



**SENQU LOCAL MUNICIPALITY
PROJECT MANAGEMENT OFFICE**

PROJECT NO.

P1027 - LADY GREY
.....

FOR

**SENQU MUNICIPALITY UPGRADING, REHABILITATION &
RECONSTRUCTION OF ROADS & STORMWATER**

VOLUME 1

TENDER DRAWINGS

MARCH 2024

DRAWINGS COMPILED FOR:

THE MUNICIPAL MANAGER

SENQU LOCAL MUNICIPALITY
19 Murray Street
Lady Grey
9755

Tel: (051) 603 1449
Email: vanzylt@senqu.gov.za



DRAWINGS COMPILED BY:

THEWO & SMMMS - JV



Sigodi Marah Martin
Management Support
Development & Engineering Consultants

58 Brebner Road
Westdene
Bloemfontein 9301

Tel: +27 (051) 4301321

Email:
PMO@thewo.co.za

DRAWING LIST

<u>NO.</u>	<u>DESCRIPTION</u>	<u>DRAWING NO.</u>
<u>GENERAL PLANS</u>		
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CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:



58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:

L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:

T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

DRAWING LIST

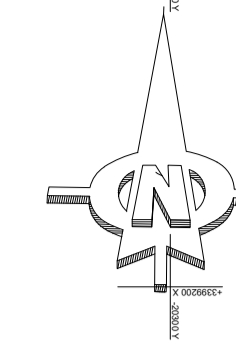
PROJECT STATUS:

TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

DWG NO

P1027-BE-CIV-RD-DL01



LEGEND :	
	PROPOSED PAVED ROADS
	NEW STORMWATER PIPE
	NEW STORMWATER MANHOLE
	PROPOSED OPEN-DRAIN
	NEW STORMWATER OUTLET / INLET
	FIGURE 8C KERB
	CONCRETE EDGE BEAM



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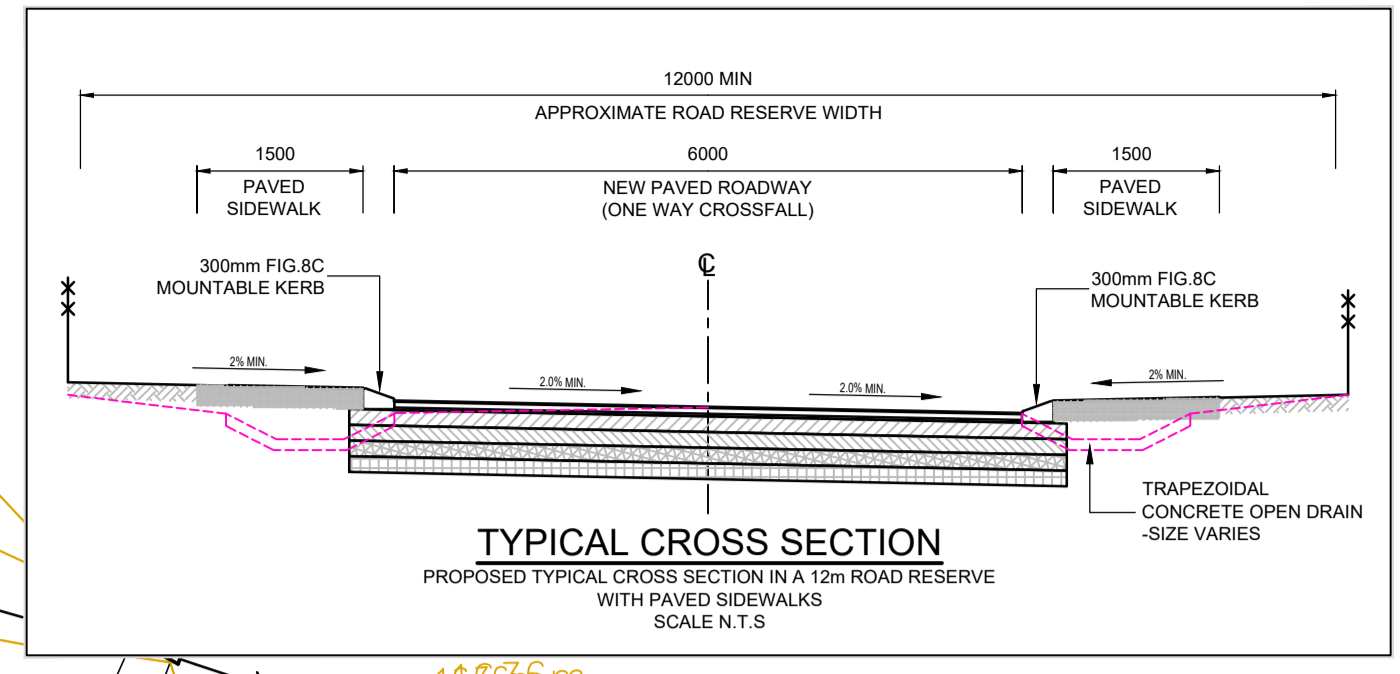
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REV	DATE	DESCRIPTION	BY	
0	2024-03-25	ISSUED FOR TENDER	L.M.	

PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
 TITLE
GENERAL LAYOUT PLAN

PROJECT STATUS: **TENDER**

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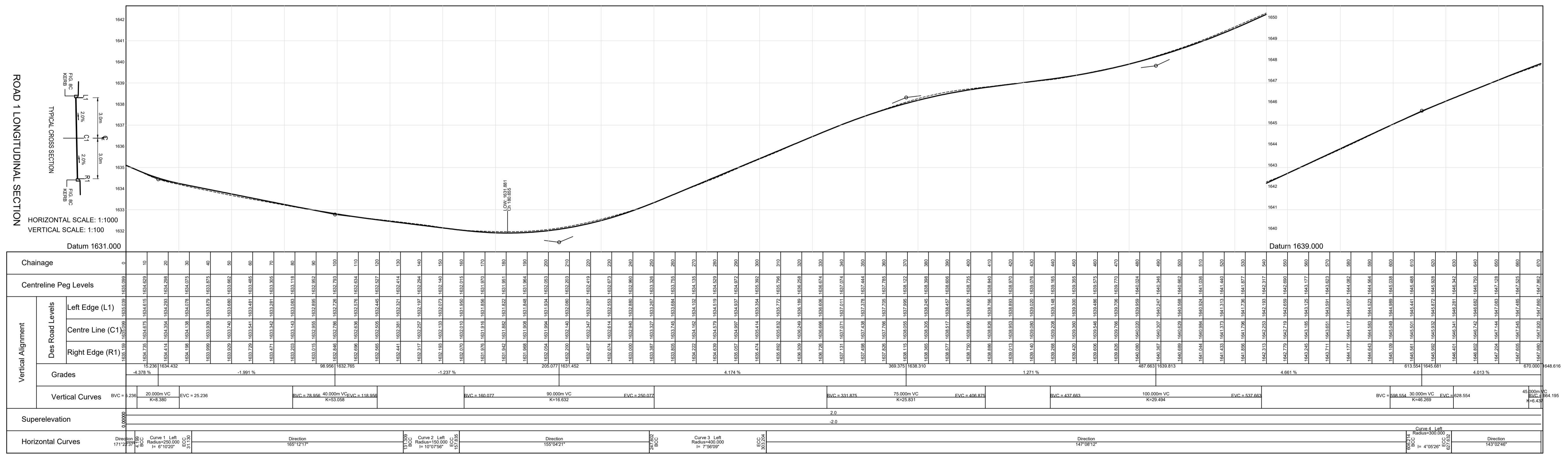
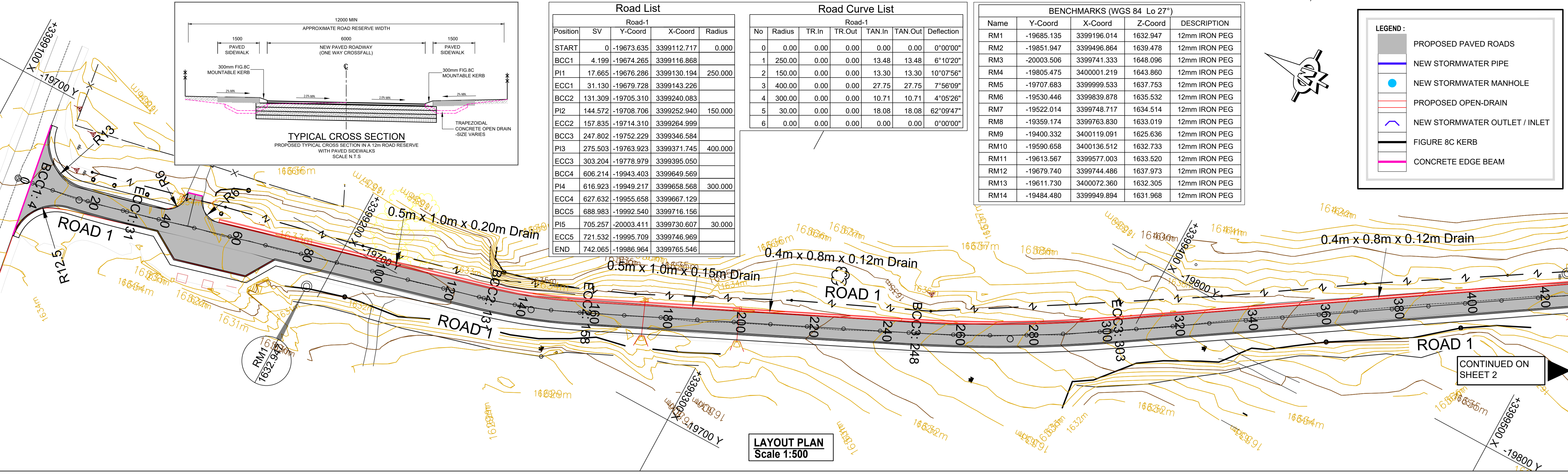
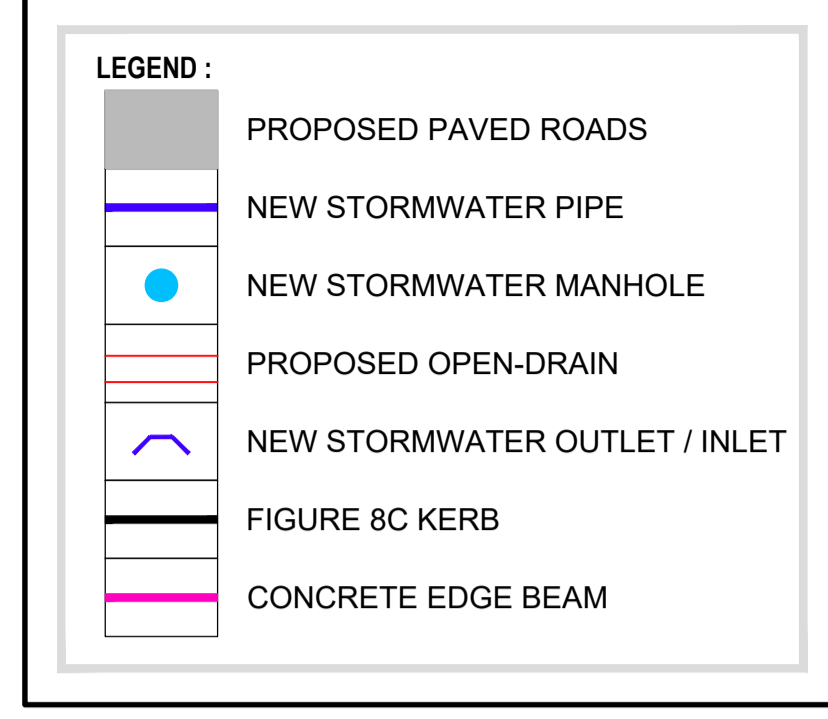
DWG NO
P1027-BE-CIV-RD-GL01



Road List				
Position	SV	Y-Coord	X-Coord	Radius
START	0	-19673.635	3399112.717	0.000
BCC1	4.199	-19674.265	3399116.868	
PI1	17.665	-19676.286	3399130.194	250.000
ECC1	31.130	-19679.728	3399143.226	
BCC2	131.309	-19705.310	3399240.083	
PI2	144.572	-19708.706	3399252.940	150.000
ECC2	157.835	-19714.310	3399264.999	
BCC3	247.802	-19752.229	3399346.584	
PI3	275.503	-19763.923	3399371.745	400.000
ECC3	303.204	-19778.979	3399395.050	
BCC4	606.214	-19943.403	3399649.569	
PI4	616.923	-19949.217	3399658.568	300.000
ECC4	627.632	-19955.658	3399667.129	
BCC5	688.983	-19992.540	3399716.156	
PI5	705.257	-20003.411	3399730.607	30.000
ECC5	721.532	-19995.709	3399746.969	
END	742.065	-19986.964	3399765.546	

Road Curve List						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	250.00	0.00	0.00	13.48	13.48	6°10'20"
2	150.00	0.00	0.00	13.30	13.30	10°07'56"
3	400.00	0.00	0.00	27.75	27.75	7°56'09"
4	300.00	0.00	0.00	10.71	10.71	4°05'28"
5	30.00	0.00	0.00	18.08	18.08	62°09'47"
6	0.00	0.00	0.00	0.00	0.00	0°00'00"

BENCHMARKS (WGS 84 Lo 27°)				
Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG



Longsection for 0 to 670

CLIENT:
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9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:
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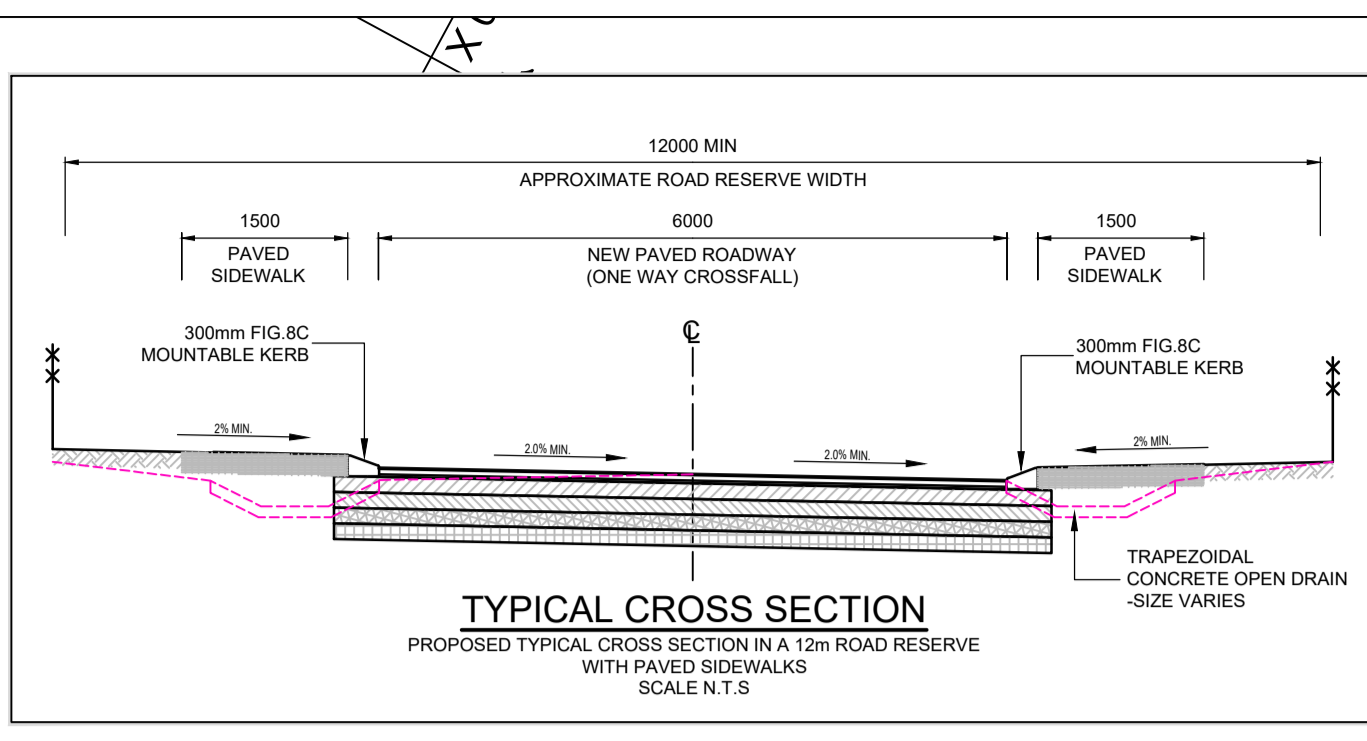
PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

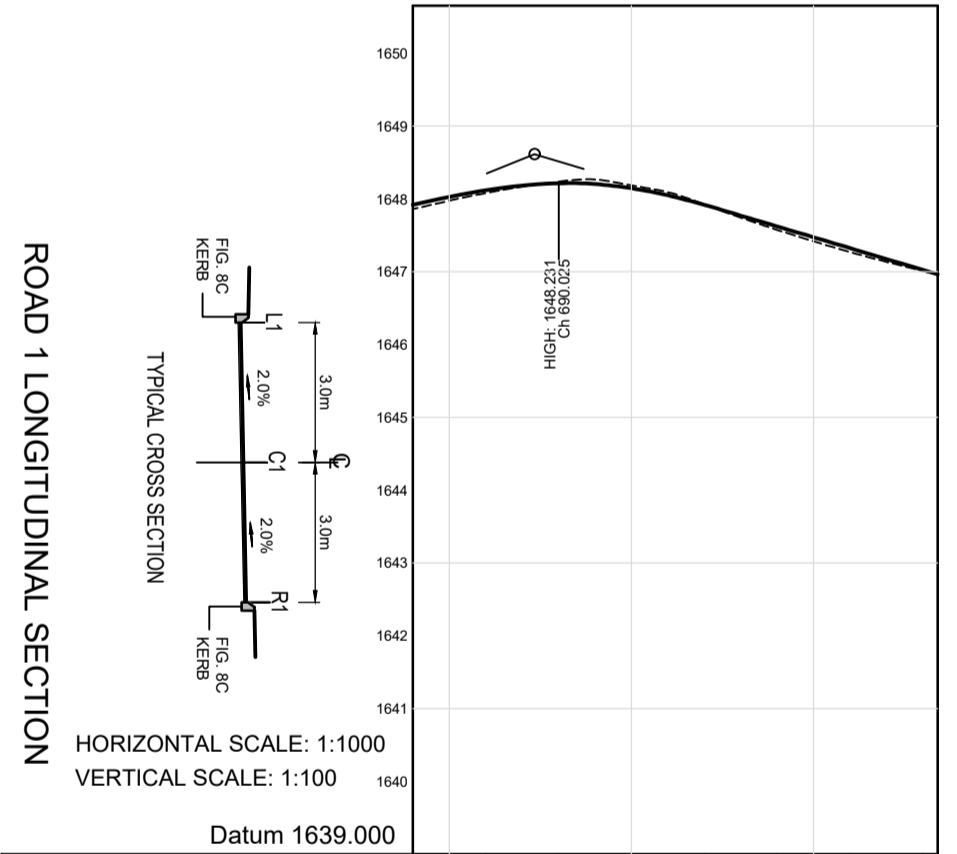
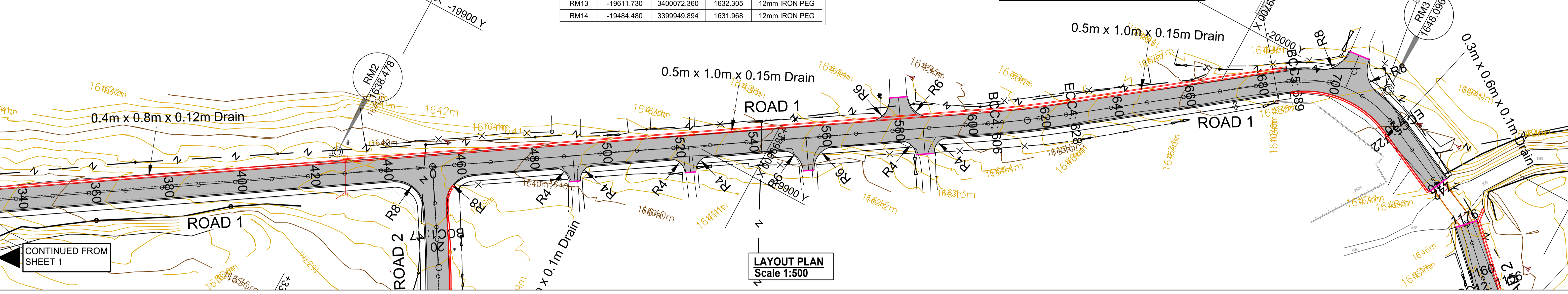
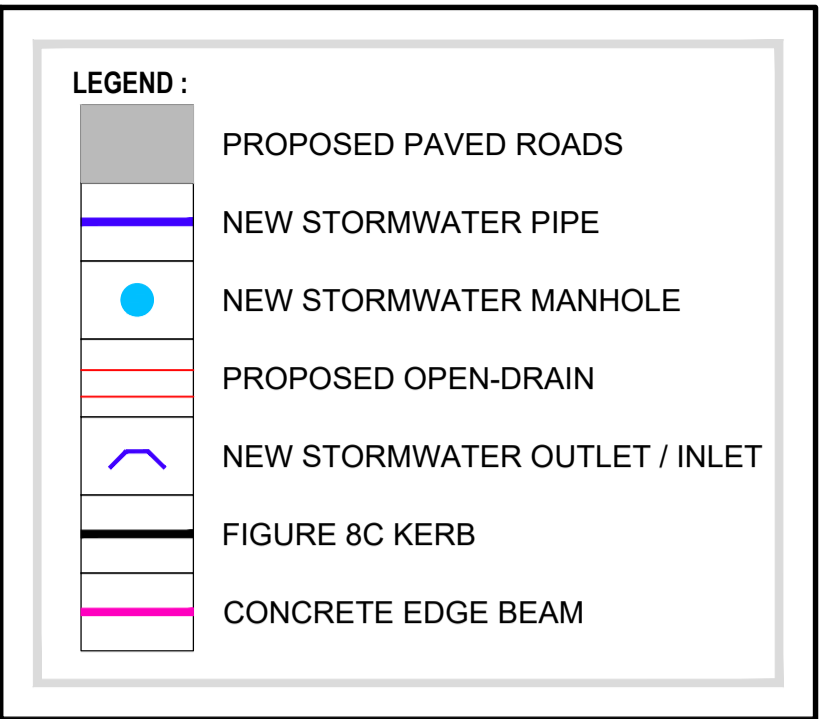
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PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
ROAD 1 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER
DATE: 2024-03-25
SCALE: AS SHOWN
SHEET: 1 OF 2
REV: 0
A1
DWG NO: P1027-BE-CIV-RD-LS01



BENCHMARKS (WGS 84 Lo 27°)				
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Chainage	Centreline Peg Levels	Vertical Alignment	Grades	Vertical Curves	Superelevation	Horizontal Curves
670	1647.850	Left Edge (L1)	4.013 %	45.000m VC EVC = 708.184	2.0	Curve 5 Right Radius=30.000
680	1648.101	Centre Line (C1)			2.0	
690	1648.243	Right Edge (R1)				
700	1648.175					
710	1647.925					
720	1647.701					
730	1647.501					
740	1647.325					

