

FOREST LODGE WARRIEWOOD CIVIL & STORMWATER ISSUE FOR S4.56



SITE BOUNDARY

AREA TO BE
DEVELOPED

LOCALITY AERIAL
NOT TO SCALE

SOURCE : SIXMAPS

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PROJECT MANAGER

ARCHITECT

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ADS ARCHITECTS



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TITLE

COVER SHEET

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	I.K.	I.O.S	J.G.	J.G.
JOB No.	DRAWING No.	ISSUE		
7368002	C1.01	3		
DATE	STATUS	ISSUE FOR S4.56		
SEPTEMBER 2023				

Plot Date

ref: X-736802-TB_A1H
 Login Name: rtho
 Logon Date: 03/11/2023@09:32:11
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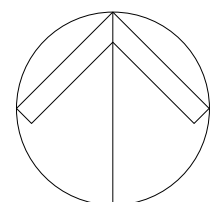
A 4

LEGEND

-
- | | |
|---------------|-------------------------------|
| --- | SITE BOUNDARY |
| — e — v — A — | EXISTING OVERHEAD ELECTRICITY |
| — e w — | EXISTING WATER MAIN |
| — e s w — | EXISTING STORMWATER MAIN |
| — e t — | EXISTING TELECOMMS LINE |

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FOREST LODGE
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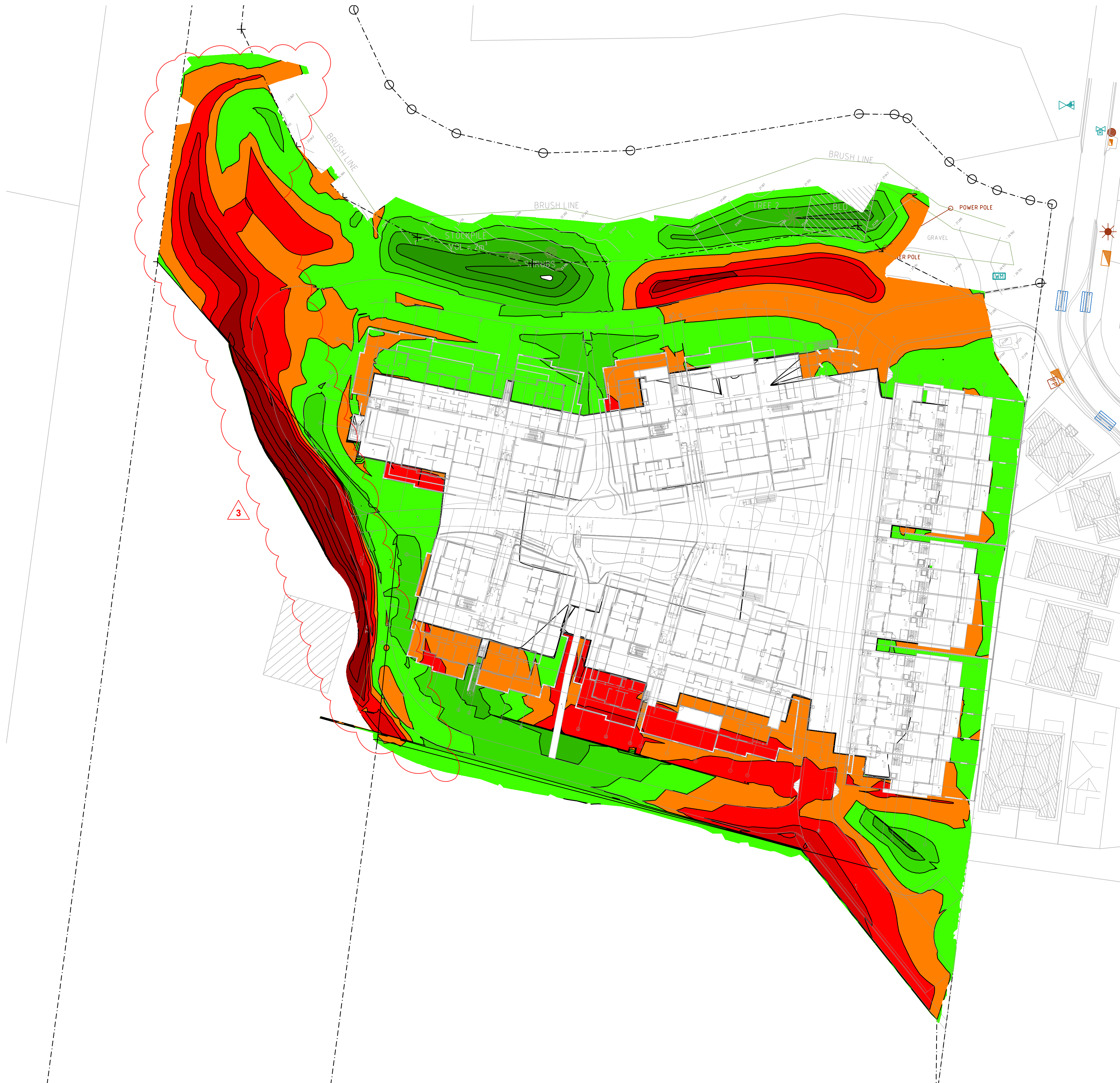
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TITLE

EXSITING SURVEY

SCALE AS SHOWN	DRAWN I.K.	DESIGNED I.O.	CHECKED J.G.	APPROVED J.G.
JOB No. 7368002		DRAWING No. C1.03		ISSUE 1
DATE SEPTEMBER 2023	STATUS ISSUE FOR \$4.56			

Levels Table			
No.	From Depth	To Depth	Colour
1	-8 000	-3 000	Dark Red
2	-3 000	-2 000	Red
3	-2 000	-1 000	Red-Orange
4	-1 000	0 000	Orange
5	0 000	1 000	Light Green
6	1 000	2 000	Green
7	2 000	3 000	Dark Green
8	3 000	5 000	Very Dark Green



LEGEND	
	SITE BOUNDARY
	NATURAL SURFACE CONTOUR
	DEPTH CONTOUR

- NOTE:**
- VOLUMES ARE PRELIMINARY ONLY AND IS SUBJECT TO CHANGE. CONTRACTOR TO CONFIRM BULK EARTHWORKS VOLUMES AND LEVELS BASED ON THEIR OWN ASSUMPTIONS AND CALCULATIONS. THE FOLLOWING DEPTH PROFILES WERE ADOPTED FOR THE BULK EARTHWORKS. NOTE: ASSUMED LEVELS, SUBJECT TO CHANGE DURING DETAILED DESIGN STAGE.
 - ASPHALT PAVEMENT (TRAFFICABLE) = 290 mm
 - CONCRETE PAVEMENT (TRAFFICABLE) = 330mm
 - CONCRETE PAVEMENT (NON-TRAFFICABLE) = 275mm
 - CONCRETE FOOTPATH IN ROAD RESERVE = 175mm
 - CONCRETE STRUCTURAL SLABS = 200 mm
 - LANDSCAPING TOP SOIL = 100 mm
 - VOLUMES FROM PIPE TRENCH HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS.
 - A TOPSOIL REMOVAL OF 300mm HAS BEEN INCLUDED FOR THE OVERALL SITE.
 - BULKING FACTORS HAVE NOT BEEN INCLUDED.
 - ALLOW A +/-15% TOLERANCE FOR THESE VOLUMES.
 - EXTENT OF VERTICAL CUTS IN ROCK TO BE CONFIRMED ON SITE BY CONTRACTOR AND GEOTECHNICAL ENGINEER.
 - EXTENT OF CUTTING/FILLING IN THE VICINITY OF EXISTING TREES SHALL BE CONFIRMED BY THE PROJECT ARBORIST.
 - TREE PROTECTION ZONES TO BE CONFIRMED BY THE PROJECT ARBORIST.
 - ALLOW A +/-15% TOLERANCE FOR THESE VOLUMES.
 - CUT 9,200 m³
 - FILL 6,800 m³
 - NET 2,400 m³ EXPORT

Proj: X:\7368002\B1_A1H_X\7368002_S11_Earthworks_Survey_X\7368002_A1H_S11_Plan_RMG_R000.dwg
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PLAN SCALE 1:500 A1 SHEET

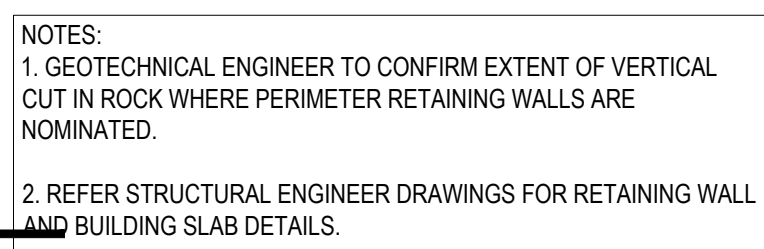
REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR \$4.56	03/11/23			
2	RE-ISSUE FOR \$4.56	05/12/23			
3	RE-ISSUE FOR \$4.56	01/02/24			

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FOREST LODGE
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TITLE				
BULK EARTHWORKS LEVELS PLAN				
SCALE AS SHOWN	DRAWN I.K.	DESIGNED I.O.	CHECKED J.G.	APPROVED J.G.
JOB No. 7368002		DRAWING No. C3.01		ISSUE 3
DATE SEPTEMBER 2023	STATUS ISSUE FOR \$4.56			



TITLE				
GENERAL ARRANGEMENT PLAN-SHEET 1				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	I.K.	I.O.	J.G.	J.G.
JOB No.	DRAWING No.		ISSUE	
7368002		C4.01		1
DATE	STATUS			
SEPTEMBER 2023			ISSUE FOR \$4.56	

PROVIDE MIN 2 x 200W x 100H SLOTS IN WALL FOR EMERGENCY OVERFLOW, TYPICAL FOR COURTYARD AREAS.

PROVIDE MIN 2 x 200W x 100H SLOTS IN WALL FOR EMERGENCY OVERFLOW, TYPICAL FOR COURTYARD AREAS.

BUILDING C FFL 27.20

BUILDING D FFL 25.20

PROVIDE 300mm HIGH FLOOD PROTECTION WALL

CH115.15-183.09 SHOTCRETE OR ROCK LINED CHANNEL WITH d50 = 300mm
BASE WIDTH = 0.5m
DEPTH = 1.0m
SIDE SLOPES 1V:2H MAX

CH100.00-115.15 TRANSITION SHOTCRETE OR ROCK LINED CHANNEL WITH d50 = 300mm

CH46.50-100.00 SHOTCRETE OR ROCK LINED CHANNEL WITH d50 = 300mm
VERTICAL CUT IN ROCK FACE ON WEST SIDE 750mm BASE WIDTH
1V:3H SIDE BATTER ON WEST
1.25m DEEP

CH37.00-CH46.50 SHOTCRETE TRANSITION

CH22.00-CH37.00 2100x2100 U-SHAPED PRECAST CONCRETE OPEN CHANNEL

CH16.00-CH22.00 SHOTCRETE TRANSITION

CH0.00-16.00 SHOTCRETE CHANNEL
2m DEPTH
2m BASE WIDTH
6m TOP WIDTH
1V:1H MAX SIDE BATTER

4m WIDE WEIR

START OF WALL IN FILL

LOCAL REGRADING AT TOP OF WALL TO DIRECT UPSTREAM OVERLAND FLOW TOWARDS DIVERSION HEADWALL AND PIPE. TOP OF WALL TO BE 500mm ABOVE GROUND LEVEL FOR FLOOD PROTECTION

RETAINED HEIGHT = 1.0m

PROVIDE RENO MATTRESS SCOUR PROTECTION AT TOP OF WALL.

LEGEND

- EXISTING BOUNDARY
- DESIGN SURFACE CONTOUR
- EXISTING SURFACE CONTOUR
- TOP OF BATTER
- BOTTOM OF BATTER
- VEHICULAR CROSSING (V.C.)
- K&G KERB & GUTTER (K&G)
- K.O. KERB ONLY (K.O.)
- KERB INLET PIT (ON GRADE)
- GRATED INLET PIT
- FINISHED SURFACE LEVEL
- FINISHED STORMWATER PIT LID/GRATE LEVEL
- TOW&B 20 TOP OF WALL LEVEL
- 80W&B 00 BOTTOM OF WALL LEVEL
- 25% GRADE ARROW
- RETAINING WALL
- BASEMENT LINE
- UPSTREAM DIVERSION SWALE
- SWALE FLOW ARROW
- RENO MATTRESS
- U-SHAPE PRECAST CONCRETE CHANNEL
- SHOTCRETE OR ROCK LINED CHANNEL
- SHOTCRETE

NOTES:

1. GEOTECHNICAL ENGINEER TO CONFIRM EXTENT OF VERTICAL CUT IN ROCK WHERE PERIMETER RETAINING WALLS ARE NOMINATED.
2. REFER STRUCTURAL ENGINEER DRAWINGS FOR RETAINING WALL AND BUILDING SLAB DETAILS.

