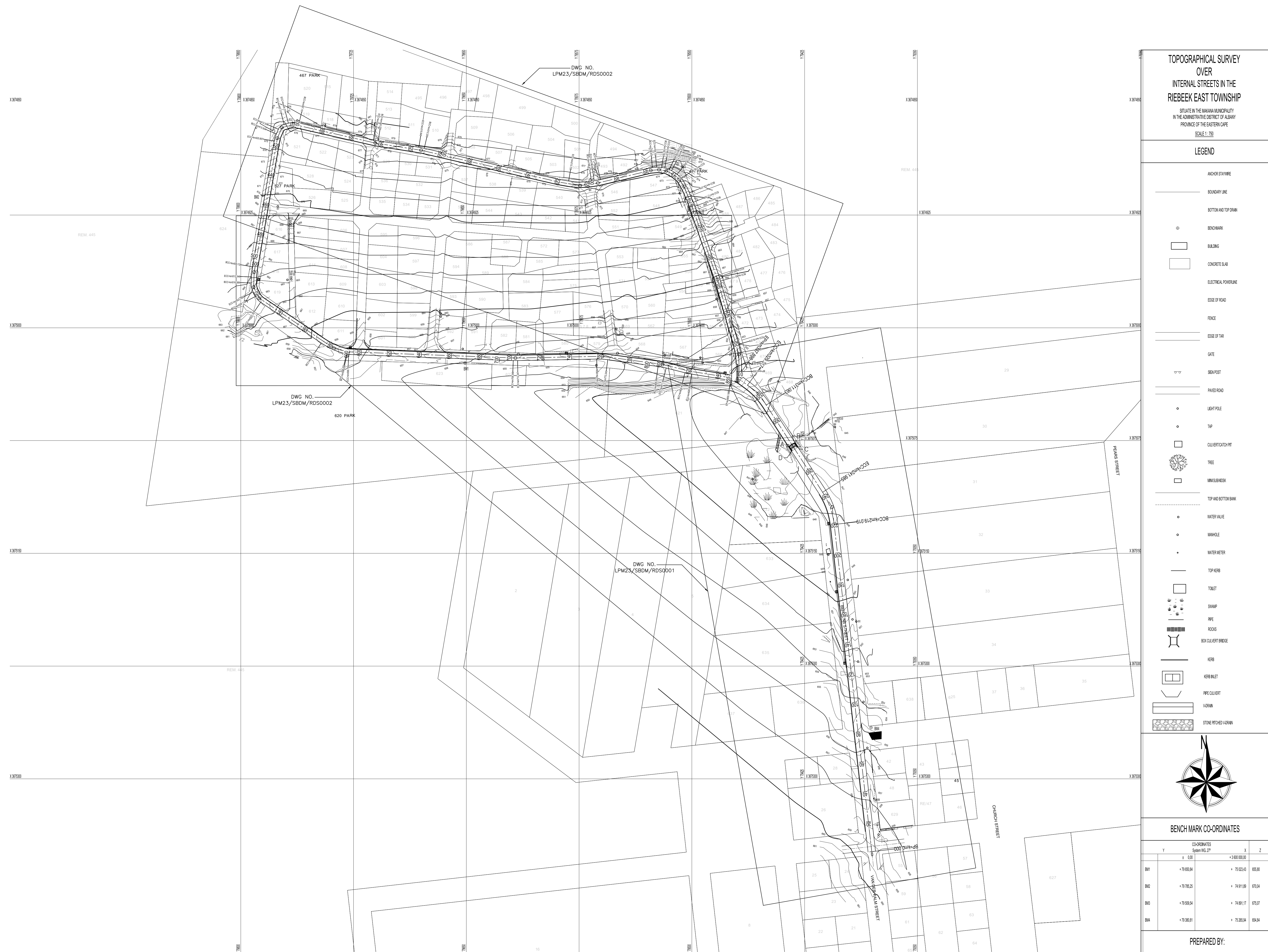


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6055
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E-Mail info@lilithaconsulting.co.za

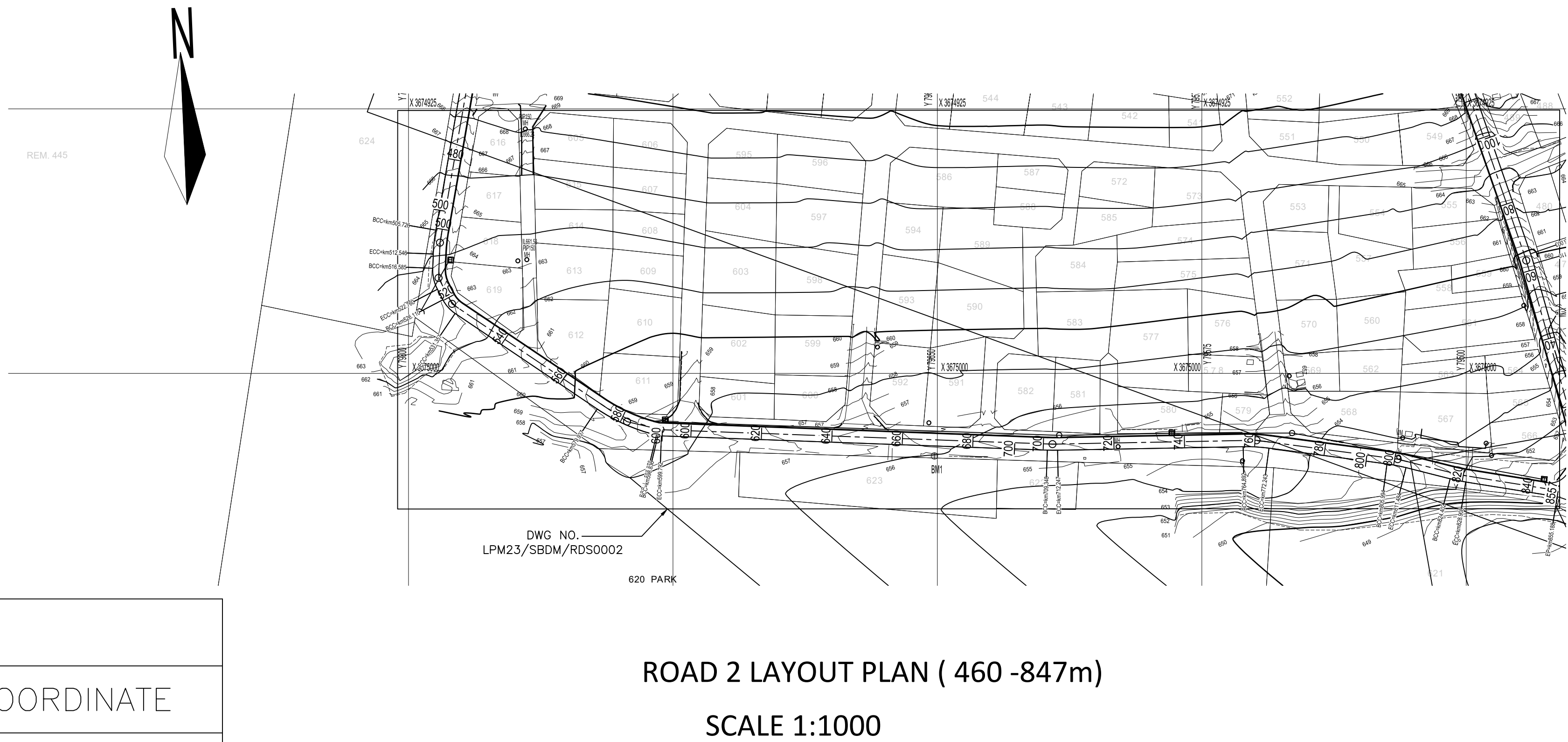
East London
Queenstown
Port Elizabeth



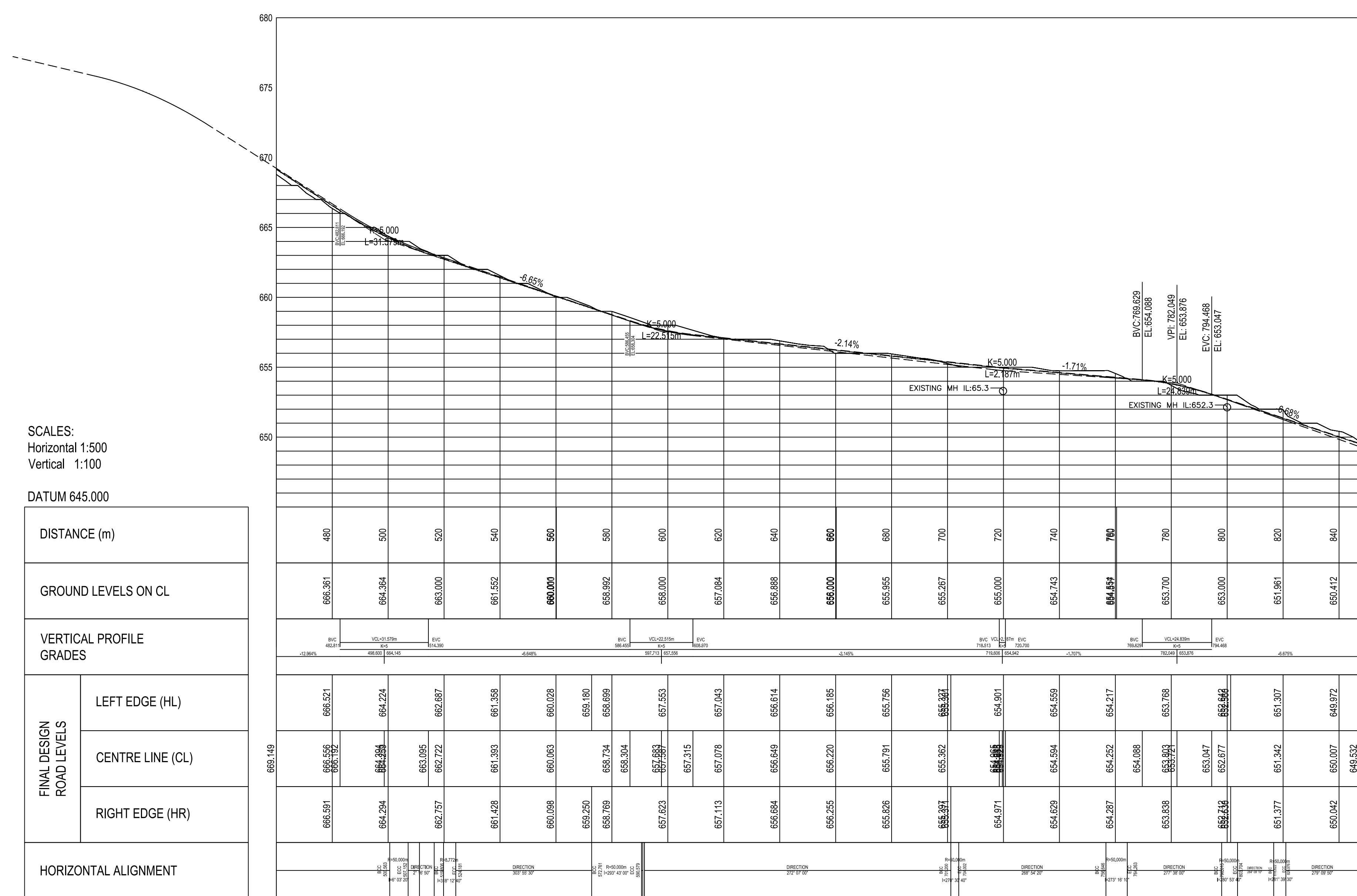
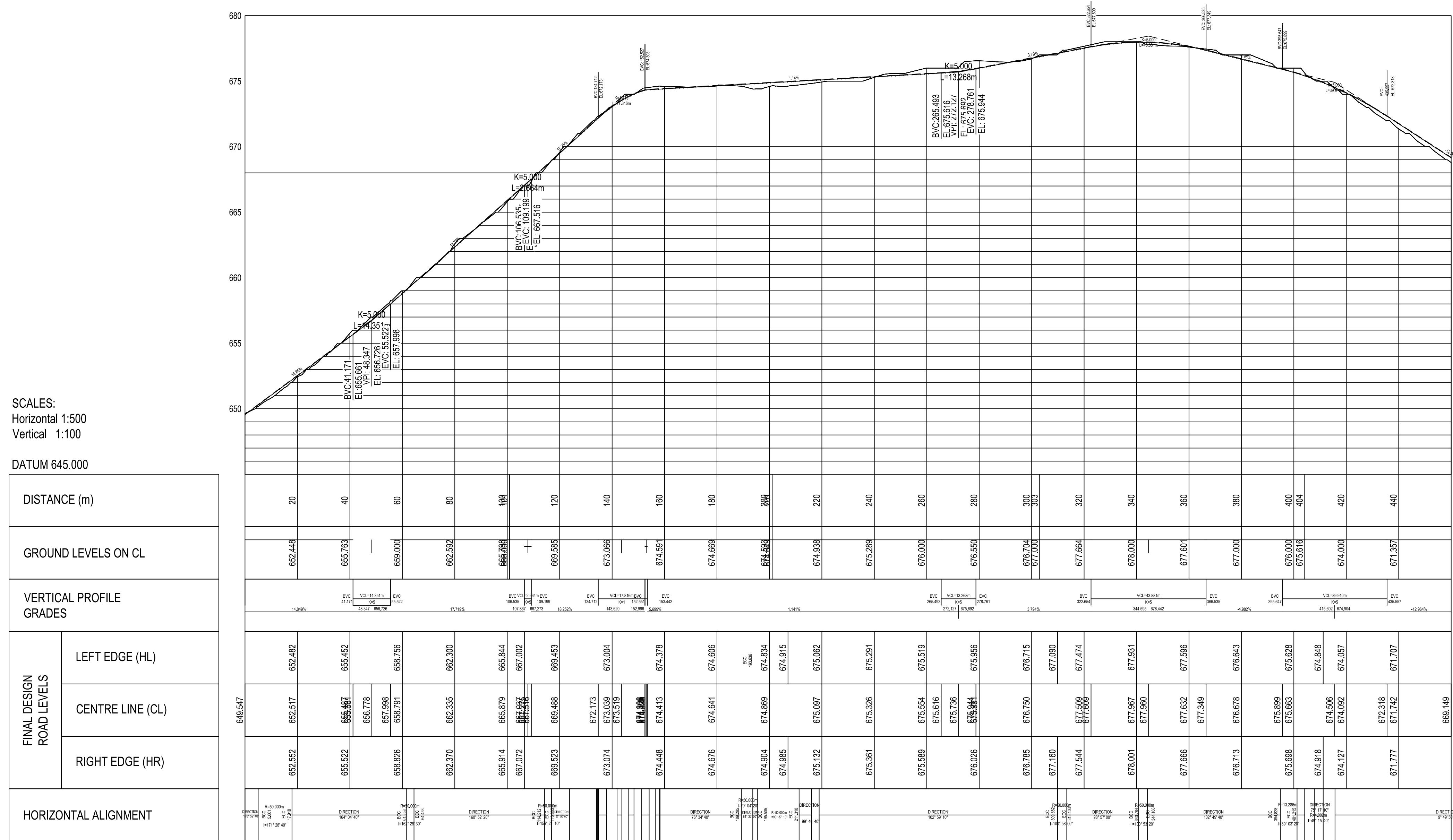
SARAH BAARTMAN DISTRICT MUNICIPALITY
60 Govan Mbeki Street
Gqeberha
6001

Telephone: (041) 508 7111

DRAWING No.	LPM23/SBDM/GEN0001	SBDM PROJECT No.:
PROJECT No.		SCALE: 1:1000
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		DATE: 05/2023
TENDER DRAWINGS		
GENERAL PLAN		SHEET 01 OF 01

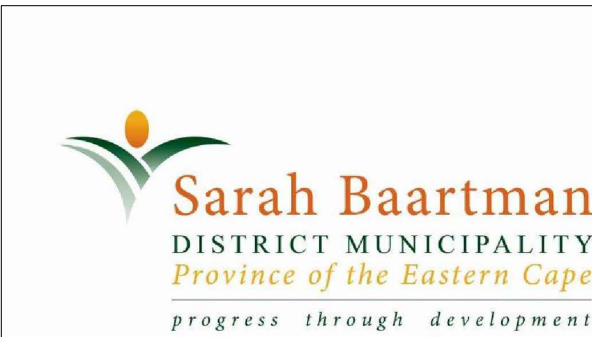


COORDINATE LIST		
POINT	COORDINATE	COORDINATE
	Y	X
START	-79 468.57	3 675 029.15
END	- 79 473.94	3 675 033.26

[illegible]

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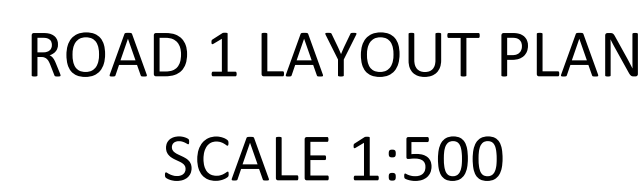
East London
Queenstown
Port Elizabeth



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Telephone: (041) 508 7111

DRAWING No.	LPM23/SBDM/RD50002	SBDM PROJECT No.:
PROJECT No.		SCALE: AS INDICATED
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		DATE: 05/2023
TENDER DRAWINGS		
ROAD LAYOUT		SHEET 01 OF 01



SCALES:
Horizontal 1:500
Vertical 1:100

DATUM 645.000



DRAWING No.	LPM23/SBDM/RDS0001	SBDM PROJECT No.:
PROJECT No.		
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		SCALE: AS INDICATED
TENDER DRAWINGS		DATE: 05/2023
ROAD LAYOUT		SHEET 01 OF 01