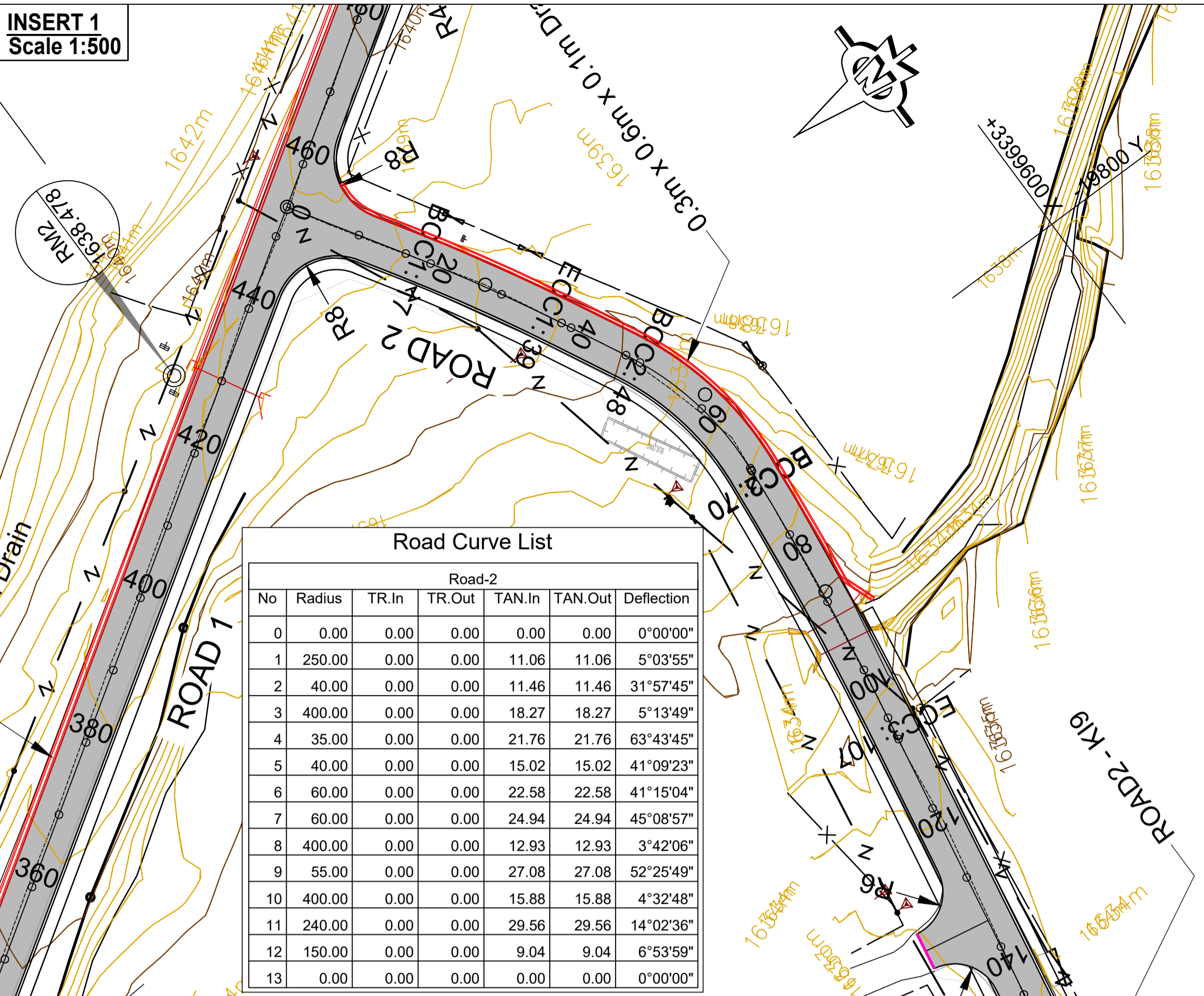
Road List				
Position	SV	Y-Coord	X-Coord	Radius
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BCC1	4.199	-19674.265	3399116.868	
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5	30.00	0.00	0.00	18.08	18.08	62°09'47"
6	0.00	0.00	0.00	0.00	0.00	0°00'00"

Longsection for 670 to 742

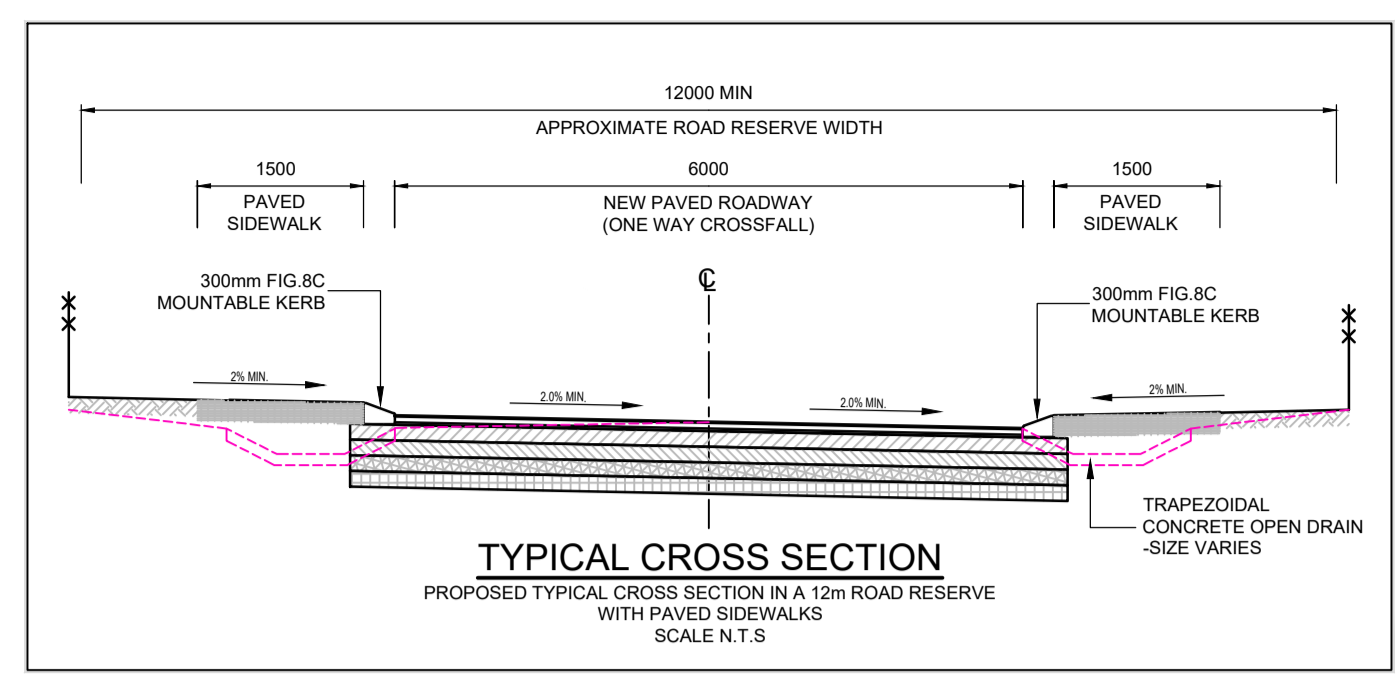
CLIENT: 19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyti@senqu.gov.za	CONSULTANT: THEWO & SMMS - JV 58 Brebner Road Westdene Bloemfontein 9301 Tel: +27 (051) 430 1321 Email: PMO@thewo.co.za	PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: 2024-03-25 SIGNATURE:	DESIGN BY: T. TSHABALALA DRAWN BY: B. MVUKUZO CHECKED BY: L. MARAH APPROVED BY: L. MARAH	REVISIONS <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>2024-03-25</td> <td>ISSUED FOR TENDER</td> <td>L.M.</td> </tr> </tbody> </table>	REV	DATE	DESCRIPTION	BY	0	2024-03-25	ISSUED FOR TENDER	L.M.	PROJECT NAME SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER TITLE ROAD 1 - LAYOUT AND LONGITUDINAL SECTION	PROJECT STATUS: TENDER <table border="1"> <thead> <tr> <th>DATE</th> <th>SCALE</th> <th>SHEET</th> <th>REV</th> <th>A1</th> </tr> </thead> <tbody> <tr> <td>2024-03-25</td> <td>AS SHOWN</td> <td>2 OF 2</td> <td>0</td> <td>A1</td> </tr> </tbody> </table> DWG NO P1027-BE-CIV-RD-LS01	DATE	SCALE	SHEET	REV	A1	2024-03-25	AS SHOWN	2 OF 2	0	A1
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DATE	SCALE	SHEET	REV	A1																				
2024-03-25	AS SHOWN	2 OF 2	0	A1																				

INSERT 1
Scale 1:500



Road Curve List

No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	250.00	0.00	0.00	11.06	11.06	5°03'55"
2	40.00	0.00	0.00	11.46	11.46	31°57'45"
3	400.00	0.00	0.00	18.27	18.27	5°13'49"
4	35.00	0.00	0.00	21.76	21.76	63°43'45"
5	40.00	0.00	0.00	15.02	15.02	41°09'23"
6	60.00	0.00	0.00	22.58	22.58	41°15'04"
7	60.00	0.00	0.00	24.94	24.94	45°08'57"
8	400.00	0.00	0.00	12.93	12.93	3°42'06"
9	55.00	0.00	0.00	27.08	27.08	52°25'49"
10	400.00	0.00	0.00	15.88	15.88	4°32'48"
11	240.00	0.00	0.00	29.56	29.56	14°02'36"
12	150.00	0.00	0.00	9.04	9.04	6°53'59"
13	0.00	0.00	0.00	0.00	0.00	0°00'00"

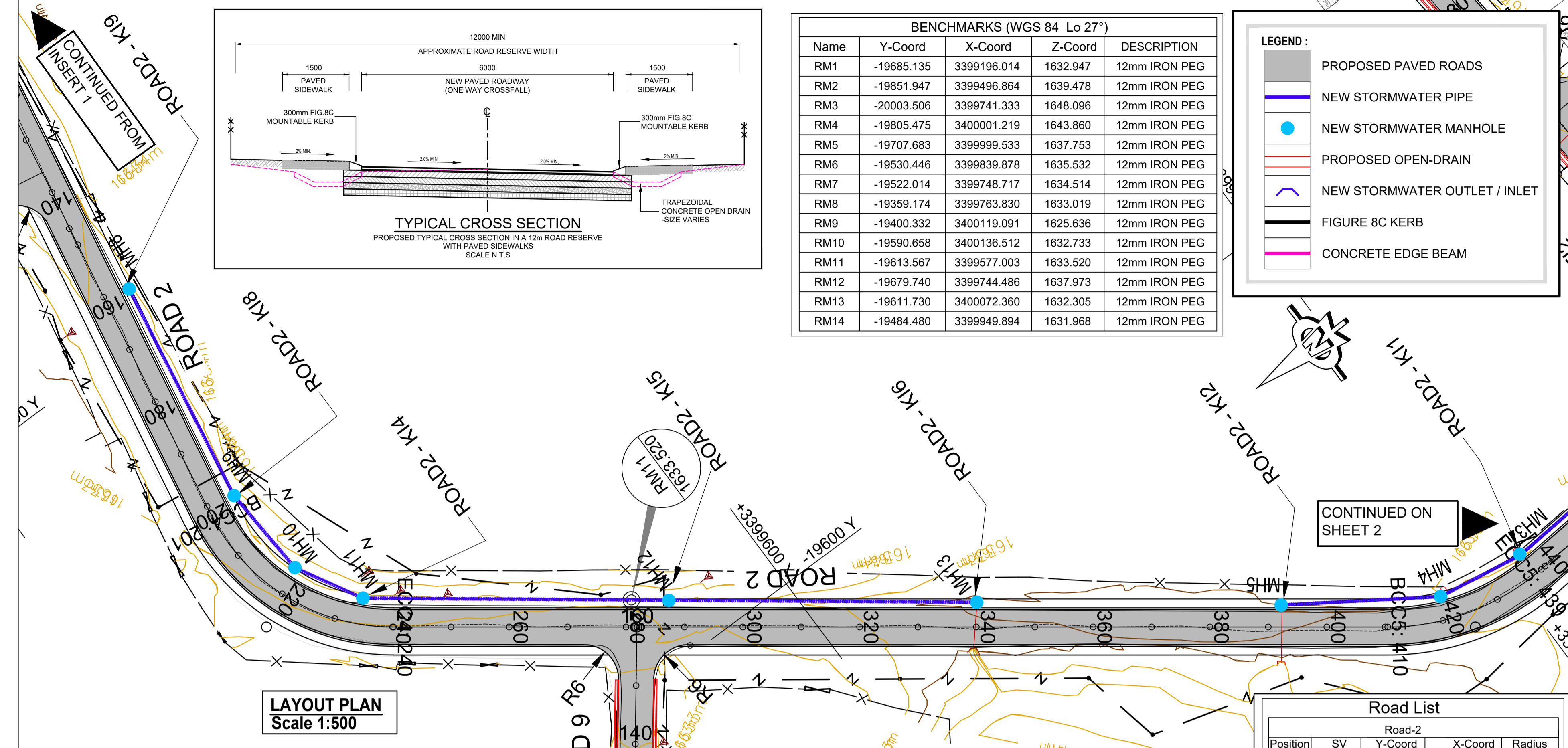


BENCHMARKS (WGS 84 Lo 27°)

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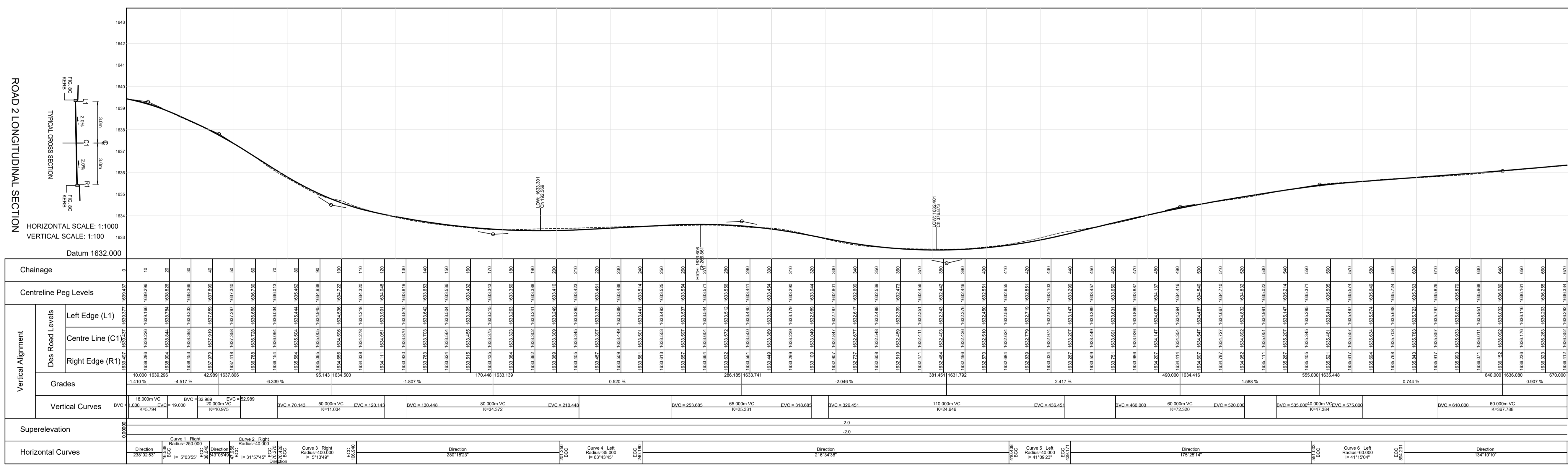
LEGEND :

- PROPOSED PAVED ROADS
- NEW STORMWATER PIPE
- NEW STORMWATER MANHOLE
- PROPOSED OPEN-DRAIN
- NEW STORMWATER OUTLET / INLET
- FIGURE 8C KERB
- CONCRETE EDGE BEAM



Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19860.852	3399521.785	0.000
BCC1	16.538	-19846.820	3399530.537	
P11	27.589	-19837.437	3399536.389	250.000
ECC1	38.640	-19827.574	3399541.390	
BCC2	47.956	-19819.266	3399545.602	
P12	59.113	-19809.048	3399550.783	40.000
ECC2	70.270	-19797.637	3399549.769	
BCC3	70.426	-19797.482	3399549.756	
P13	88.683	-19779.284	3399548.139	400.000
ECC3	106.940	-19761.310	3399544.871	
BCC4	201.250	-19668.521	3399527.997	
P14	220.715	-19647.117	3399524.105	35.000
ECC4	240.180	-19634.152	3399541.576	
BCC5	410.438	-19532.695	3399678.303	
P15	424.804	-19523.746	3399690.363	40.000
ECC5	439.171	-19524.945	3399705.332	
BCC6	551.003	-19533.873	3399816.808	
P16	572.602	-19535.676	3399839.319	60.000
ECC6	594.201	-19551.875	3399855.054	
BCC7	768.926	-19677.202	3399976.800	
P17	792.566	-19695.095	3399994.180	60.000
ECC7	816.206	-19720.035	3399993.754	
BCC8	836.727	-19740.553	3399993.403	
P18	849.649	-19753.477	3399993.182	400.000
ECC8	862.570	-19766.360	3399992.127	
BCC9	878.986	-19782.721	3399990.787	
P19	904.150	-19809.712	3399988.577	55.000
ECC9	929.315	-19824.418	3399965.836	
BCC10	952.978	-19837.267	3399945.966	
P20	968.850	-19845.890	3399932.631	400.000
ECC10	984.721	-19855.542	3399920.022	
BCC11	1077.702	-19912.063	3399846.191	
P21	1107.115	-19930.032	3399822.718	240.000
ECC11	1136.527	-19953.159	3399804.308	
BCC12	1137.736	-19954.105	3399803.555	
P22	1146.767	-19961.179	3399797.923	150.000
ECC12	1155.799	-19967.526	3399791.482	
END	1175.514	-19981.364	3399777.439	



Longsection for 0 to 670

CLIENT:
19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:
THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

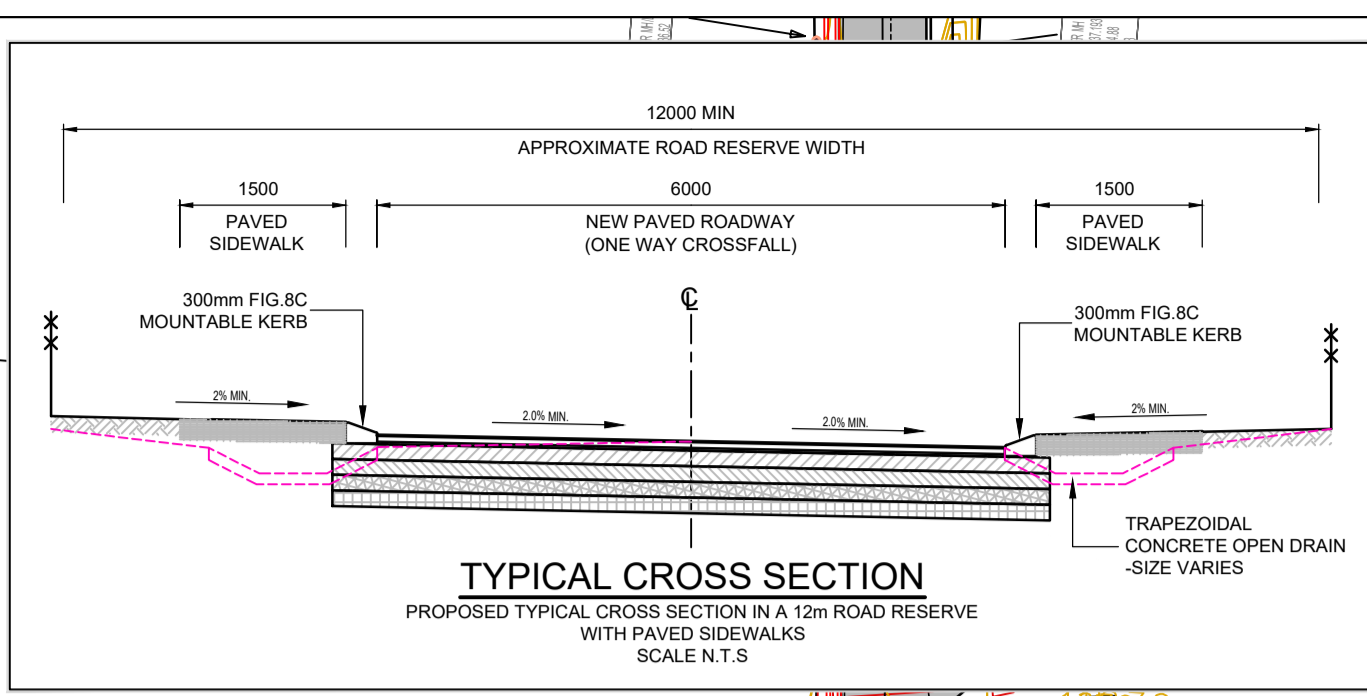
DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

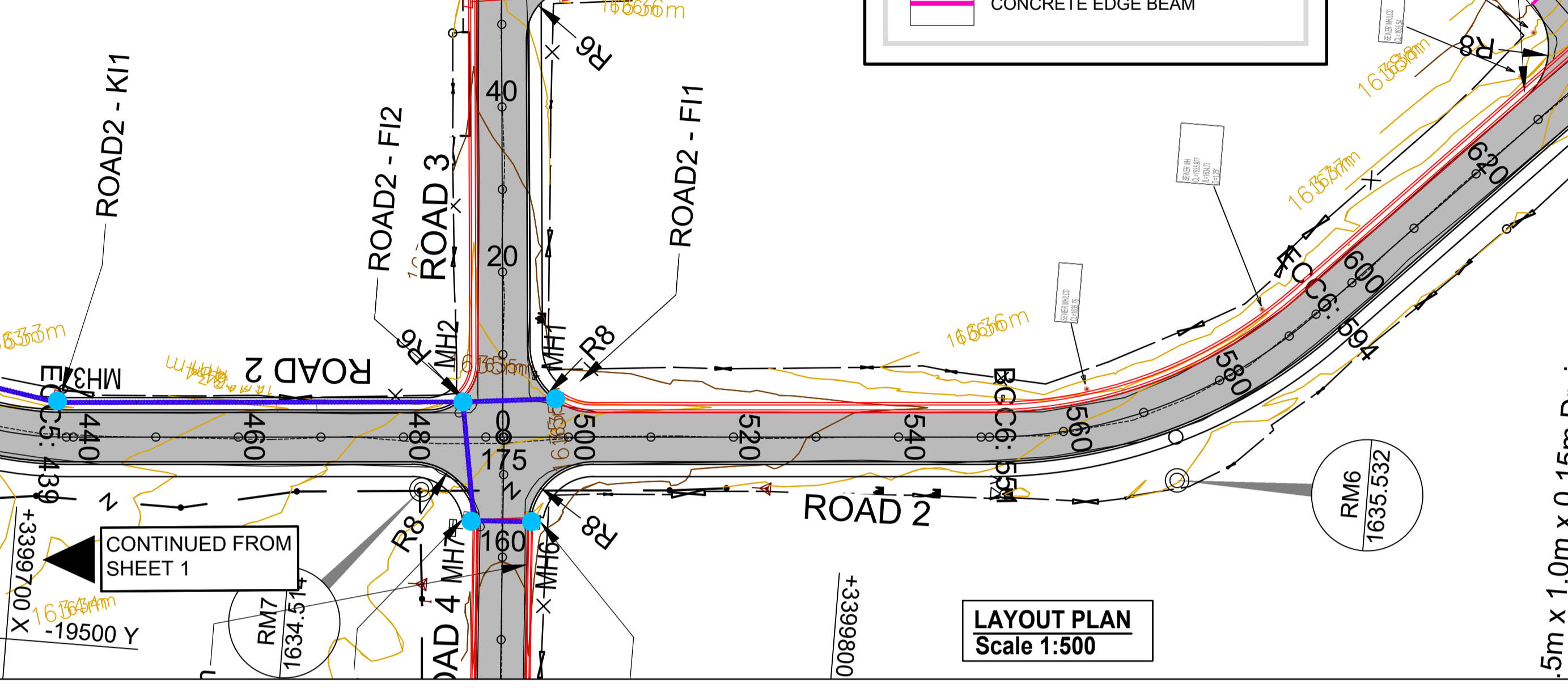
PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
ROAD 2 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER
DATE: 2024-03-25
SCALE: AS SHOWN
SHEET: 1 OF 3
REV: 0
A1
DWG NO: P1027-BE-CIV-RD-LS02