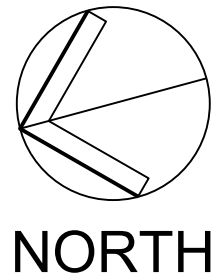
	DESIGN SURFACE CONTOUR
	EXISTING SURFACE CONTOUR
	TOP OF BATTER
	BOTTOM OF BATTER
	VEHICULAR CROSSING (V.C.)
	K&G
	KERB & GUTTER (K&G)
	K.O.
	KERB ONLY (K.O.)
	KERB INLET PIT (ON GRADE)
	GRATED INLET PIT
	FINISHED SURFACE LEVEL
	FINISHED STORMWATER PIT LID/GRATE LEVEL
	TOP OF WALL LEVEL
	BOTTOM OF WALL LEVEL
	GRADE ARROW
	RETAINING WALL
	BASEMENT LINE
	UPSTREAM DIVERSION SWALE
	SWALE FLOW ARROW
	RENO MATRESS
	U-SHAPE PRECAST CONCRETE CHANNEL
	SHOTCRETE OR ROCK LINED CHANNEL
	SHOTCRETE

NOTES:

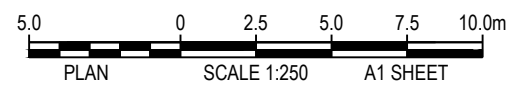
1. GEOTECHNICAL ENGINEER TO CONFIRM EXTENT OF VERTICAL CUT IN ROCK WHERE PERIMETER RETAINING WALLS ARE NOMINATED.
2. REFER STRUCTURAL ENGINEER DRAWINGS FOR RETAINING WALL AND BUILDING SLAB DETAILS.

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PROJECT	FOREST LODGE WARRIEWOOD

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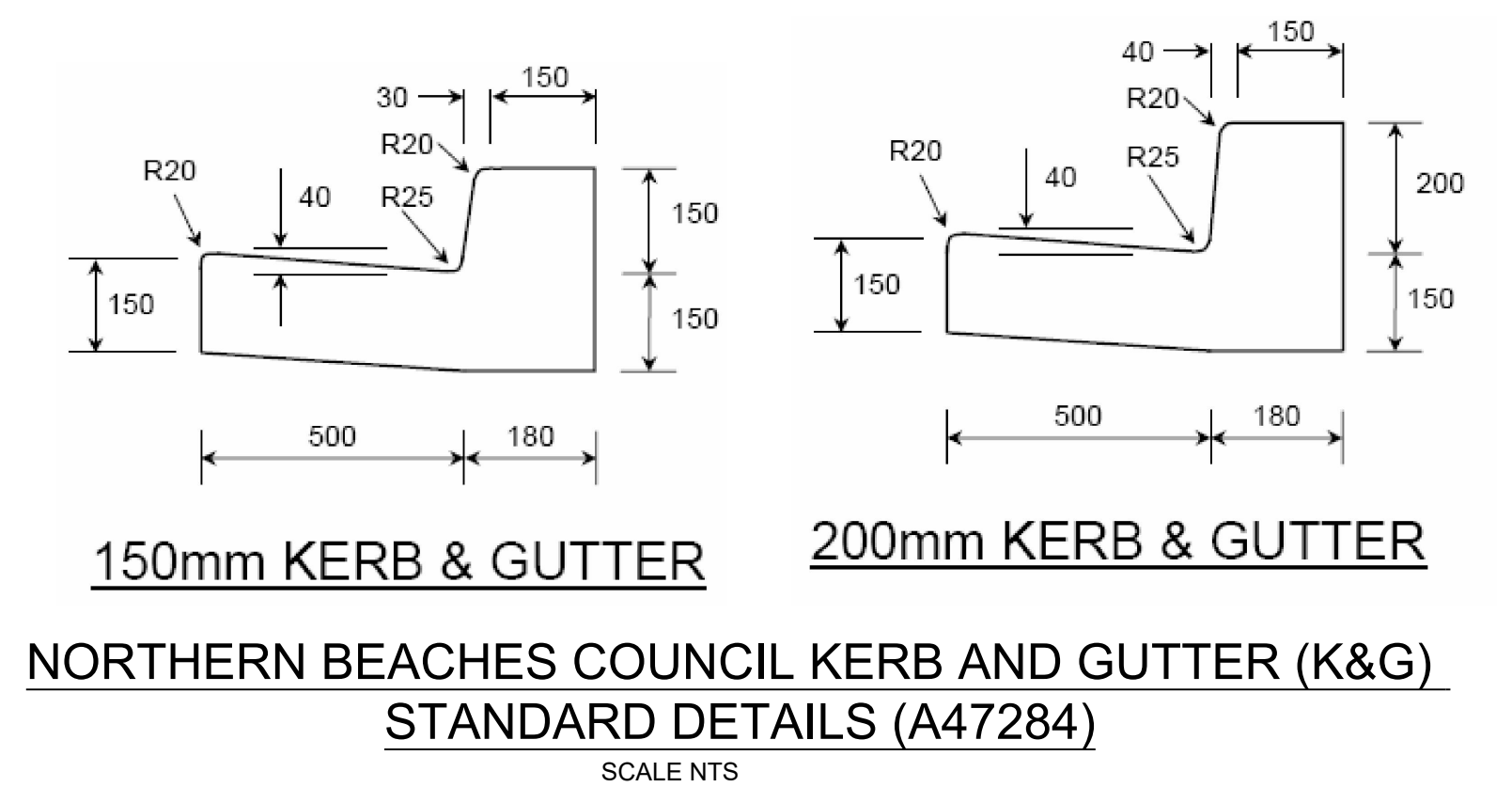
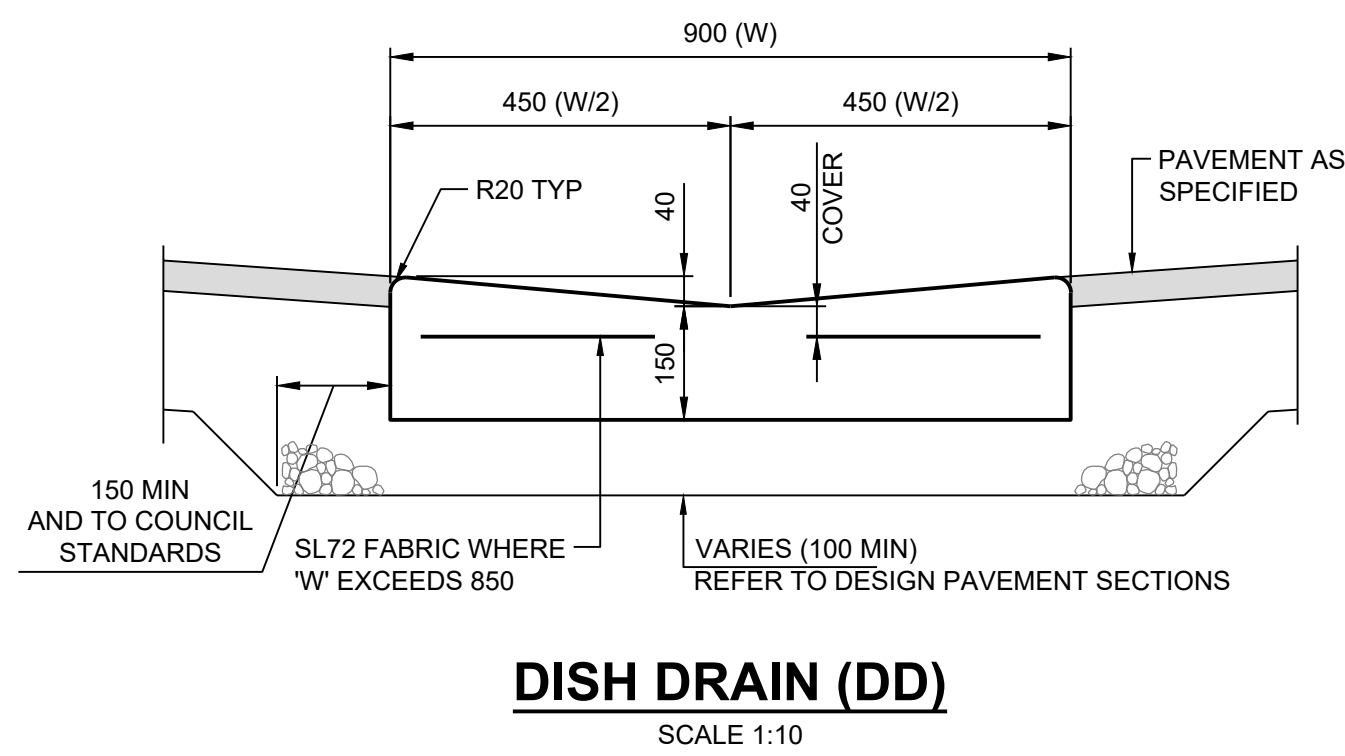
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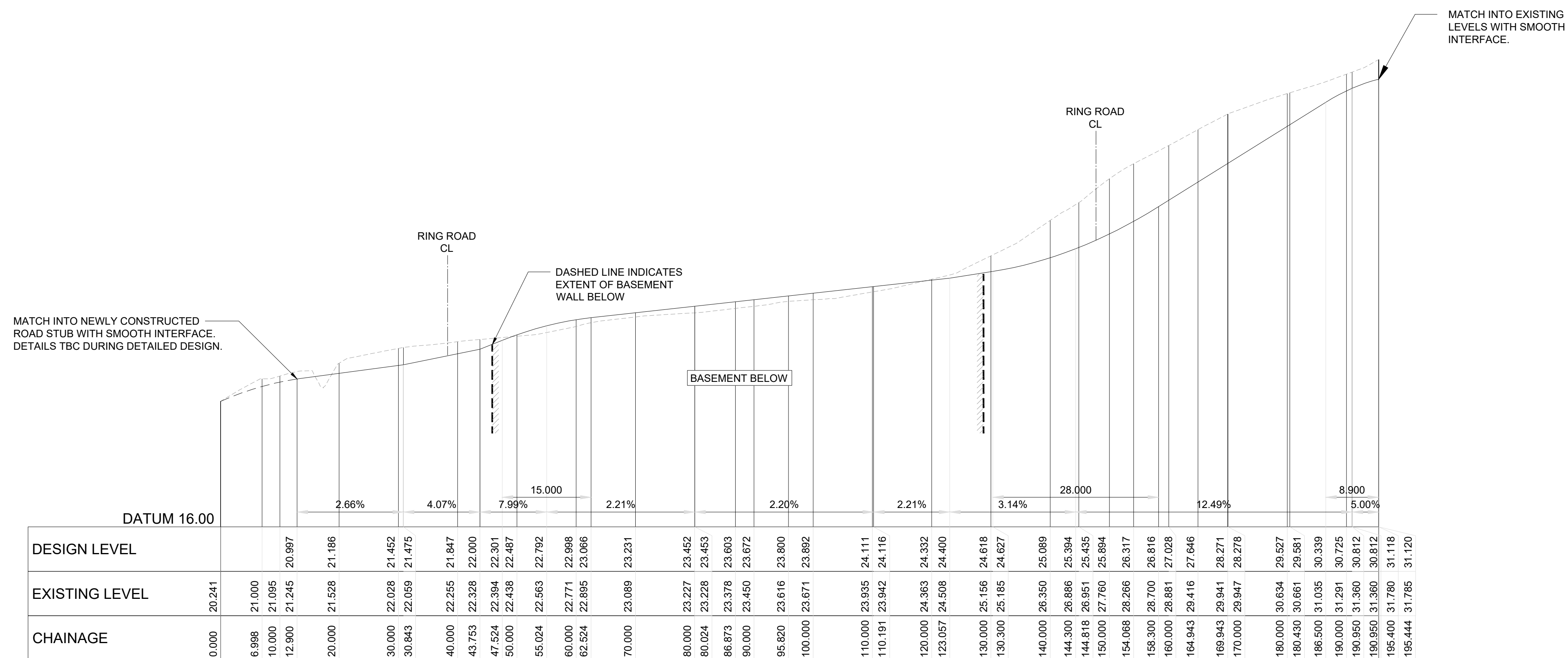
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TITLE				
GENERAL ARRANGEMENT PLAN-SHEET 2				
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	I.K.	I.O.	J.G.	J.G.
JOB No.	DRAWING No.			ISSUE
7368002		C4.02		3
DATE	STATUS	ISSUE FOR \$4.56		
SEPTEMBER 2023				