Lilitha
project managers

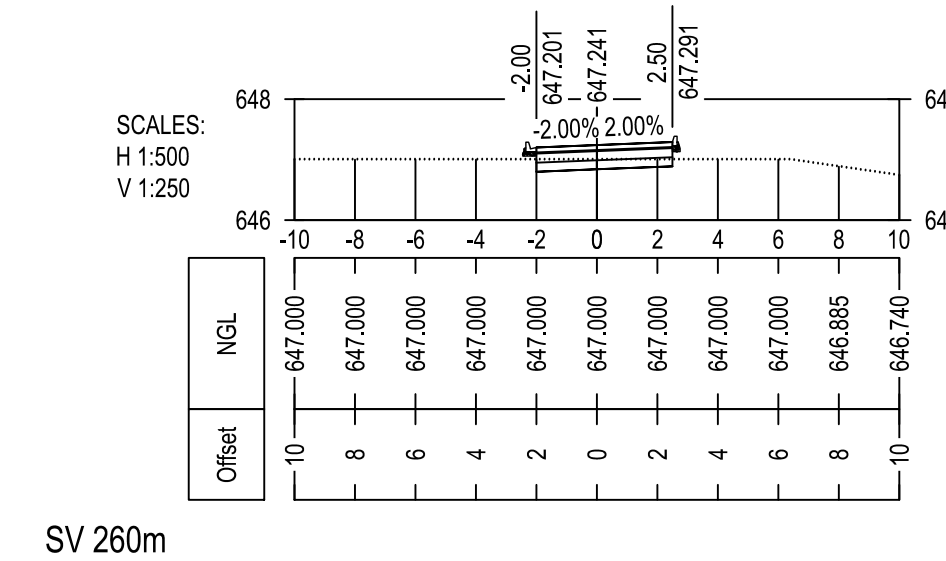
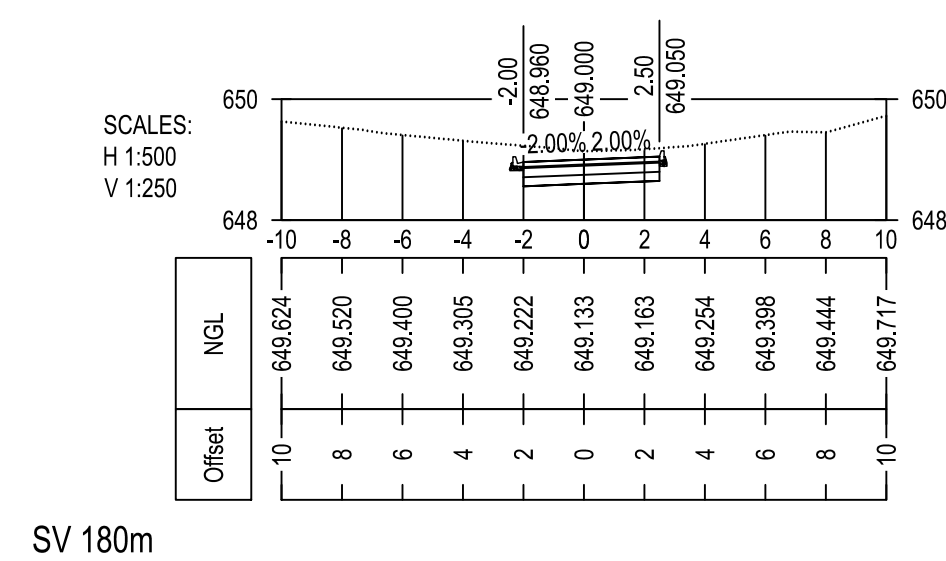
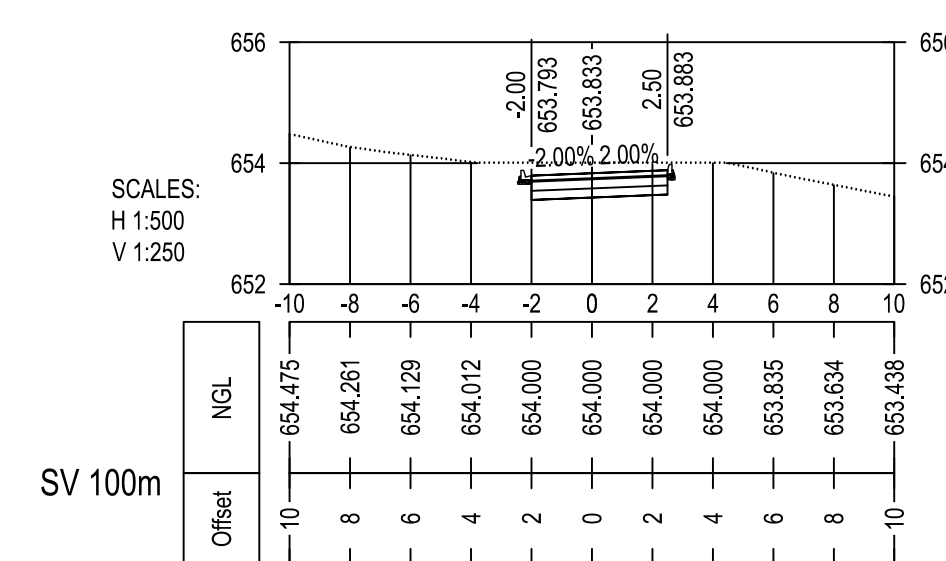
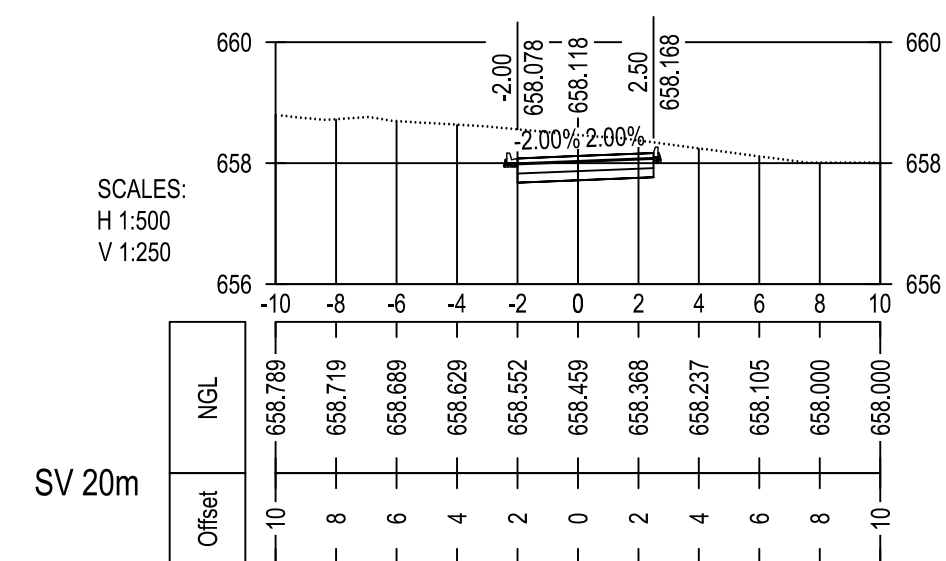
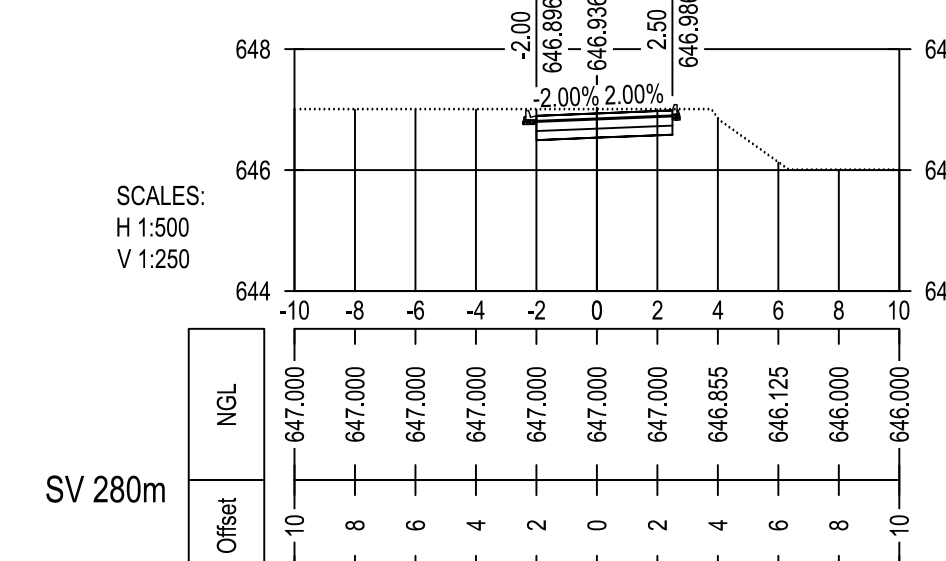
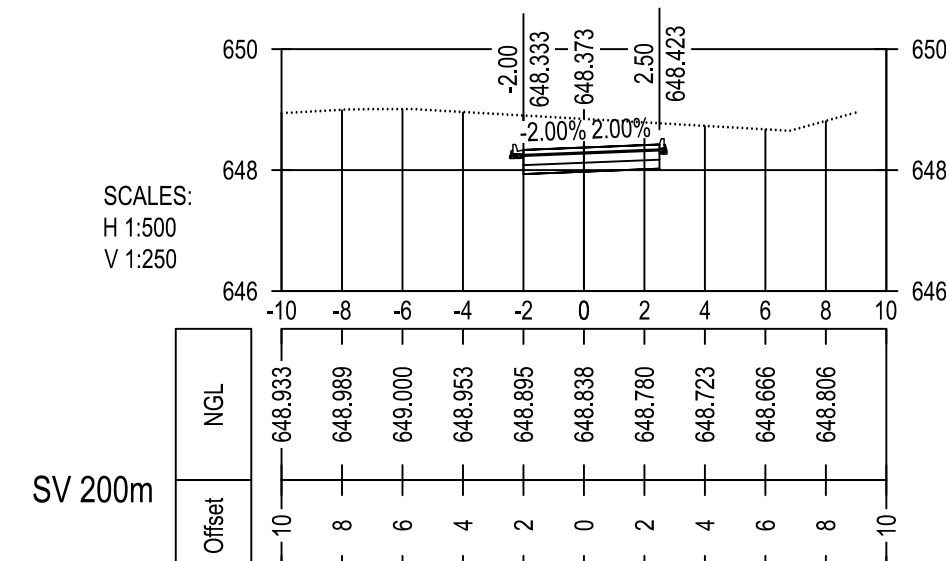
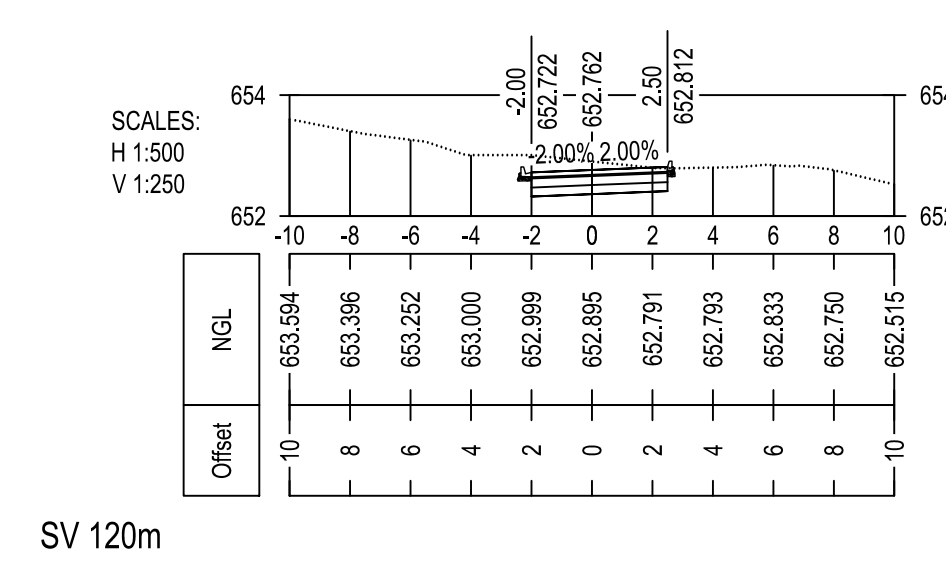
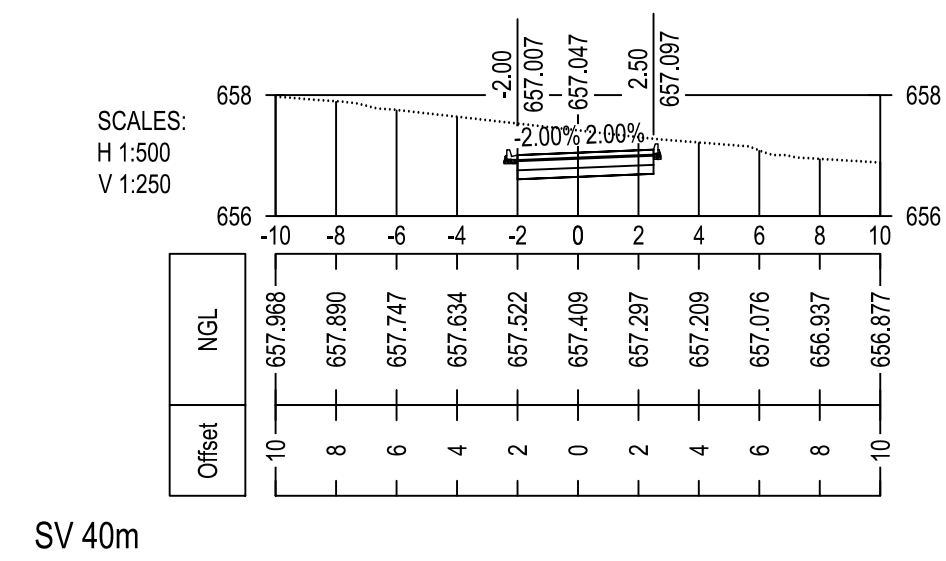
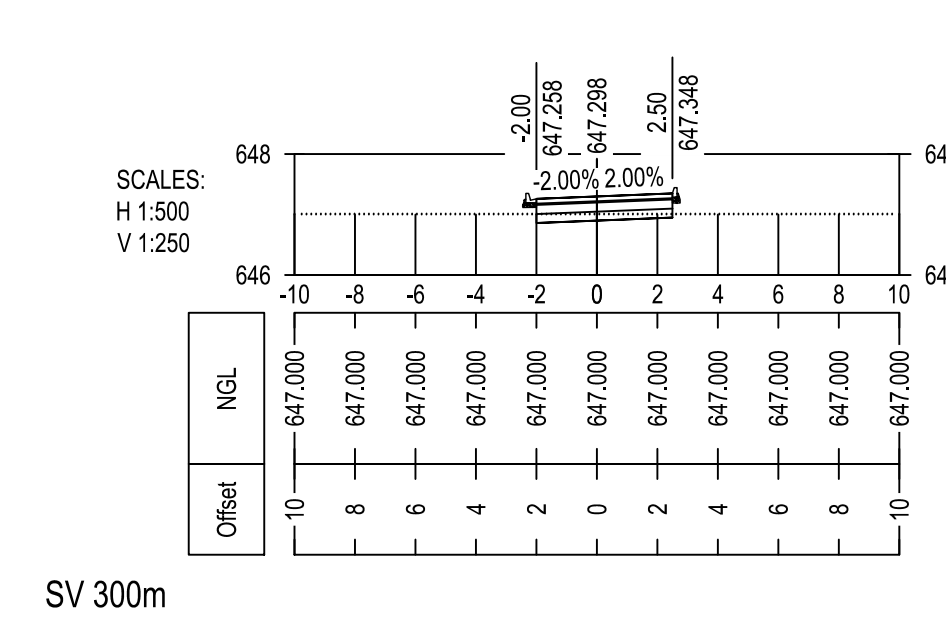
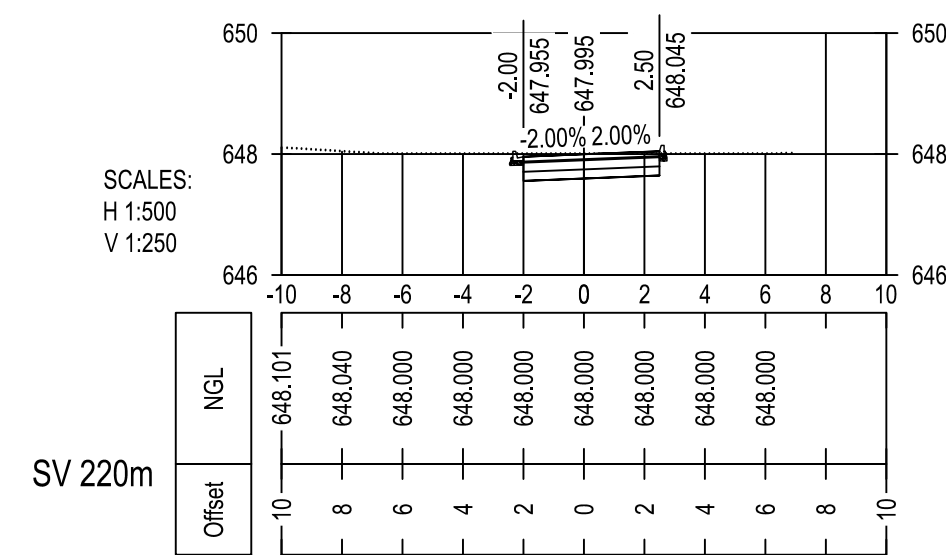
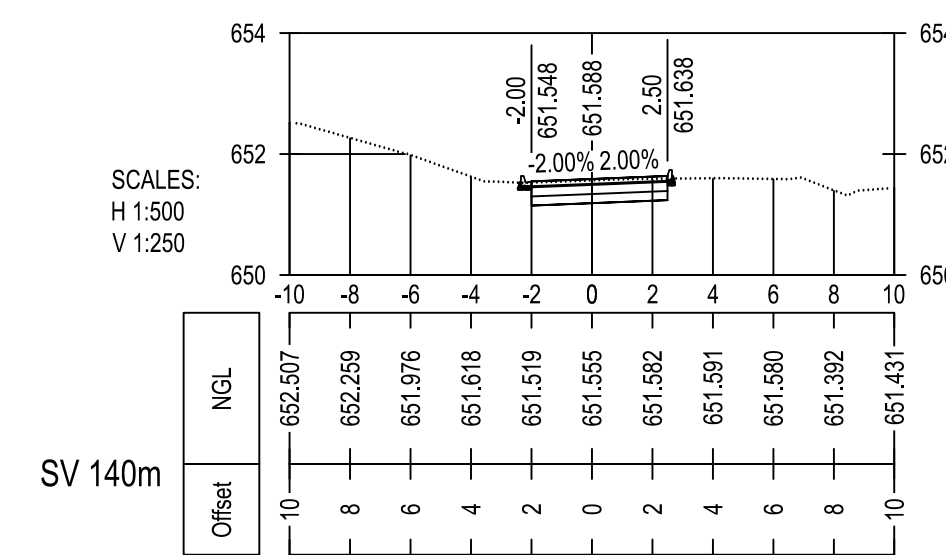