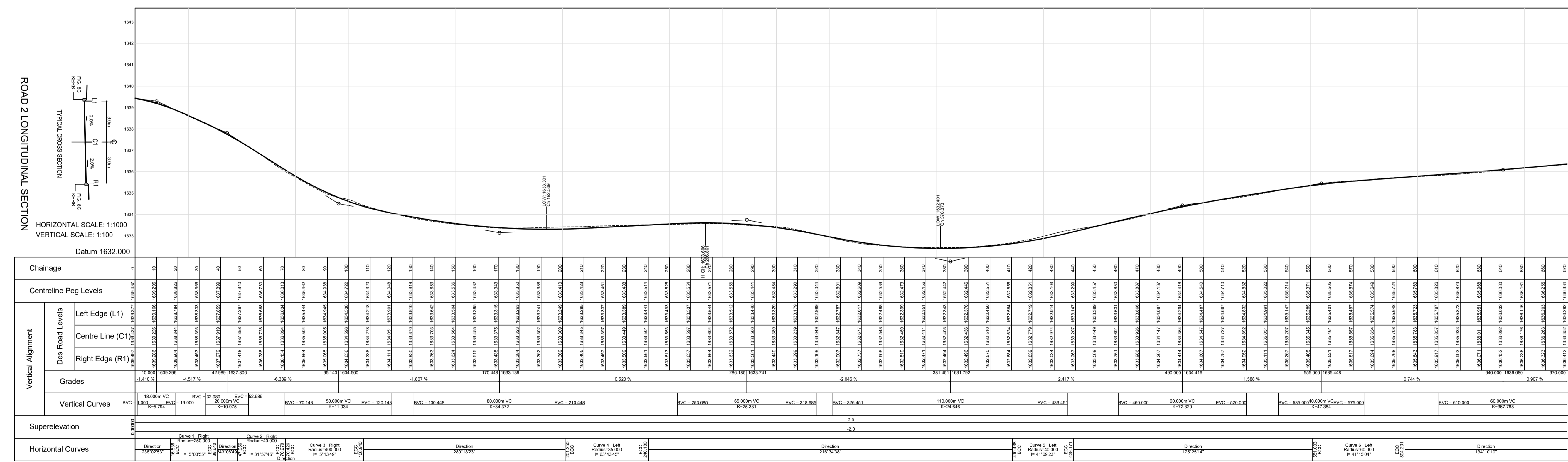
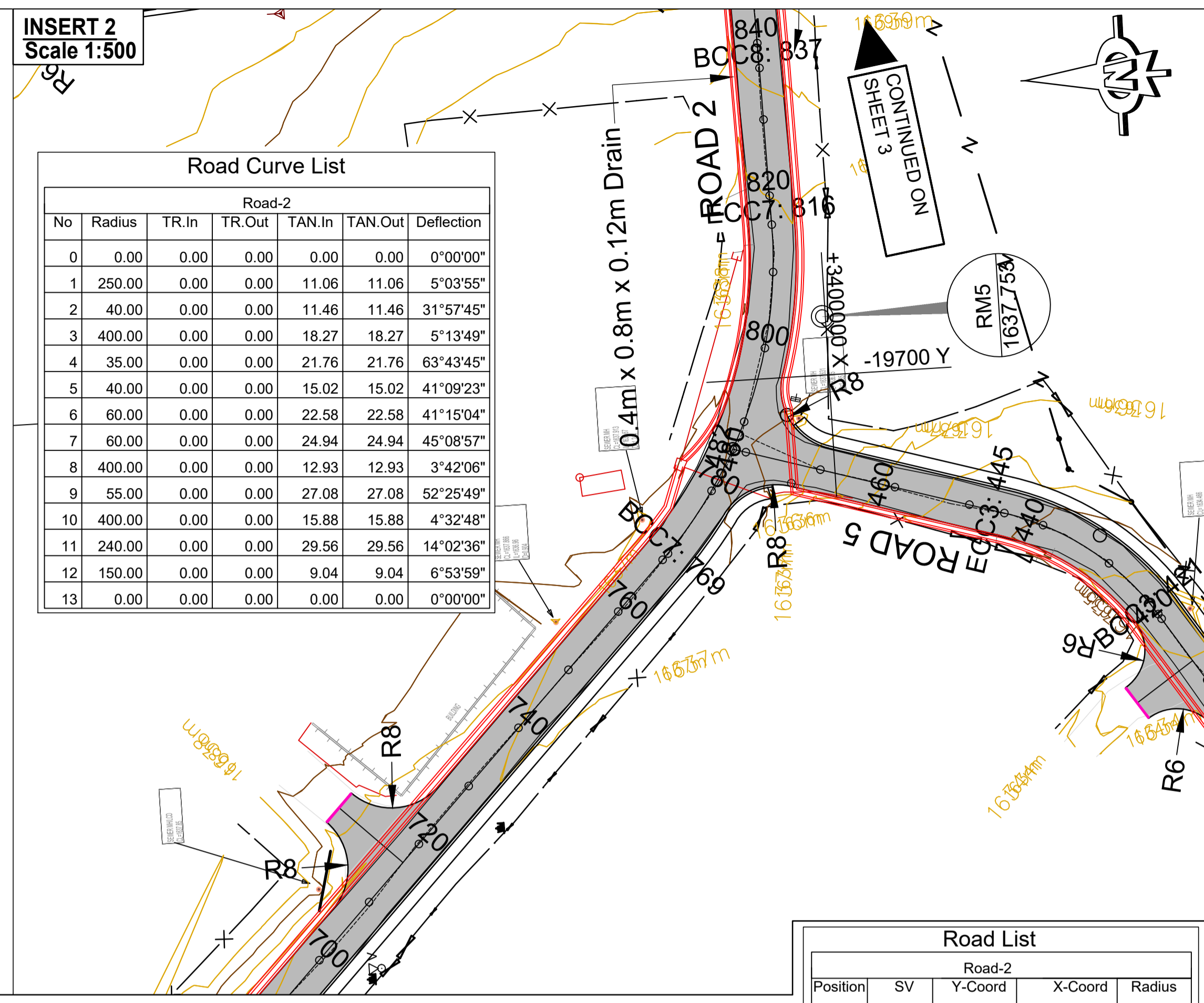
LEGEND :

- PROPOSED PAVED ROADS
- NEW STORMWATER PIPE
- NEW STORMWATER MANHOLE
- PROPOSED OPEN-DRAIN
- NEW STORMWATER OUTLET / INLET
- FIGURE 8C KERB
- CONCRETE EDGE BEAM



BENCHMARKS (WGS 84 Lo 27°)

Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
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RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG



Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19860.852	3399521.785	0.000
BCC1	16.538	-19846.820	3399530.537	
P11	27.589	-19837.437	3399536.389	250.000
ECC1	38.640	-19827.574	3399541.390	
BCC2	47.956	-19819.266	3399545.602	
P12	59.113	-19809.048	3399550.783	40.000
ECC2	70.426	-19797.482	3399549.756	
BCC3	70.426	-19797.482	3399549.756	
P13	88.683	-19779.284	3399548.139	400.000
ECC3	106.940	-19761.310	3399544.871	
BCC4	201.250	-19668.521	3399527.997	
P14	220.715	-19647.117	3399524.105	35.000
ECC4	240.180	-19634.152	3399541.576	
BCC5	410.438	-19532.695	3399678.303	
P15	424.804	-19523.746	3399690.363	40.000
ECC5	439.171	-19524.945	3399705.332	
BCC6	551.003	-19533.873	3399816.808	
P16	572.602	-19535.676	3399839.319	60.000
ECC6	594.201	-19551.875	3399855.054	
BCC7	768.926	-19677.202	3399976.800	
P17	792.566	-19695.095	3399994.180	60.000
ECC7	816.206	-19720.035	3399993.754	
BCC8	836.727	-19740.553	3399993.403	
P18	849.649	-19753.477	3399993.182	400.000
ECC8	862.570	-19766.360	3399992.127	
BCC9	878.986	-19782.721	3399990.787	
P19	904.150	-19809.712	3399988.577	55.000
ECC9	929.315	-19824.418	3399965.836	
BCC10	952.978	-19837.267	3399945.966	
P110	968.850	-19845.290	3399932.631	400.000
ECC10	984.721	-19855.542	3399920.022	
BCC11	1077.702	-19912.063	3399846.191	
P111	1107.115	-19930.032	3399822.718	240.000
ECC11	1136.527	-19953.159	3399804.308	
BCC12	1137.736	-19954.105	3399803.555	
P112	1146.767	-19961.179	3399797.923	150.000
ECC12	1155.799	-19967.526	3399791.482	
END	1175.514	-19981.364	3399777.439	

CLIENT: 19 Murray Street, Lady Grey 9755. Tel: (051) 603 1449. Email: vanzyt@senqu.gov.za

CONSULTANT: THEWO & SMMS - JV. 58 Brebner Road, Westdene, Bloemfontein 9301. Tel: +27 (051) 430 1321. Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER: L. MARAH. PROF. Reg.No: 920281. DATE: 2024-03-25. SIGNATURE:

DESIGN BY: T. TSHABALALA. DRAWN BY: B. MVUKUZO. CHECKED BY: L. MARAH. APPROVED BY: L. MARAH

REVISIONS:

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME: SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE: ROAD 2 - LAYOUT AND LONGITUDINAL SECTION

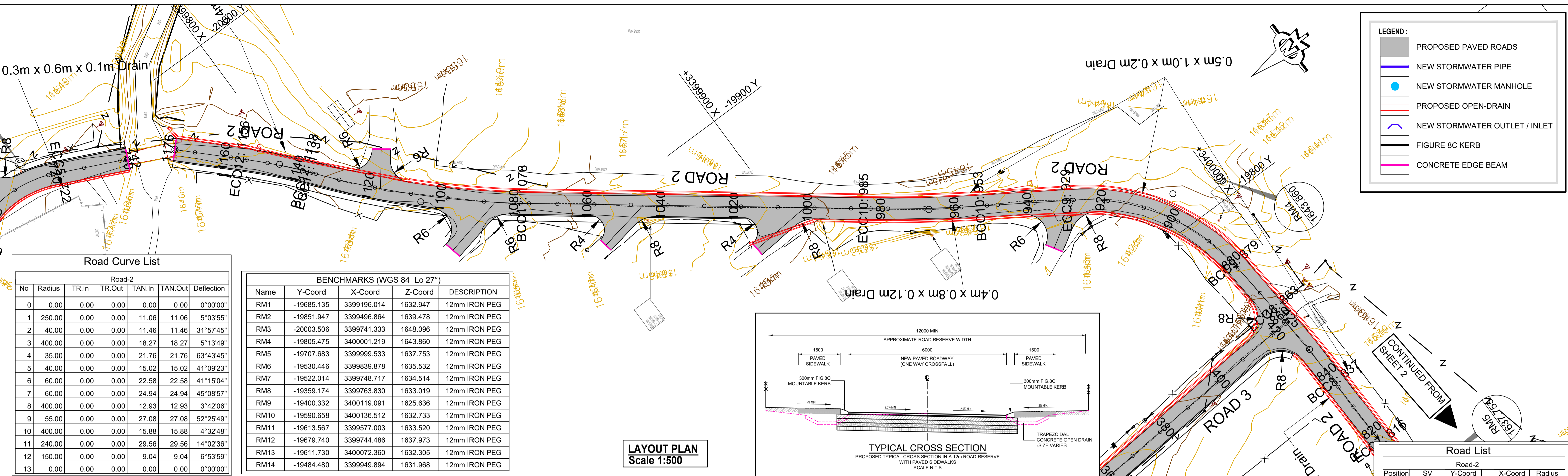
PROJECT STATUS: TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	2 OF 3	0	A1

DWG NO: P1027-BE-CIV-RD-LS02

LEGEND :

- PROPOSED PAVED ROADS
- NEW STORMWATER PIPE
- NEW STORMWATER MANHOLE
- PROPOSED OPEN-DRAIN
- NEW STORMWATER OUTLET / INLET
- FIGURE 8C KERB
- CONCRETE EDGE BEAM

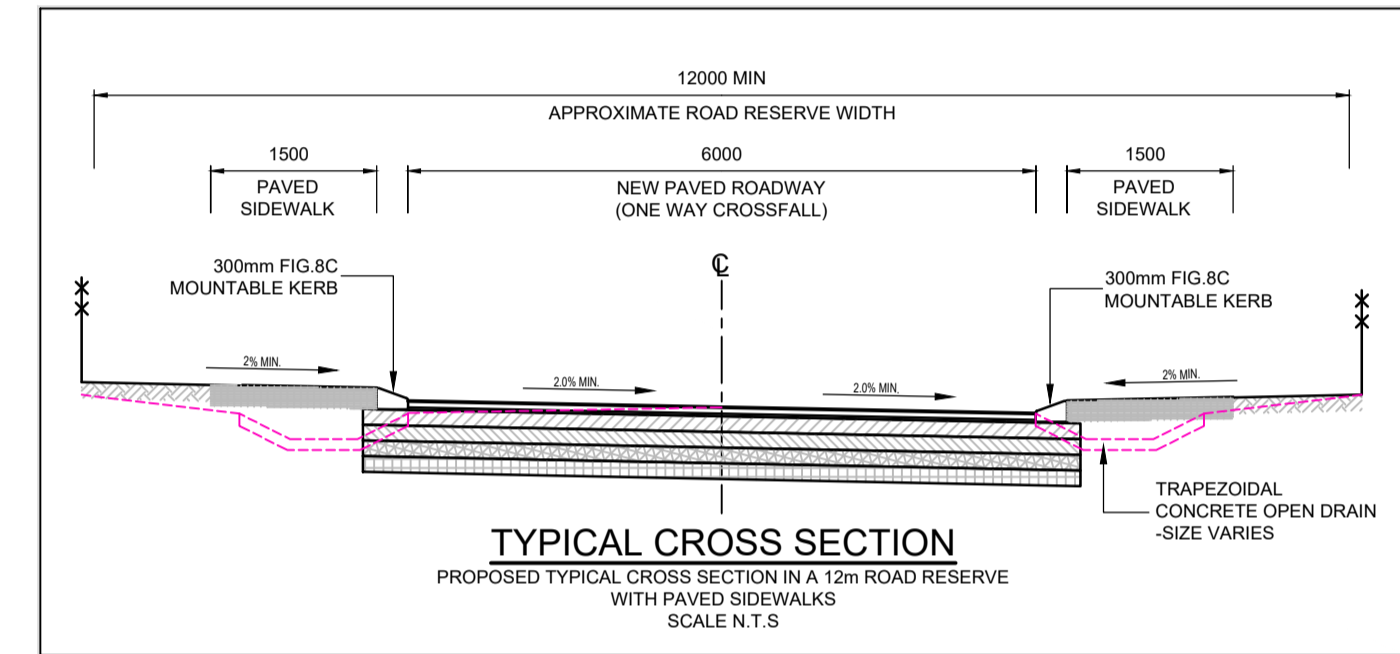


Road Curve List

No	Radius	TR.In	TR.Out	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0°0'00"
1	250.00	0.00	11.06	11.06	5°03'55"
2	40.00	0.00	11.46	11.46	31°57'45"
3	400.00	0.00	18.27	18.27	5°13'49"
4	35.00	0.00	21.76	21.76	63°43'45"
5	40.00	0.00	15.02	15.02	41°09'23"
6	60.00	0.00	22.58	22.58	41°15'04"
7	60.00	0.00	24.94	24.94	45°08'57"
8	400.00	0.00	12.93	12.93	3°42'06"
9	55.00	0.00	27.08	27.08	52°25'49"
10	400.00	0.00	15.88	15.88	4°32'48"
11	240.00	0.00	29.56	29.56	14°02'36"
12	150.00	0.00	9.04	9.04	6°53'59"
13	0.00	0.00	0.00	0.00	0°0'00"

BENCHMARKS (WGS 84 Lo 27°)

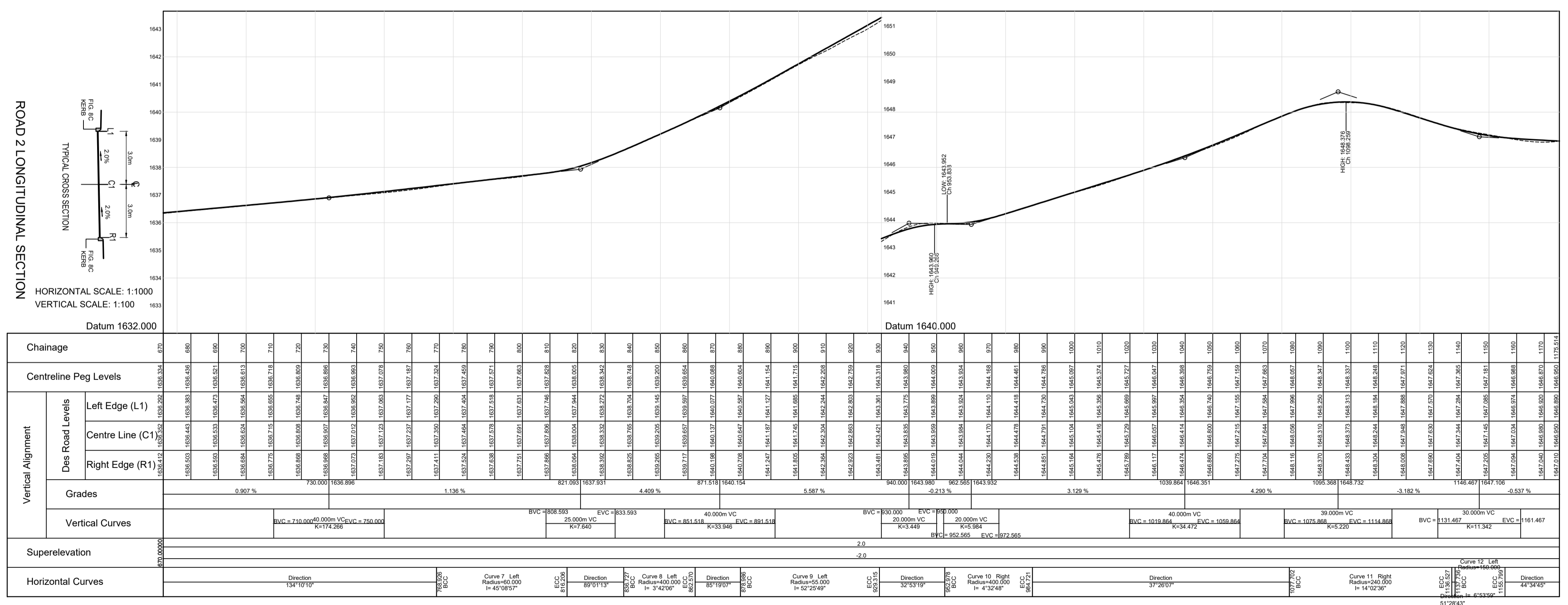
Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG



LAYOUT PLAN
Scale 1:500

Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19860.852	3399521.785	0.000
BCC1	16.538	-19846.820	3399530.537	
P11	27.589	-19837.437	3399536.389	250.000
ECC1	38.640	-19827.574	3399541.390	
BCC2	47.956	-19819.266	3399545.602	
P12	59.113	-19809.048	3399550.783	40.000
ECC2	70.270	-19797.637	3399549.769	
BCC3	70.426	-19797.482	3399549.756	
P13	88.683	-19779.284	3399548.139	400.000
ECC3	106.940	-19761.310	3399544.871	
BCC4	201.250	-19668.521	3399527.989	
P14	220.715	-19647.117	3399524.105	35.000
ECC4	240.180	-19634.152	3399541.576	
BCC5	410.438	-19532.695	3399678.303	
P15	424.804	-19523.746	3399690.363	40.000
ECC5	439.171	-19524.945	3399705.332	
BCC6	551.003	-19533.873	3399816.808	
P16	572.602	-19535.676	3399839.319	60.000
ECC6	594.201	-19551.875	3399855.054	
BCC7	768.926	-19677.202	3399976.800	
P17	792.566	-19695.095	3399994.180	60.000
ECC7	816.206	-19720.035	3399993.754	
BCC8	836.727	-19740.553	3399993.403	
P18	849.649	-19753.477	3399993.182	400.000
ECC8	862.570	-19766.360	3399992.127	
BCC9	878.986	-19782.721	3399990.787	
P19	904.150	-19809.712	3399988.577	55.000
ECC9	929.315	-19824.418	3399965.836	
BCC10	952.978	-19837.267	3399945.966	
P110	968.850	-19845.290	3399932.631	400.000
ECC10	984.721	-19855.542	3399920.022	
BCC11	1077.702	-19912.063	3399846.191	
P111	1107.115	-19930.032	3399822.718	240.000
ECC11	1136.527	-19953.159	3399804.308	
BCC12	1137.736	-19954.105	3399803.555	
P112	1146.767	-19961.179	3399797.923	150.000
ECC12	1155.799	-19967.526	3399791.482	
END	1175.514	-19981.364	3399777.439	



Longsection for 670 to 1175

CLIENT:
19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyit@senqu.gov.za

CONSULTANT:
THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

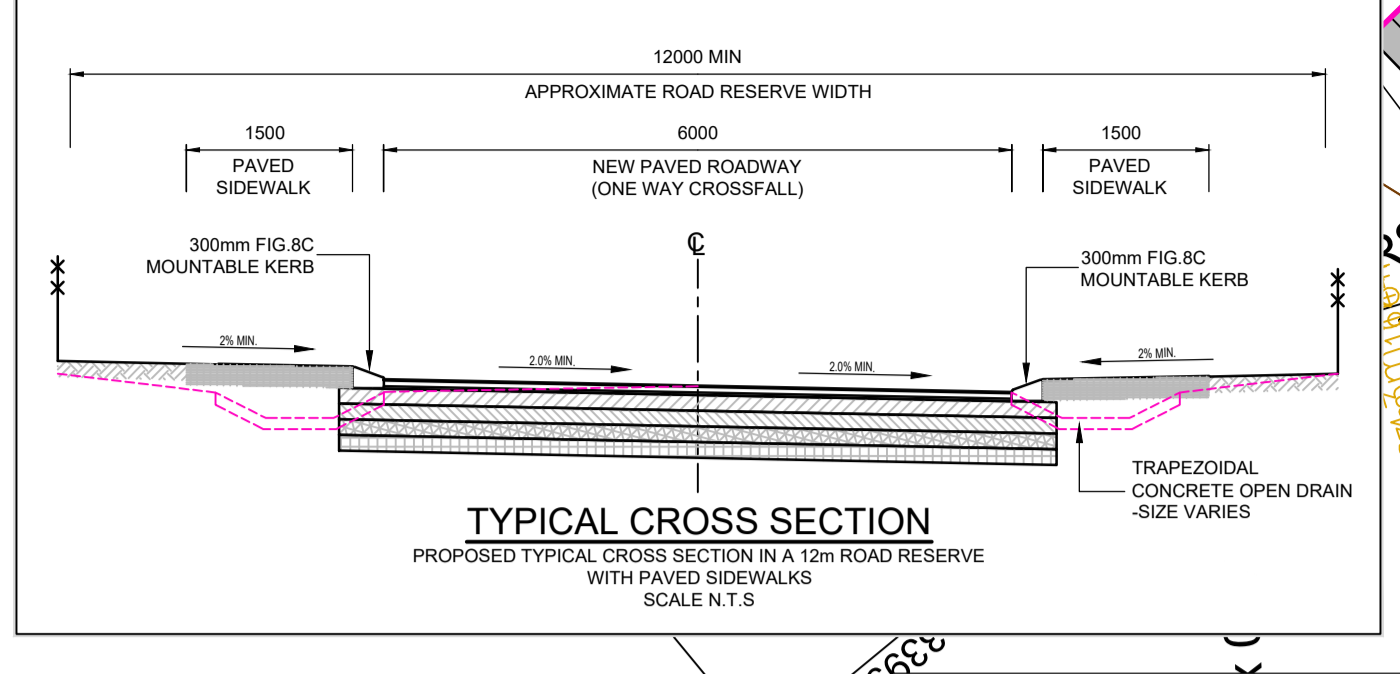
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0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
ROAD 2 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER
DATE: 2024-03-25
SCALE: AS SHOWN
SHEET: 3 OF 3
REV: 0
A1
DWG NO: P1027-BE-CIV-RD-LS02

LEGEND :

- PROPOSED PAVED ROADS
- NEW STORMWATER PIPE
- NEW STORMWATER MANHOLE
- PROPOSED OPEN-DRAIN
- NEW STORMWATER OUTLET / INLET
- FIGURE 8C KERB
- CONCRETE EDGE BEAM



BENCHMARKS (WGS 84 Lo 27°)

Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.744	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG