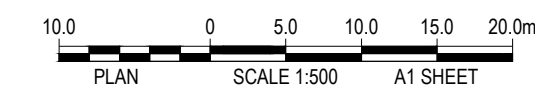
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		1	ISSUE FOR \$4.56	03/11/23							SITeworks DETAILS				
											SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
											AS SHOWN	I.K.	I.O.	J.G.	J.G.
											JOB No.	DRAWING No.		ISSUE	
											7368002		C4.51		1
											DATE	STATUS			
											SEPTEMBER 2023	ISSUE FOR \$4.56			



Access Road LONGITUDINAL SECTION
HORIZONTAL SCALE 1:250
VERTICAL SCALE 1:50

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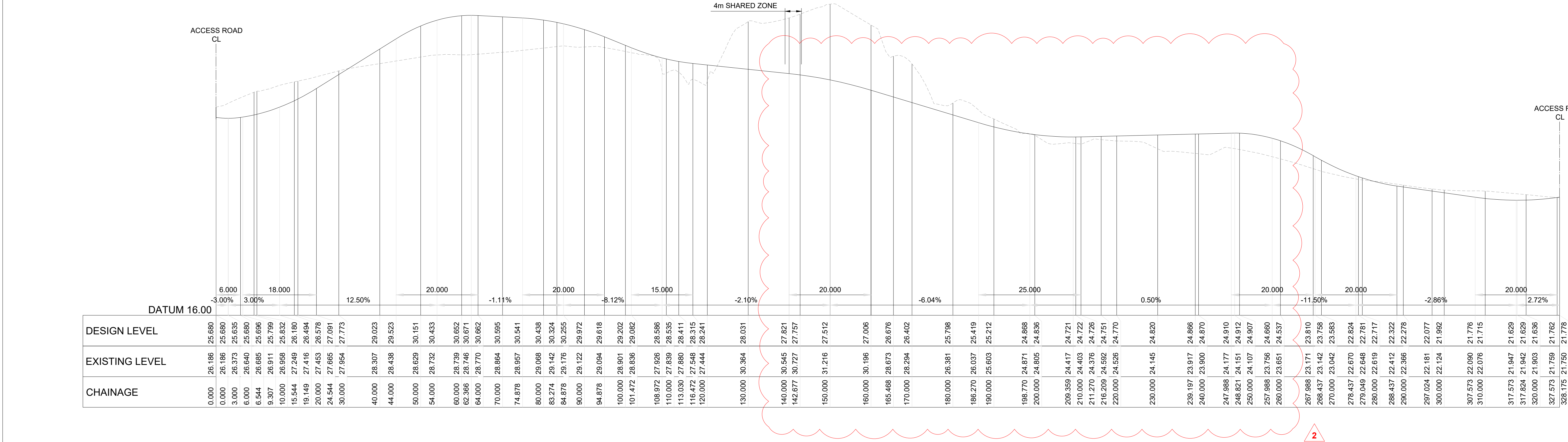
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	TITLE
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ROAD LONG SECTIONS - ACCESS ROAD

SCALE AS SHOWN	DRAWN I.K.	DESIGNED I.O.	CHECKED J.G.	APPROVED J.G.
JOB No. 7368002		DRAWING No. C5.11		ISSUE 1
DATE SEPTEMBER 2023	STATUS ISSUE FOR \$4.56			

\\fs1\X\7368002_Tp_A1_H\7368002\WSP\CS\MO_03_Propo_Surfaces_RING ROAD
Plot Date: 05/12/2023@16:23:33 Logon Name: slawert
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RING ROAD LONGITUDINAL SECTION
HORIZONTAL SCALE 1:250
VERTICAL SCALE 1:50

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PLAN SCALE 1:500 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR S4.56	03/11/23			
2	RE-ISSUE FOR S4.56	05/12/23			

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FOREST LODGE WARRIEWOOD

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JOB No. **7368002** DRAWING No. **C5.12** ISSUE **2**

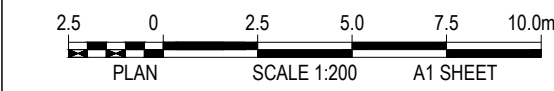
DATE **SEPTEMBER 2023** STATUS **ISSUE FOR S4.56**

SHEET SIZE: **A1**

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 Log Name: slsawart

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REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
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TITLE					
ROAD CROSS SECTIONS - ACCESS ROAD					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
AS SHOWN	I.K.	I.O.	J.G.	J.G.	
JOB No.		DRAWING No.		ISSUE	
7368002		C5.21		1	
DATE	STATUS				
SEPTEMBER 2023	ISSUE FOR \$4.56				

DESIGN LEVEL	21.724	22.017			
EXISTING LEVEL	21.606	21.227			
OFFSET	-8.000	-5.650	-3.500	0.000	3.500

CHAINAGE 20.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	18.700	22.100			
EXISTING LEVEL	18.700	22.100			
OFFSET	-8.000	-7.879	-5.650	-3.500	0.000

CHAINAGE 60.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	19.700	22.800			
EXISTING LEVEL	19.700	22.800			
OFFSET	-8.000	-7.687	-5.650	-3.500	0.000

CHAINAGE 100.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	24.600				
EXISTING LEVEL	25.695	25.132			
OFFSET	-8.000	-6.650	-3.500	0.000	2.484

CHAINAGE 140.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.000				
EXISTING LEVEL	29.346	29.508	29.097		
OFFSET	-8.000	-7.002	-4.934	-2.264	0.000

CHAINAGE 180.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	22.035	22.200			
EXISTING LEVEL	22.033	22.146			
OFFSET	-8.000	-7.662	-5.650	-3.500	0.000

CHAINAGE 30.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	18.950	22.842			
EXISTING LEVEL	18.950	22.842			
OFFSET	-8.000	-7.656	-5.650	-3.500	0.000

CHAINAGE 70.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	19.948	24.086			
EXISTING LEVEL	19.948	24.150			
OFFSET	-8.000	-7.656	-5.650	-3.500	0.000

CHAINAGE 110.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	25.940	26.258			
EXISTING LEVEL	25.947	26.197			
OFFSET	-8.000	-7.652	-5.650	-3.500	0.000

CHAINAGE 150.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.908				
EXISTING LEVEL	29.934	30.315	30.664	31.291	31.967
OFFSET	-8.000	-5.726	-3.575	0.000	3.500

CHAINAGE 190.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	22.131	22.200			
EXISTING LEVEL	22.170	21.890			
OFFSET	-8.000	-5.650	-3.500	0.000	3.388

CHAINAGE 40.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	19.200	23.265			
EXISTING LEVEL	19.200	23.436			
OFFSET	-8.000	-7.657	-5.650	-3.500	0.000

CHAINAGE 80.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	20.059	24.305			
EXISTING LEVEL	20.057	24.343			
OFFSET	-8.000	-7.803	-5.650	-3.500	0.000

CHAINAGE 120.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	27.362	27.654			
EXISTING LEVEL	28.092	27.071			
OFFSET	-8.000	-6.650	-3.500	0.000	3.500

CHAINAGE 160.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	30.147				
EXISTING LEVEL	30.934	30.976	31.039	31.121	31.050
OFFSET	-8.000	-3.972	-2.660	0.000	2.524

CHAINAGE 195.44
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	22.100				
EXISTING LEVEL	22.240	22.528	22.382	22.487	22.382
OFFSET	-8.000	-5.650	-3.500	0.000	3.500

CHAINAGE 50.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	19.450	22.800			
EXISTING LEVEL	19.450	22.800			
OFFSET	-8.000	-7.701	-5.650	-3.500	0.000

CHAINAGE 90.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	20.303	24.600			
EXISTING LEVEL	20.306	24.600			
OFFSET	-8.000	-7.838	-5.650	-3.500	0.000

CHAINAGE 130.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	28.673	28.810			
EXISTING LEVEL	28.679	28.803			
OFFSET	-8.000	-7.965	-5.653	-3.502	0.000

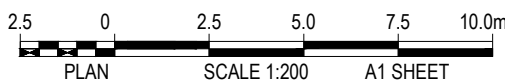
CHAINAGE 170.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

Work: V:\368002_Tp_A1.dwg Cadd File: T:\368002\Drawings\AutoCAD\Design\Civil\20154-160\CS-21 Road Cross Sections.dwg
 Plot Date: 05.12.2023 @ 16:25:51 Login Name: istewart

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DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR



SHEET SIZE: A1

DESIGN LEVEL	26.333	26.229	26.053	25.888	25.681	25.503	25.314	25.146	25.036
EXISTING LEVEL	28.689	28.479	28.116	27.288	26.186	26.169	26.159	26.595	26.397
OFFSET	-8.000	-6.686	-4.418	-2.364	0.000	2.011	4.325	6.384	8.000

CHAINAGE 0.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.518	29.397	29.450	25.753	25.832	25.909	25.979	26.001	25.741
EXISTING LEVEL	-7.505	29.301	29.450	26.007	25.753	25.909	25.979	26.001	25.741
OFFSET	-8.000	-7.505	-7.113	-4.776	-2.623	0.000	2.577	4.945	7.153

CHAINAGE 10.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.401	29.506	26.493	26.578	26.652	26.827	26.907	26.292
EXISTING LEVEL	29.401	29.185	28.477	27.453	27.328	27.210	27.141	26.907
OFFSET	-8.000	-5.268	-4.007	-2.001	0.000	2.458	4.472	7.181

CHAINAGE 20.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.558	29.475	27.868	27.773	27.833	28.061	28.136	26.846
EXISTING LEVEL	30.279	29.584	29.526	27.954	27.912	27.844	27.803	27.711
OFFSET	-8.000	-4.289	-4.069	0.000	2.000	4.380	6.511	8.000

CHAINAGE 30.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.378	29.445	28.938	29.023	29.083	29.328	29.402
EXISTING LEVEL	29.432	29.321	28.571	28.307	28.307	28.182	28.109
OFFSET	-8.000	-4.322	-4.030	0.000	2.000	4.804	6.908

CHAINAGE 40.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.295	29.415	30.066	30.151	30.211	30.330	30.281	28.159
EXISTING LEVEL	29.295	29.917	28.765	28.629	28.545	28.444	28.354	28.150
OFFSET	-8.000	-5.530	-4.016	-2.000	2.000	4.133	6.207	8.000

CHAINAGE 50.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.300	29.385	30.717	30.607	30.652	30.866	30.861	30.275
EXISTING LEVEL	29.300	28.838	28.774	28.765	28.739	28.634	28.610	28.222
OFFSET	-8.000	-6.398	-4.066	-2.030	0.000	3.648	6.089	7.883

CHAINAGE 60.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.301	29.355	30.660	30.550	30.595	30.796	30.743	29.607
EXISTING LEVEL	29.321	28.919	28.890	28.883	28.864	28.861	28.860	28.368
OFFSET	-8.000	-7.346	-2.030	-1.500	0.000	3.829	6.087	8.000

CHAINAGE 70.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	29.302	29.305	29.326	30.353	30.438	30.498	30.523	30.411	30.249
EXISTING LEVEL	29.465	29.139	29.001	29.032	29.068	29.076	29.075	29.059	28.000
OFFSET	-8.000	-6.237	-4.168	-2.000	0.000	2.000	4.196	6.270	8.000

CHAINAGE 80.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	28.263	27.845	29.873	29.972	30.047	30.156	30.108	30.082
EXISTING LEVEL	29.312	29.110	29.007	29.122	29.091	29.045	28.777	28.506
OFFSET	-8.000	-4.584	-2.476	0.000	2.506	4.558	6.741	8.000