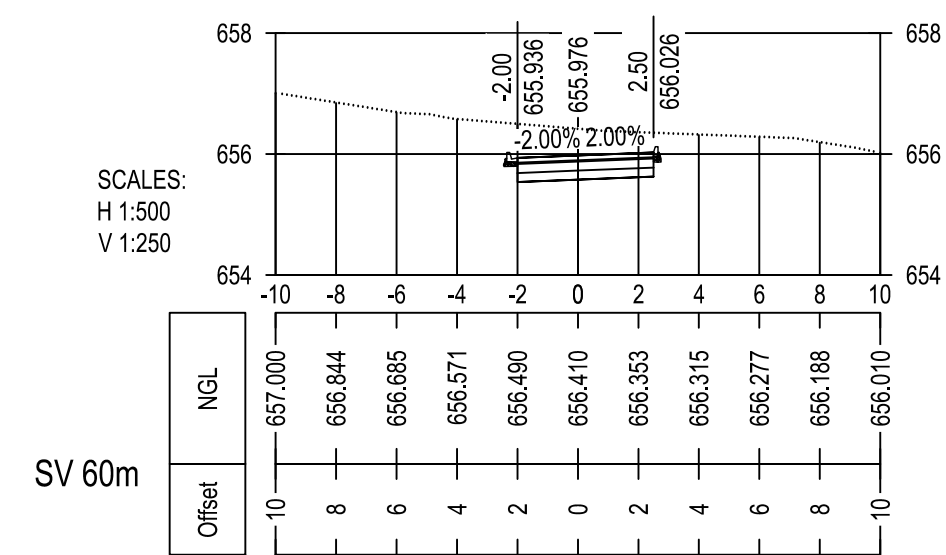
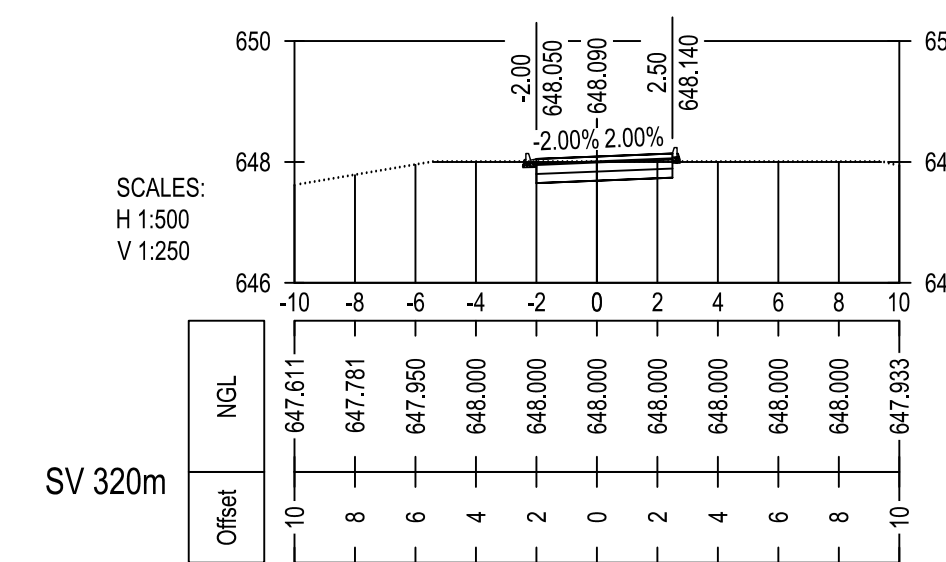
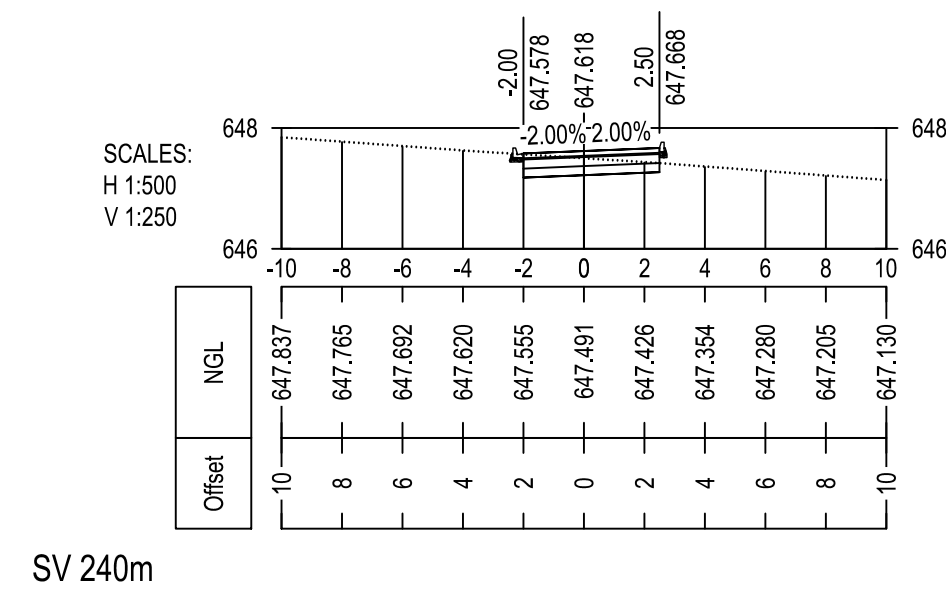
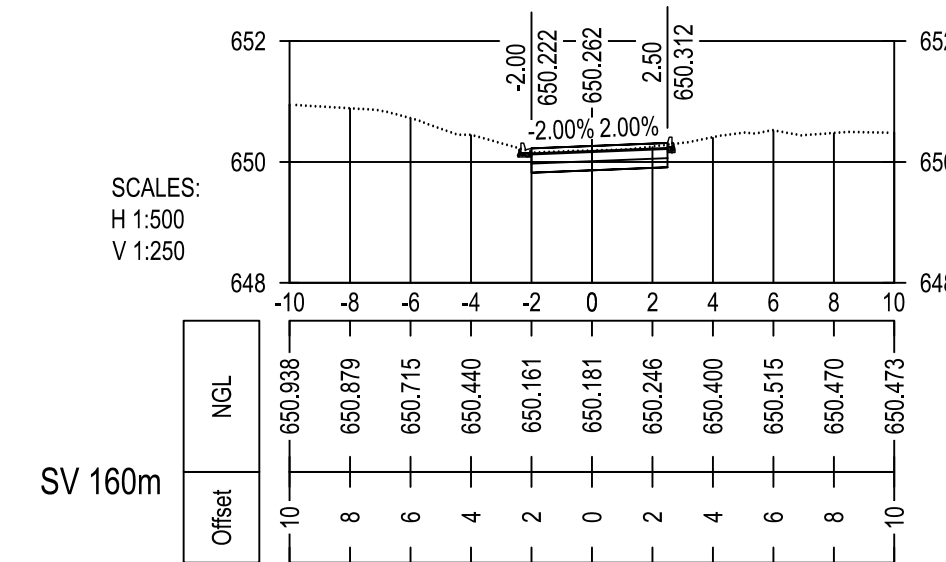
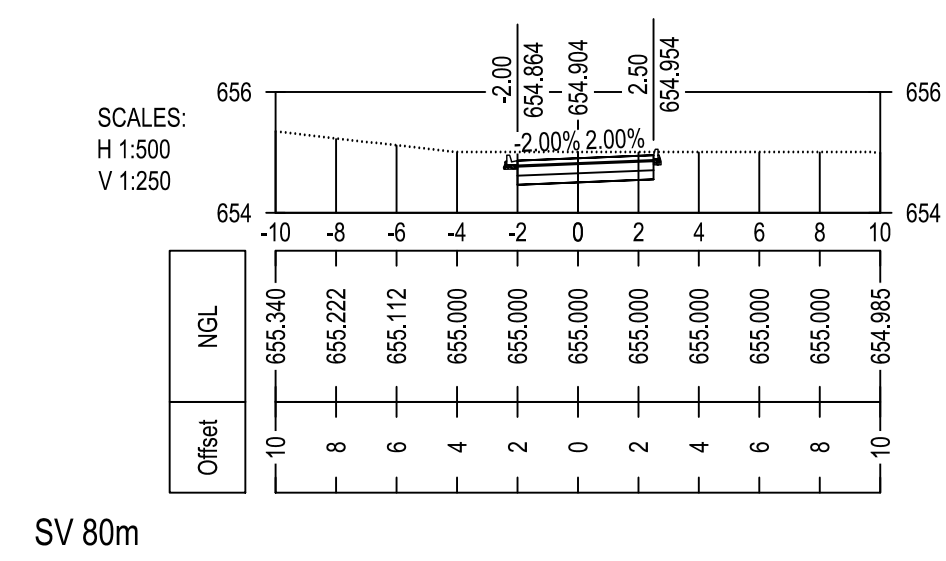
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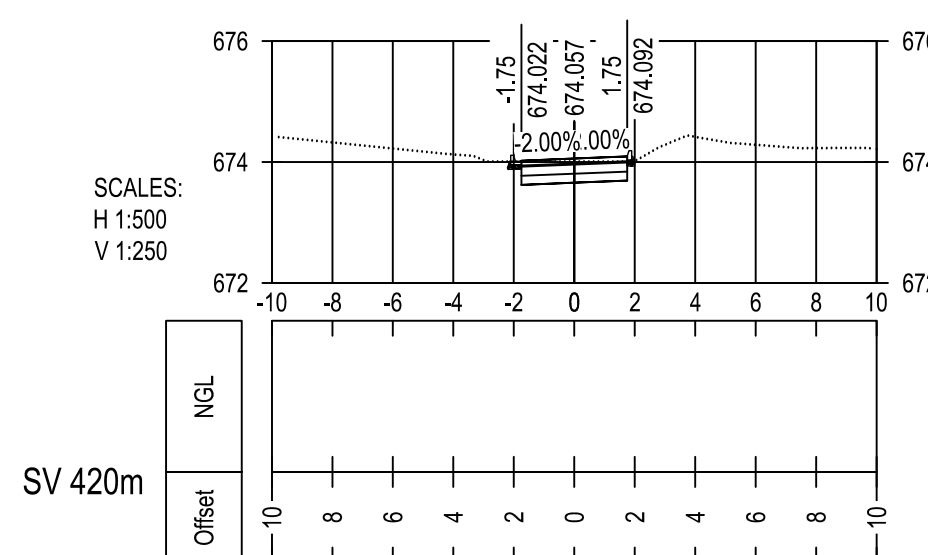
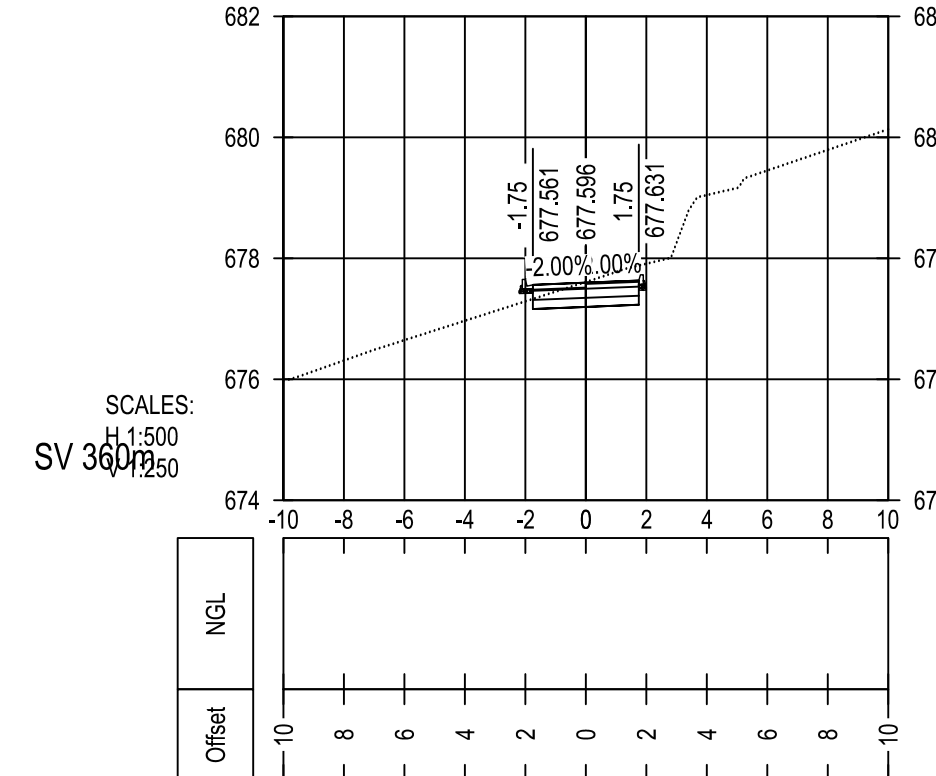
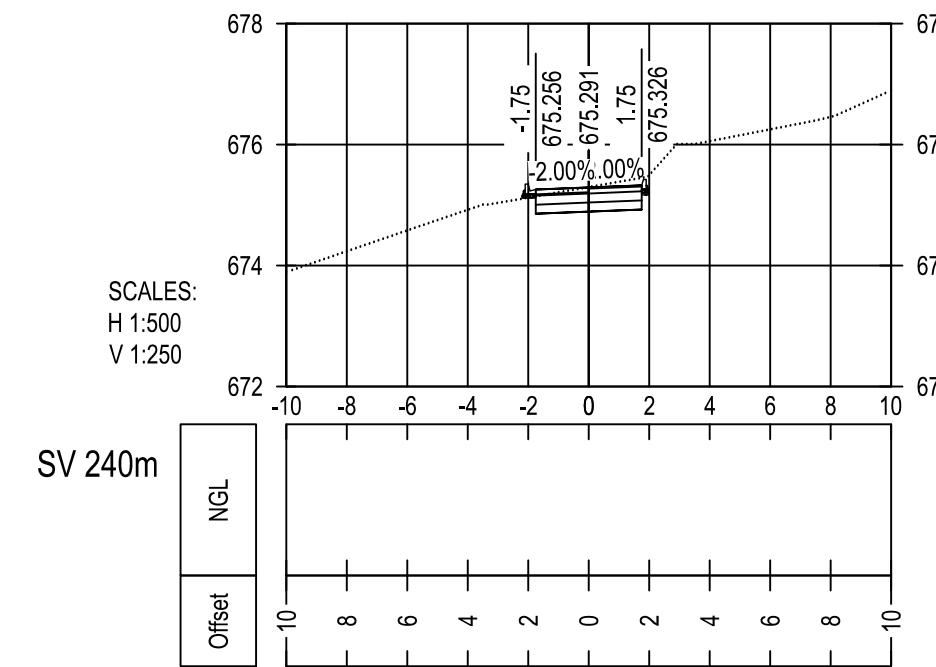
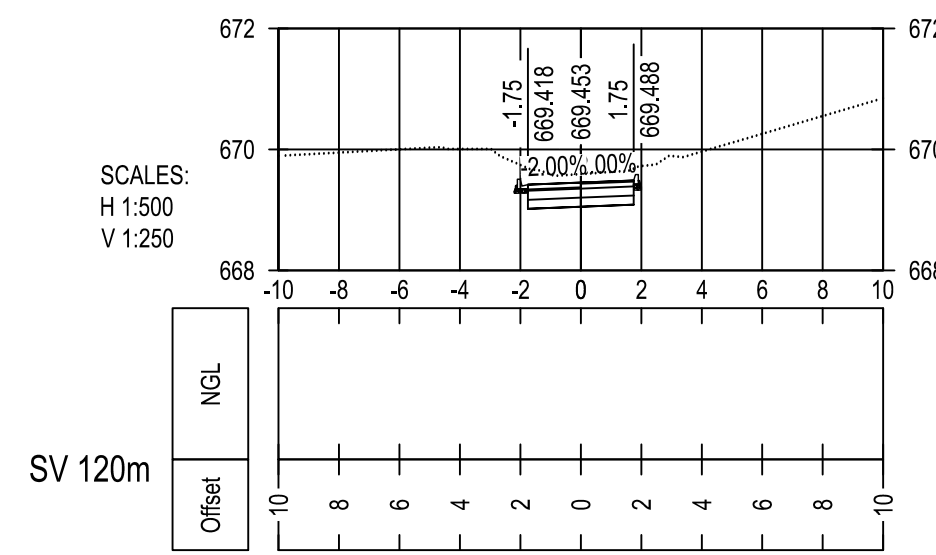
Telephone: (041) 508 7111