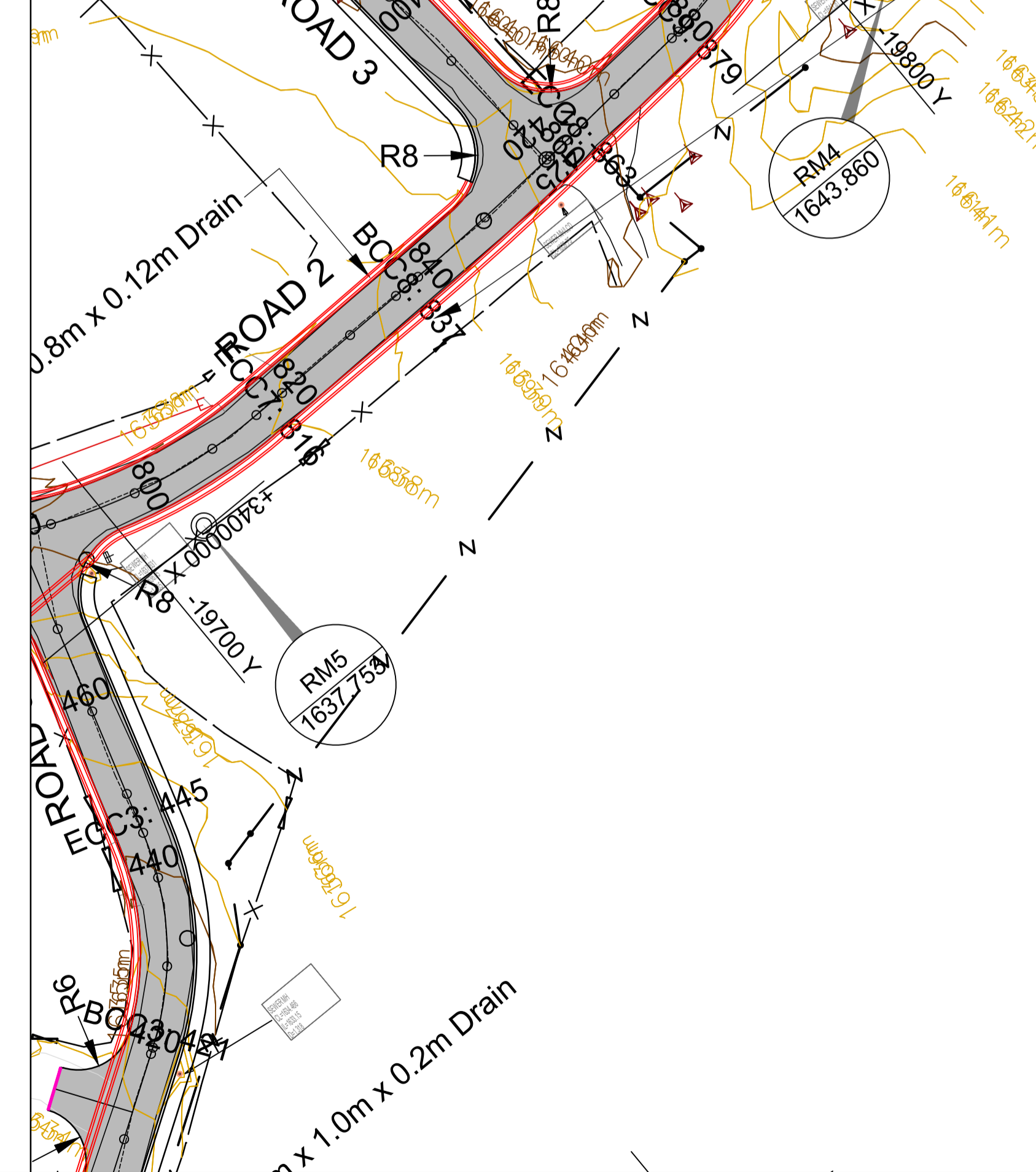
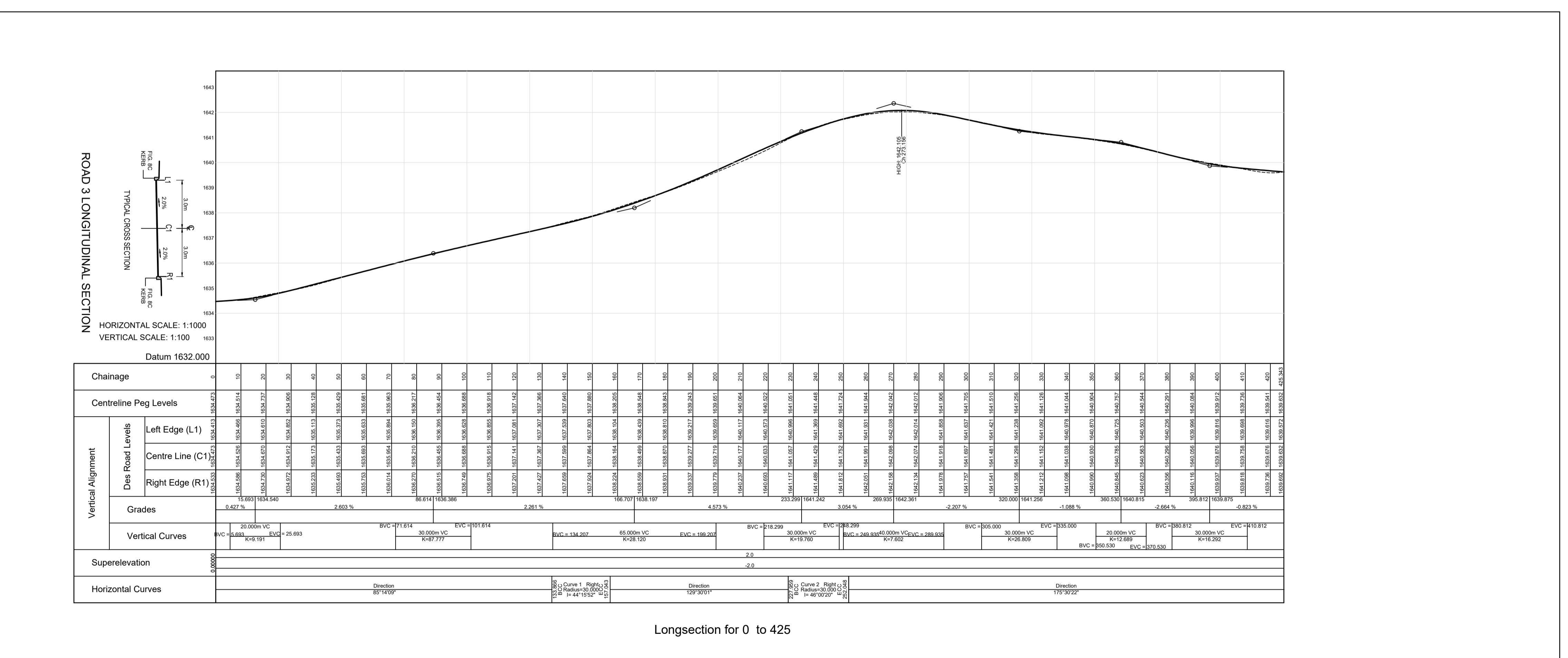
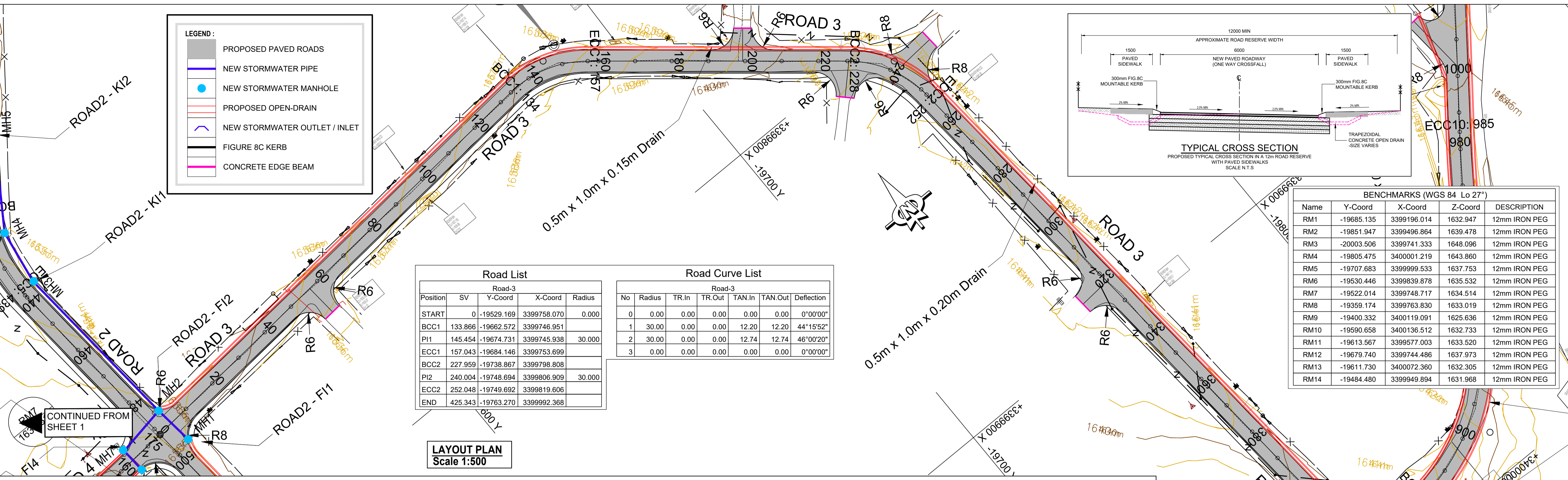
Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19529.169	3399758.070	0.000
BCC1	133.866	-19662.572	3399746.951	
PI1	145.454	-19674.731	3399745.938	30.000
ECC1	157.043	-19684.146	3399753.699	
BCC2	227.959	-19738.867	3399798.808	
PI2	240.004	-19748.694	3399806.909	30.000
ECC2	252.048	-19749.692	3399819.606	
END	425.343	-19763.270	3399992.368	

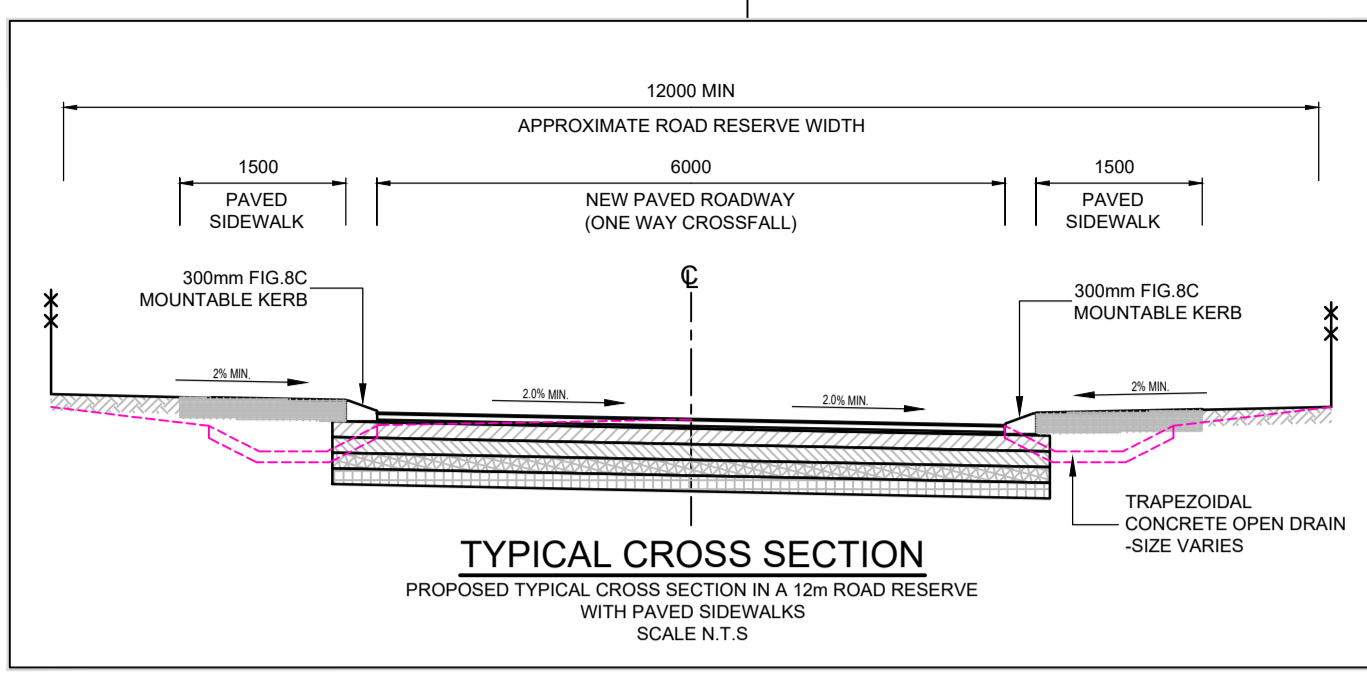
Road Curve List

No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	30.00	0.00	0.00	12.20	12.20	44°15'52"
2	30.00	0.00	0.00	12.74	12.74	46°00'20"
3	0.00	0.00	0.00	0.00	0.00	0°00'00"

LAYOUT PLAN
Scale 1:500



CLIENT: 19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyt@senqu.gov.za	CONSULTANT: THEWO & SMMS - JV 58 Brebner Road Westdene Bloemfontein 9301 Tel: +27 (051) 430 1321 Email: PMO@thewo.co.za	PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: 2024-03-25 SIGNATURE:	DESIGN BY: T. TSHABALALA DRAWN BY: B. MVUKUZO CHECKED BY: L. MARAH APPROVED BY: L. MARAH	REVISIONS <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>2024-03-25</td> <td>ISSUED FOR TENDER</td> <td>L.M.</td> </tr> </tbody> </table>	REV	DATE	DESCRIPTION	BY	0	2024-03-25	ISSUED FOR TENDER	L.M.	PROJECT NAME SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER TITLE ROAD 3 - LAYOUT AND LONGITUDINAL SECTION	PROJECT STATUS: TENDER <table border="1"> <thead> <tr> <th>DATE</th> <th>SCALE</th> <th>SHEET</th> <th>REV</th> <th>A1</th> </tr> </thead> <tbody> <tr> <td>2024-03-25</td> <td>AS SHOWN</td> <td>1 OF 1</td> <td>0</td> <td>A1</td> </tr> </tbody> </table> DWG NO P1027-BE-CIV-RD-LS03	DATE	SCALE	SHEET	REV	A1	2024-03-25	AS SHOWN	1 OF 1	0	A1
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0	2024-03-25	ISSUED FOR TENDER	L.M.																					
DATE	SCALE	SHEET	REV	A1																				
2024-03-25	AS SHOWN	1 OF 1	0	A1																				
ROAD 3 - LAYOUT AND LONGITUDINAL SECTION																								

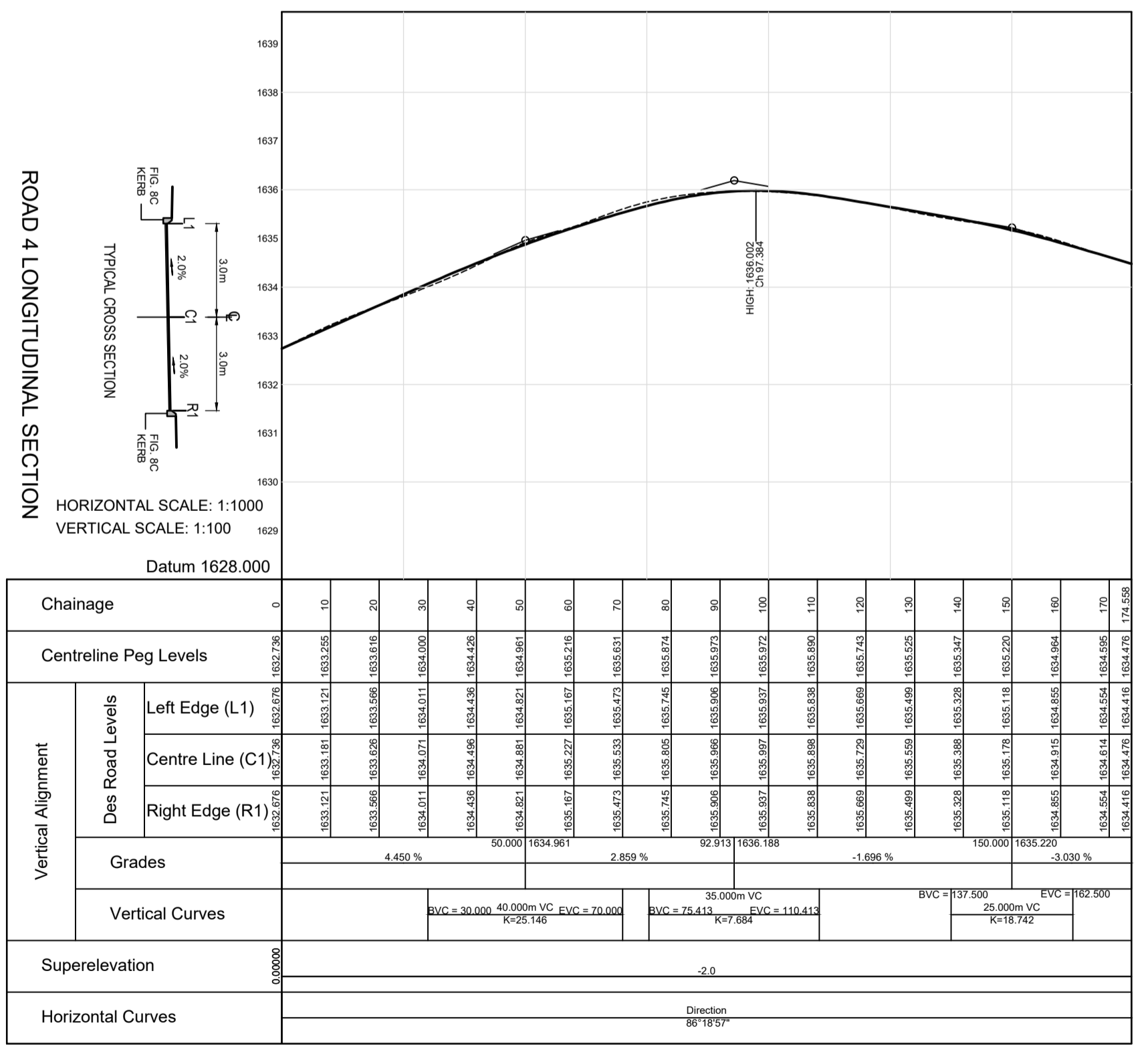
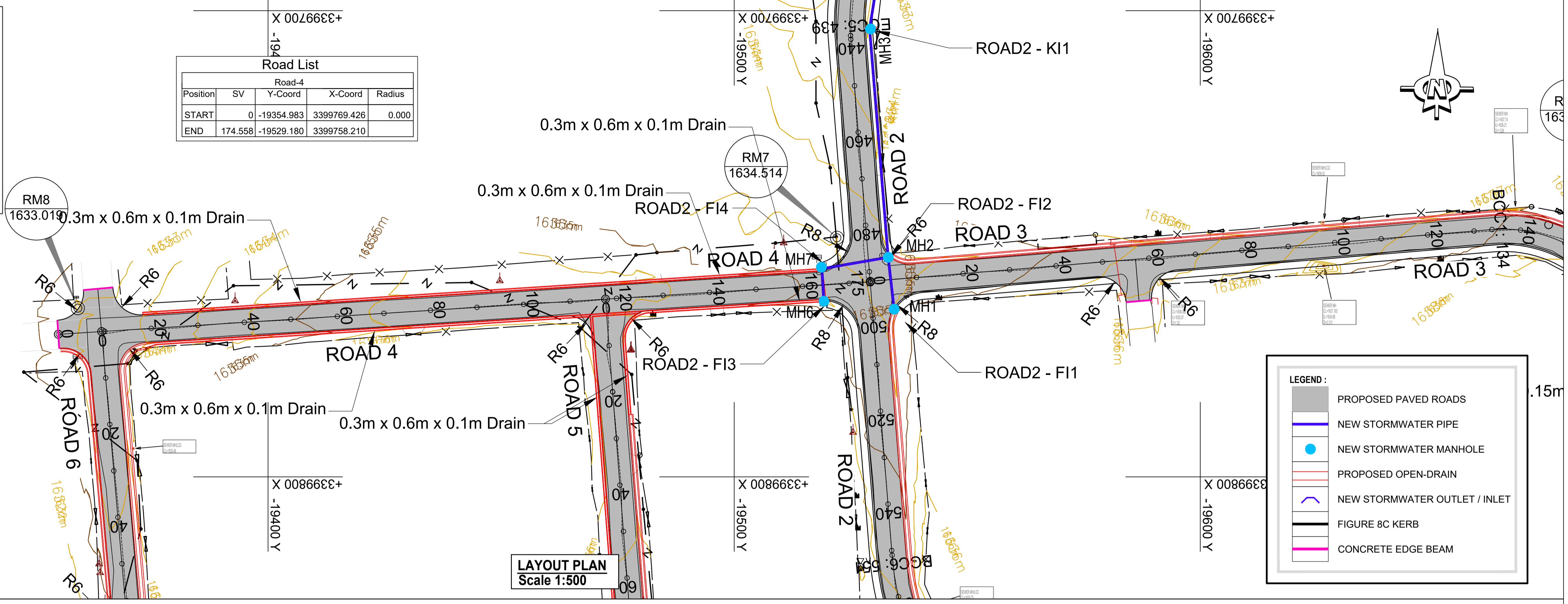


BENCHMARKS (WGS 84 Lo 27°)

Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
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RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
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RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG

Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19354.983	3399769.426	0.000
END	174.558	-19529.180	3399758.210	



Longsection for 0 to 174

CLIENT:
 19 Murray Street
 Lady Grey
 9755
 Tel: (051) 603 1449
 Email: vanzyt@senqu.gov.za

CONSULTANT:
 THEWO & SMMS - JV
 58 Brebner Road
 Westdene
 Bloemfontein
 9301
 Tel: +27 (051) 430 1321
 Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
 L. MARAH
 PROF. Reg.No:
 920281
 DATE:
 2024-03-25
 SIGNATURE:

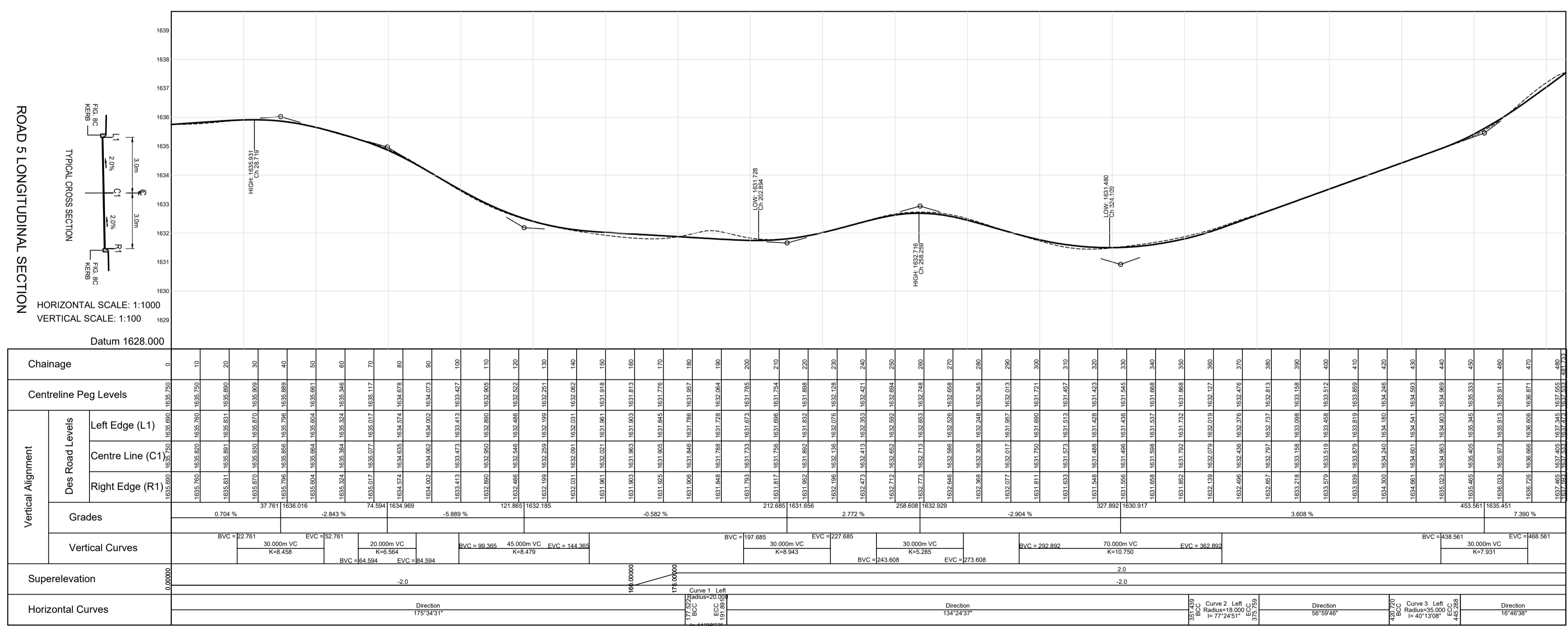
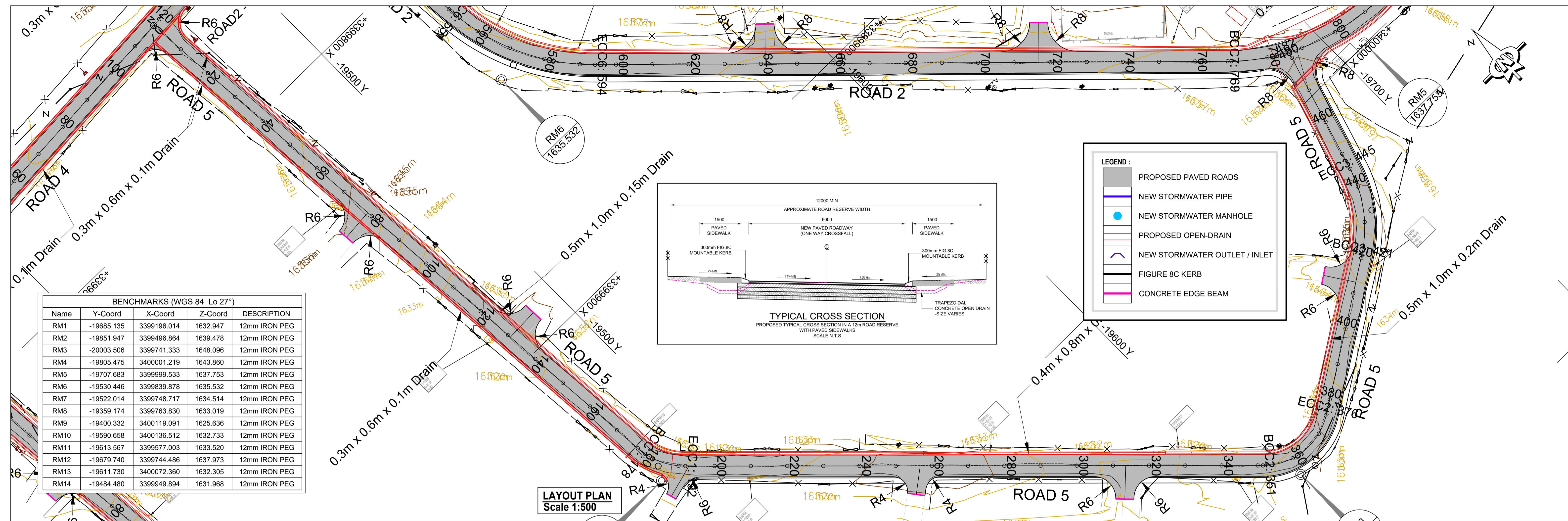
DESIGN BY:
 T. TSHABALALA
DRAWN BY:
 B. MVUKUZO
CHECKED BY:
 L. MARAH
APPROVED BY:
 L. MARAH