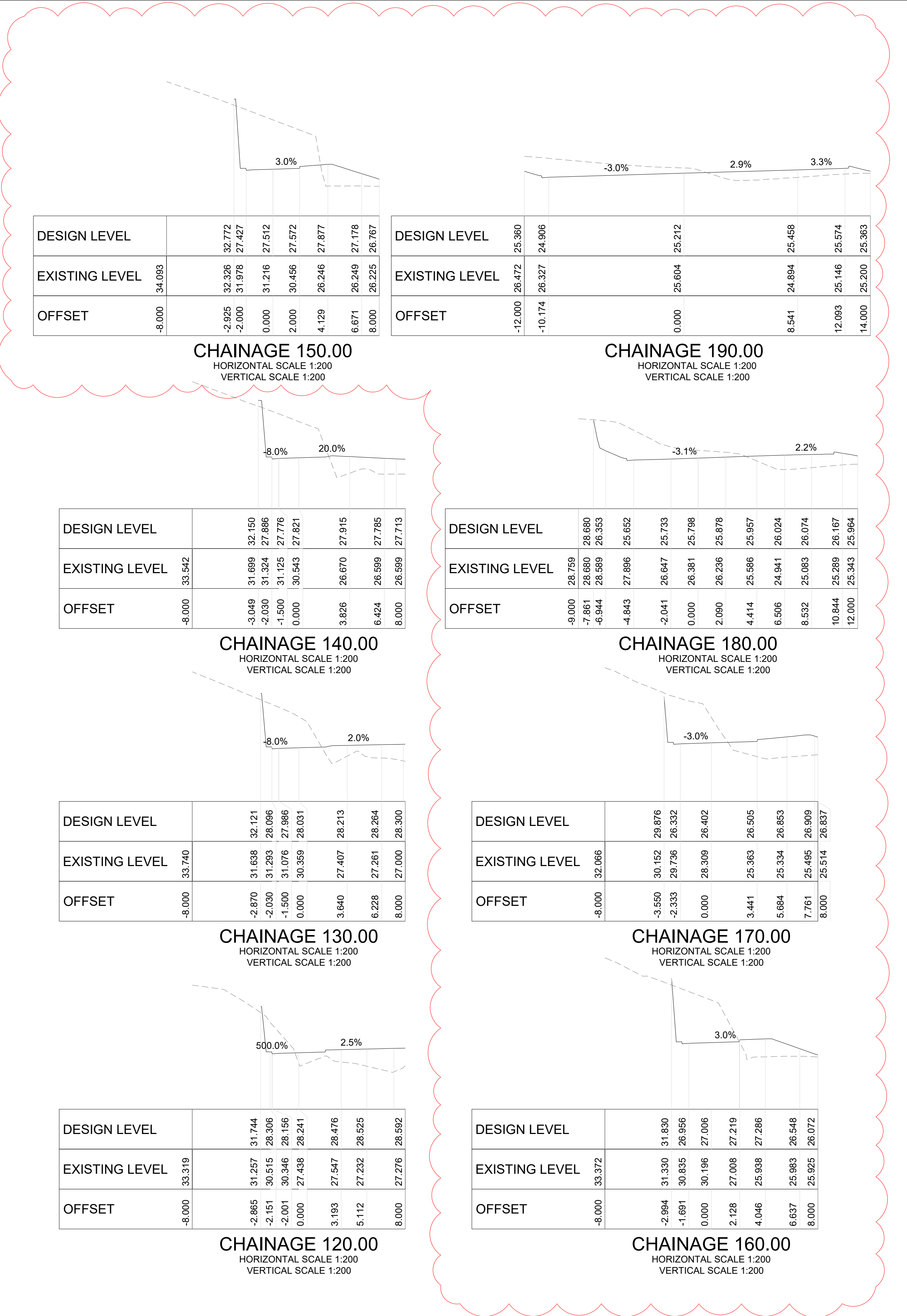
CHAINAGE 90.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	30.108	30.011	29.586	29.135	29.202	29.287	29.435	29.450
EXISTING LEVEL	30.172	30.132	29.186	29.030	28.901	28.695	28.496	28.442
OFFSET	-8.000	-7.510	-4.907	-2.230	0.000	2.827	4.836	6.959

CHAINAGE 100.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200

DESIGN LEVEL	30.320	28.591	28.441	28.481	28.894	27.100	27.100
EXISTING LEVEL	29.730	28.284	28.078	27.631	27.821	27.582	27.823
OFFSET	-8.000	-3.321	-2.468	-1.819	3.904	5.969	8.000

CHAINAGE 110.00
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:200



FOREST LODGE
WARRIEWOOD

PREPARED BY

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TITLE

ROAD CROSS SECTIONS -
RING ROAD SHEET 1

SCALE
AS SHOWN

DRAWN
I.K.

DESIGNED
I.O.

CHECKED
J.G.

APPROVED
J.G.

JOB No.

7368002

DRAWING No.

C5.22

ISSUE

2

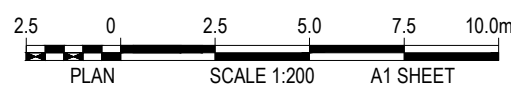
DATE
SEPTEMBER 2023

STATUS
ISSUE FOR \$4.56



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PROJECT

KUATRO

FOREST LODGE
WARRIEWOOD

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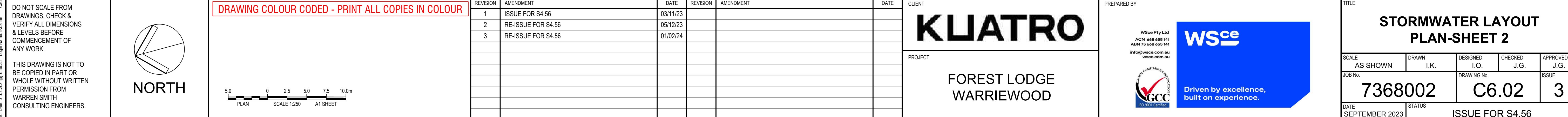
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ABN 75 668 655 141
info@wsce.com.au
wsce.com.au



TITLE

ROAD CROSS SECTIONS - RING ROAD SHEET 2

SCALE AS SHOWN	DRAWN I.K.	DESIGNED I.O.S.	CHECKED J.G.	APPROVED J.G.
JOB No. 7368002		DRAWING No. C5.23		ISSUE 2
DATE SEPTEMBER 2023	STATUS ISSUE FOR \$4.56			



Ver: X:\1688002_16_A.H
 Plot Date: 01/02/2024@03:35:22
 User Name: Kunalini
 Plot File: T:\1688002\Drawings\AutoCAD\Civil Design\Civil 2024\1688002_16 Stormwater Pit Schedule.dwg

NAME	SURFACE ELEV. (m)	PIT DEPTH (m)	PIT SIZE AND TYPE	FROM	TO	LENGTH (m)	U/S IL (m)	D/S IL (m)	SLOPE (%)	PIPE TYPE	DIA (mm)	No. PIPES
Pit 1/1	24.41	0.67	900SQ PIT WITH CLASS B GRATE	Pit 1/1	Pit 2/1	13.20	23.74	23.61	0.98	uPVC	225	1
Pit 2/1	24.50	1.73	900SQ PIT WITH CLASS B GRATE	Pit 2/1	Pit 3/1	17.80	22.77	22.59	1.01	uPVC	225	1
Pit 3/1	23.48	1.49	900SQ PIT WITH CLASS B GRATE	Pit 3/1	Pit 4/1	12.40	21.99	21.87	0.97	uPVC	225	1
Pit 4/1	22.69	0.87	600SQ PIT WITH CLASS B GRATE	Pit 4/1	Pit 5/1	12.00	21.82	21.70	1.00	uPVC	300	1
Pit 5/1	22.64	1.43	900SQ PIT WITH CLASS B GRATE	Pit 5/1	Pit 6/1	18.20	21.21	21.03	0.99	uPVC	300	1
Pit 6/1	21.97	0.99	600SQ PIT WITH CLASS B GRATE	Pit 6/1	Pit 7/1	13.70	20.98	20.84	1.02	uPVC	300	1
Pit 7/1	21.90	1.11	600SQ PIT WITH CLASS B GRATE	Pit 7/1	Pit 8/1	11.90	20.79	20.67	1.01	uPVC	300	1
Pit 8/1	22.09	1.47	900SQ PIT WITH CLASS B COVER	Pit 8/1	Pit 9/1	17.50	20.62	20.45	0.97	uPVC	300	1
Pit 9/1	21.31	1.01	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 9/1	Pit 10/1	7.10	20.30	20.26	0.56	RCP	375	2
Pit 10/1	21.33	1.09	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 10/1	Basin 2	7.20	20.24	20.20	0.56	RCP	375	2
Basin 2	21.40		OSD BASIN 2	Basin 2	HW4	28.20	19.25	18.00	4.43	uPVC	300	1
Pit 13/1	21.49	1.00	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 13/1	Basin 2	2.90	20.49	20.20	10	uPVC	225	1
Pit 1/2	25.80	1.27	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 1/2	Pit 2/2	9.60	24.53	24.01	5.42	uPVC	225	1
Pit 2/2	24.85	0.75	900SQ PIT WITH CLASS B GRATE	Pit 2/2	Pit 3/2	4.20	24.10	24.05	1.19	uPVC	225	1
Pit 3/2	24.86	0.96	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 3/2	Pit 4/2	7.00	23.90	23.83	1.00	uPVC	225	1
Pit 4/2	24.85	1.12	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 4/2	Pit 5/2	44.70	23.73	22.76	2.17	uPVC	225	1
Pit 5/2	23.61	1.01	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 5/2	Pit 6/2	15.40	22.60	22.19	2.66	uPVC	300	1
Pit 6/2	23.24	1.07	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 6/2	Pit 7/2	32.00	22.17	20.94	3.84	uPVC	300	2
Pit 7/2	21.85	0.97	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 7/2	Pit 9/1	7.70	20.88	20.40	6.23	uPVC	300	2
Pit 1/3	23.60	0.90	18m LENGTH ACO TRENCH DRAIN WITH CLASS D GRATE	Pit 1/3	Pit 5/2	7.40	22.70	22.62	1.08	uPVC	150	2
Pit 2/4	23.66	0.90	3.8m LENGTH ACO TRENCH DRAIN WITH CLASS D GRATE	Pit 2/4	Pit 4/4	10.70	22.76	22.34	3.93	uPVC	150	2
Pit 4/4	23.25	0.91	7.2m LENGTH ACO TRENCH DRAIN WITH CLASS D GRATE	Pit 4/4	Pit 6/2	7.40	22.34	22.26	1.08	uPVC	150	2
Pit 1/5	21.85	0.91	900SQ PIT WITH CLASS D GRATE	Pit 1/5	Pit 7/2	7.00	20.94	20.90	0.57	uPVC	300	2
Pit 1/6	26.10	1.10	900SQ PIT WITH CLASS B GRATE	Pit 1/6	Pit 2/6	1.80	25.00	24.85	8.33	uPVC	225	1
Pit 2/6	25.70	1.00	900SQ PIT WITH CLASS B GRATE	Pit 2/6	Pit 3/6	22.50	24.70	24.50	0.89	uPVC	225	1
Pit 3/6	25.46	1.01	900SQ PIT WITH 600 x 900 CLASS B SINGLE GRATE WITH 1.2m LENGTH ACO TRENCH DRAIN	Pit 3/6	Pit 4/6	18.80	24.45	24.27	0.96	uPVC	225	1
Pit 4/6	25.13	1.48	900SQ PIT WITH CLASS B GRATE WITH 2.8m LENGTH ACO TRENCH DRAIN	Pit 4/6	Pit 5/6	23.80	23.65	23.53	0.50	uPVC	300	1
Pit 5/6	25.19	1.69	900SQ PIT WITH 600 x 900 CLASS B SINGLE GRATE WITH 1.2m LENGTH ACO TRENCH DRAIN	Pit 5/6	Pit 6/6	10.20	23.50	23.44	0.59	uPVC	300	1
Pit 6/6	24.87	1.46	900SQ PIT WITH 600 x 900 CLASS B SINGLE GRATE WITH 1.2m LENGTH ACO TRENCH DRAIN	Pit 6/6	Pit 7/6	10.50	23.41	23.35	0.57	uPVC	300	1
Pit 7/6	24.63	1.31	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 7/6	Pit 8/6	17.80	23.32	23.23	0.51	uPVC	300	1
Pit 8/6	24.79	1.59	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 8/6	Pit 8/7	29.90	23.20	23.01	0.64	uPVC	300	1
Pit 1/7	30.18	0.85	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 1/7	Pit 2/7	28.10	29.33	27.47	6.62	uPVC	225	1
Pit 2/7	28.33	0.91	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 2/7	Pit 3/7	12.70	27.42	27.23	1.50	uPVC	225	1
Pit 3/7	28.08	0.90	900SQ PIT WITH CLASS D COVER	Pit 3/7	Pit 4/7	18.70	27.18	26.75	2.30	uPVC	225	1
Pit 4/7	27.56	1.51	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 4/7	Pit 5/7	10.90	26.05	25.94	1.01	uPVC	225	1
Pit 5/7	27.01	1.10	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 5/7	Pit 6/7	20.00	25.91	24.99	4.60	uPVC	225	1
Pit 6/7	25.78	0.88	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 6/7	Pit 7/7	22.40	24.90	23.40	6.70	uPVC	300	1
Pit 7/7	24.73	1.83	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 7/7	Basin 1	7.00	22.90	22.43	6.71	RCP	375	1
Pit 8/7	24.62	1.60	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 8/7	Pit 7/7	13.00	23.02	22.95	0.54	uPVC	300	1
Basin 1	24.30	2.81	OSD BASIN 1	Basin 1	HW5	21.10	21.49	21.00	2.32	uPVC	150	1
Pit 1/8	28.62	1.55	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit1/8	Pit2/8	24.30	27.07	24.64	10.00	uPVC	225	1
Pit 2/8	25.49	0.88	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit2/8	Pit 1/2	4.80	24.61	24.56	1.04	uPVC	225	1
Pit 3/8	26.14	0.89	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 3/8	Pit2/8	7.20	25.25	24.64	8.47	uPVC	225	1
Pit 1/9	22.99	0.96	900SQ PIT WITH CLASS B GRATE	Pit 1/9	Pit 2/9	8.70	22.03	21.70	3.79	uPVC	300	1
Pit 2/9	22.63	2.13	900SQ PIT WITH 600 x 900 CLASS D SINGLE GRATE WITH 1.8m LINTEL OPENING	Pit 2/9	Basin 2	3.00	20.50	20.20	10.00	uPVC	300	1
Pit 1/11	25.46	0.71	900SQ PIT WITH CLASS B GRATE	Pit 1/11	Pit 2/6	2.90	24.75	24.72	1.03	uPVC	225	1
Pit 1/12	23.05	0.95	900SQ PIT WITH CLASS B GRATE	Pit 1/12	Pit 1/9	3.70	22.10	22.06	1.08	uPVC	225	1
Pit 1/14	27.45	1.15	600SQ PIT WITH CLASS B GRATE	Pit 1/14	Pit 2/14	6.40	26.30	26.25	0.78	uPVC	225	1
Pit 2/14	27.19	0.97	900SQ PIT WITH CLASS B GRATE & 3.8m LENGTH ACO TRENCH DRAIN	Pit 2/14	Pit 4/7	23.50	26.22	26.10	0.51	uPVC	225	1
Pit 1/15	24.60	0.93	900SQ PIT WITH CLASS B COVER	Pit 1/15	Pit 8/7	7.10	23.67	23.05	8.73	uPVC	150	1