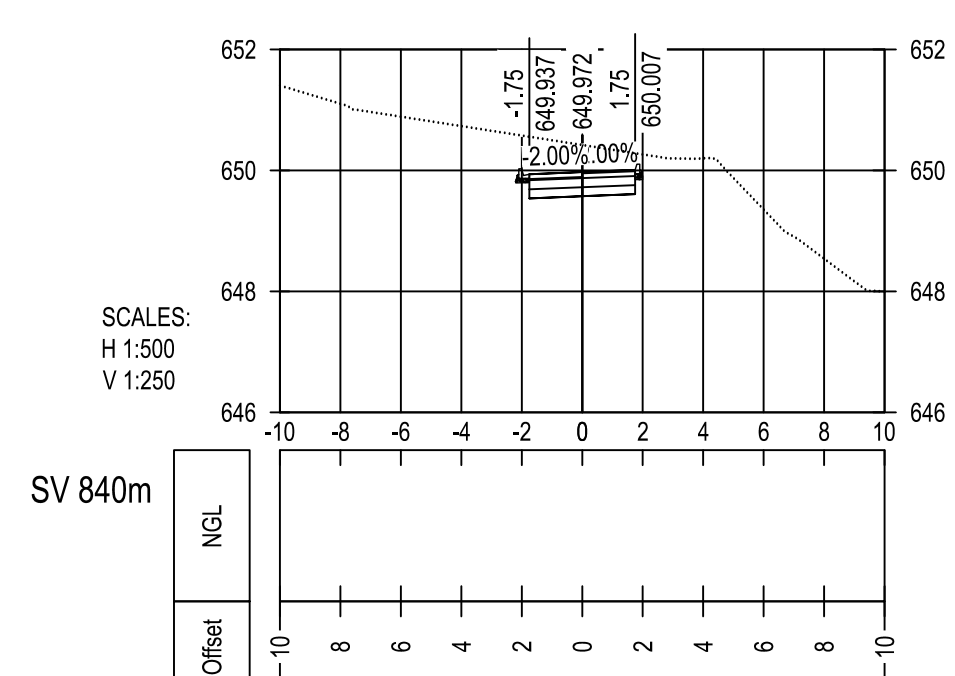
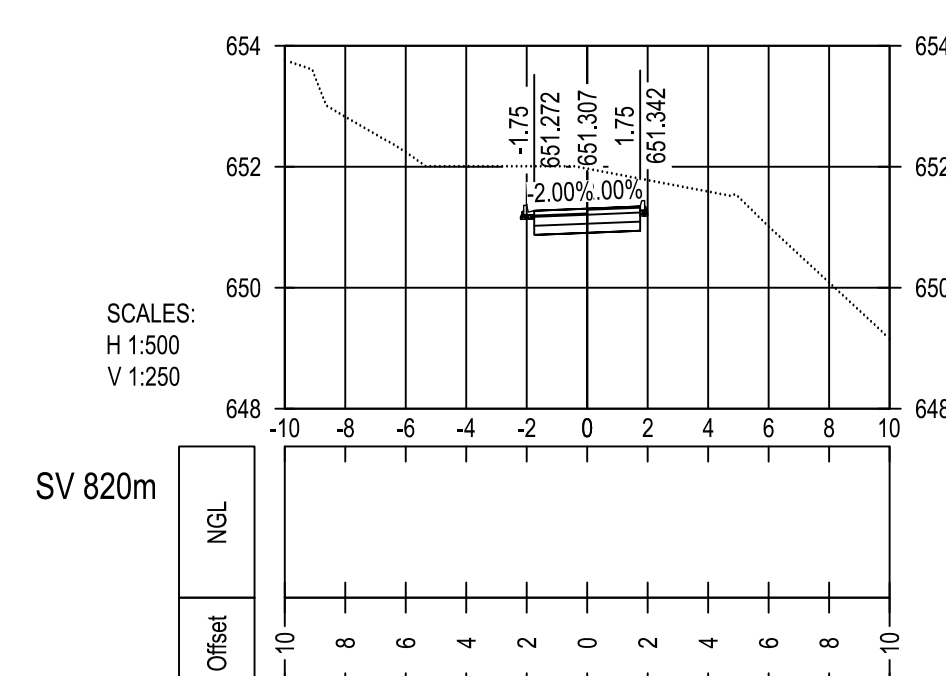
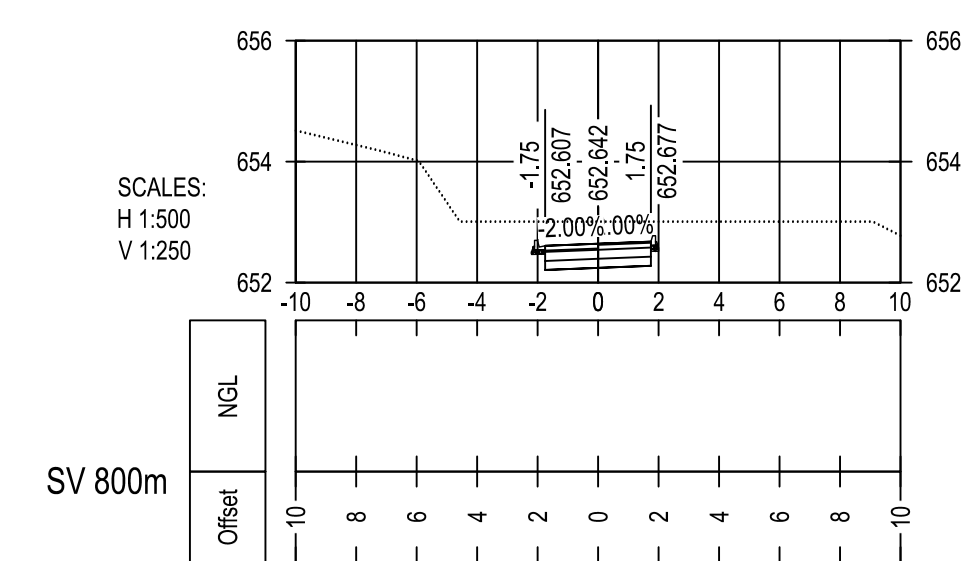
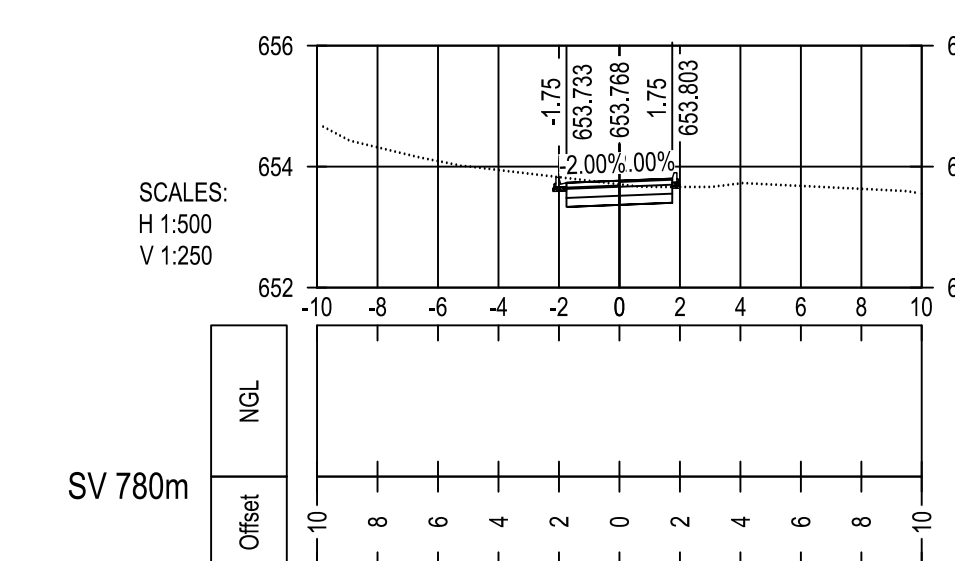
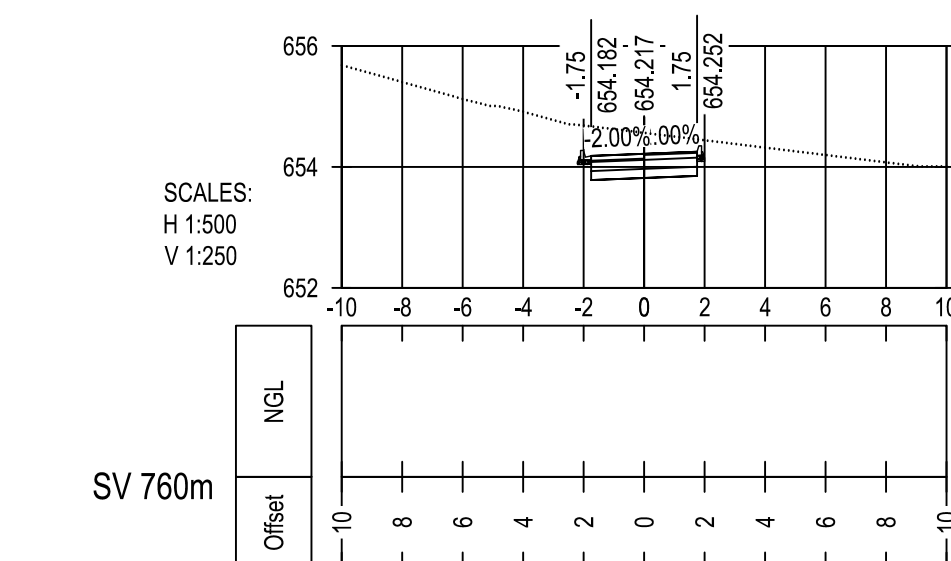
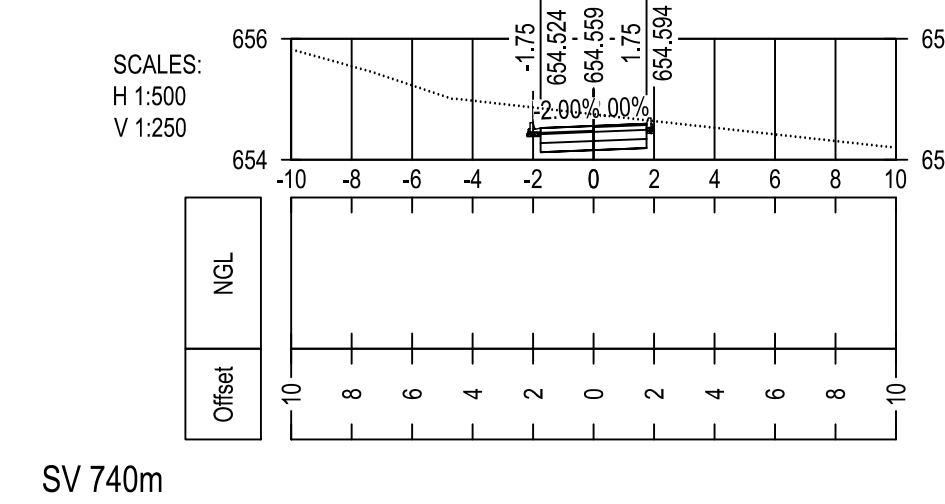
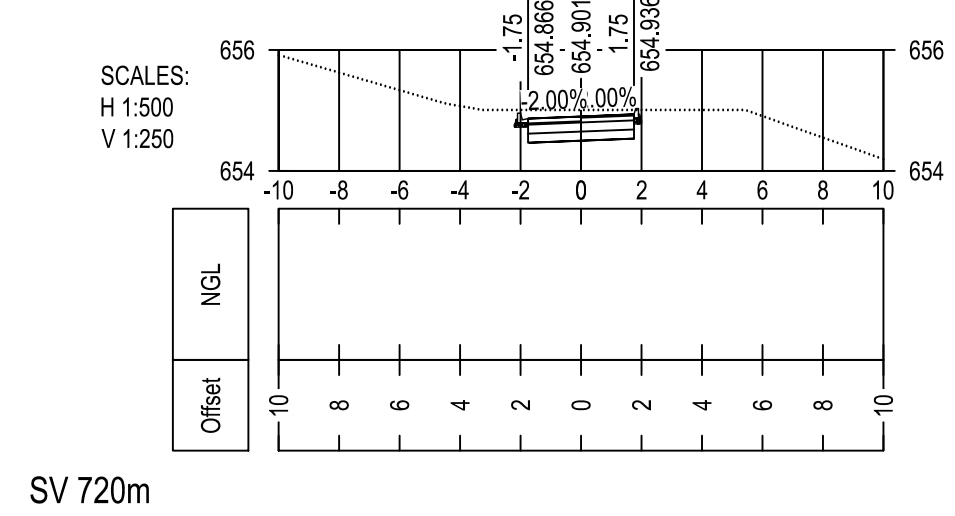
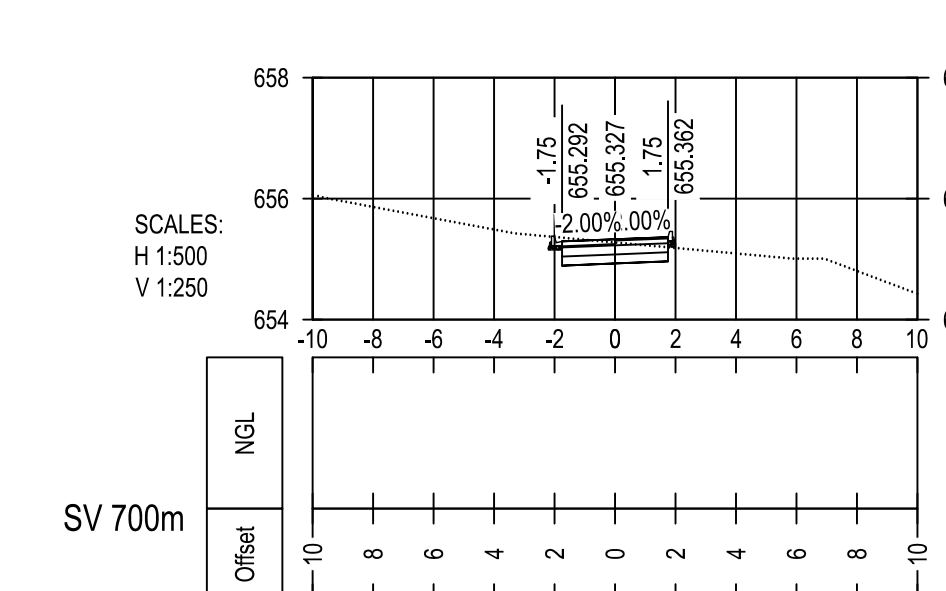
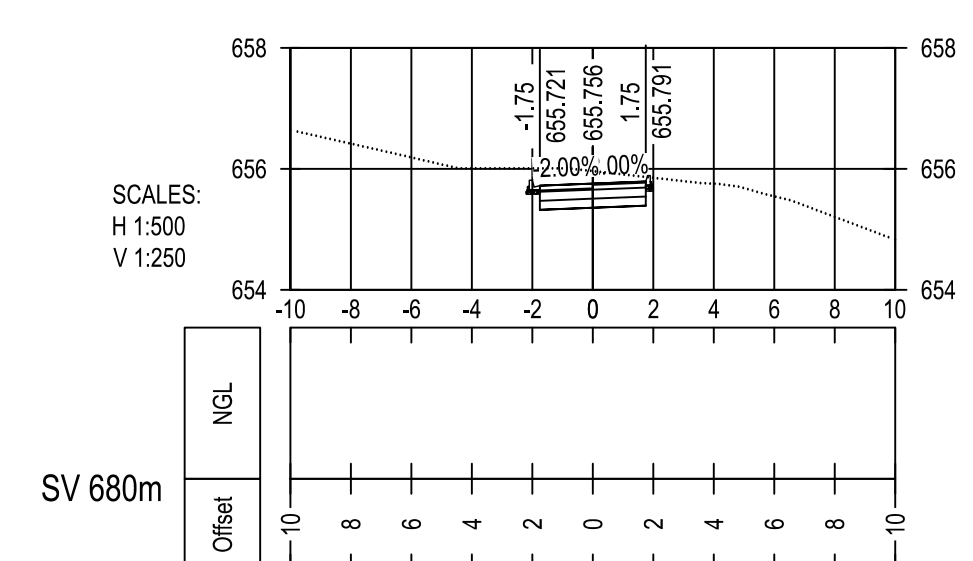
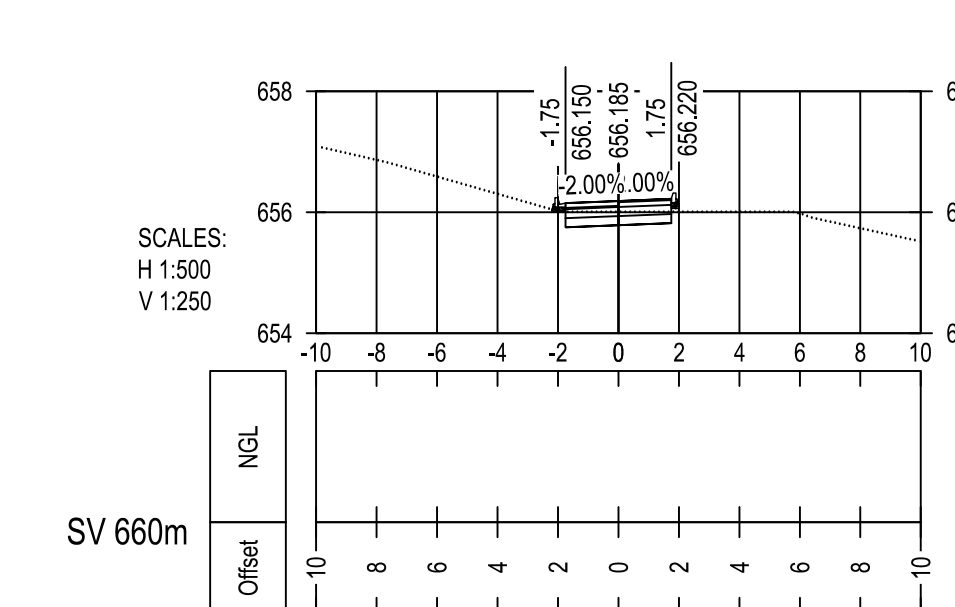
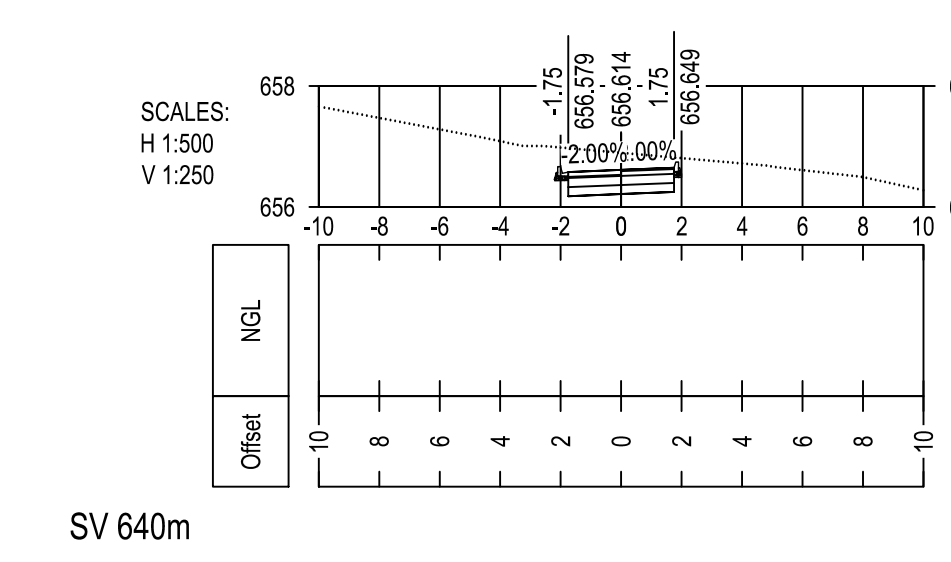
