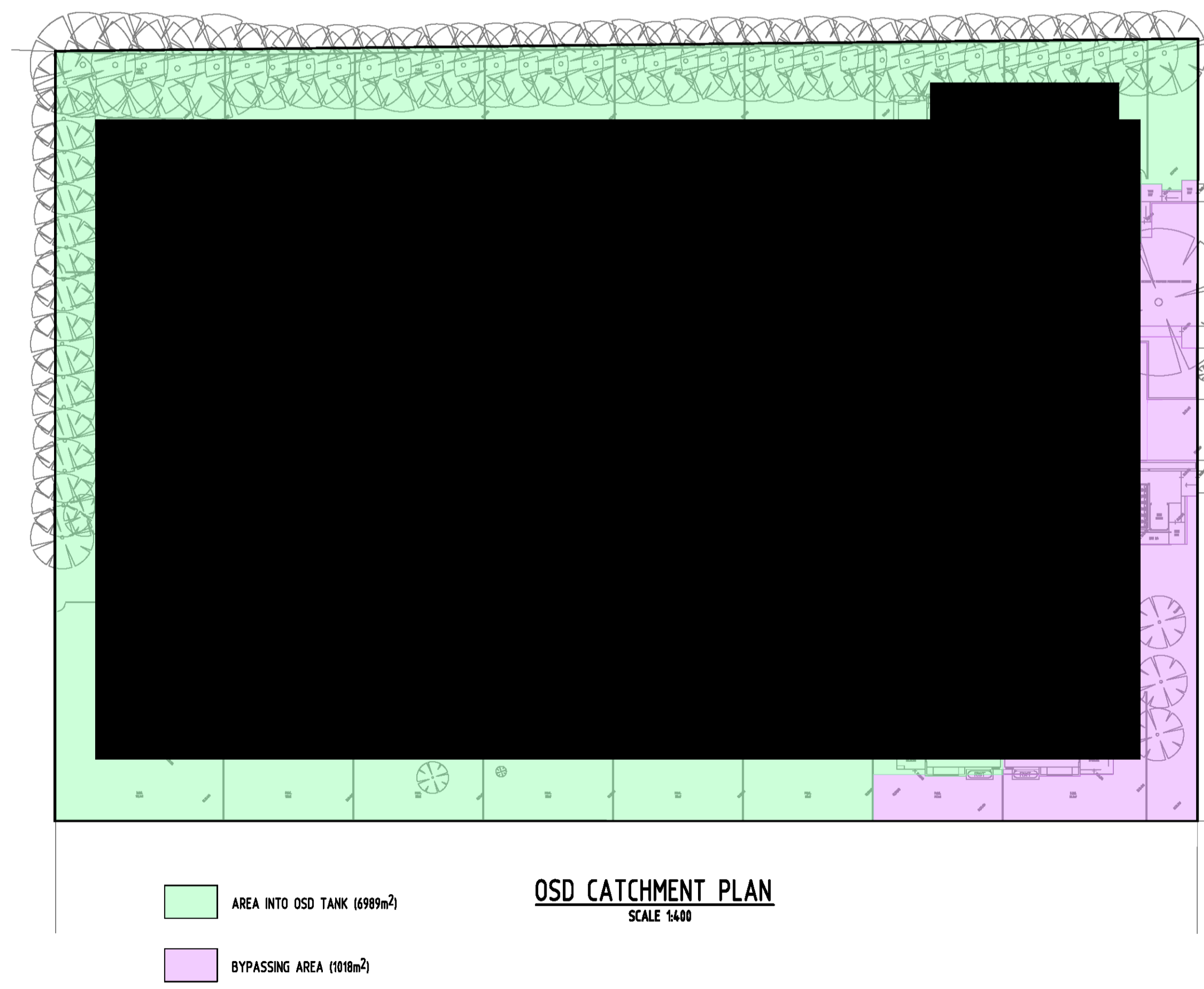
Drawing Status		
FOR APPROVAL		
NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title		
EROSION AND SEDIMENT CONTROL PLAN AND DETAILS		
Project No	Drawing No	Revision No
20190170	SW400	B
Grid	Date	Sheet
-	A.H.D.	5 OF 6
Scale (at original size)		
AS SHOWN		