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REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	ISSUE FOR \$4.56	03/11/23			
2	RE-ISSUE FOR \$4.56	05/12/23			
3	RE-ISSUE FOR \$4.56	01/02/24			

CLIENT


PROJECT
 FOREST LODGE
 WARRIEWOOD

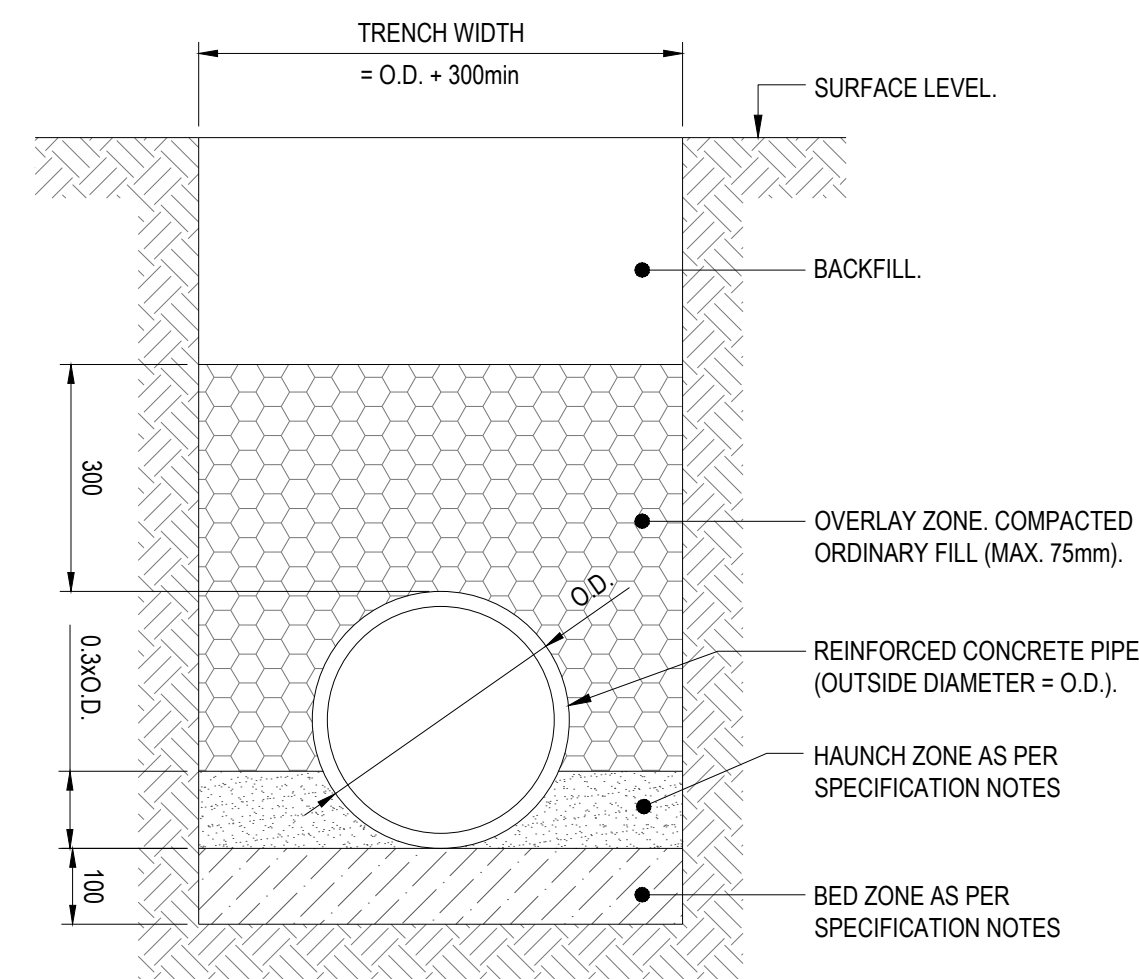
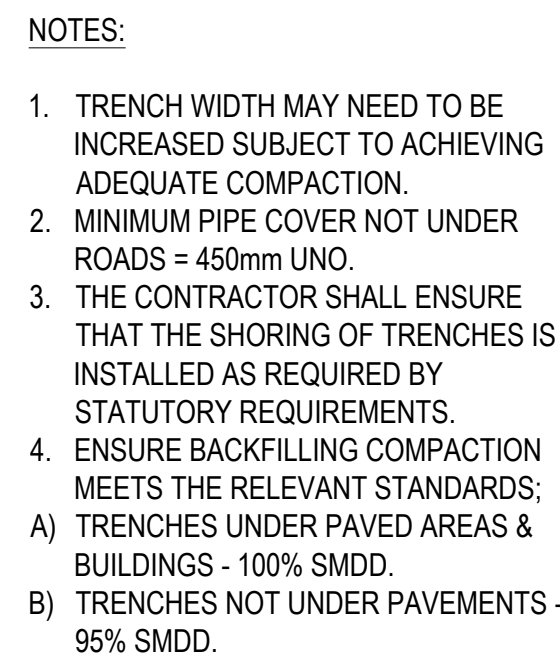
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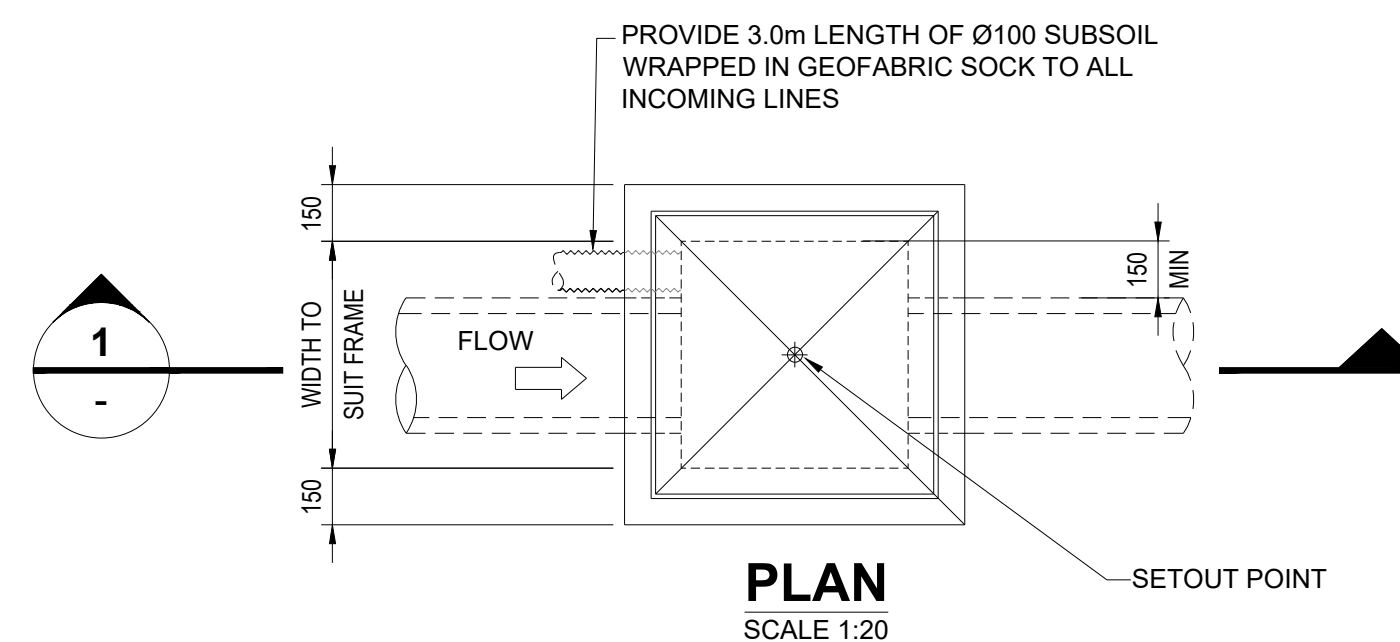

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TITLE					
STORMWATER PIT SCHEDULE					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
AS SHOWN	I.K.	I.O.	J.G.	J.G.	
JOB No.		DRAWING No.		ISSUE	
7368002		C6.04		3	
DATE	STATUS				
SEPTEMBER 2023	ISSUE FOR \$4.56				



NOTES:

1. TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING ADEQUATE COMPACTION.
2. MINIMUM PIPE COVER NOT UNDER ROADS = 450mm UNO.
MINIMUM PIPE COVER UNDER ROADS = 600mm UNO.
3. THE CONTRACTOR SHALL ENSURE THAT THE SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTORY REQUIREMENTS.
4. ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS:
 - A) TRENCHES UNDER PAVED AREAS & BUILDINGS - 100% SMDD.
 - B) TRENCHES NOT UNDER PAVEMENTS - 90% SMDD.