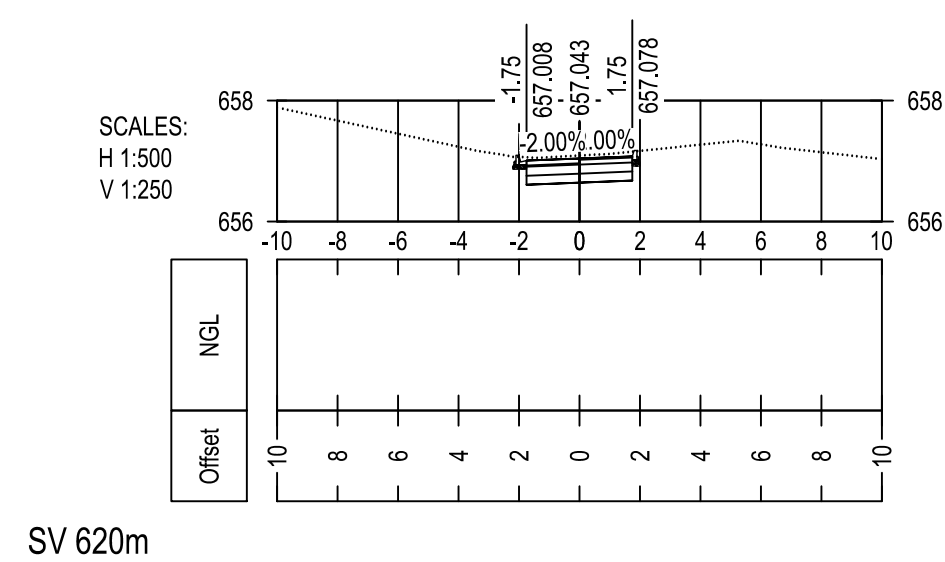
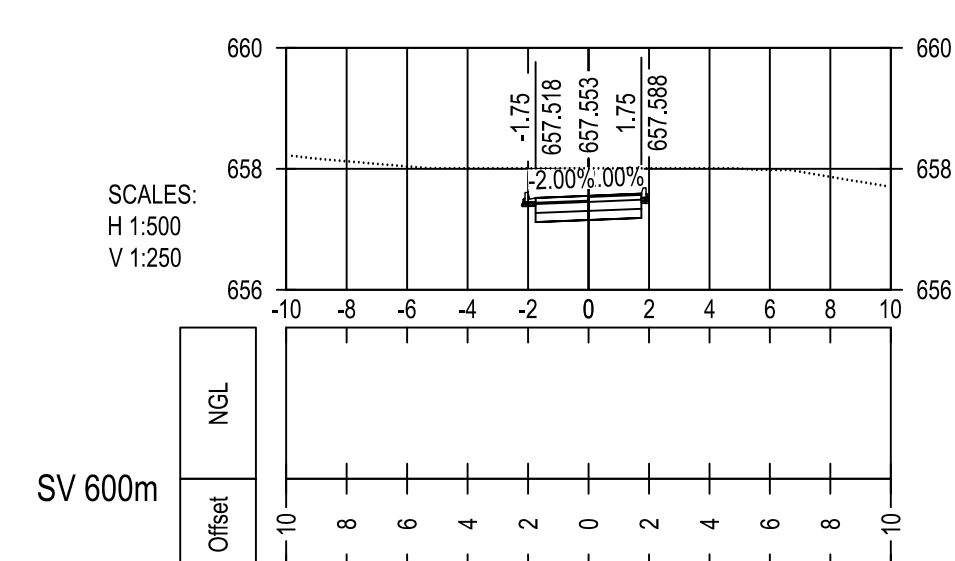
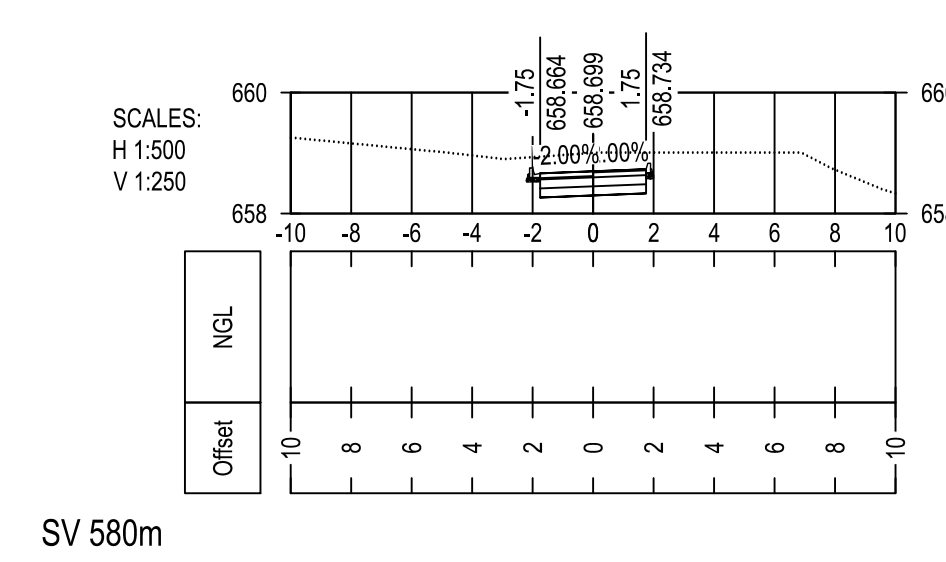
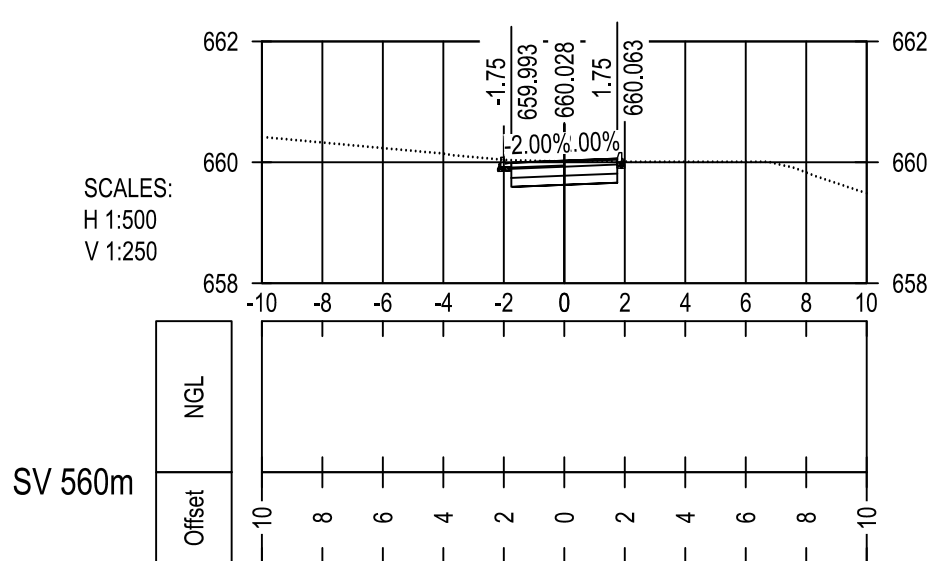
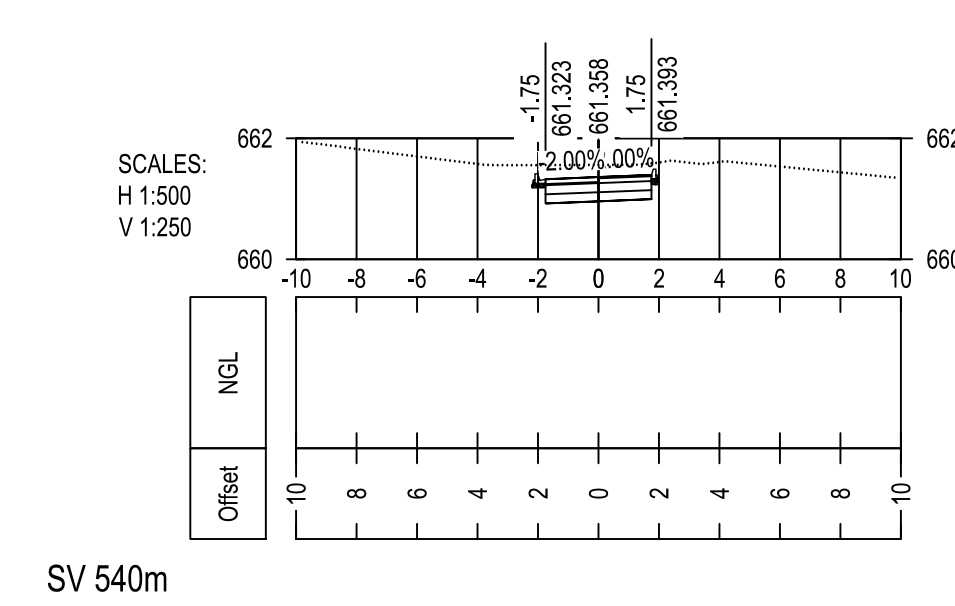
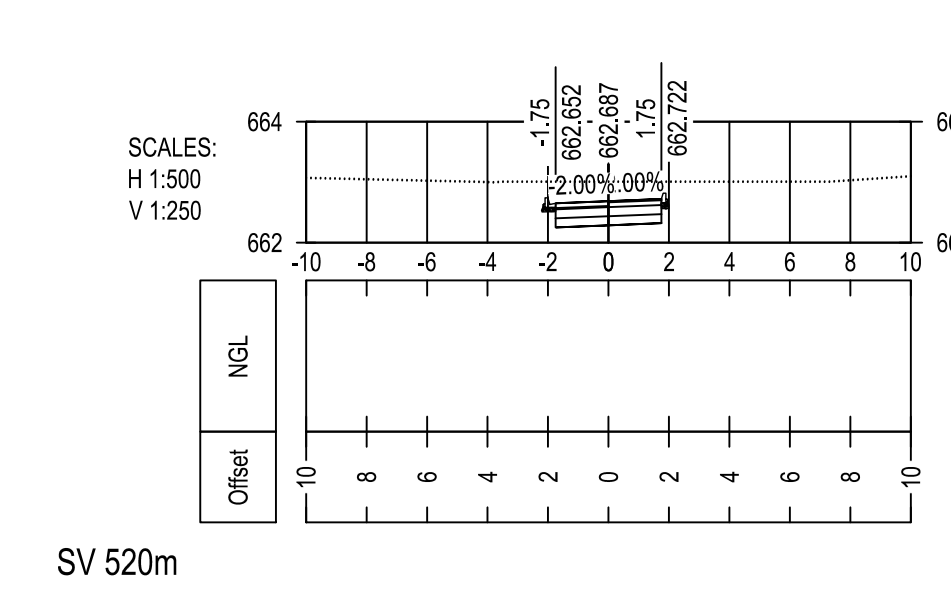
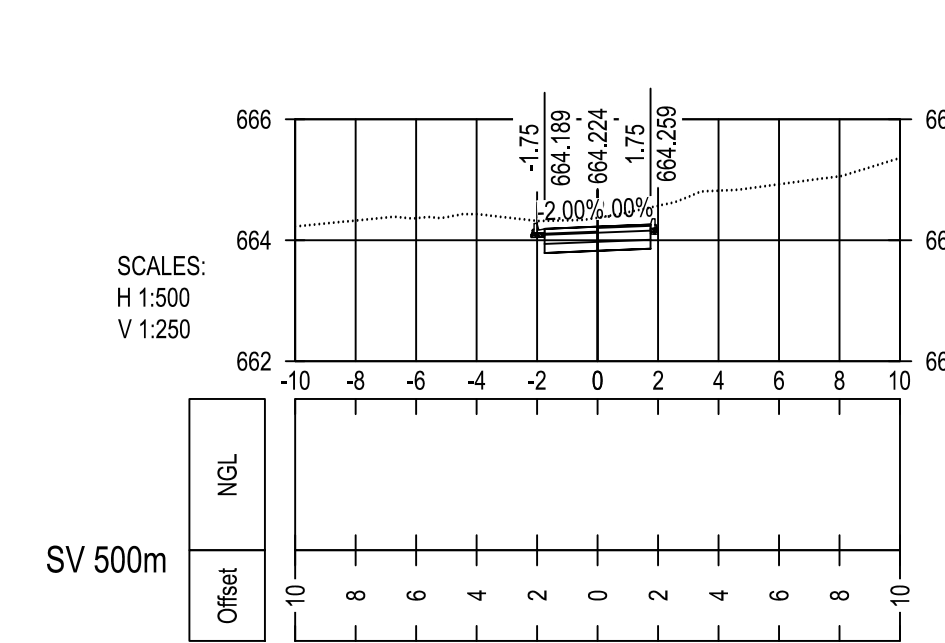
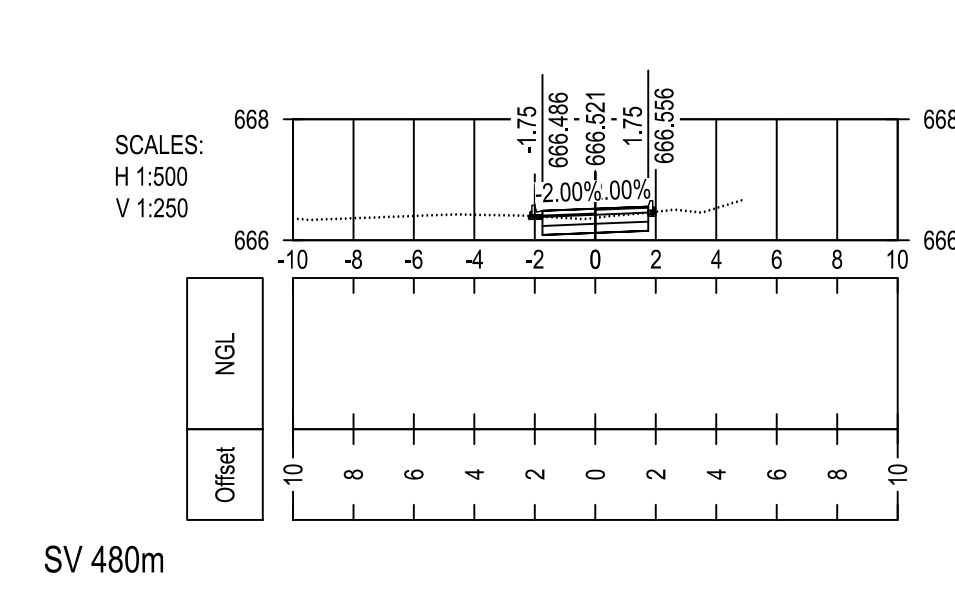
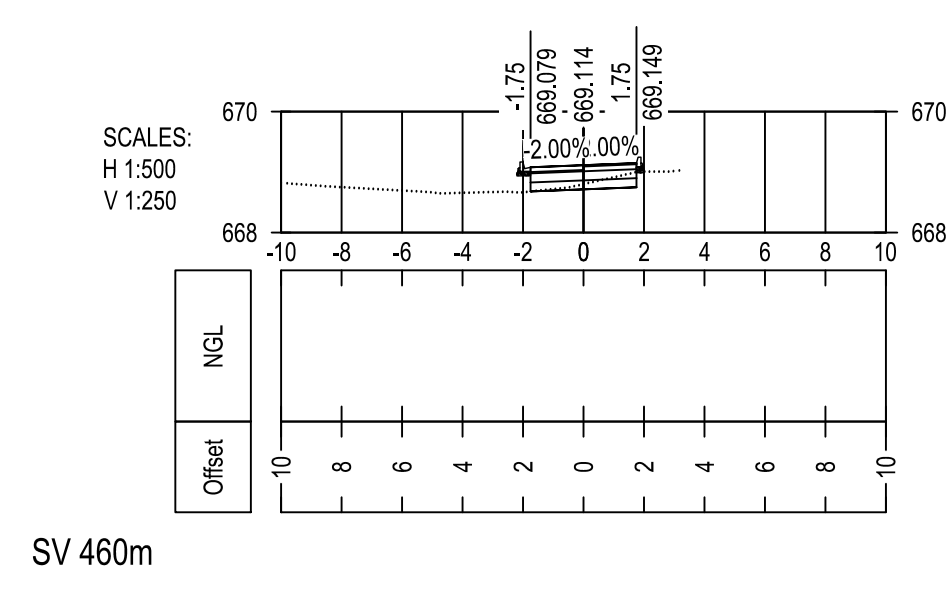
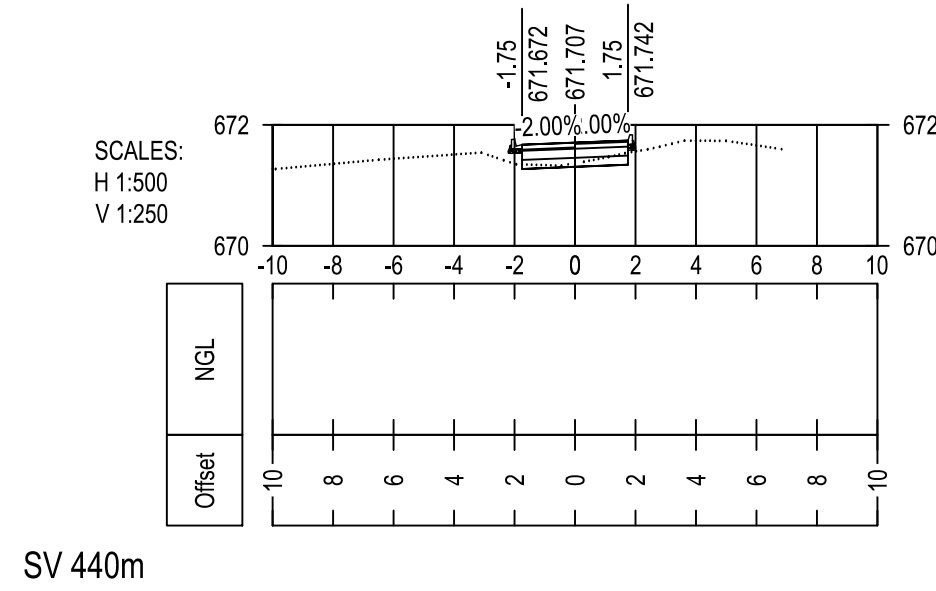