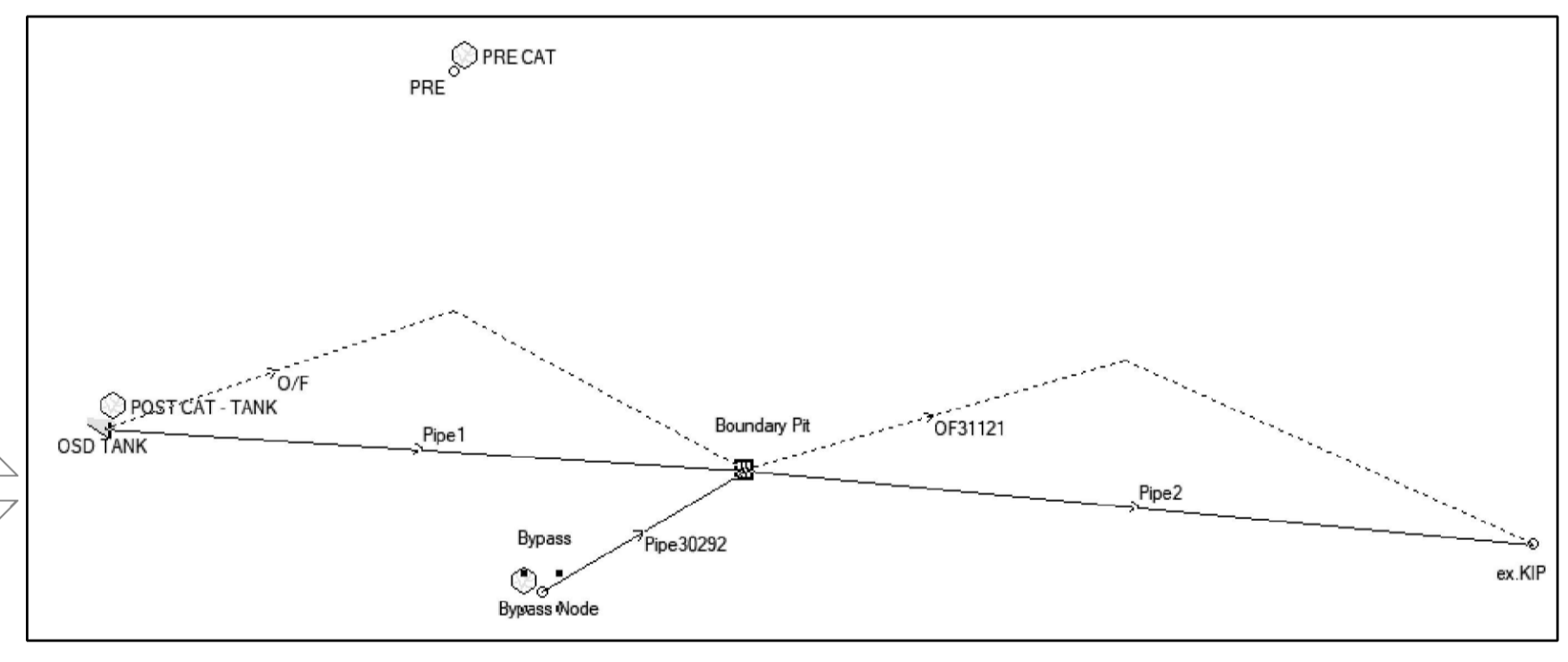
**MUSIC CATCHMENT PLAN**  
SCALE 1:400



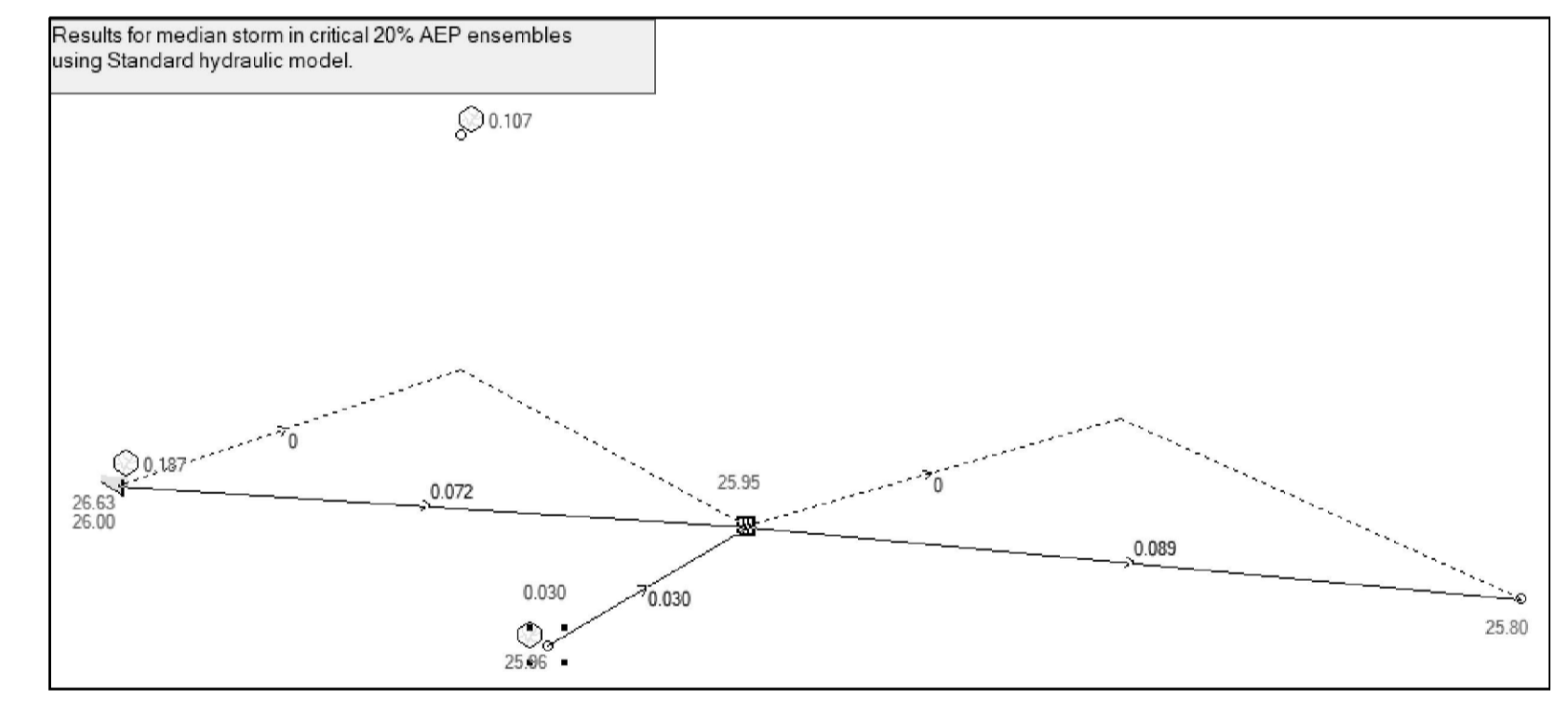
**MUSIC RESULTS**



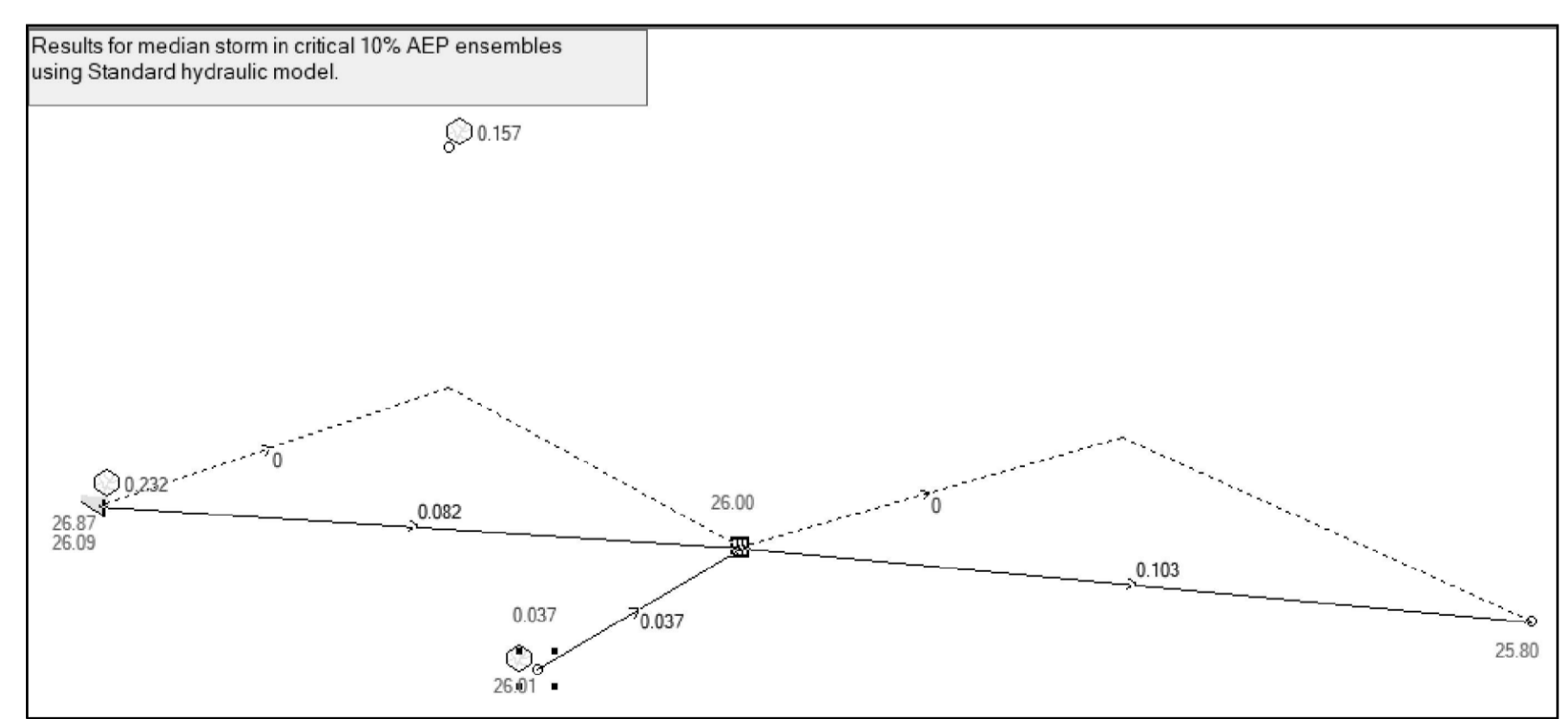
**OSD CATCHMENT PLAN**  
SCALE 1:400



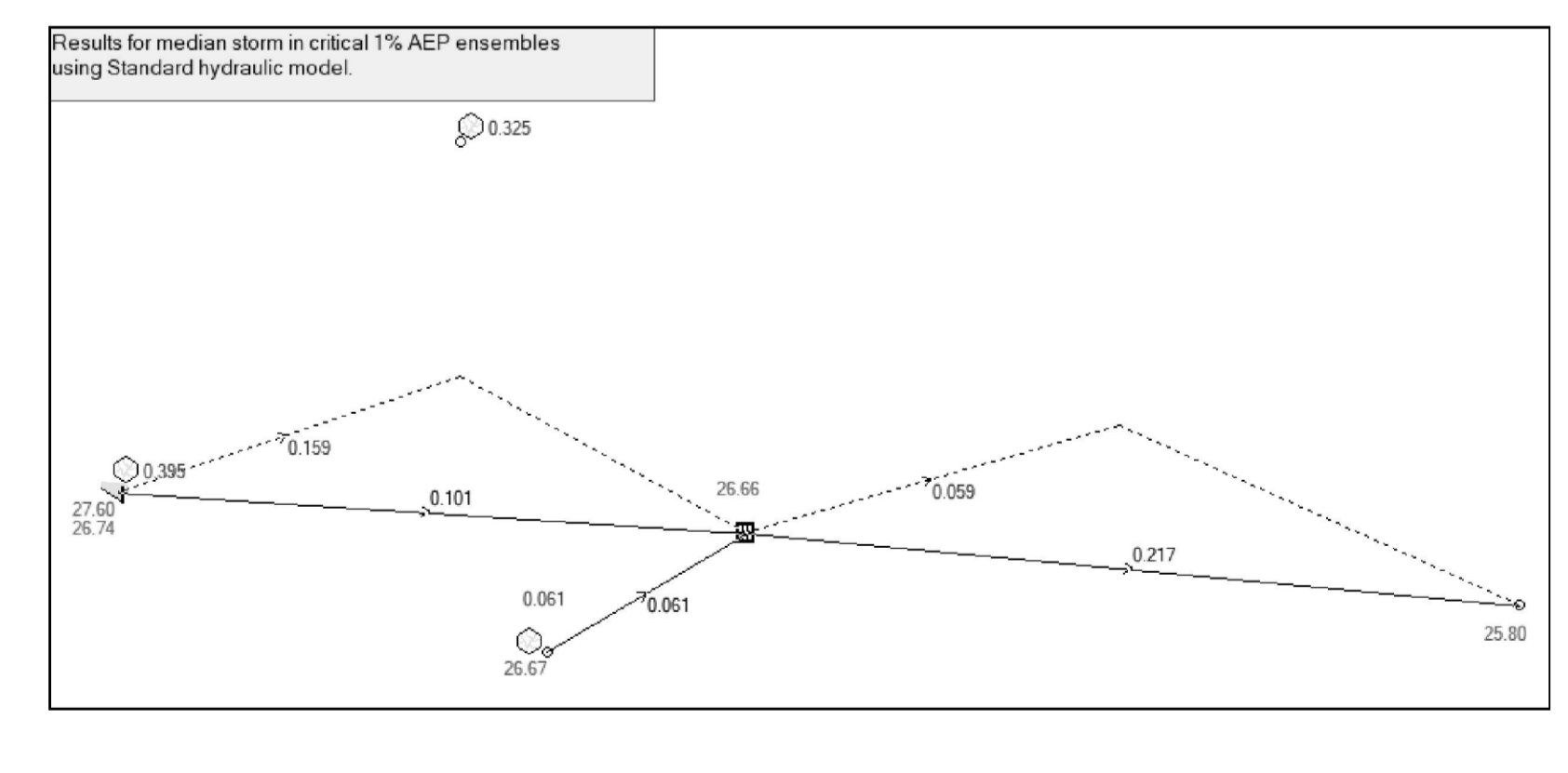
**DRAINS MODEL**



**DRAINS RESULTS - 20% AEP**



**DRAINS RESULTS - 10% AEP**



**DRAINS RESULTS - 1% AEP**

Issue	Last revision title	by	Date	Status
B	ISSUE FOR DA	MN	18.12.20	1
PA	ISSUE FOR DA	MN	06.11.20	1
P3	ISSUE FOR DA	MN	27.10.20	1
A	ISSUE FOR DA	FZ	29.10.2019	2
P2	PRELIMINARY	FZ	25.09.2019	1
P1	PRELIMINARY	FZ	27.08.2019	1

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

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

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

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

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

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

**CLIENT**  
GREATER WESTERN GROUP P/L

**ARCHITECT**  
ALVARO

**SGC Engineering Value**  
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 SENIORS HOUSING DEVELOPMENT  
103-109 LAYCOCK STREET,  
CRANE BROOK

Grid: - Datum: A.H.D. Sheet: 6 OF 6 Scale (at original size): AS SHOWN

**Reference Coordination Drawing**

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

Drawing Title: **STORMWATER CONCEPT DESIGN**  
MUSIC CATCHMENT AND OSD CATCHMENT PLAN

Project No: 20190170 Drawing No: SW500 Revision No: B