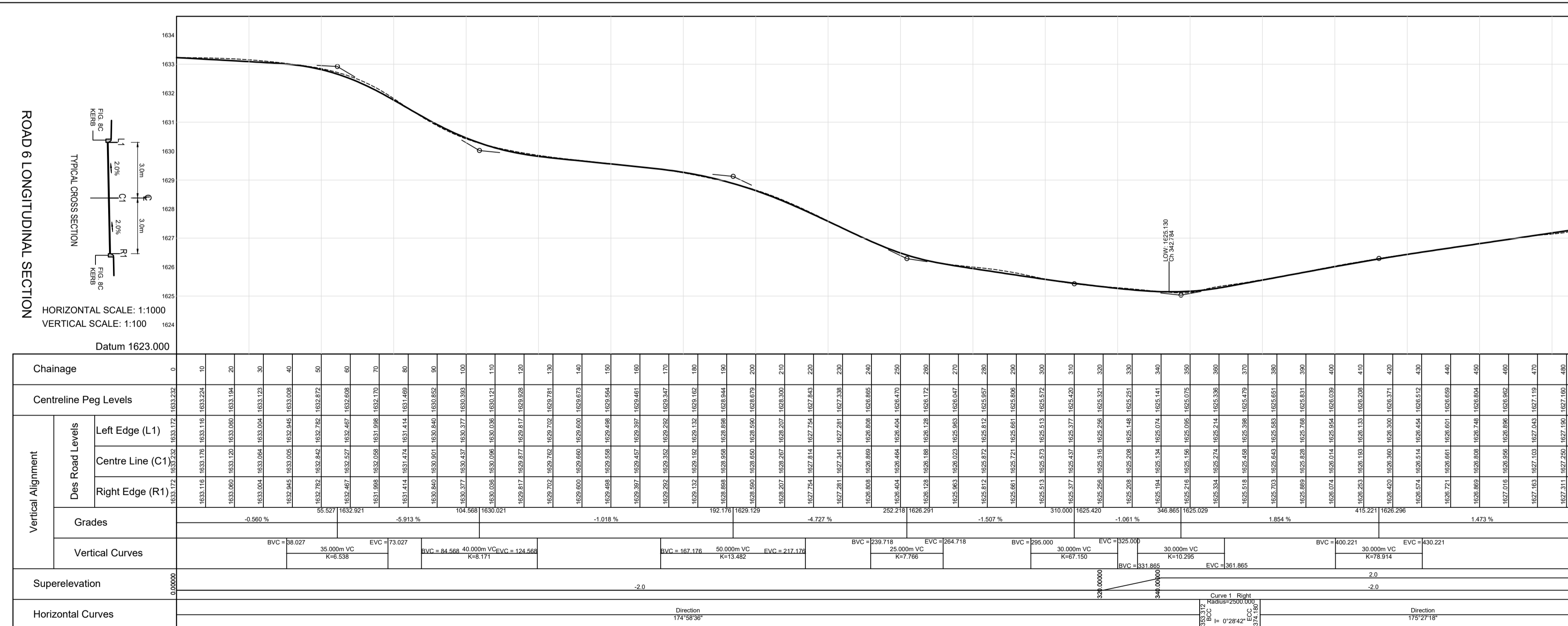
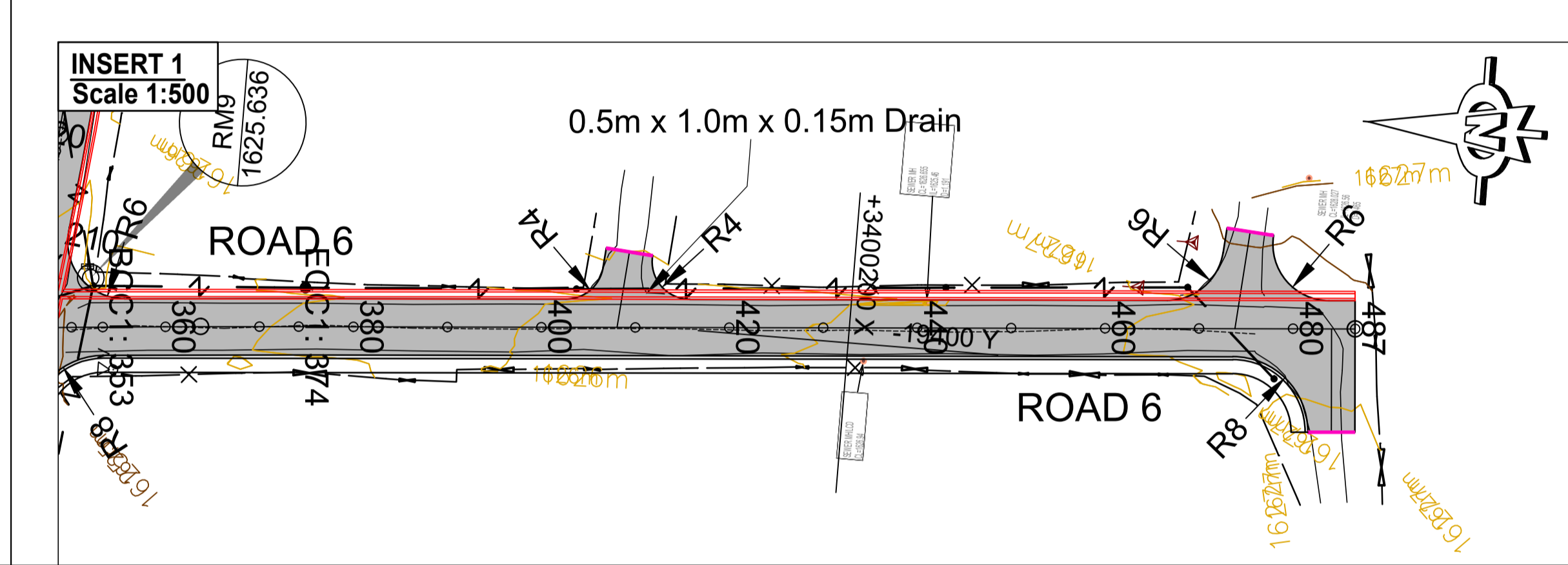
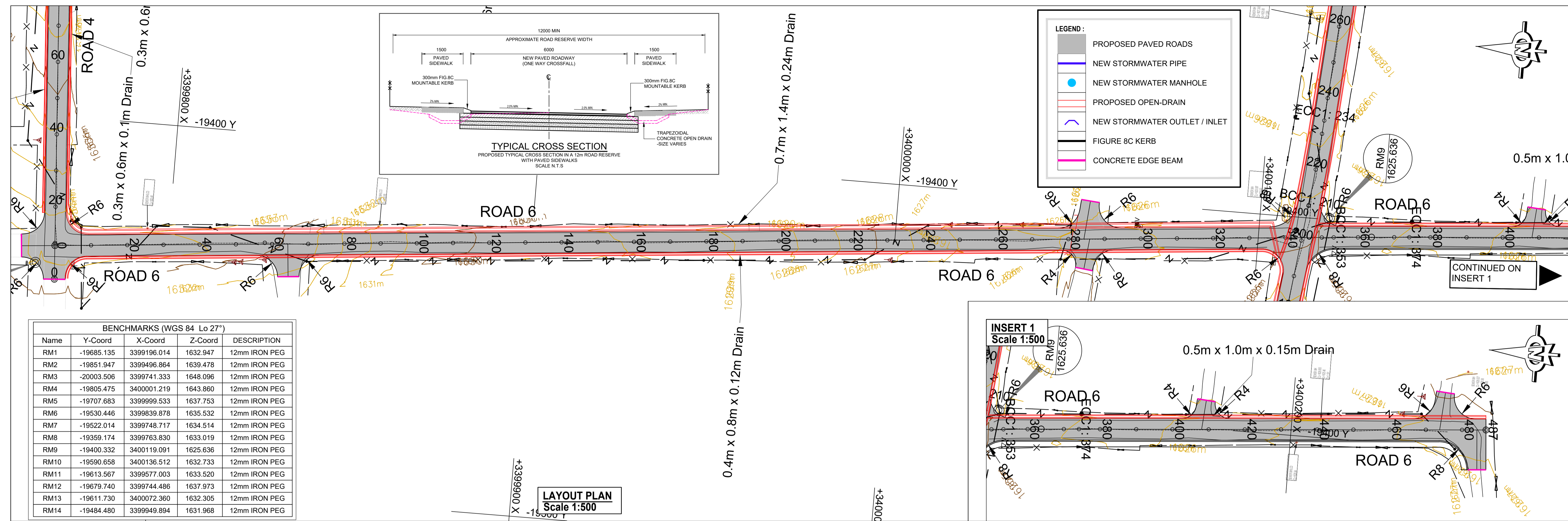
REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME
 SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
 ROAD 4 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER
 DATE: 2024-03-25
 SCALE: AS SHOWN
 SHEET: 1 OF 1
 REV: 0
 A1
 DWG NO: P1027-BE-CIV-RD-LS04





Road List

Position	SV	Y-Coord	X-Coord	Radius
START	0	-19364.268	3399768.828	0.000
BCC1	353.312	-19395.204	3400120.784	
PI1	363.746	-19396.118	3400131.177	2500.000
ECC1	374.180	-19396.945	3400141.578	
END	486.622	-19405.855	3400253.667	

Road Curve List

No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	2500.00	0.00	0.00	10.43	10.43	0°28'42"
2	0.00	0.00	0.00	0.00	0.00	0°00'00"

Longsection for 0 to 486

Chainage	Centreline Peg Levels	Vertical Alignment	Grades	Vertical Curves	Superelevation	Horizontal Curves
0	1633.121	Left Edge (L1): 1633.121, Centre Line (C): 1633.121, Right Edge (R1): 1633.121	-0.500%	BVC=38.027, EVC=F3.027	0.0000	Direction: 174°58'30"
10	1633.241	Left Edge (L1): 1633.241, Centre Line (C): 1633.241, Right Edge (R1): 1633.241	-5.813%	BVC=84.568, EVC=C124.666	-2.0	Direction: 174°58'30"
20	1633.461	Left Edge (L1): 1633.461, Centre Line (C): 1633.461, Right Edge (R1): 1633.461	-1.018%	BVC=167.176, EVC=C217.128	-2.0	Direction: 174°58'30"
30	1633.681	Left Edge (L1): 1633.681, Centre Line (C): 1633.681, Right Edge (R1): 1633.681	-4.727%	BVC=239.718, EVC=C264.718	-2.0	Direction: 174°58'30"
40	1633.901	Left Edge (L1): 1633.901, Centre Line (C): 1633.901, Right Edge (R1): 1633.901	-1.507%	BVC=295.000, EVC=C325.000	-2.0	Direction: 174°58'30"
50	1634.121	Left Edge (L1): 1634.121, Centre Line (C): 1634.121, Right Edge (R1): 1634.121	-1.061%	BVC=300.000, EVC=C330.000	-2.0	Direction: 174°58'30"
60	1634.341	Left Edge (L1): 1634.341, Centre Line (C): 1634.341, Right Edge (R1): 1634.341	1.854%	BVC=340.000, EVC=C378.914	-2.0	Direction: 174°58'30"
70	1634.561	Left Edge (L1): 1634.561, Centre Line (C): 1634.561, Right Edge (R1): 1634.561	1.473%	BVC=400.221, EVC=C430.221	-2.0	Direction: 174°58'30"
80	1634.781	Left Edge (L1): 1634.781, Centre Line (C): 1634.781, Right Edge (R1): 1634.781			-2.0	Direction: 174°58'30"
90	1635.001	Left Edge (L1): 1635.001, Centre Line (C): 1635.001, Right Edge (R1): 1635.001			-2.0	Direction: 174°58'30"
100	1635.221	Left Edge (L1): 1635.221, Centre Line (C): 1635.221, Right Edge (R1): 1635.221			-2.0	Direction: 174°58'30"
110	1635.441	Left Edge (L1): 1635.441, Centre Line (C): 1635.441, Right Edge (R1): 1635.441			-2.0	Direction: 174°58'30"
120	1635.661	Left Edge (L1): 1635.661, Centre Line (C): 1635.661, Right Edge (R1): 1635.661			-2.0	Direction: 174°58'30"
130	1635.881	Left Edge (L1): 1635.881, Centre Line (C): 1635.881, Right Edge (R1): 1635.881			-2.0	Direction: 174°58'30"
140	1636.101	Left Edge (L1): 1636.101, Centre Line (C): 1636.101, Right Edge (R1): 1636.101			-2.0	Direction: 174°58'30"
150	1636.321	Left Edge (L1): 1636.321, Centre Line (C): 1636.321, Right Edge (R1): 1636.321			-2.0	Direction: 174°58'30"
160	1636.541	Left Edge (L1): 1636.541, Centre Line (C): 1636.541, Right Edge (R1): 1636.541			-2.0	Direction: 174°58'30"
170	1636.761	Left Edge (L1): 1636.761, Centre Line (C): 1636.761, Right Edge (R1): 1636.761			-2.0	Direction: 174°58'30"
180	1636.981	Left Edge (L1): 1636.981, Centre Line (C): 1636.981, Right Edge (R1): 1636.981			-2.0	Direction: 174°58'30"
190	1637.201	Left Edge (L1): 1637.201, Centre Line (C): 1637.201, Right Edge (R1): 1637.201			-2.0	Direction: 174°58'30"
200	1637.421	Left Edge (L1): 1637.421, Centre Line (C): 1637.421, Right Edge (R1): 1637.421			-2.0	Direction: 174°58'30"
210	1637.641	Left Edge (L1): 1637.641, Centre Line (C): 1637.641, Right Edge (R1): 1637.641			-2.0	Direction: 174°58'30"
220	1637.861	Left Edge (L1): 1637.861, Centre Line (C): 1637.861, Right Edge (R1): 1637.861			-2.0	Direction: 174°58'30"
230	1638.081	Left Edge (L1): 1638.081, Centre Line (C): 1638.081, Right Edge (R1): 1638.081			-2.0	Direction: 174°58'30"
240	1638.301	Left Edge (L1): 1638.301, Centre Line (C): 1638.301, Right Edge (R1): 1638.301			-2.0	Direction: 174°58'30"
250	1638.521	Left Edge (L1): 1638.521, Centre Line (C): 1638.521, Right Edge (R1): 1638.521			-2.0	Direction: 174°58'30"
260	1638.741	Left Edge (L1): 1638.741, Centre Line (C): 1638.741, Right Edge (R1): 1638.741			-2.0	Direction: 174°58'30"
270	1638.961	Left Edge (L1): 1638.961, Centre Line (C): 1638.961, Right Edge (R1): 1638.961			-2.0	Direction: 174°58'30"
280	1639.181	Left Edge (L1): 1639.181, Centre Line (C): 1639.181, Right Edge (R1): 1639.181			-2.0	Direction: 174°58'30"
290	1639.401	Left Edge (L1): 1639.401, Centre Line (C): 1639.401, Right Edge (R1): 1639.401			-2.0	Direction: 174°58'30"
300	1639.621	Left Edge (L1): 1639.621, Centre Line (C): 1639.621, Right Edge (R1): 1639.621			-2.0	Direction: 174°58'30"
310	1639.841	Left Edge (L1): 1639.841, Centre Line (C): 1639.841, Right Edge (R1): 1639.841			-2.0	Direction: 174°58'30"
320	1640.061	Left Edge (L1): 1640.061, Centre Line (C): 1640.061, Right Edge (R1): 1640.061			-2.0	Direction: 174°58'30"
330	1640.281	Left Edge (L1): 1640.281, Centre Line (C): 1640.281, Right Edge (R1): 1640.281			-2.0	Direction: 174°58'30"
340	1640.501	Left Edge (L1): 1640.501, Centre Line (C): 1640.501, Right Edge (R1): 1640.501			-2.0	Direction: 174°58'30"
350	1640.721	Left Edge (L1): 1640.721, Centre Line (C): 1640.721, Right Edge (R1): 1640.721			-2.0	Direction: 174°58'30"
360	1640.941	Left Edge (L1): 1640.941, Centre Line (C): 1640.941, Right Edge (R1): 1640.941			-2.0	Direction: 174°58'30"
370	1641.161	Left Edge (L1): 1641.161, Centre Line (C): 1641.161, Right Edge (R1): 1641.161			-2.0	Direction: 174°58'30"
380	1641.381	Left Edge (L1): 1641.381, Centre Line (C): 1641.381, Right Edge (R1): 1641.381			-2.0	Direction: 174°58'30"
390	1641.601	Left Edge (L1): 1641.601, Centre Line (C): 1641.601, Right Edge (R1): 1641.601			-2.0	Direction: 174°58'30"
400	1641.821	Left Edge (L1): 1641.821, Centre Line (C): 1641.821, Right Edge (R1): 1641.821			-2.0	Direction: 174°58'30"
410	1642.041	Left Edge (L1): 1642.041, Centre Line (C): 1642.041, Right Edge (R1): 1642.041			-2.0	Direction: 174°58'30"
420	1642.261	Left Edge (L1): 1642.261, Centre Line (C): 1642.261, Right Edge (R1): 1642.261			-2.0	Direction: 174°58'30"
430	1642.481	Left Edge (L1): 1642.481, Centre Line (C): 1642.481, Right Edge (R1): 1642.481			-2.0	Direction: 174°58'30"
440	1642.701	Left Edge (L1): 1642.701, Centre Line (C): 1642.701, Right Edge (R1): 1642.701			-2.0	Direction: 174°58'30"
450	1642.921	Left Edge (L1): 1642.921, Centre Line (C): 1642.921, Right Edge (R1): 1642.921			-2.0	Direction: 174°58'30"
460	1643.141	Left Edge (L1): 1643.141, Centre Line (C): 1643.141, Right Edge (R1): 1643.141			-2.0	Direction: 174°58'30"
470	1643.361	Left Edge (L1): 1643.361, Centre Line (C): 1643.361, Right Edge (R1): 1643.361			-2.0	Direction: 174°58'30"
480	1643.581	Left Edge (L1): 1643.581, Centre Line (C): 1643.581, Right Edge (R1): 1643.581			-2.0	Direction: 174°58'30"
490	1643.801	Left Edge (L1): 1643.801, Centre Line (C): 1643.801, Right Edge (R1): 1643.801			-2.0	Direction: 174°58'30"
500	1644.021	Left Edge (L1): 1644.021, Centre Line (C): 1644.021, Right Edge (R1): 1644.021			-2.0	Direction: 174°58'30"

CLIENT:

19 Murray Street
Lady Grey
9755

Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:

THEWO & SMMS - JV

58 Brebner Road
Westdene
Bloemfontein
9301

Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH

DESIGN BY:
T. TSHABALALA

DRAWN BY:
B. MVUKUZO

CHECKED BY:
L. MARAH

APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME:
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE:
ROAD 6 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

DWG NO:
P1027-BE-CIV-RD-LS06

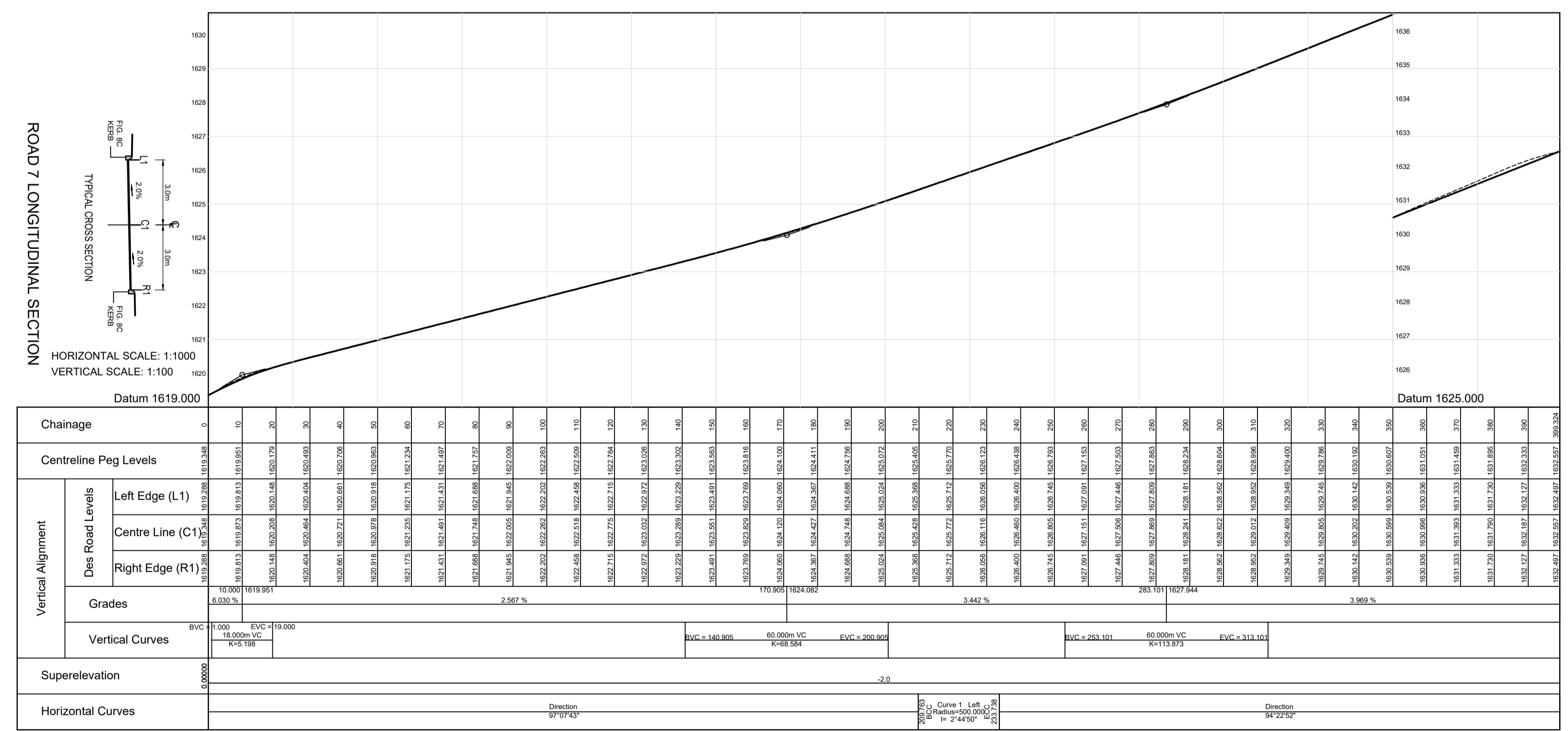
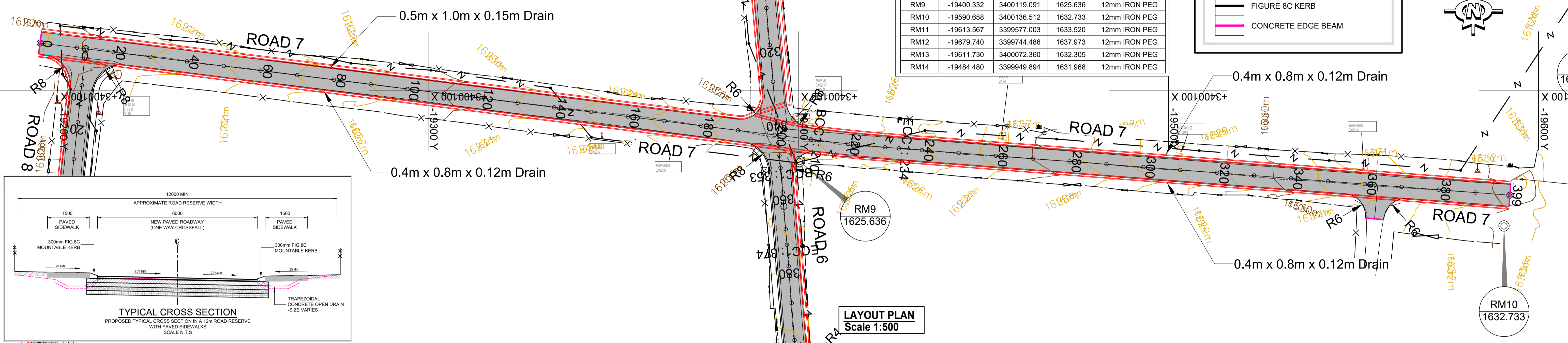
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START	0	-19195.171	3400087.098
BCC1	209.763	-19403.312	3400113.129
PI1	221.750	-19415.209	3400114.617
ECC1	233.738	-19427.164	3400115.533
END	399.324	-19592.266	3400128.182