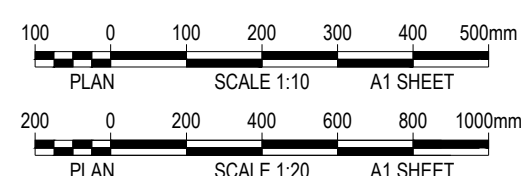


600 - 900SQ SURFACE INLET PITS

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PROJECT	
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FOREST LODGE
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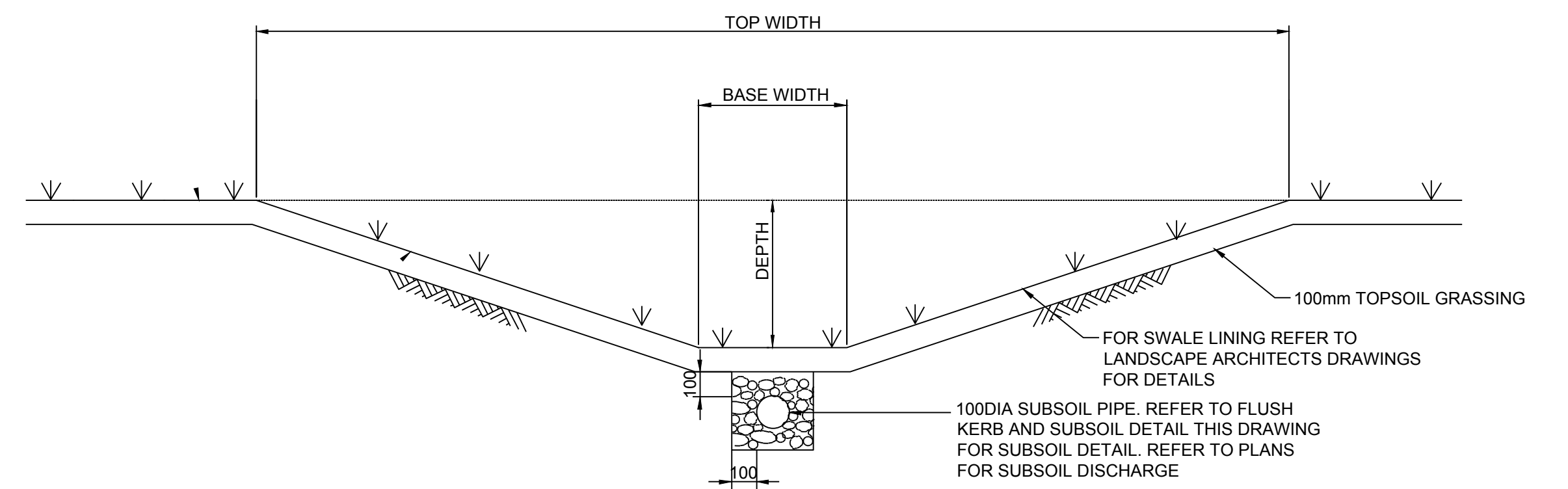
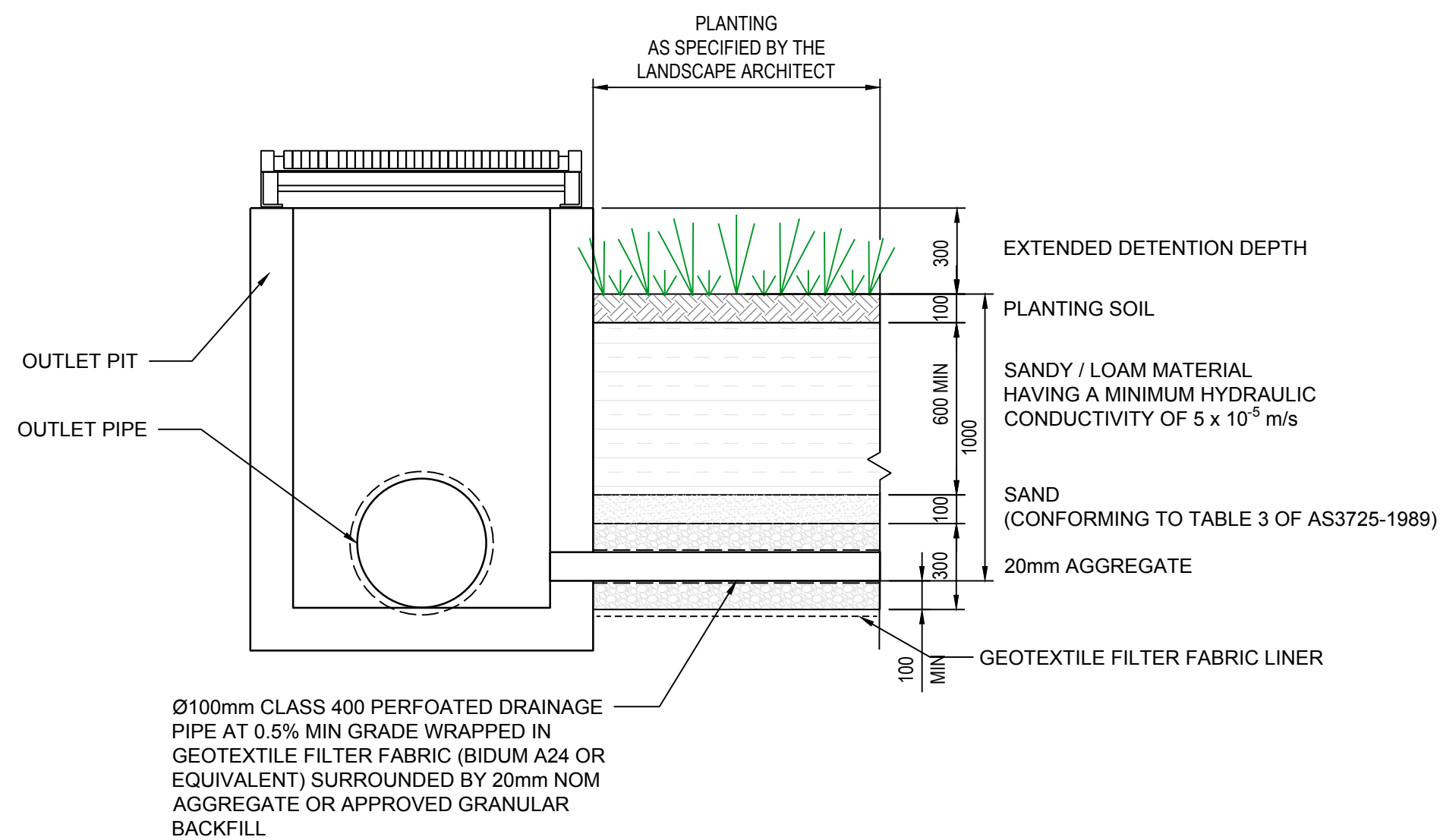
PREPARED BY	
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	TITLE
--	-------

STORMWATER DRAINAGE DETAILS - SHEET 1

SCALE AS SHOWN	DRAWN I.K.	DESIGNED I.O.	CHECKED J.G.	APPROVED J.G.
JOB No. 7368002		DRAWING No. C6.06		ISSUE 1
DATE SEPTEMBER 2023	STATUS ISSUE FOR \$4.56			



1. REFER TO PLAN FOR SWALE DIMENSIONS
2. SWALE INVERT LEVELS AS SPECIFIED ON PLAN. MIN LONGITUDINAL GRADE 0.5% (UNO)

PLAN
NOT TO SCALE

PLACE 5 BOULDERS
Ø500mm - Ø600mm AS
SHOWN FOR ENERGY
DISSIPATION

RIP-RAP

PIPE FLOW

STACKED ROCK
HEADWALL

TAPER AT 1 IN 3

FLOW

SEDGES AND RUSHES PLANTED
IN TOPSOIL FILLED VOIDS

CROSS SECTION
NOT TO SCALE

STACKED ROCK
HEADWALL AND WINGS

RIP-RAP

COARSE GRAVELS
/ COBBLES

LENGTH OF SCOUR PROTECTION	
OUTLET PIPE SIZE	L (mm)
375 - 750	4000
900 - 1350	6000
1500 - 1800	8000

CONCRETE TRENCH STOP

STACKED ROCK HEADWALL OVER PIPE END

STACKED ROCK BOULDERS AT SIDES FOR HEADWALL WINGS

SEDGES AND RUSHES PLANTED IN TOPSOIL FILLED VOIDS BETWEEN ROCKS

PIPE FLOW

PROVIDE 3.0m LENGTH OF Ø100mm SUBSOIL WRAPPED IN GEOTABRIC SOCK

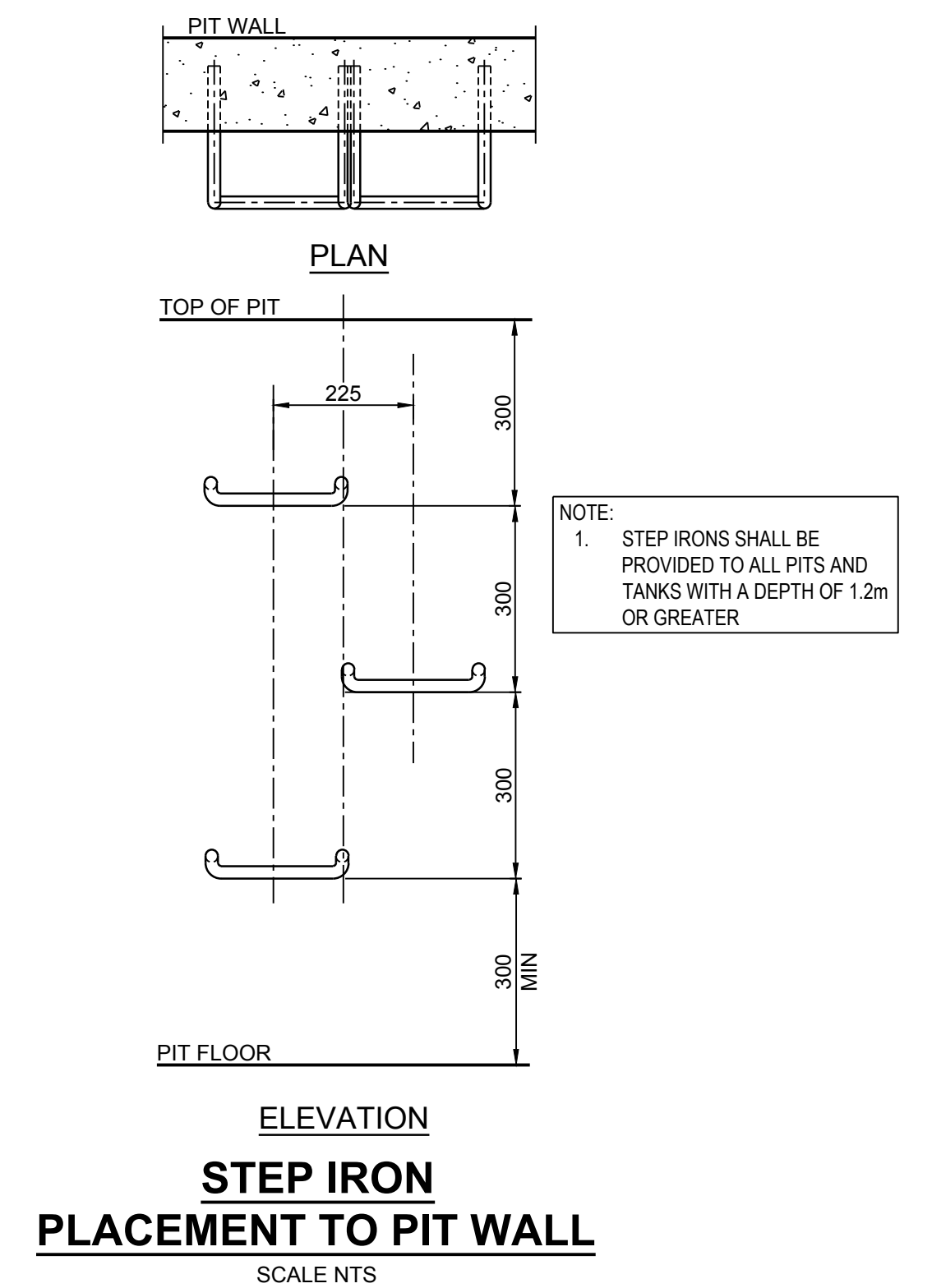
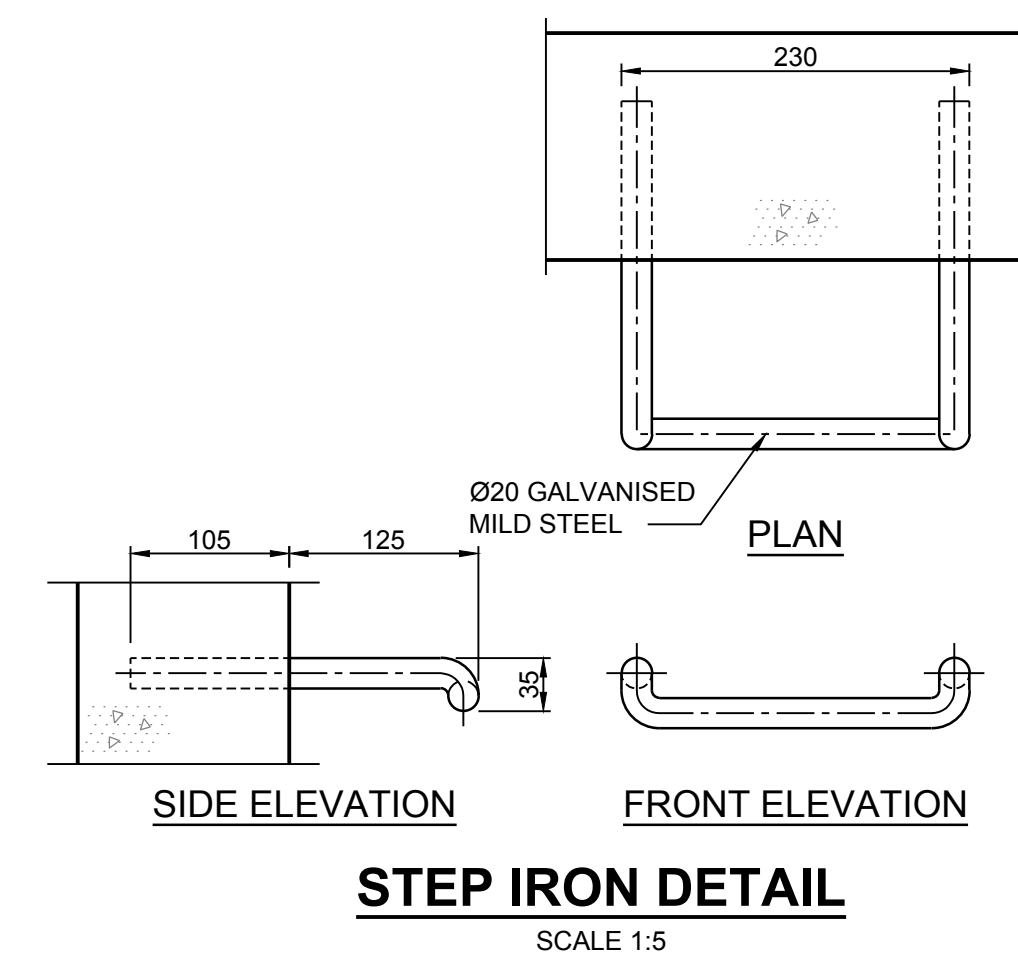
PROVIDE RIP-RAP ROCK VARYING IN SIZE Ø100mm-Ø300mm