ROAD 1 CROSS SECTIONS

SCALE 1 : 250

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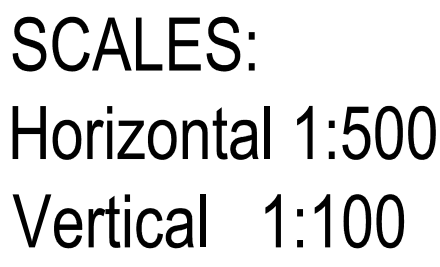
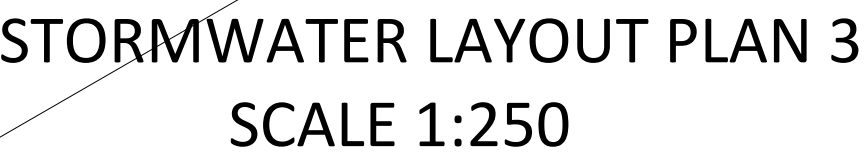
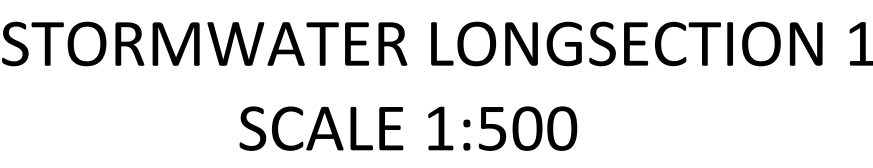
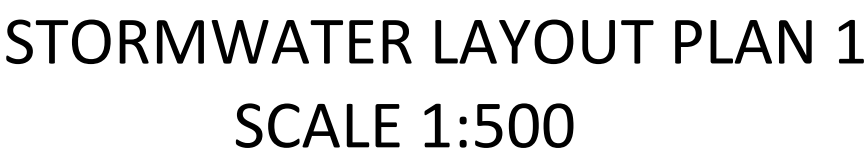
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ROAD 2 CROSS SECTIONS

SCALE 1 : 250 (440-840)

[illegible]



DATUM 660.000

GROUND LEVEL (m)	
FINAL COVER LEVEL (m)	
PIPE INVERT LEVEL(m)	
EXCAVATION LEVEL (m)	
EXCAVATION DEPTH (m)	
PIPE SLOPE	
PIPE LENGTH	BETWEEN KI & MH (m)
	CUMULATIVE LENGTH (m)

STORMWATER LONGSECTION 3
SCALE 1:250



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project managers

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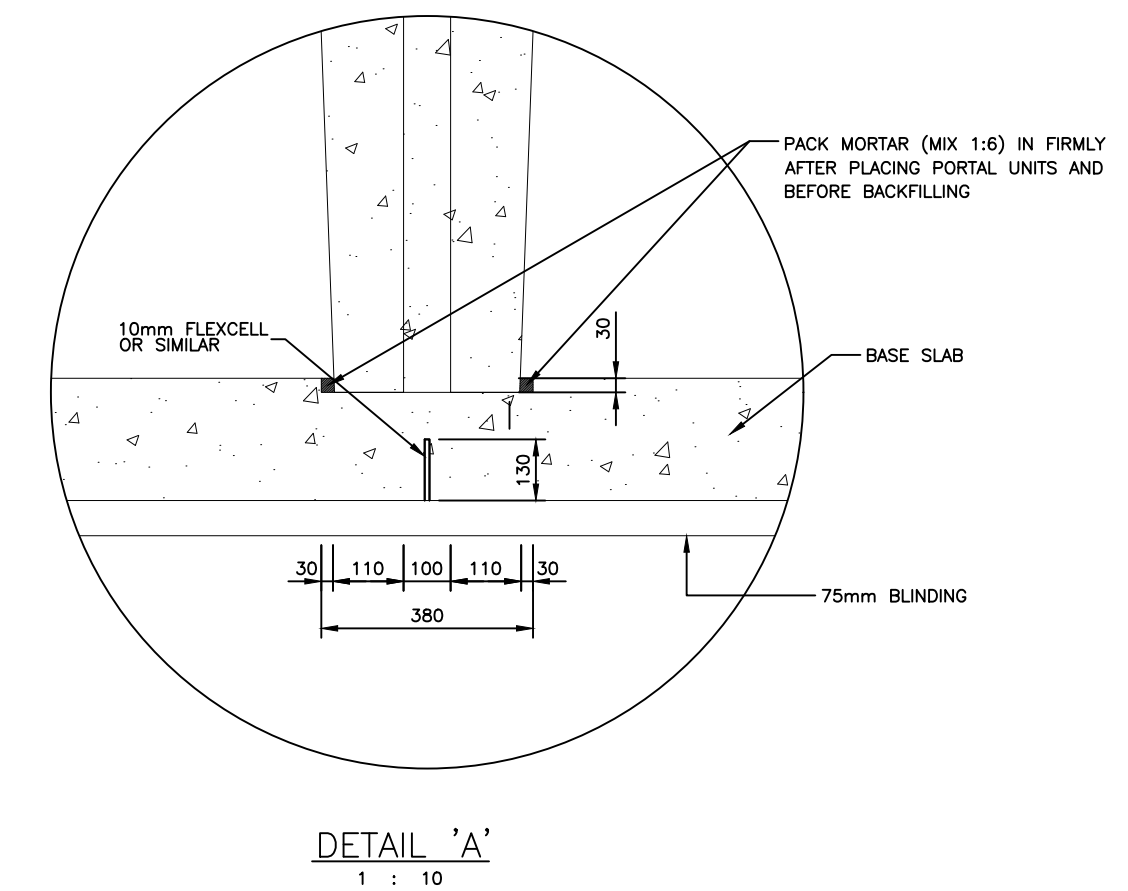
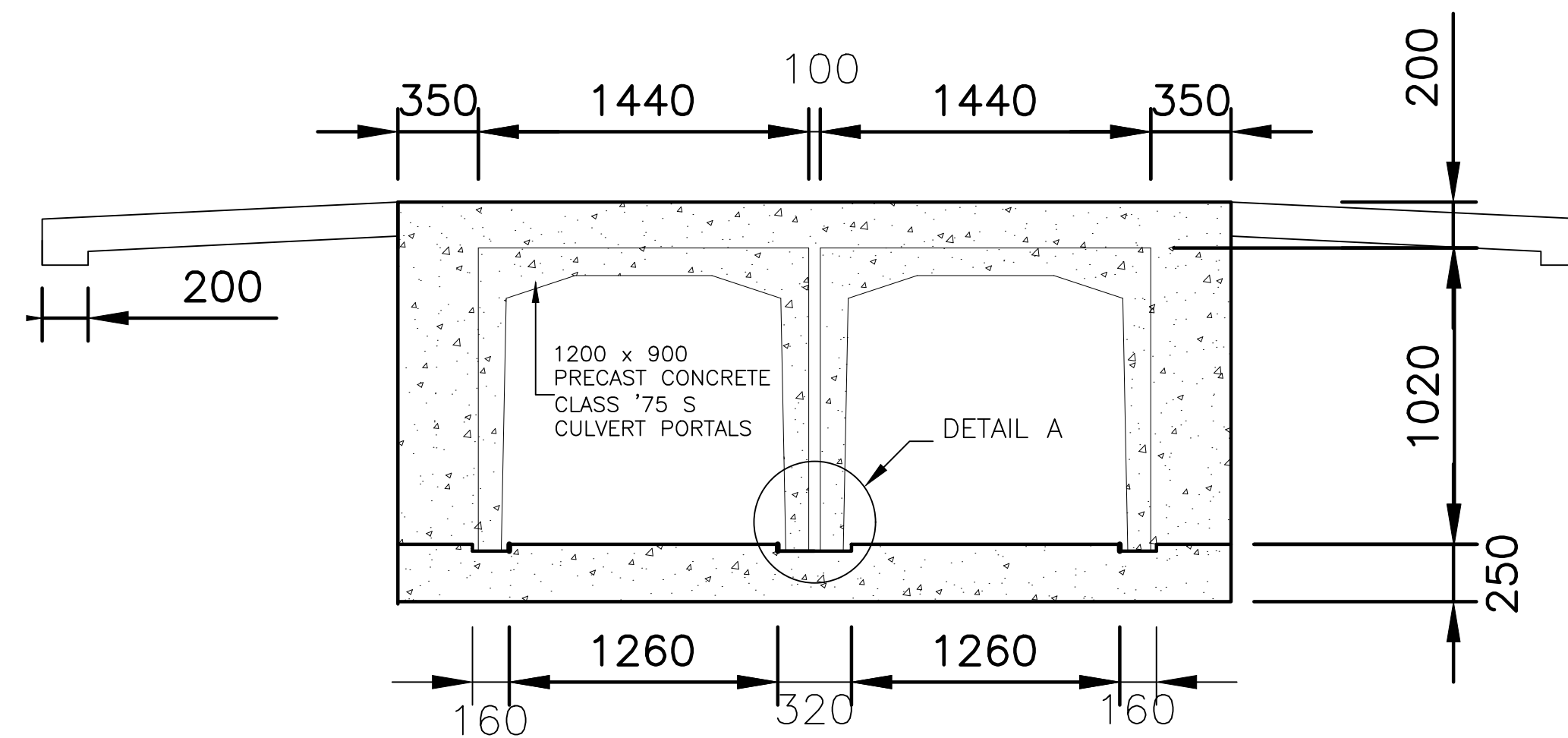
East London
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60 Govan Mbeki Street
Gqeberha
6001

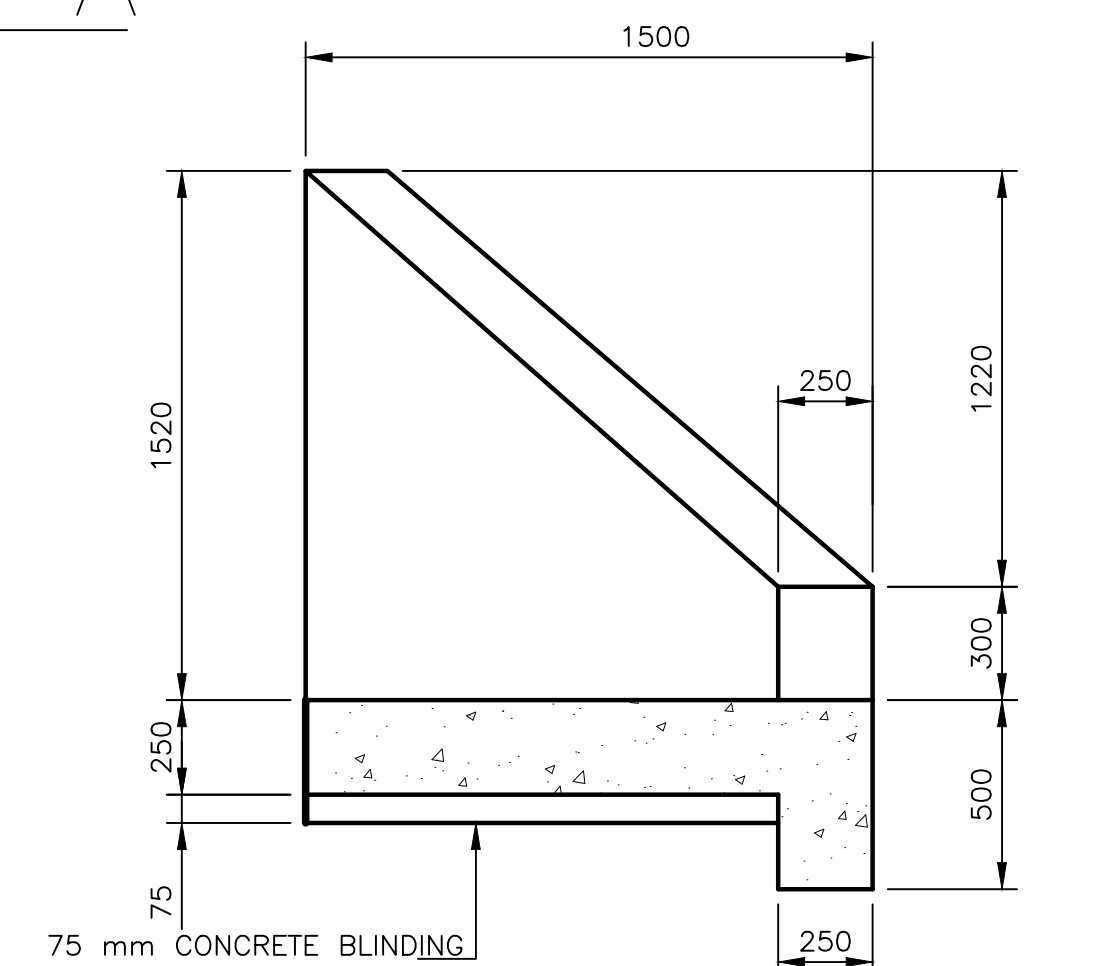
Telephone: (041) 508 7111

DRAWING No.	LPM23/SBDM/STW0001	SBDM PROJECT No.:
PROJECT No.		SCALE: AS INDICATED
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		DATE: 03/2023
TENDER DRAWINGS		
STORMWATER LAYOUT 1		SHEET 01 OF 01



Technical drawing of a cross-section of a concrete structure. The drawing shows a vertical wall with a horizontal base and a sloped top section. Dimensions are given in millimeters.

- Total width: 1500 mm
- Total height: 1220 mm
- Base thickness: 250 mm
- Sloped section vertical height: 1520 mm
- Base label: 75 mm CONCRETE BLINDING

ELEVATION ON UPSTREAM WINGWALL

(2 No. OFF)
1 : 20

(2 No. OFF)
1 : 20

Client / Departmental

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Gqeberha
6001

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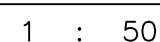
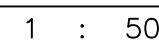
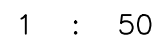
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PROJECT No.		
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		SCALE: AS INDICATED
TENDER DRAWINGS		DATE: 05/2023
PORTAL CULVERT BRIDGE		SHEET 01 OF 01

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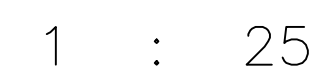
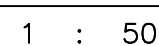
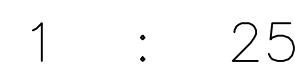
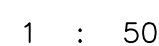
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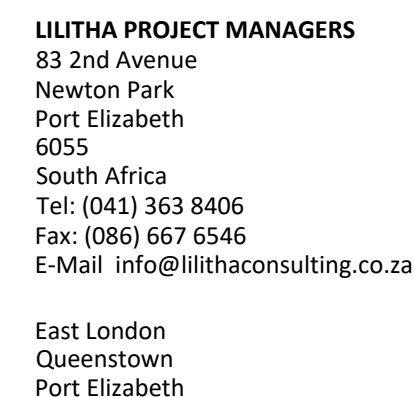




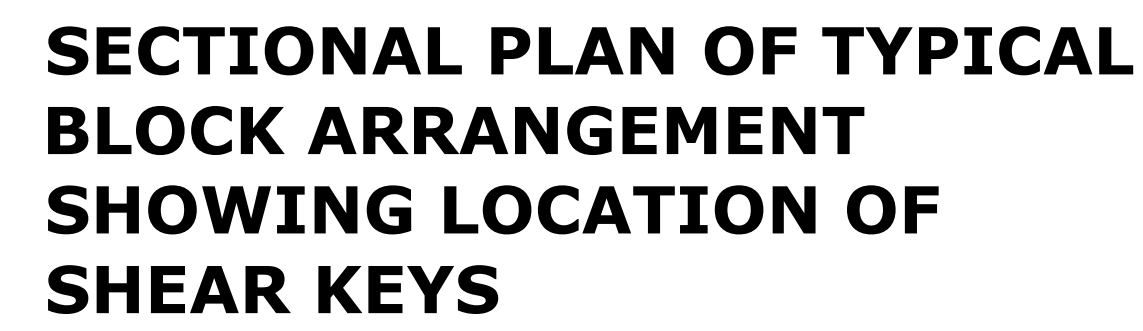
1 : 20



HOT ROLLED ROUND MILD STEEL (R) BARS –
CHARACTERISTIC STRENGTH 250 MPa

[illegible]

DRAWING No.	LPM23/SBDM/BDG0002	SBDM PROJECT No.:
PROJECT No.		SCALE: AS INDICATED
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		DATE: 05/2023
TENDER DRAWINGS		
PORTAL CULVERT BRIDGE RC		SHEET 01 OF 01



HEADWALL DIMENSIONS						
Ø	A	B	C	D	E	F
450	600	1160	2200	930	200	1000
600	750	1390	2700	1150	225	1200
750	900	1610	3400	1520	250	1500
825	1050	1825	4100	1880	275	1800
1050	1200	2050	4800	2245	300	2100
1200	1350	2270	5500	2605	325	2400
1350	1500	2500	6200	2970	350	2700