Road Curve List						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	500.00	0.00	0.00	11.99	11.99	2°44'50"
2	0.00	0.00	0.00	0.00	0.00	0°00'00"

BENCHMARKS (WGS 84 Lo 27°)				
Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG

LEGEND :

- PROPOSED PAVED ROADS
- NEW STORMWATER PIPE
- NEW STORMWATER MANHOLE
- PROPOSED OPEN-DRAIN
- NEW STORMWATER OUTLET / INLET
- FIGURE 8C KERB
- CONCRETE EDGE BEAM



Longsection for 0 to 399

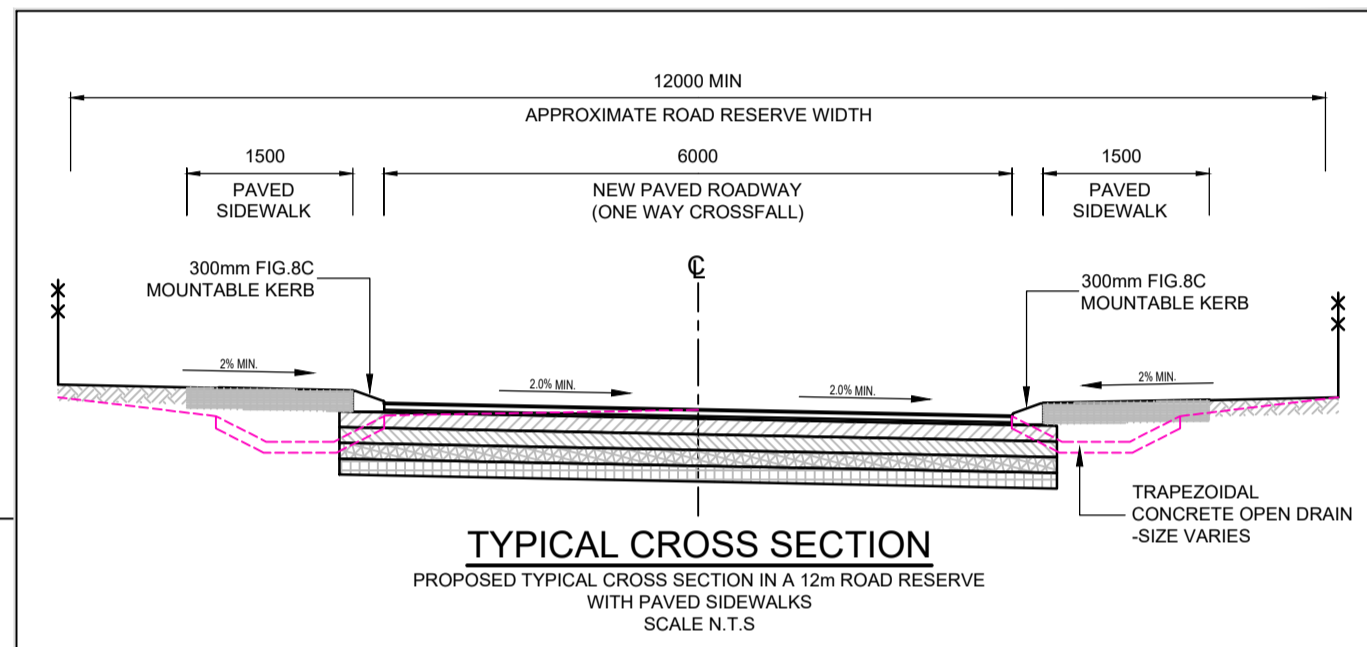
CLIENT: 19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyit@senqu.gov.za	CONSULTANT: THEWO & SMMS - JV 58 Brebner Road Westdene Bloemfontein 9301 Tel: +27 (051) 430 1321 Email: PMO@thewo.co.za	PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: 2024-03-25 SIGNATURE:	DESIGN BY: T. TSHABALALA DRAWN BY: B. MVUKUZO CHECKED BY: L. MARAH APPROVED BY: L. MARAH	REVISIONS	PROJECT NAME SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER TITLE ROAD 7 - LAYOUT AND LONGITUDINAL SECTION	PROJECT STATUS: TENDER													
				<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>2024-03-25</td> <td>ISSUED FOR TENDER</td> <td>L.M.</td> </tr> </tbody> </table>		REV	DATE	DESCRIPTION	BY	0	2024-03-25	ISSUED FOR TENDER	L.M.	<table border="1"> <thead> <tr> <th>DATE</th> <th>SCALE</th> <th>SHEET</th> <th>REV</th> <th>A1</th> </tr> </thead> <tbody> <tr> <td>2024-03-25</td> <td>AS SHOWN</td> <td>1 OF 1</td> <td>0</td> <td>A1</td> </tr> </tbody> </table>	DATE	SCALE	SHEET	REV	A1
REV	DATE	DESCRIPTION	BY																
0	2024-03-25	ISSUED FOR TENDER	L.M.																
DATE	SCALE	SHEET	REV	A1															
2024-03-25	AS SHOWN	1 OF 1	0	A1															

+3400100 X
-19000 Y

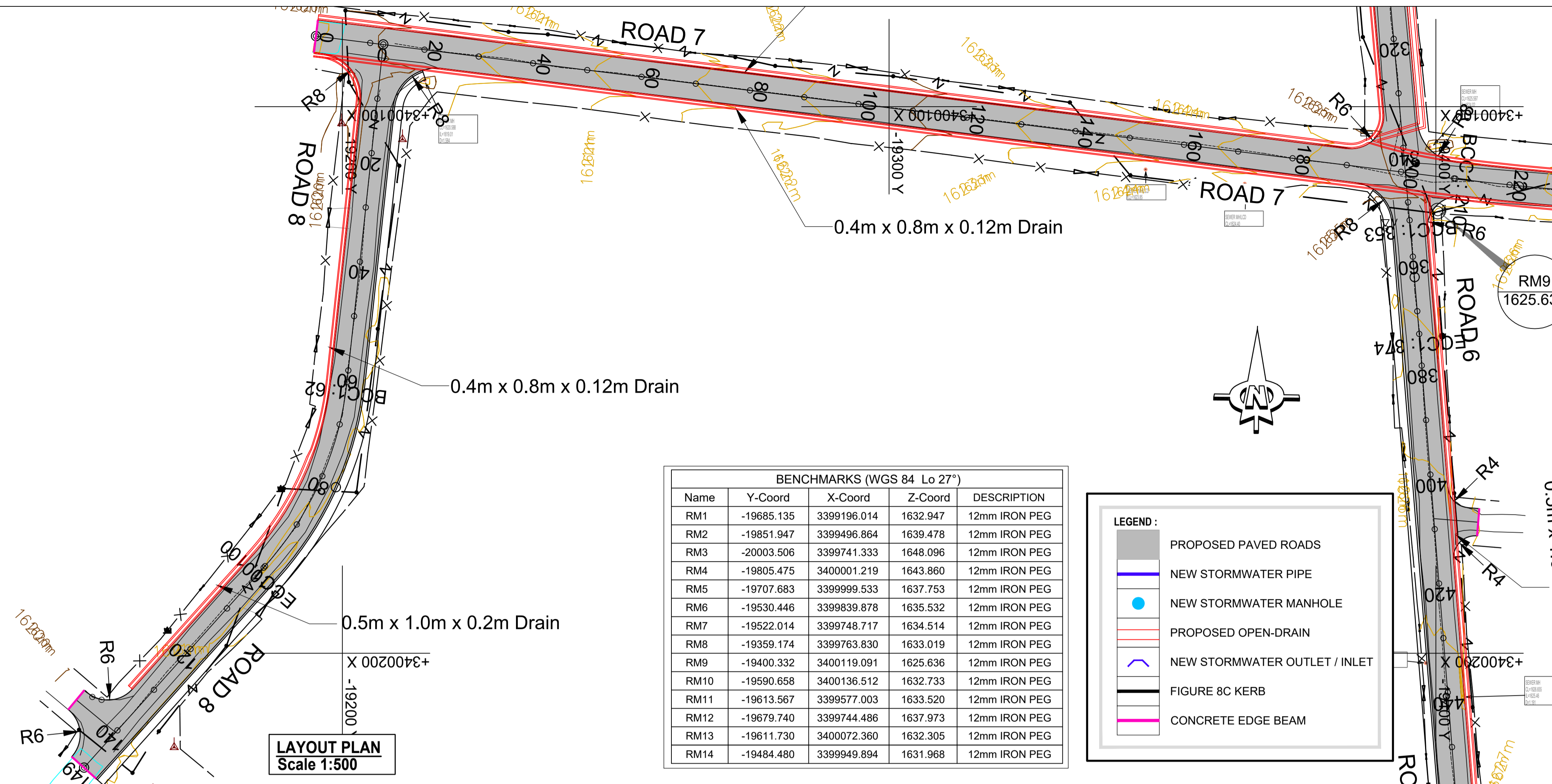
+3400100 X
-19100 Y

Road List				
Position	SV	Y-Coord	X-Coord	Radius
START	0	-19207.472	3400088.603	0.000
BCC1	62.113	-19200.856	3400150.363	
PI1	80.857	-19198.791	3400169.631	60.000
ECC1	99.601	-19185.846	3400184.052	
END	149.160	-19152.740	3400220.932	

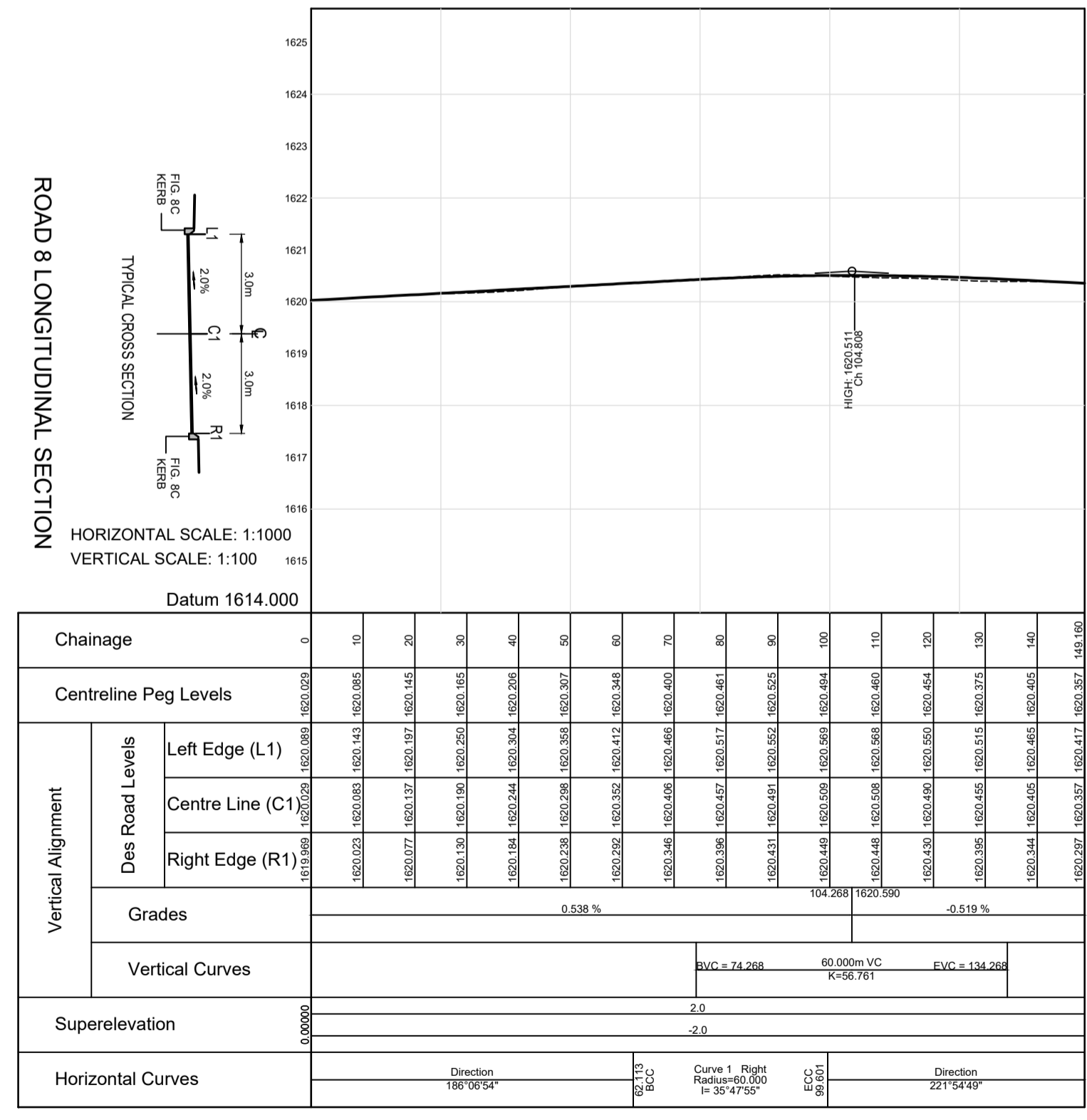
Road Curve List						
Road-8						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0°00'00"
1	60.00	0.00	0.00	19.38	19.38	35°47'55"
2	0.00	0.00	0.00	0.00	0.00	0°00'00"



+3400200 X
-19100 Y



BENCHMARKS (WGS 84 Lo 27°)				
Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
RM4	-19805.475	3400001.219	1643.860	12mm IRON PEG
RM5	-19707.683	3399999.533	1637.753	12mm IRON PEG
RM6	-19530.446	3399839.878	1635.532	12mm IRON PEG
RM7	-19522.014	3399748.717	1634.514	12mm IRON PEG
RM8	-19359.174	3399763.830	1633.019	12mm IRON PEG
RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG



Longsection for 0 to 149

CLIENT:

19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:

THEWO & SMMS - JV

58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH

PROF. Reg.No:
920281

DATE:
2024-03-25

SIGNATURE:

DESIGN BY:
T. TSHABALALA

DRAWN BY:
B. MVUKUZO

CHECKED BY:
L. MARAH

APPROVED BY:
L. MARAH

REVISIONS			
REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE
ROAD 8 - LAYOUT AND LONGITUDINAL SECTION

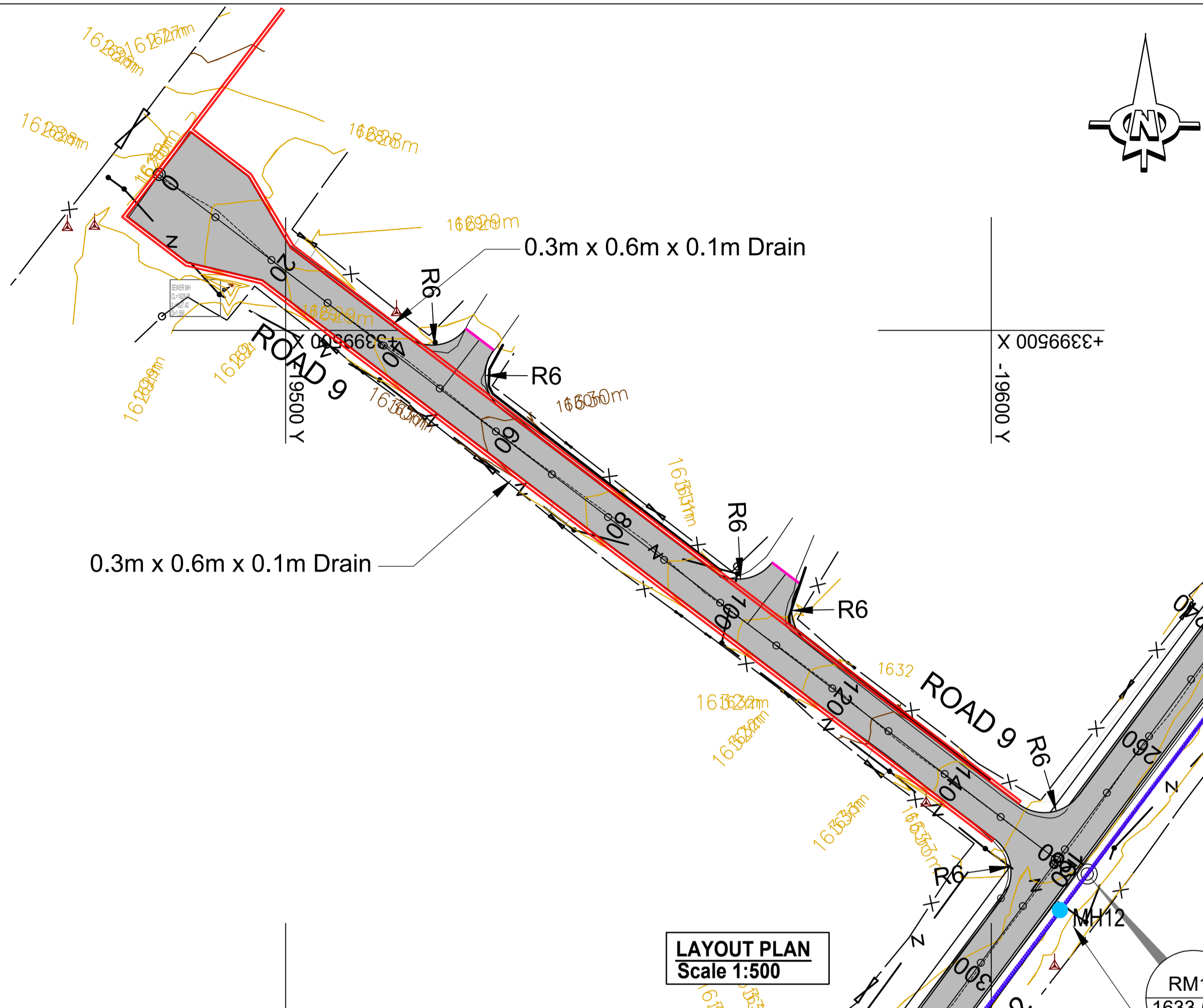
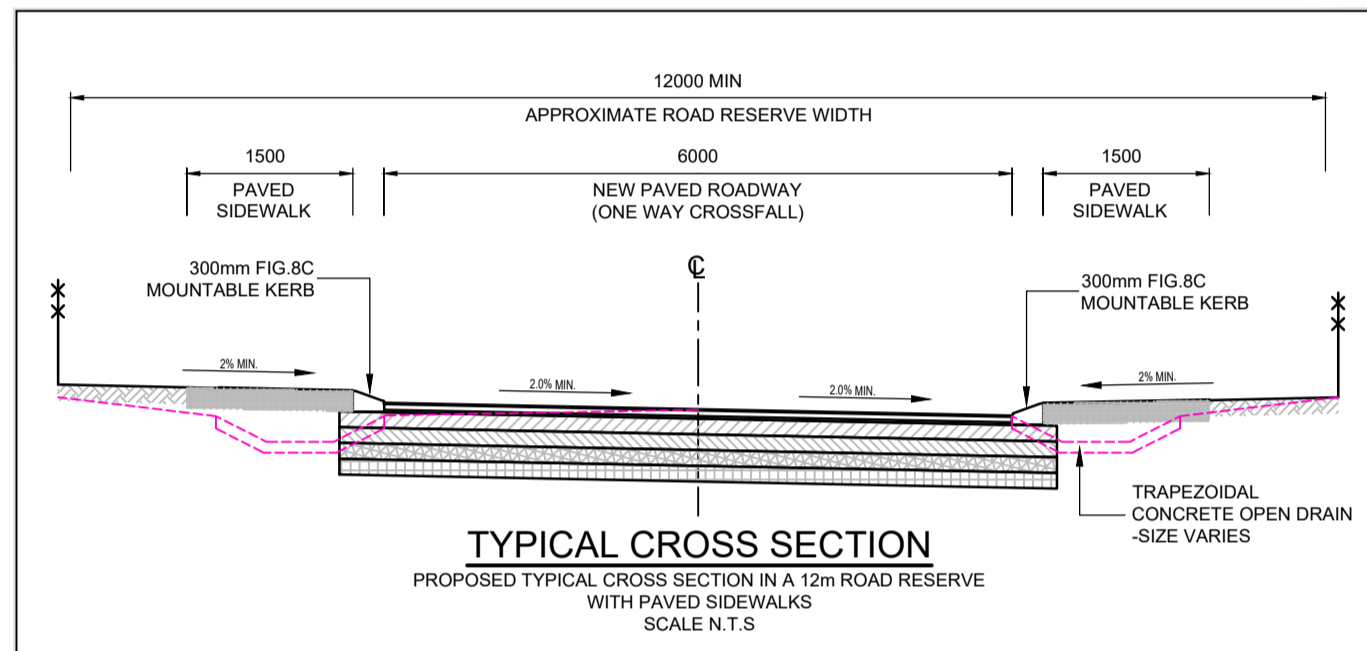
PROJECT STATUS:
TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