SCOUR PROTECTION TO INVERT LEVEL

LAY BIDUM A44 GEOTEXTILE FABRIC OR APPROVED EQUIVALENT WITH MINIMUM OVERLAP OF 500mm

L
(REFER TABLE)

ROCK HEADWALL - TYPICAL ARRANGEMENT
NOT TO SCALE

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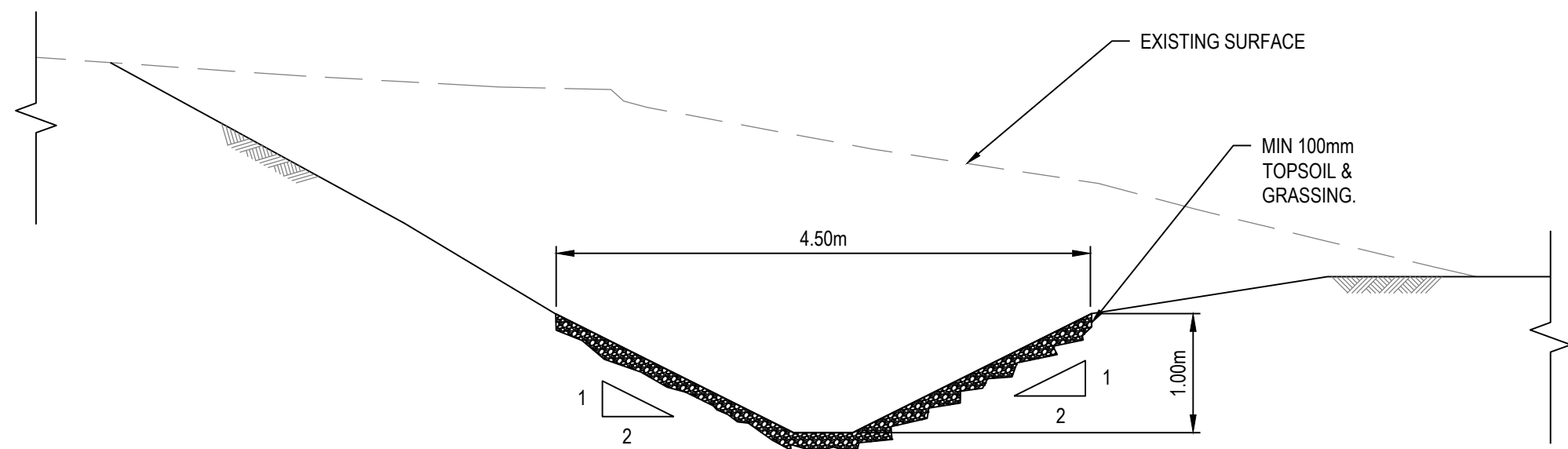
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TITLE

**STORMWATER DRAINAGE
DETAILS - SHEET 2**

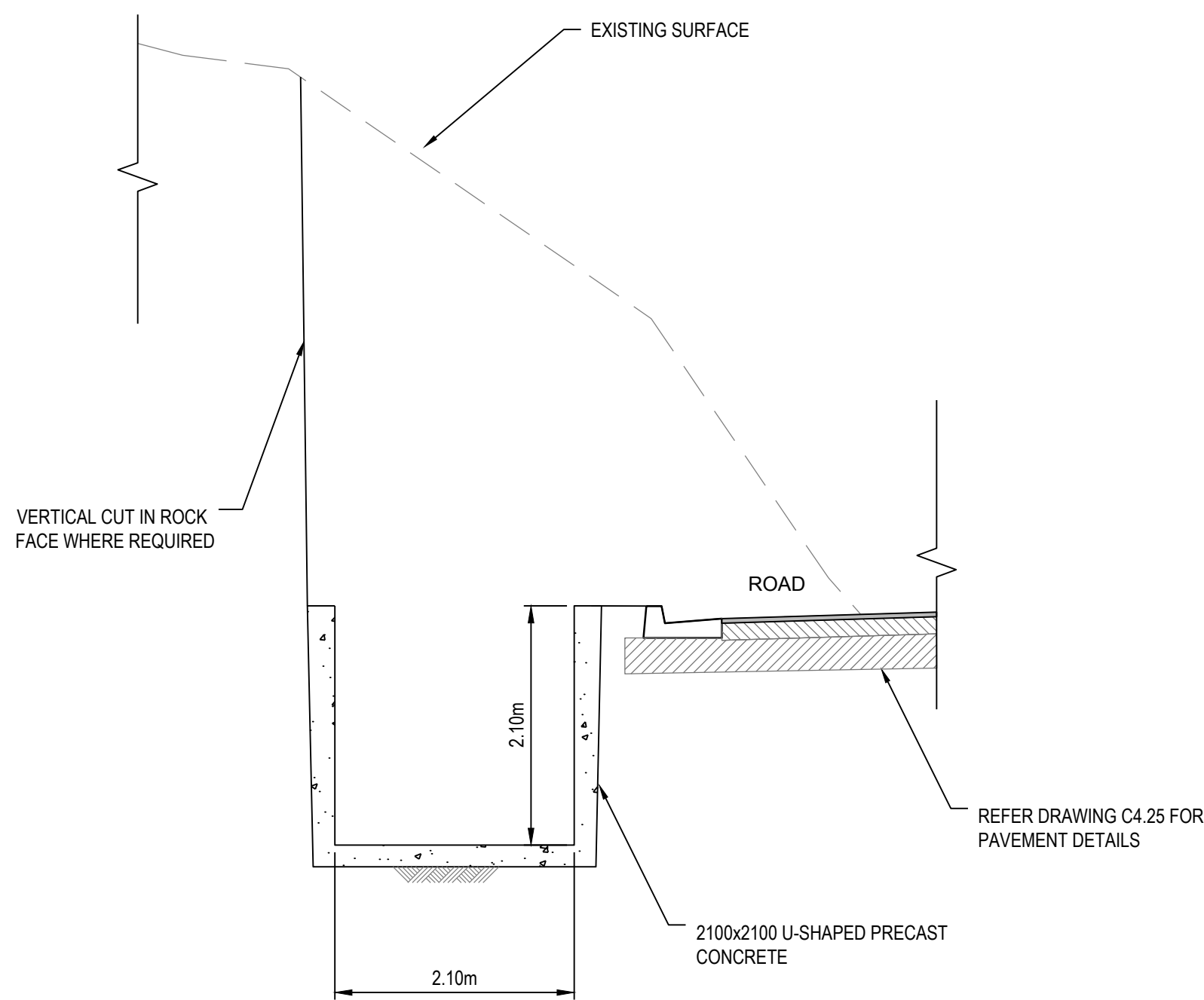
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JOB No. 7368002		DRAWING No. C6.07	ISSUE 2	
DATE SEPTEMBER 2023		STATUS ISSUE FOR \$4.56		



NOTE:
ROCK LINED CHANNEL SWALE TYPE REFER TO DETAIL ON
C6.07 "TYPICAL SECTION THROUGH SWALE"

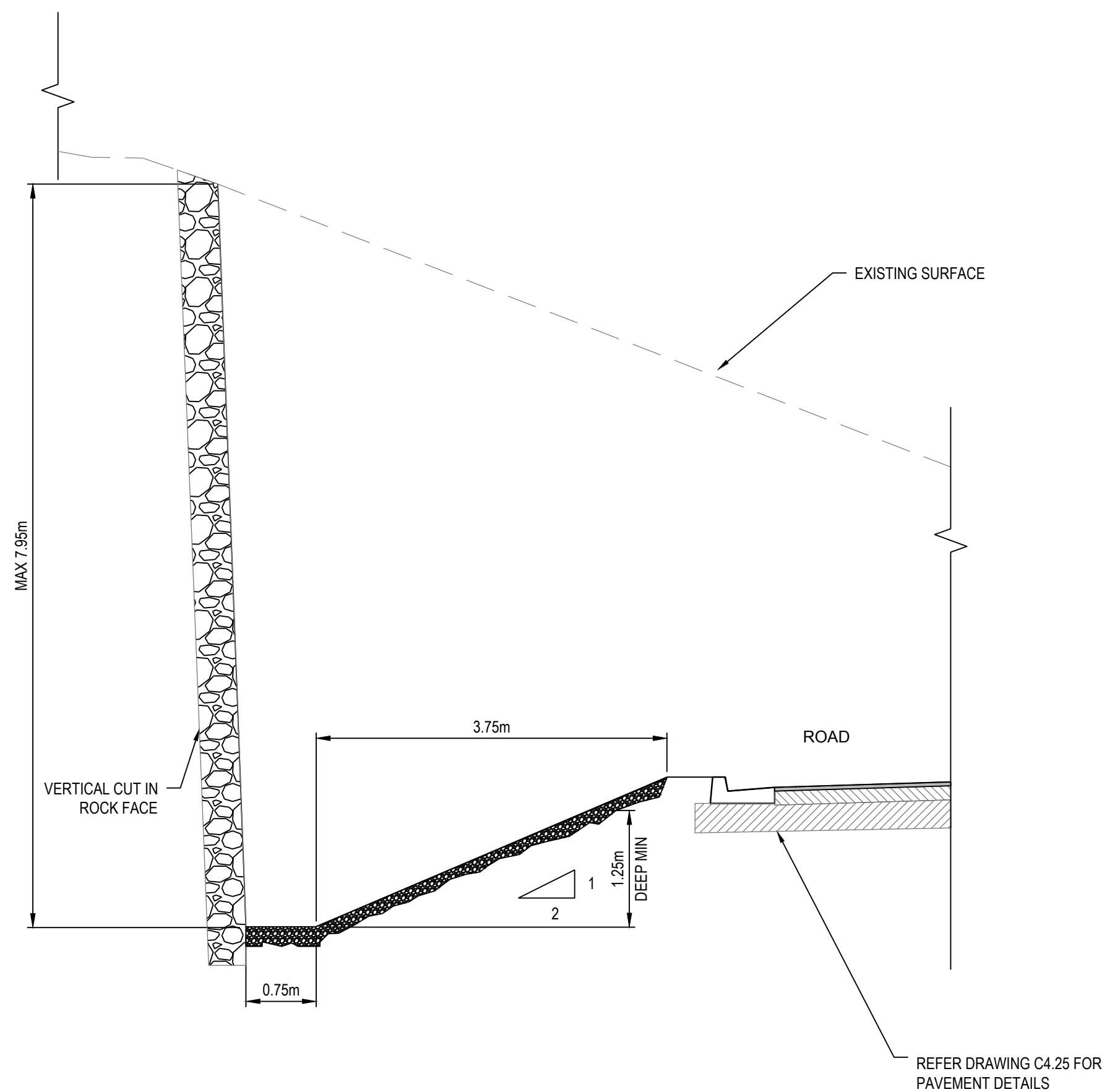
CH115.15-183.09 SHOTCRETE OR ROCK LINED CHANNEL