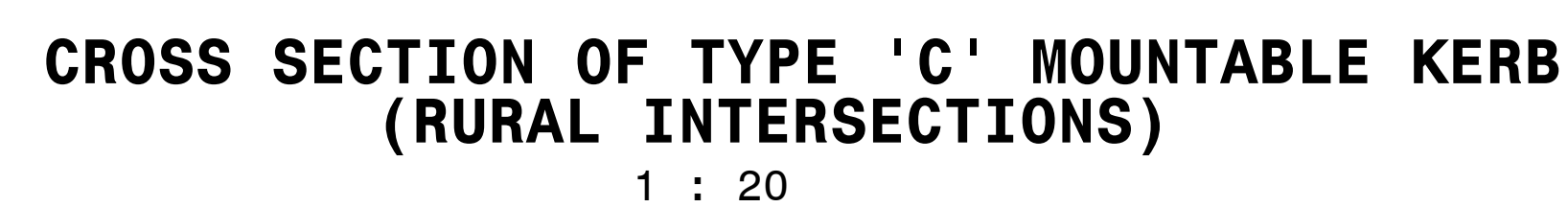
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Port Elizabeth



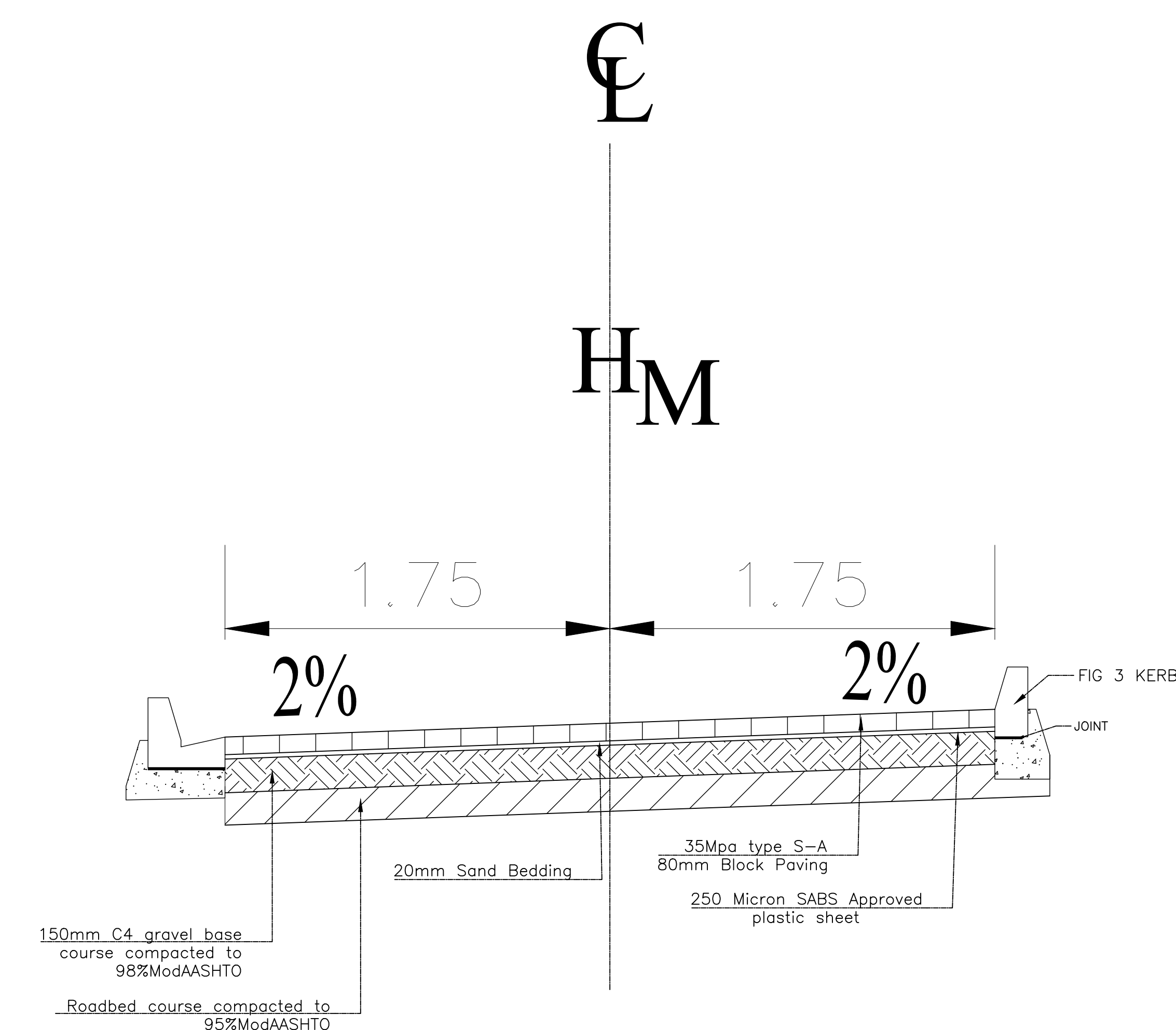
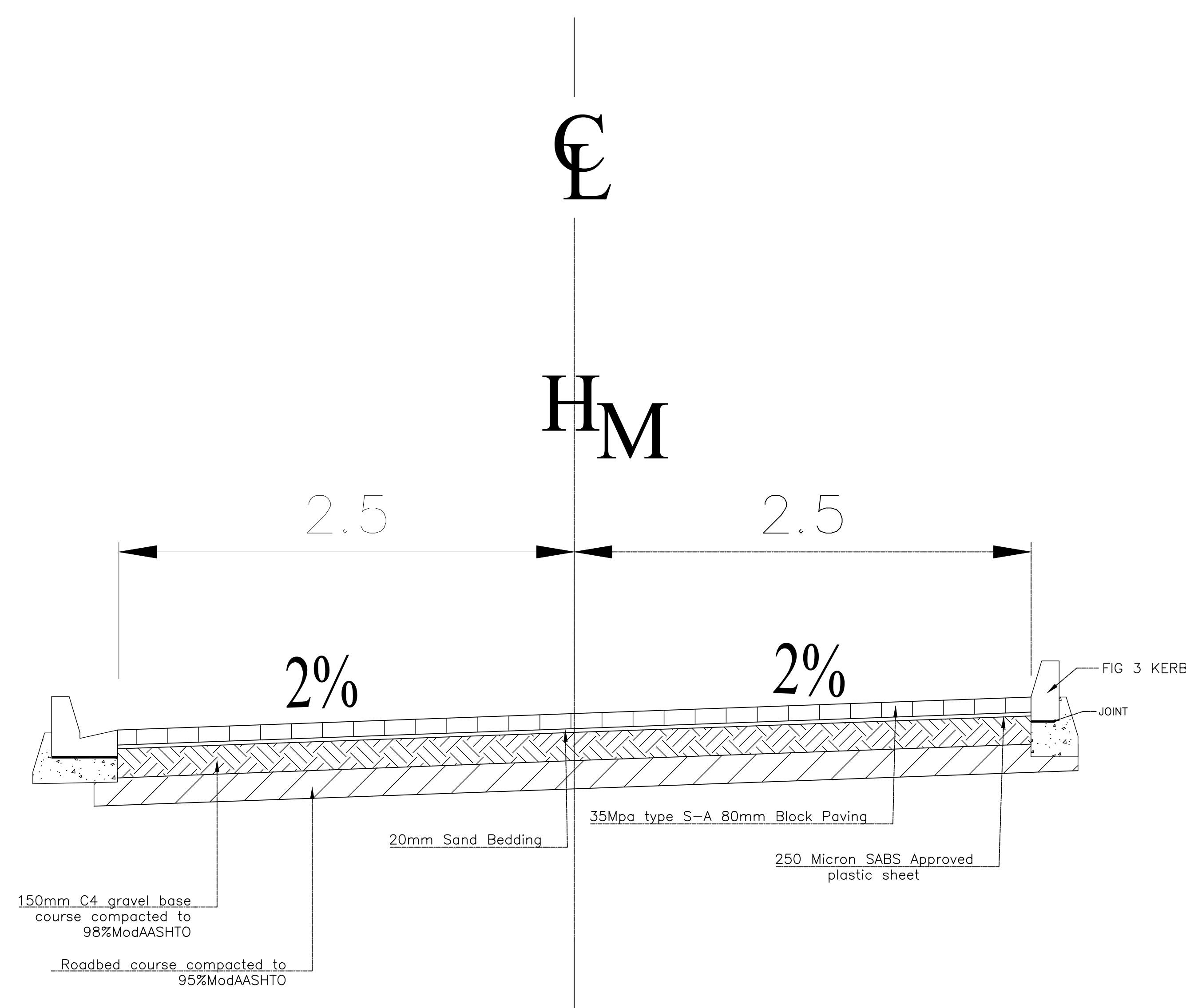
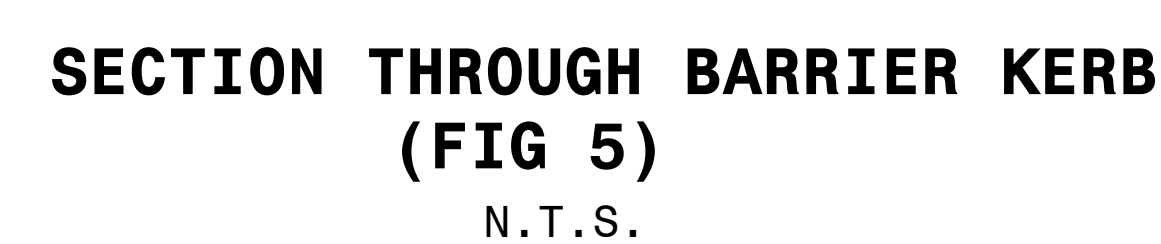
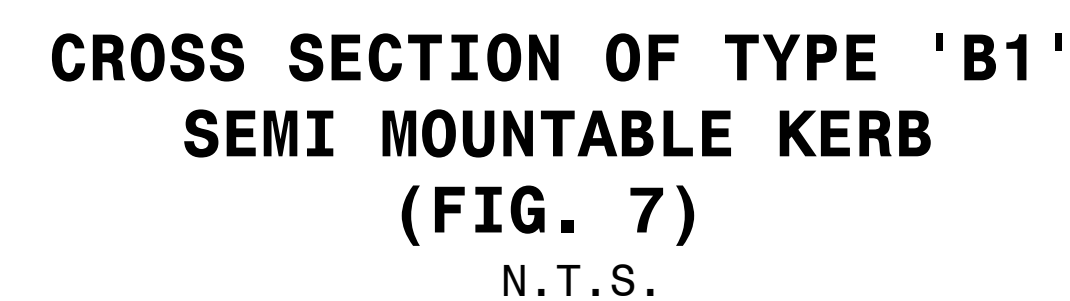
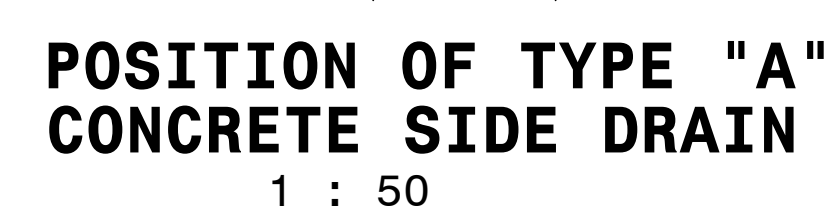
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DRAWING No.	LPM23/SBDM/STD0001	SBDM PROJECT NO.:
PROJECT No.		
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		SCALE: 1:1000
TENDER DRAWINGS		DATE: 02/2023
STANDARD DETAILS		SHEET 01 OF 01



DIMENSIONS OF TYPE 'E' CONCRETE CHANNELS

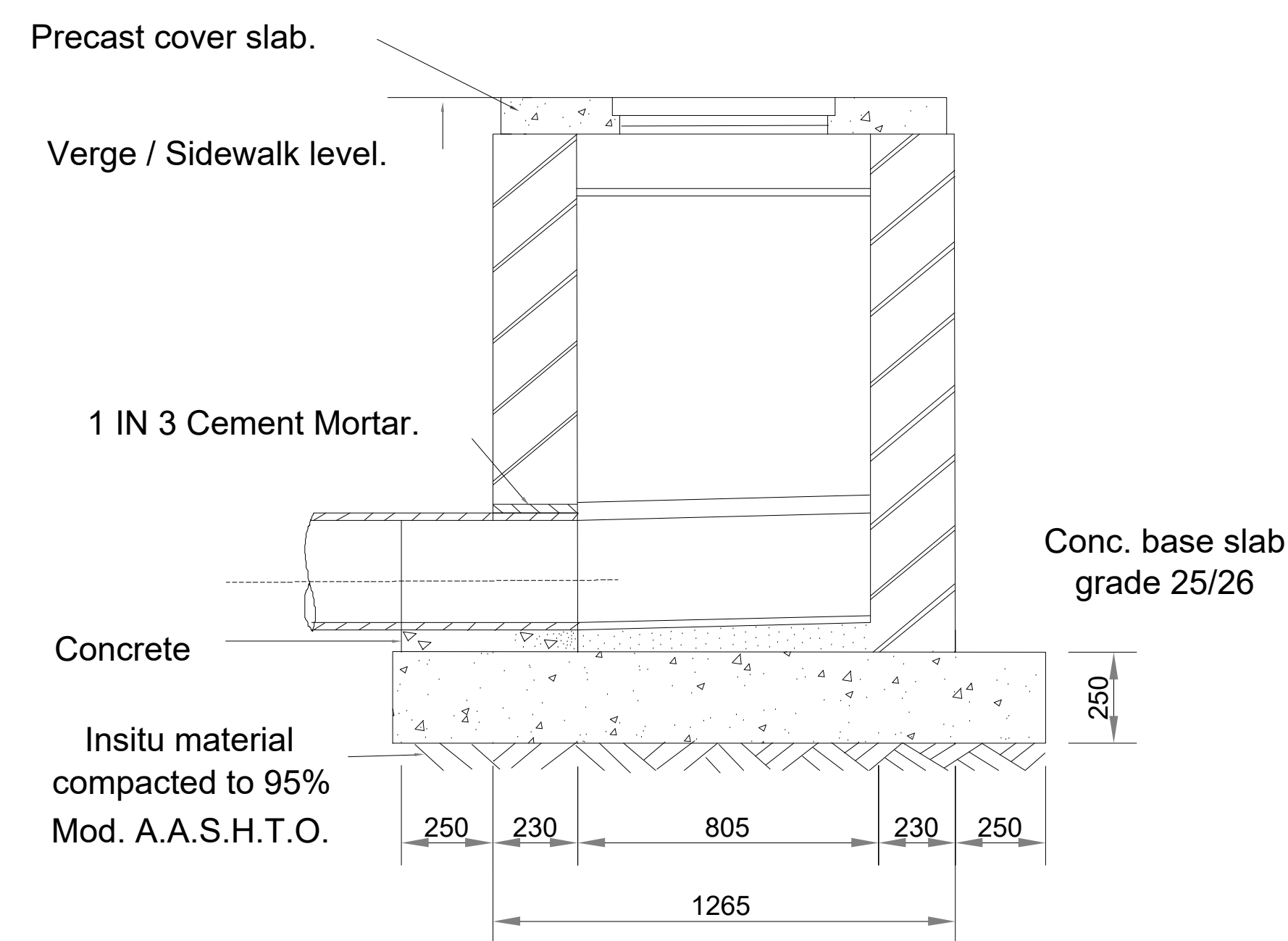
DIMENSIONS OF TYPE 'F' CONCRETE CHANNELS



Client / Departmental:

 Sarah Baartman
DISTRICT MUNICIPALITY
Province of the Eastern Cap
progress through development

DRAWING No.	LPM23/SBDM/STD0002	SBDM PROJECT NO.:
PROJECT No.		SCALE: 1:1000
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		DATE: 05/2023
TENDER DRAWINGS		
STANDARD DETAILS		SHEET 01 OF 01



GRADED CHANNEL SINGLE S.W. INLET

Diagram illustrating the Plan view of a four-bay precast inlet structure. The structure consists of four rectangular bays, each 1220 mm wide, separated by 140 mm wide channels. Each bay contains a circular inlet with a diameter of 750 mm. The structure is supported by a 'Cast in situ channel with steel float finish' base. The base has a 'Channel slope varies' on both sides, with a slope of 1:4 indicated. The total width of the structure is 5140 mm. The diagram includes labels for 'Precast Inlet Slab', 'Inlet pipe.(Position varies)', 'Outlet pipe.(Position varies)', 'Std. kerb as specified', and 'See Note 2'. Dimensions are given in millimeters (mm).