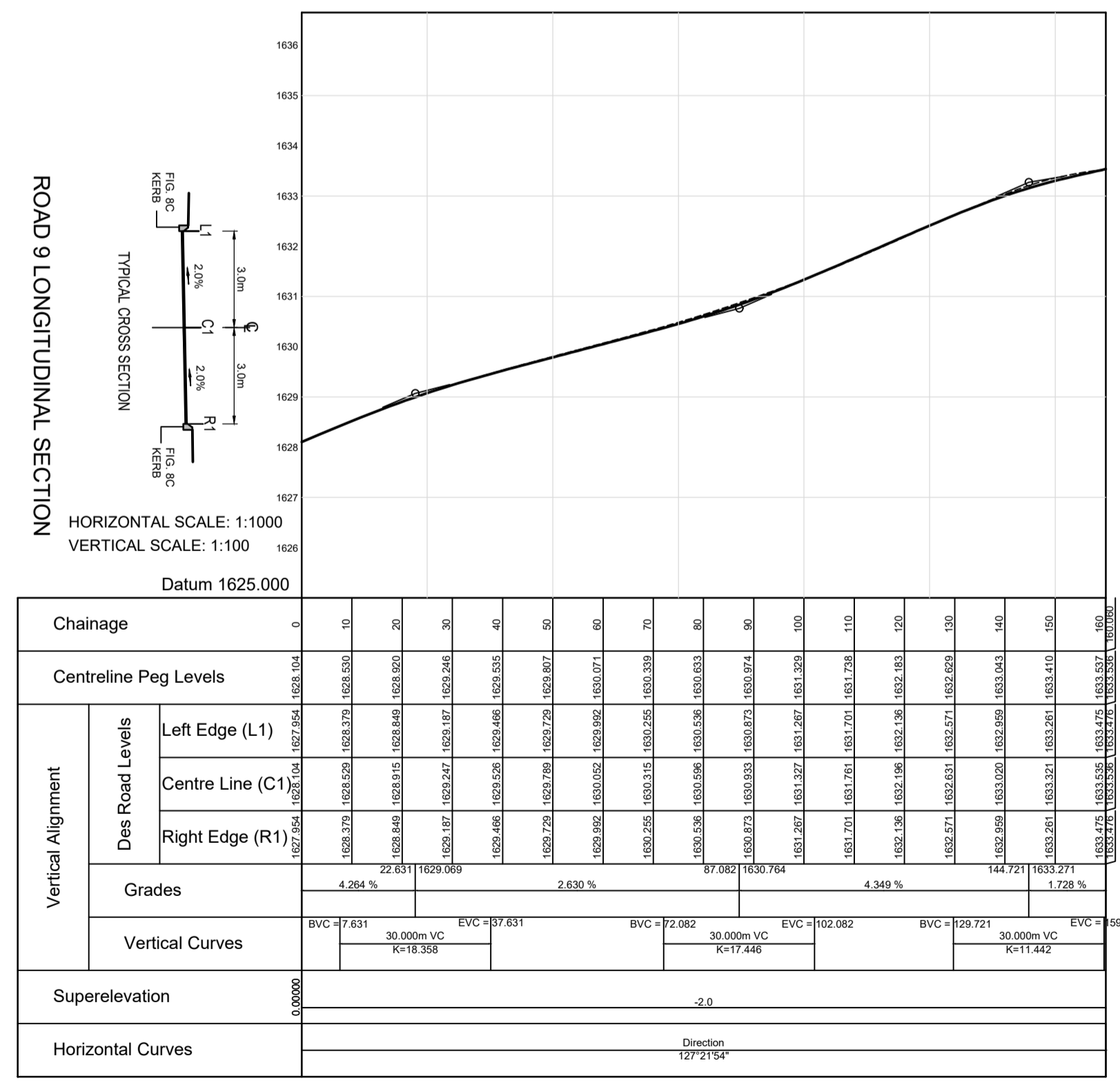
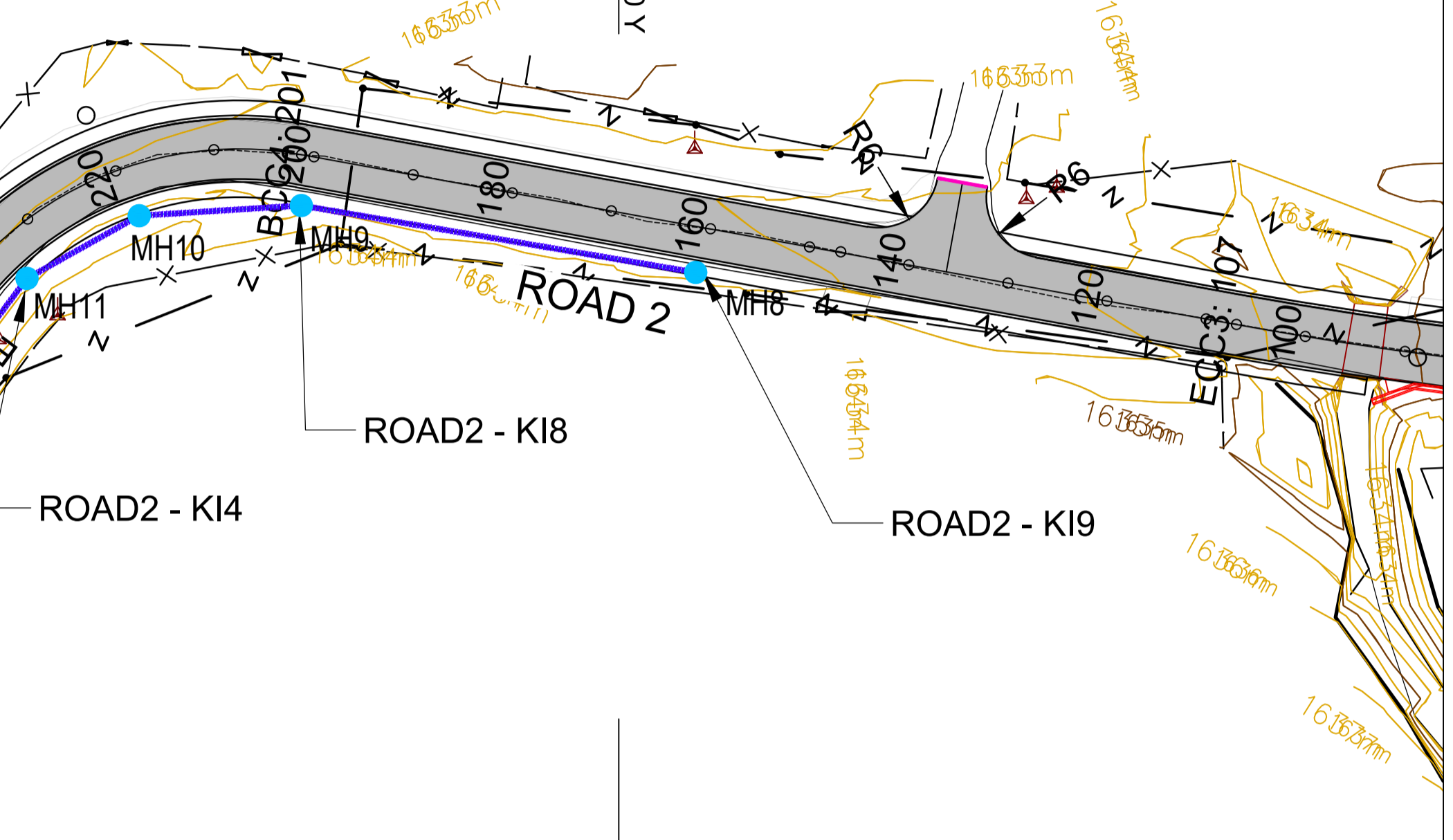
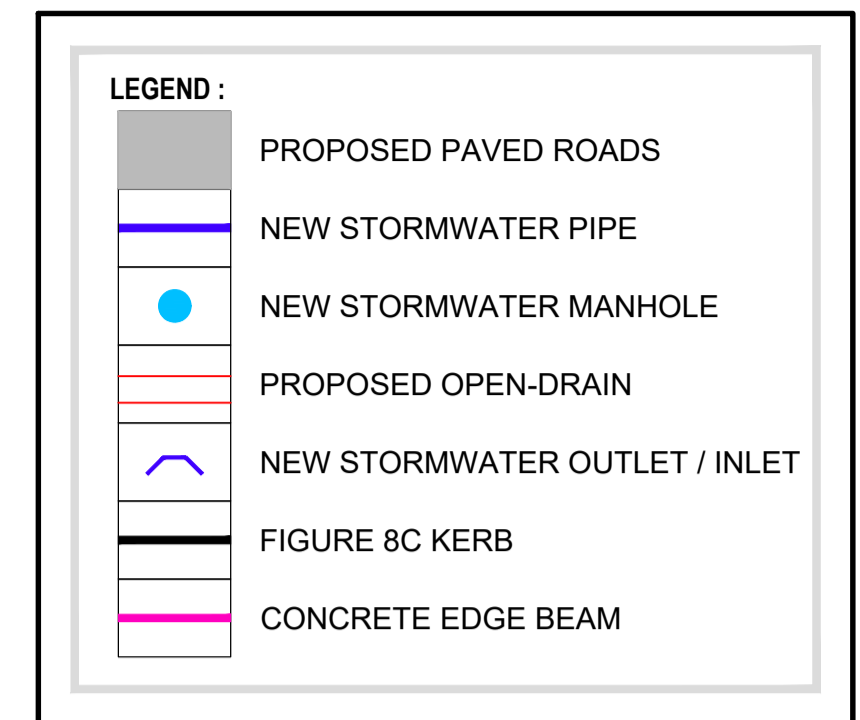
DWG NO
P1027-BE-CIV-RD-LS08

Road List				
Road-9				
Position	SV	Y-Coord	X-Coord	Radius
START	0	-19482.100	3399477.911	0.000
END	160.060	-19609.314	3399575.050	

X 009663E+
-19400 Y



BENCHMARKS (WGS 84 Lo 27°)				
Name	Y-Coord	X-Coord	Z-Coord	DESCRIPTION
RM1	-19685.135	3399196.014	1632.947	12mm IRON PEG
RM2	-19851.947	3399496.864	1639.478	12mm IRON PEG
RM3	-20003.506	3399741.333	1648.096	12mm IRON PEG
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RM9	-19400.332	3400119.091	1625.636	12mm IRON PEG
RM10	-19590.658	3400136.512	1632.733	12mm IRON PEG
RM11	-19613.567	3399577.003	1633.520	12mm IRON PEG
RM12	-19679.740	3399744.486	1637.973	12mm IRON PEG
RM13	-19611.730	3400072.360	1632.305	12mm IRON PEG
RM14	-19484.480	3399949.894	1631.968	12mm IRON PEG



Longsection for 0 to 160

CLIENT:
19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:
THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

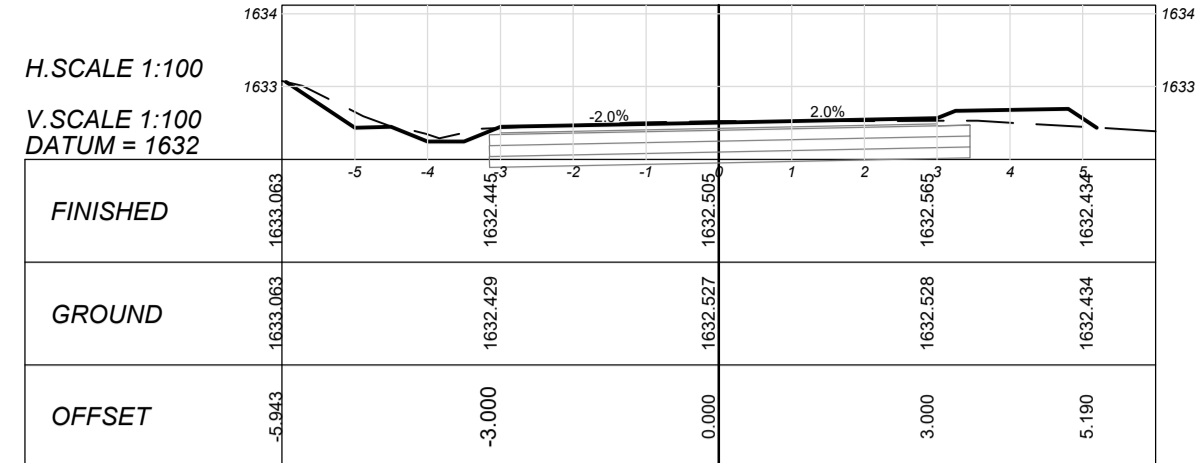
DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS			
REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

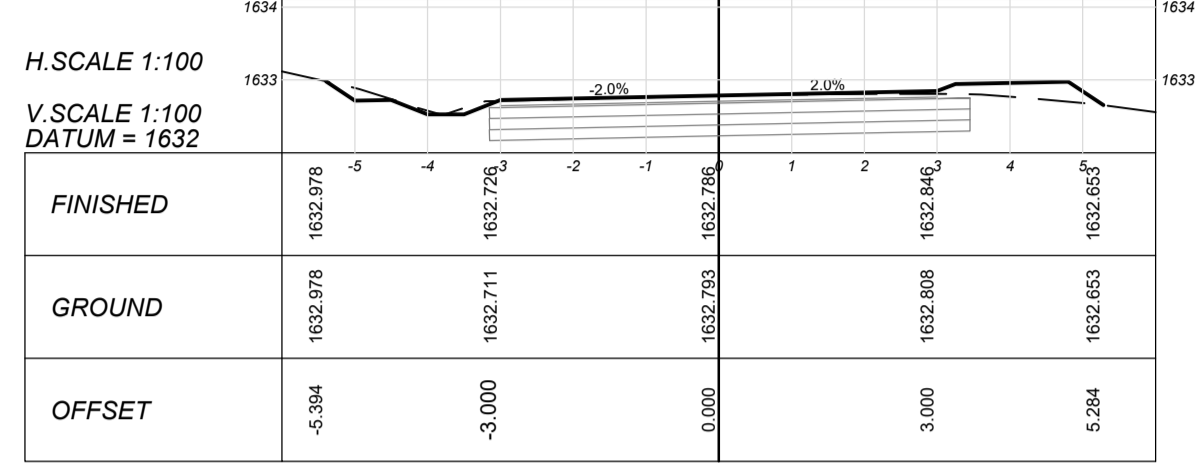
PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
ROAD 9 - LAYOUT AND LONGITUDINAL SECTION