SECTION 1
SCALE 1:50 C4.02



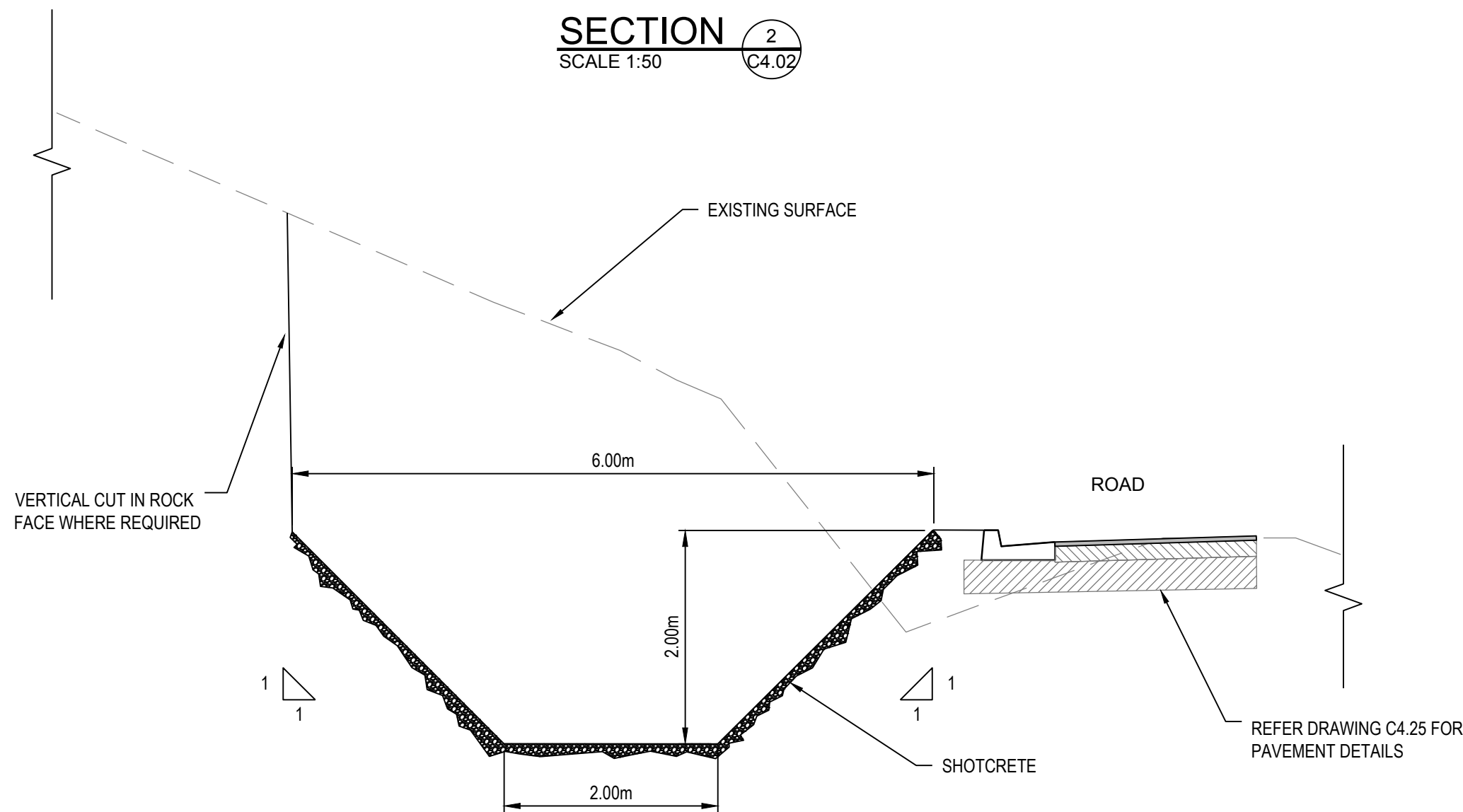
CH22.00-CH37.00 2100x2100 U-SHAPED
PRECAST CONCRETE OPEN CHANNEL

SECTION 3
SCALE 1:50 C4.02



CH46.50-CH100.00 SHOTCRETE OR ROCK LINED CHANNEL

SECTION 2
SCALE 1:50 C4.02



CH0.00-16.00 SHOTCRETE CHANNEL

SECTION 4
SCALE 1:50 C4.02

Ver: X:\7688002\7688002.dwg User: Kishor Login Name: Kishor C:\Program Files\Autodesk\AutoCAD 2014\Help\10 Stormwater Drainage Typical Sections.dwg
Plot Date: 01/02/2024 09:16:09
Plot Path: X:\7688002\7688002.dwg

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STORMWATER DRAINAGE TYPICAL SECTIONS				
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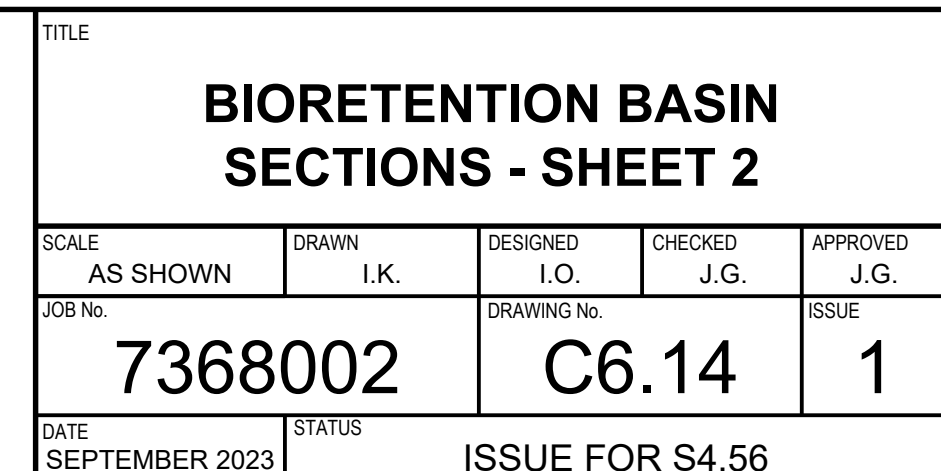
The image shows the top section of a presentation slide. At the top left, the word 'CLIENT' is written in a small, red, sans-serif font. To its right is a decorative horizontal line with a repeating scalloped or wave pattern in red. Below this, the word 'KLIATRO' is displayed in a large, bold, black, sans-serif font. A thin horizontal line separates this header from the main content area below. In the main content area, the words 'PROJECT' and 'FOREST LODGE' are stacked vertically in a black, sans-serif font, with 'FOREST LODGE' being significantly larger than 'PROJECT'. Below 'FOREST LODGE', the word 'WARRIEWOOD' is written in a smaller, black, sans-serif font.

7368002	C6.11	2
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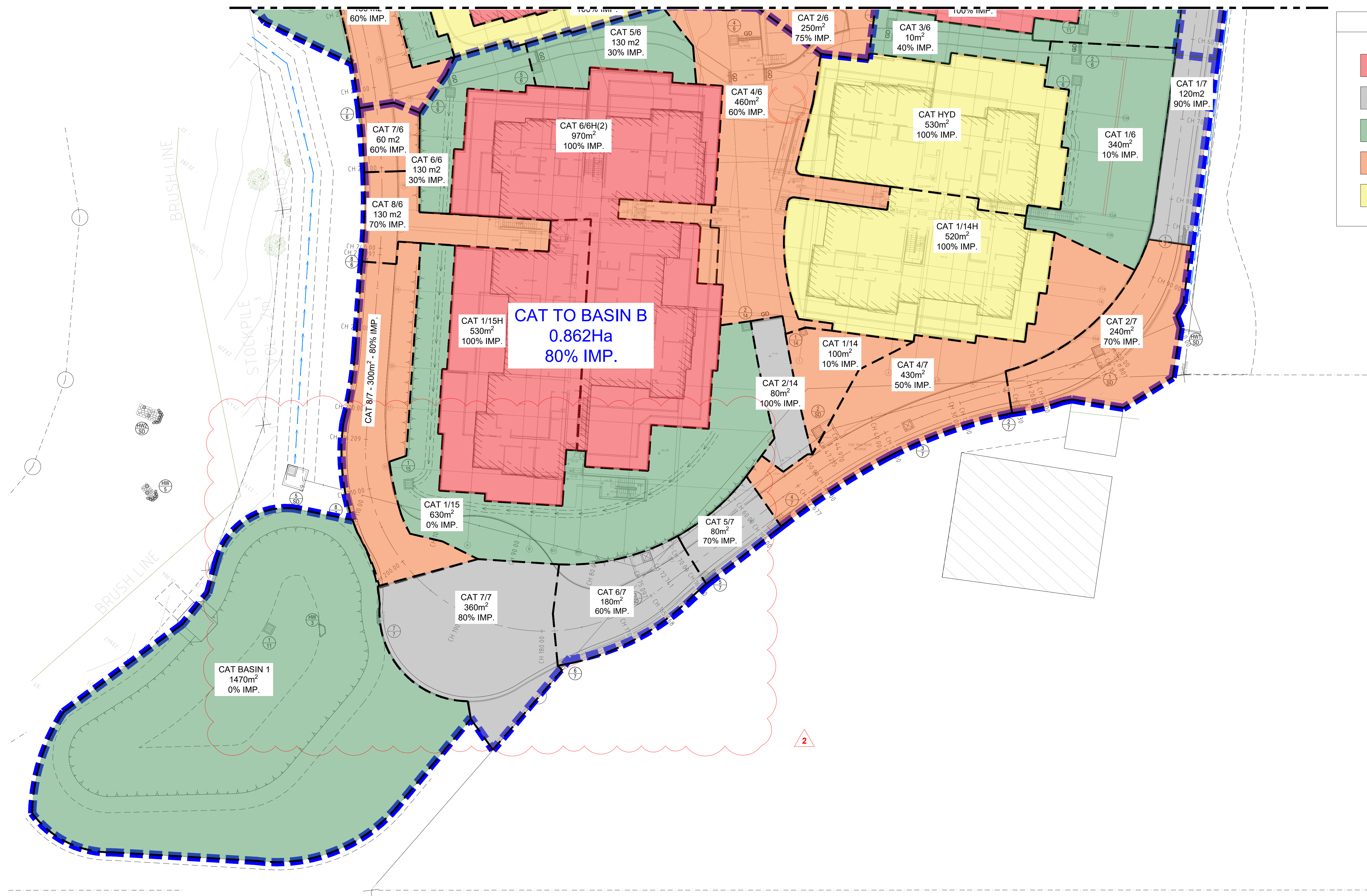
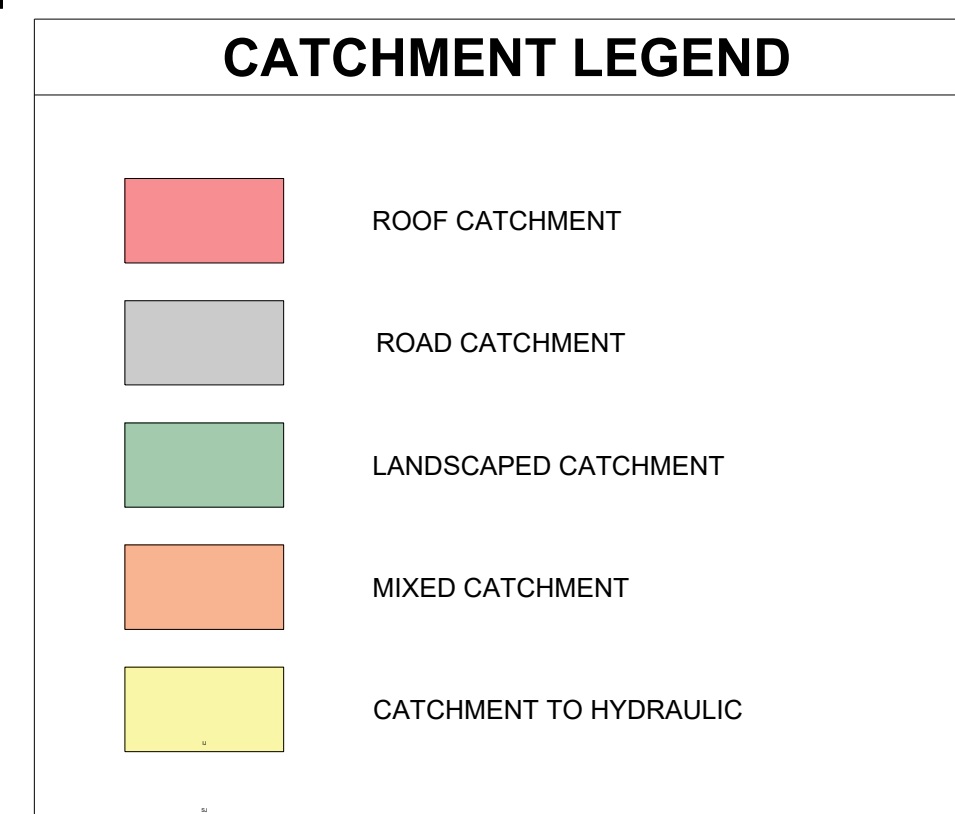


1000 0 500 1000 1500 2000mm
PLAN SCALE 1:50 A1 SHEET

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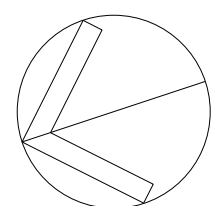
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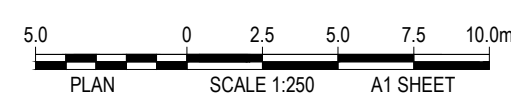
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 Plot Date: 05/12/2023@16:53:20 Login Name: Stewart
 Cad File: 7368002-Drawings/AutoCAD/Civil/Design/Civil/2054965Stormwater Catchment Plan - Sheet ZJ.dwg

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**STORMWATER CATCHMENT
PLAN - SHEET 2**

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