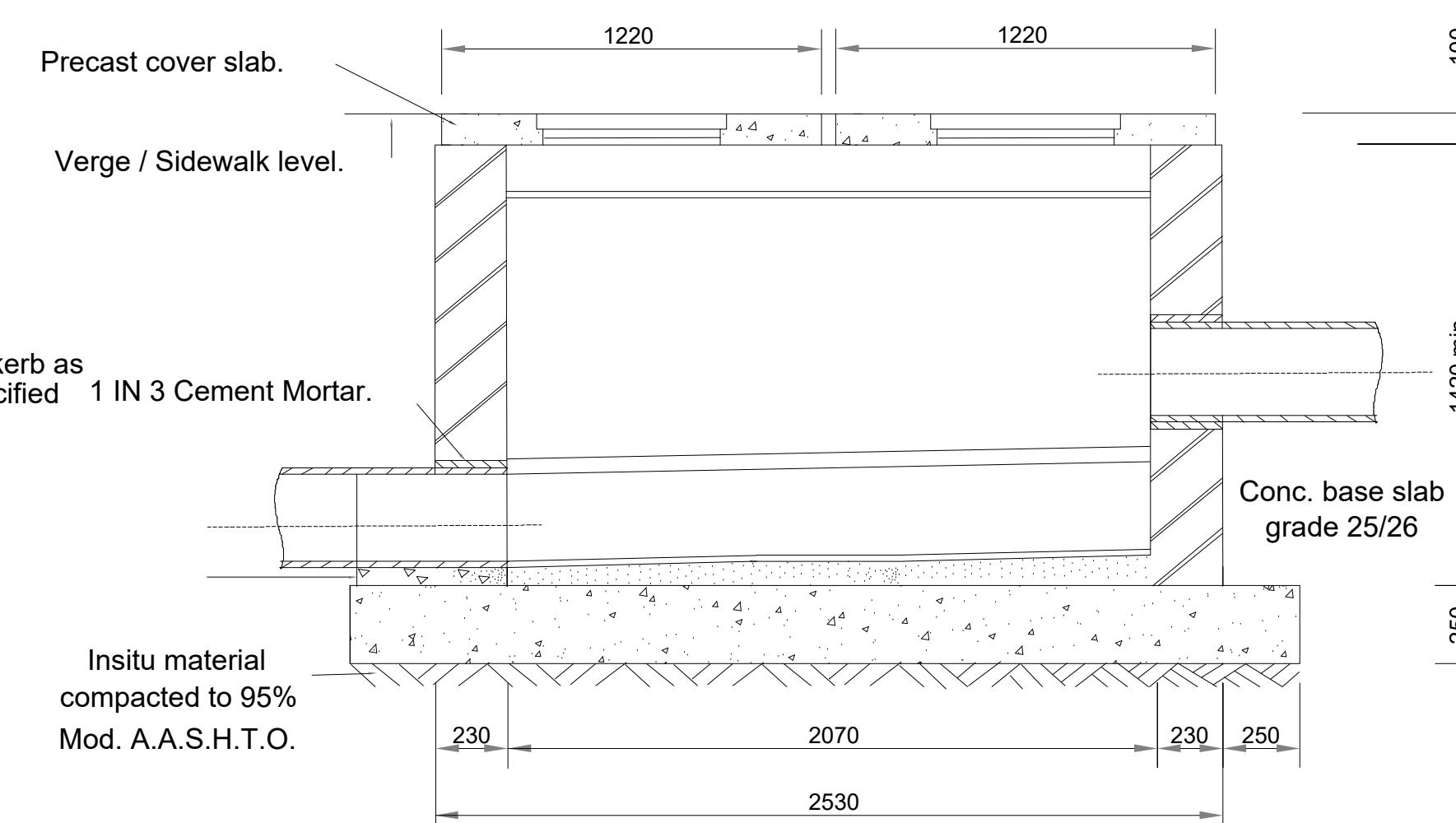
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GRADED CHANNEL 4M S.W. INLET

STORMWATER CATCHPIT COORDINATE LIST

CATCHPIT	X	Y	DEPTH (mm)
KI1	-79398.2545	-3675223.0755	1590
KI2	-79403.7172	-3675175.5670	1520
KI3	-79408.9394	-3675130.1526	1345
RING-ROAD KI1	-79727.1599	-3675013.2728	1370
RING-ROAD KI2	-79659.1139	-3675015.6074	1135
RING-ROAD KI3	-79583.4932	-3675016.9934	1290
RING-ROAD KI4	-79477.9098	-3675030.0601	1840
RING-ROAD KI5	-79788.0762	-3675967.8467	1740

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SERIES SPECIFICATIONS.
2. THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
3. EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO ANY CONSTRUCTION BEING DONE. REFER ANY DISCREPANCIES TO THE SITE ENGINEER.
5. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
6. MINIMUM PIPE COVER TO BE 600mm.
7. ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.
8. DRAWINGS TO BE USED TOGETHER WITH LONGSECTIONS.



GRADED CHANNEL 2M S.W. INLET

Verge / Sidewalk
crossfall normally 4%

20mm cement
mortar
Render 1:3

Conc. Benching
grade 20/13 type "A"
(See Note 3.)

Insitu material
compacted to 95%
Mod. A.A.S.H.T.O.

Kerb line
Set line
P.C. Slab

Channel cast in
with steel flow
finish.

Conc. base slab
grade 25/26

Dimensions:
Top width: 1220, 75
Right side height: 100, 120
Right side slope: 1:4
Right side horizontal offset: 375, 200
Internal vertical dimension: 190, 10
Bottom left horizontal offsets: 250, 230, 805, 230, 250
Total bottom width: 1265
Right side vertical offset from top: 250
Slopes: 1:10, R=20, 1:5

1000

Precast kerb and insitu channel

S.W. Inlet

Edge of channel

200

50

Std. kerbing where specified

SECTION 5 - 5

S.W. INLET - RIGHT TYPE 'S2'
(MIRRORED FOR LEFT)



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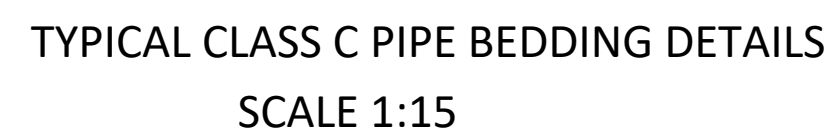
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SARAH BAARTMAN DISTRICT MUNICIPALITY
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DRAWING No.	LPM23/SBDM/STD0004	SBDM PROJECT No.:
PROJECT No.		SCALE:
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		AS SHOWN
DETAILED DESIGNS		DATE: 03/2023
STANDARD DETAILS		SHEET 01 OF 01



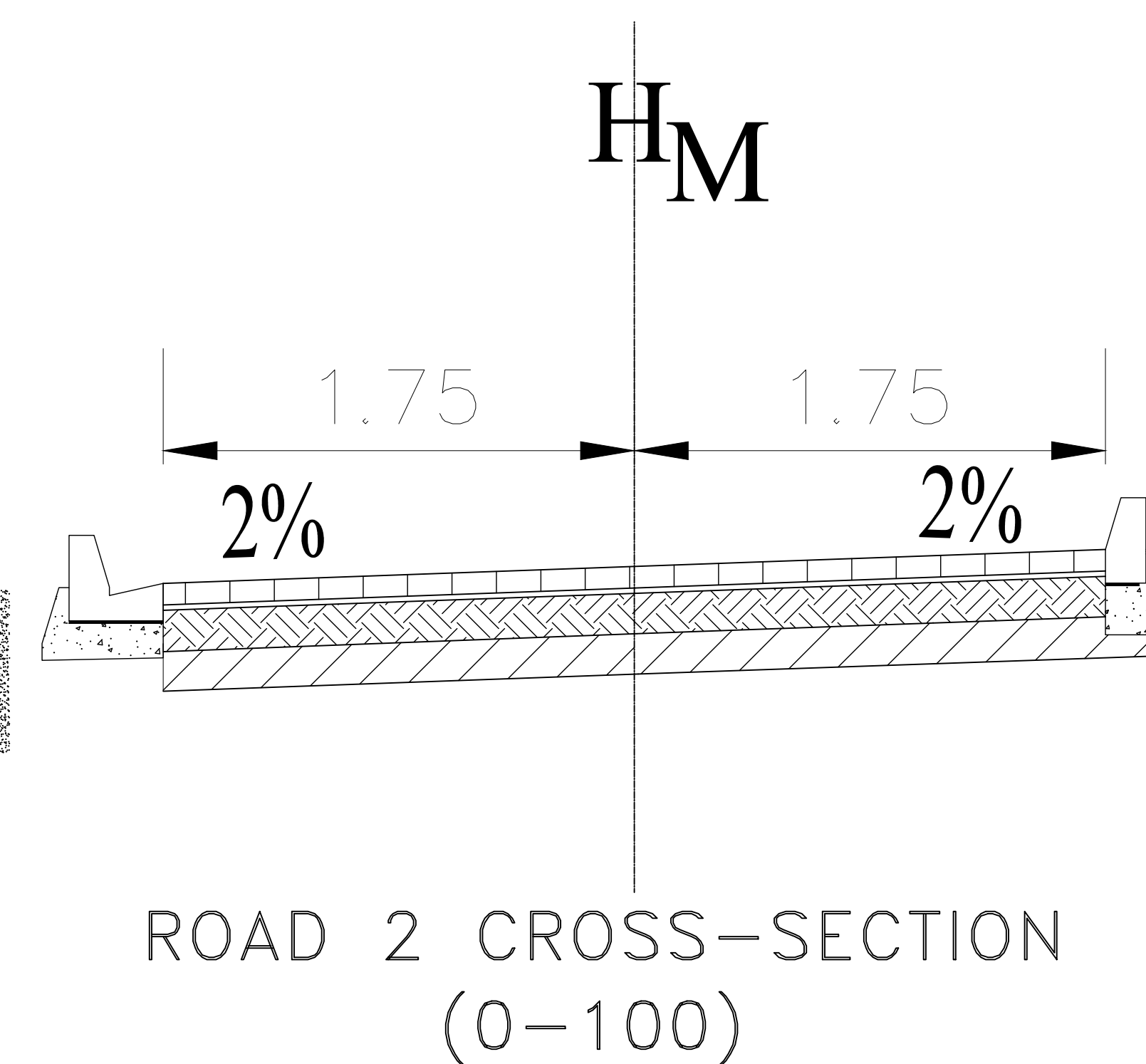
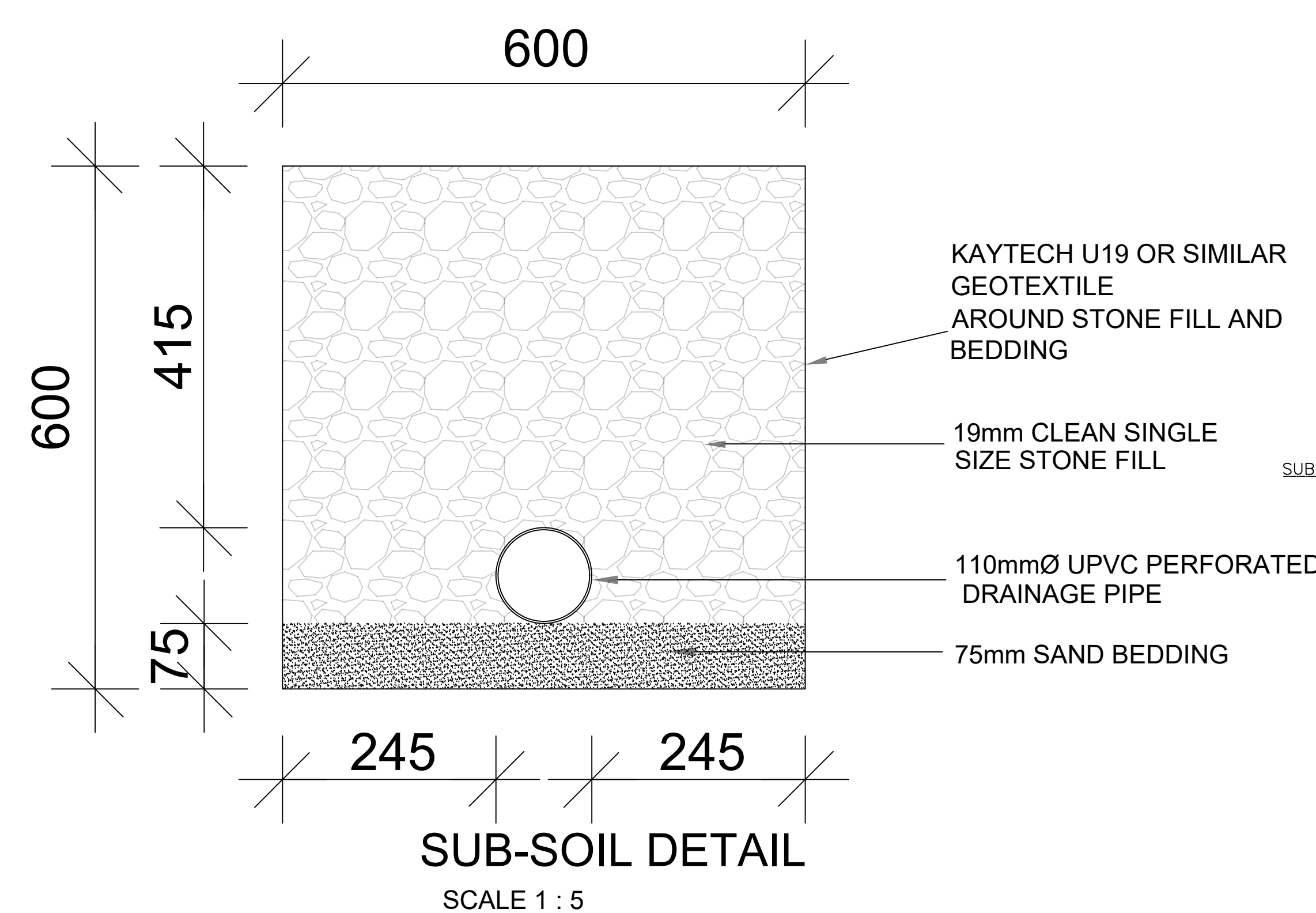
TYPICAL STORMWATER MANHOLE DETAILS
SCALE 1:10

TABLE 1[illegible]

CATCHPIT	X	Y	DEPTH (mm)
MH1	-79400.5539	-3675203.0815	1520
MH2	-79407.4527	-3675143.0815	1655
RING-ROAD MH1	-79707.1708	-3675013.9512	1500
RING-ROAD MH2	-79628.0454	-3675017.1458	1490
RING-ROAD MH3	-79459.3832	-3675016.9350	1680
RING-ROAD MH4	-79527.1855	-3675020.4701	1755
RING-ROAD MH5	-79302.9065	-3675025.5006	2115

NOTES:

1. CONCRETE COVERS ARE SET TO FINAL GROUND LEVELS. GRATES ARE BELOW GROUND LEVEL.
2. PIPES PROTRUDE A MAXIMUM OF 300mm INTO STRUCTURE, BUT "DEAD SPACES" ARE BLANKED OFF.
3. NOMINAL 230mm BRICKWORK.
4. STRUCTURE BRACED WHILE COMPACTING ADJACENT ROAD LAYERS.
5. MANHOLE DEPTHS ARE AS SHOWN IN TABLE 2.
6. PIPE DIAMETERS RANGE FROM 225mm – 600mm.
7. DRAWINGS TO BE USED WITH LONG SECTIONS.

[illegible]

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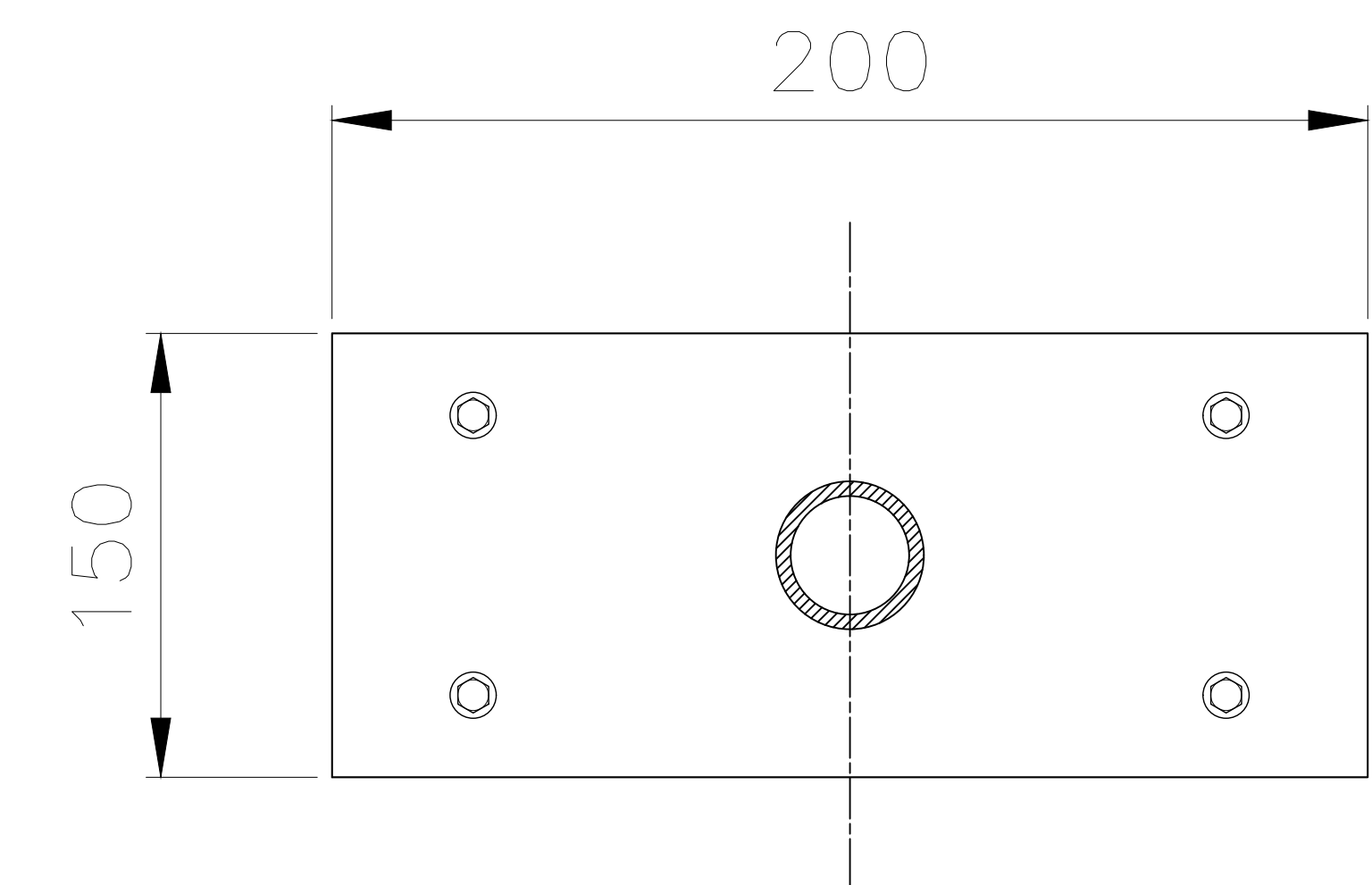
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DRAWING No.	LPM23/SBDM/STD0003	SBDM PROJECT No.:
PROJECT No.		SCALE:
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		AS SHOWN
TENDER DRAWINGS		DATE: 03/2023
STANDARD DETAILS		SHEET 01 OF 01



88mm round bar

10mm breakaway plate with pre drilled holes

10mm expansion joint

[illegible]

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DRAWING No.	LPM23/SBDM/STD0005	SBDM PROJECT No.:
PROJECT No.		
UPGRADING OF VAN BEHRENS STREET (RING ROAD)		SCALE: 1:1000
TENDER DRAWINGS		DATE: 05/2023
STANDARD DETAILS		SHEET 01 OF 01