PROJECT STATUS:
TENDER
DATE: 2024-03-25
SCALE: AS SHOWN
SHEET: 1 OF 1
REV: 0
A1
DWG NO: P1027-BE-CIV-RD-LS09

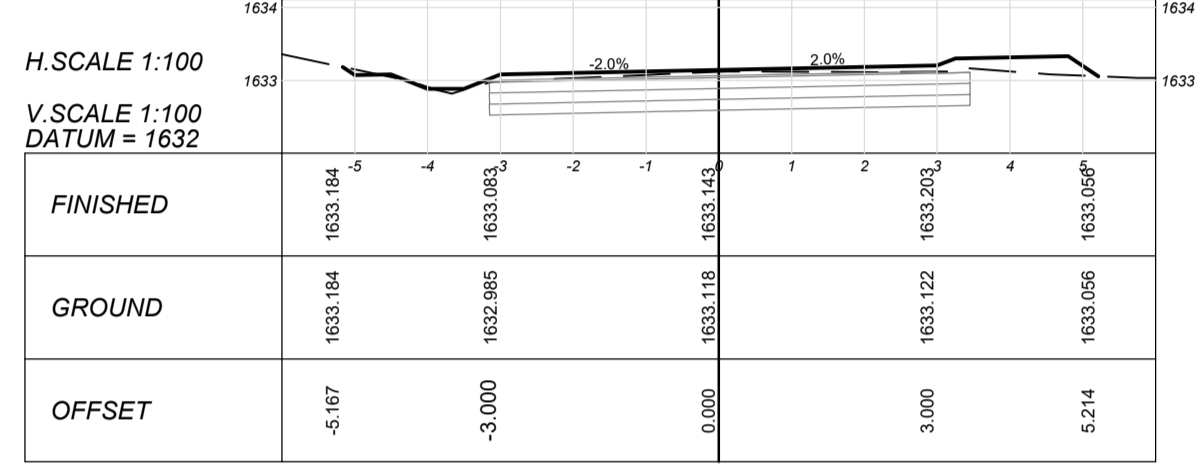
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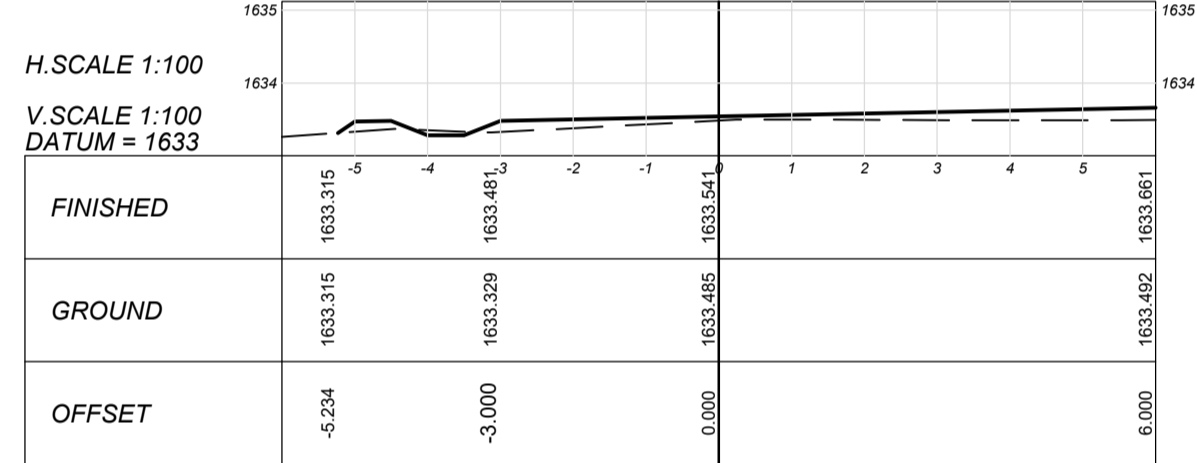
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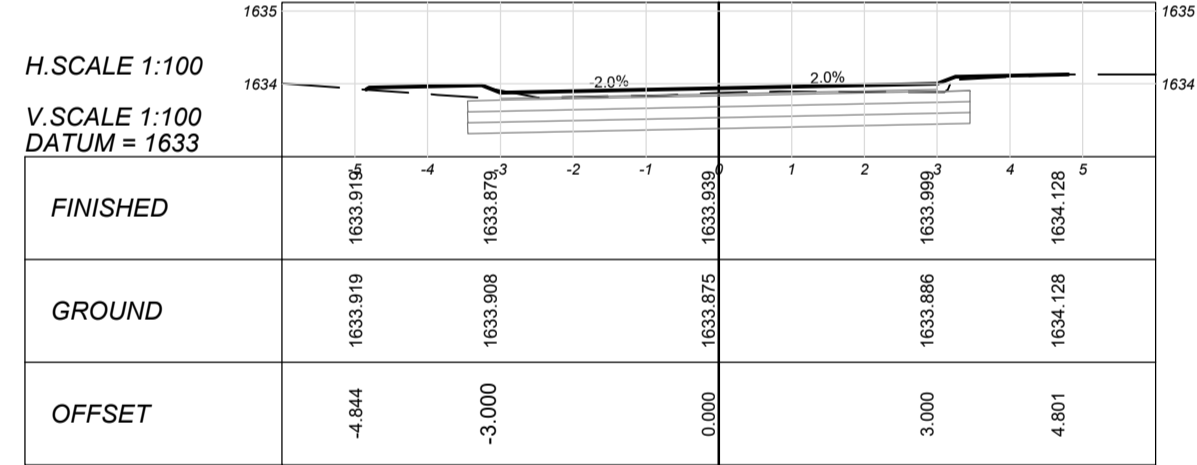
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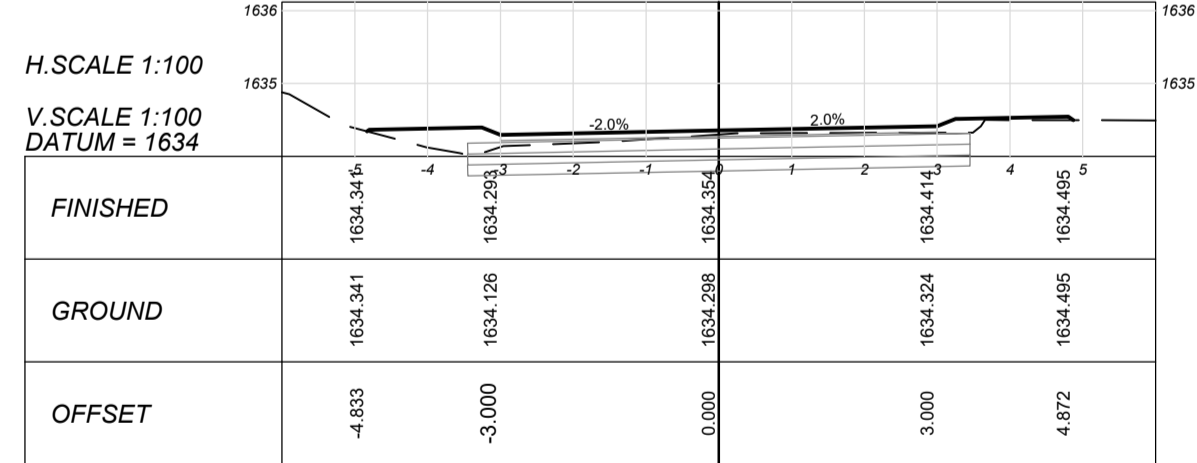
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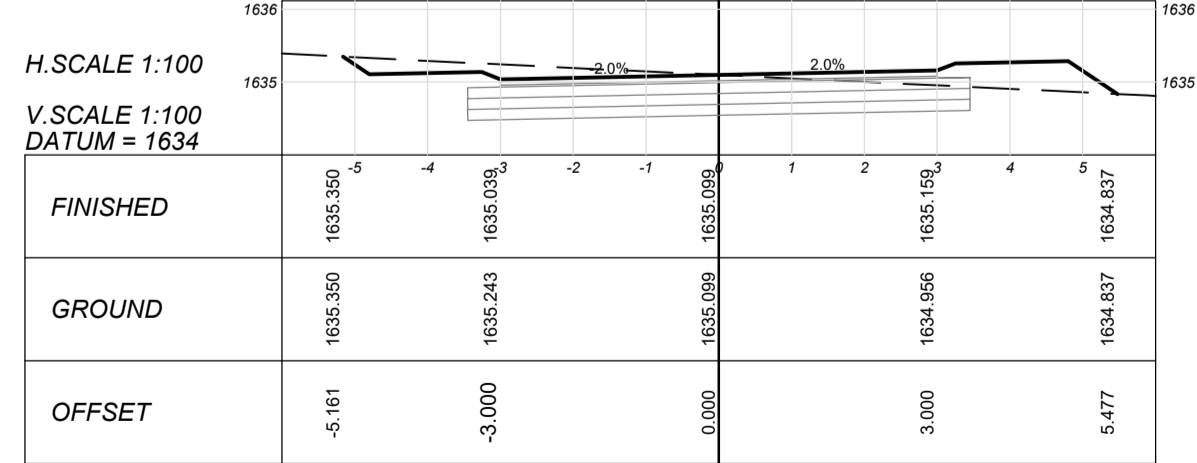
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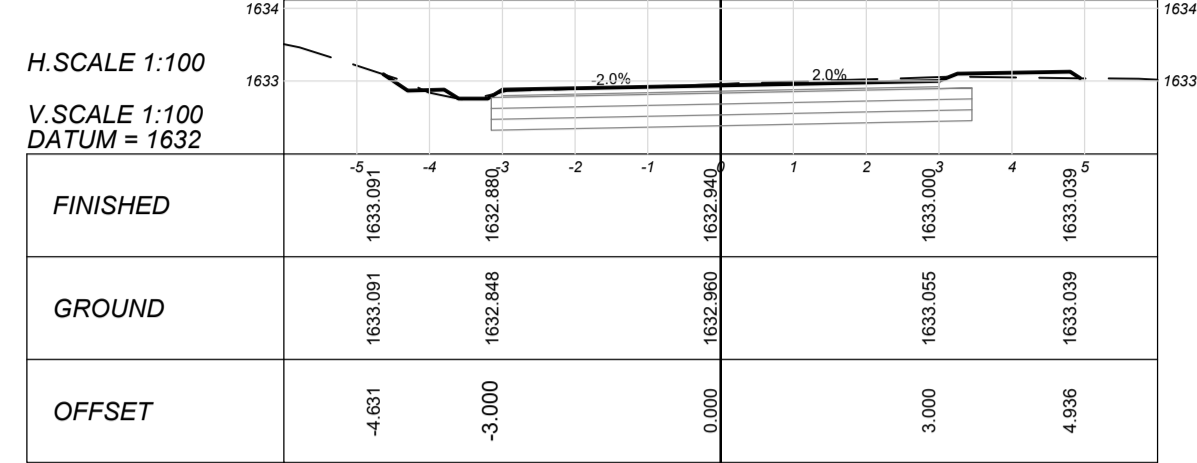
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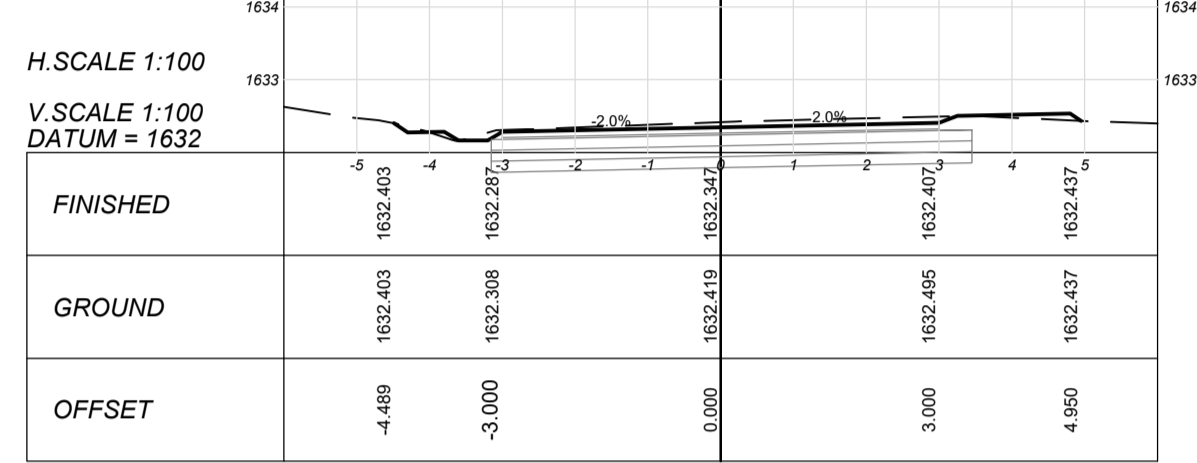
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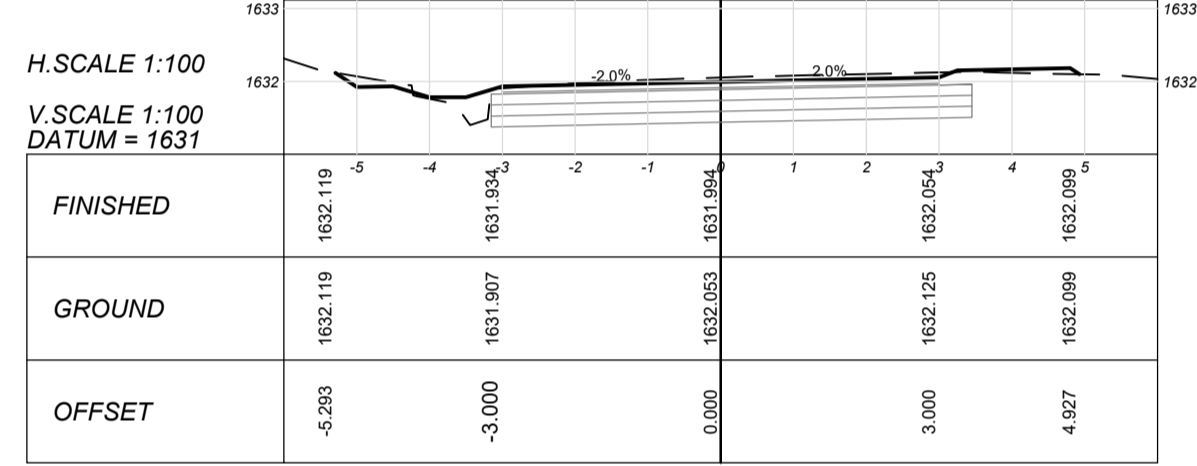
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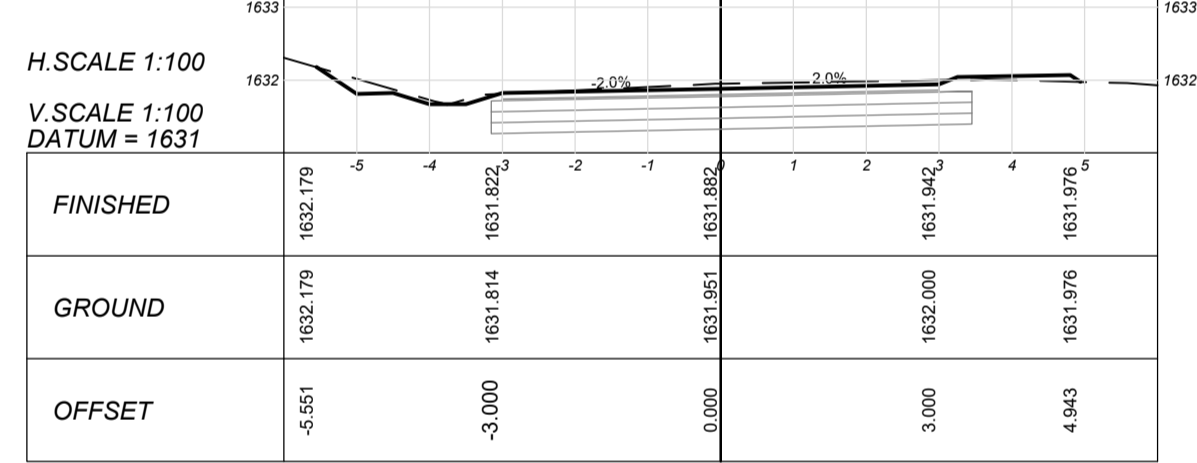
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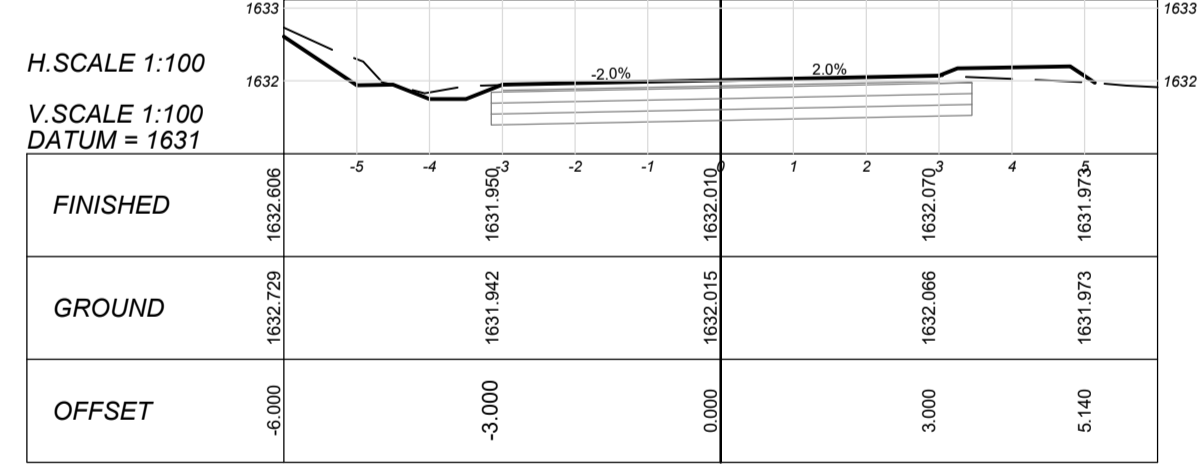
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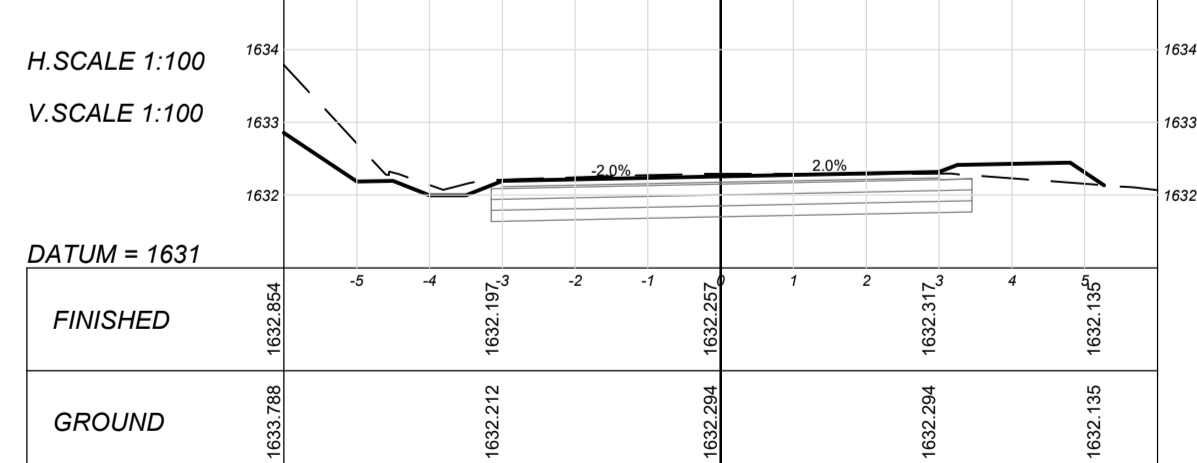
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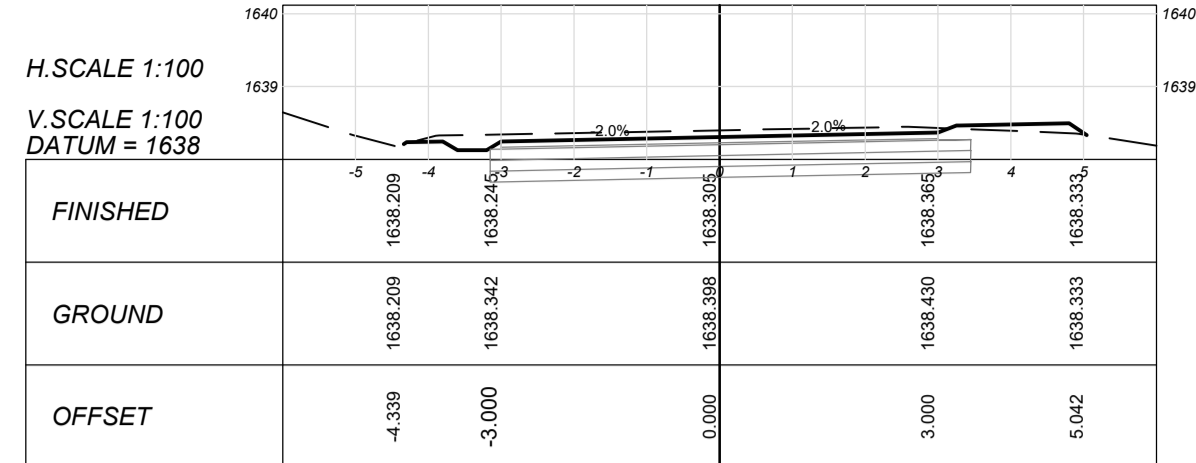
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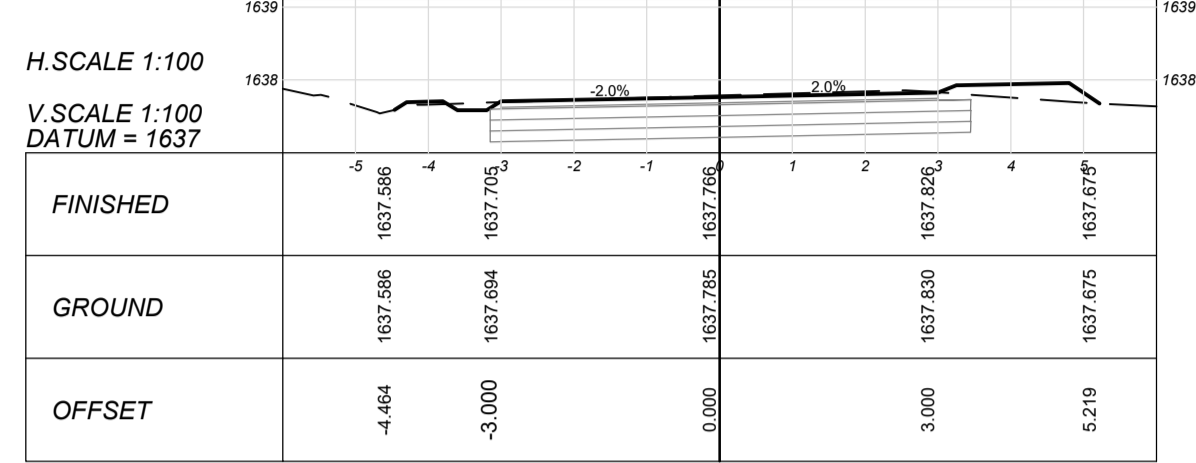
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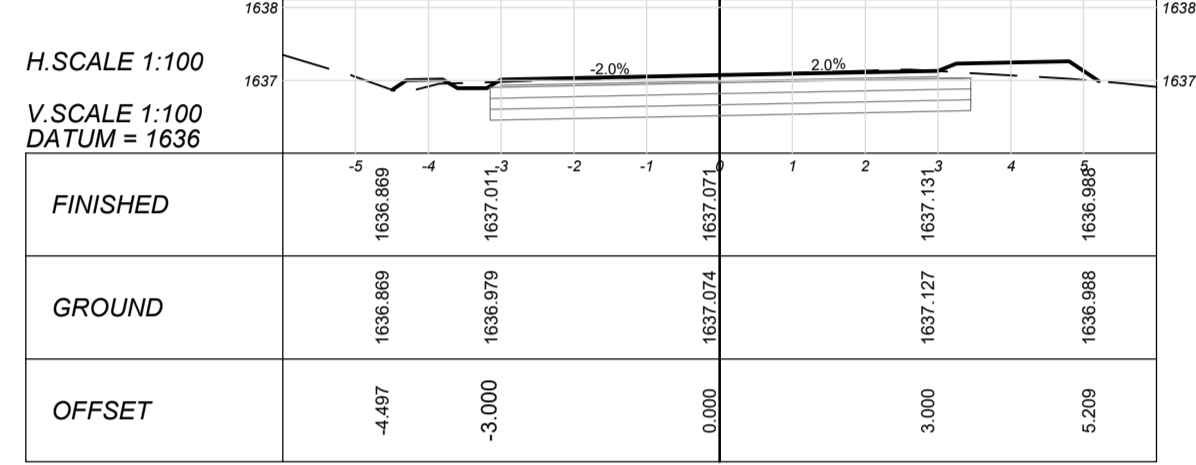
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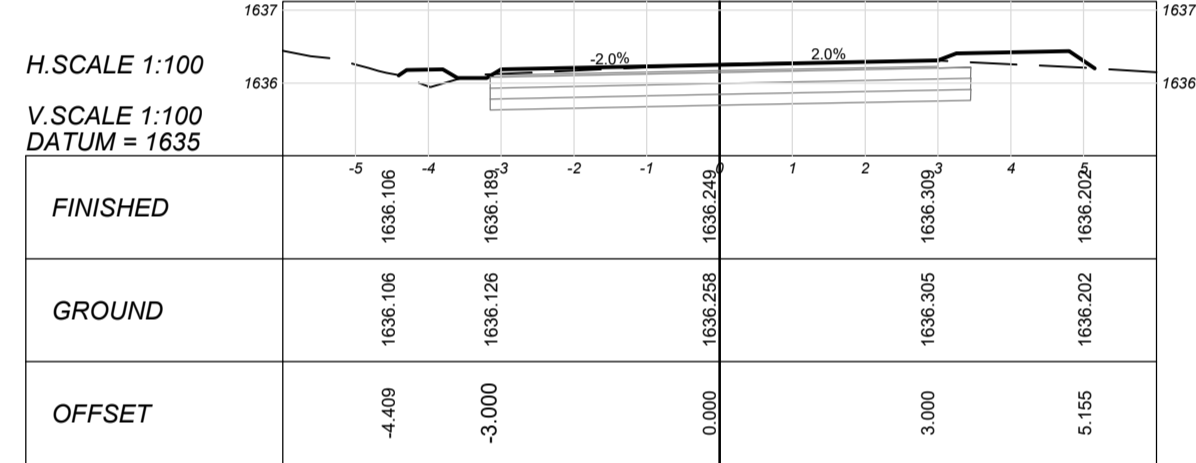
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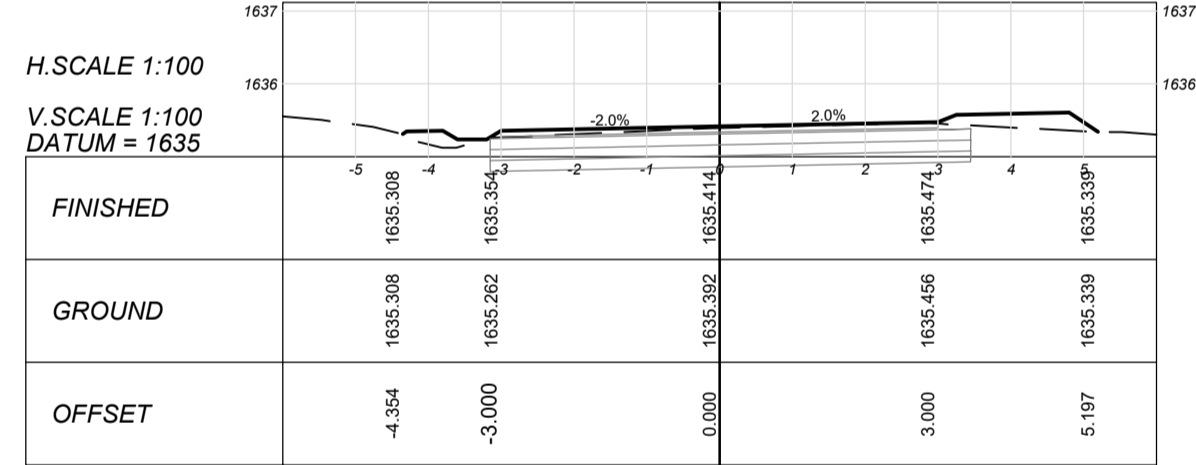
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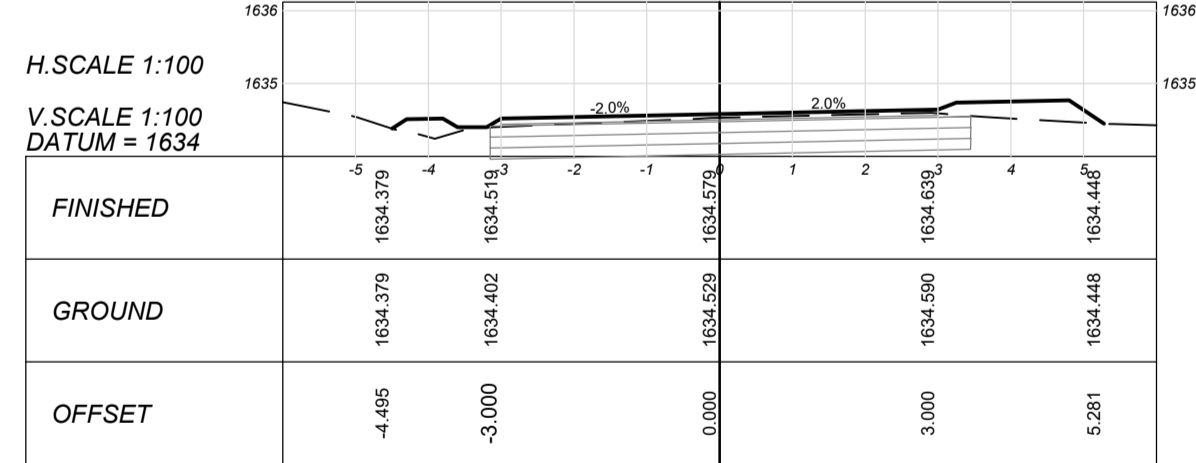
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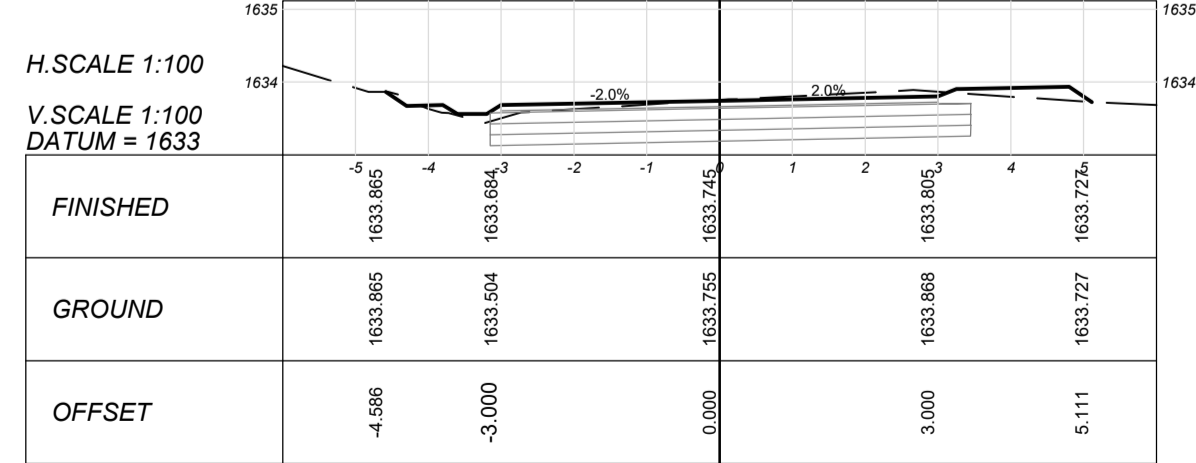
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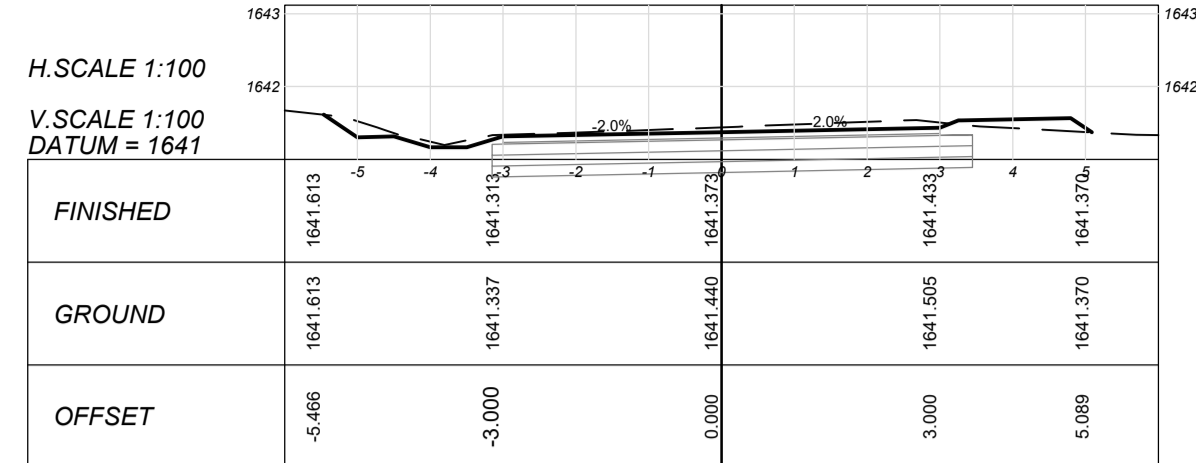
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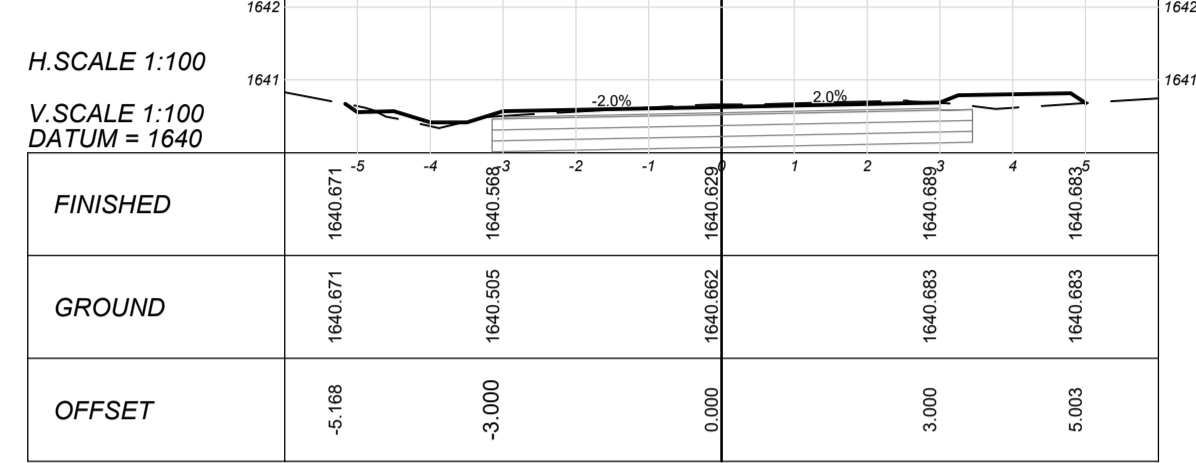
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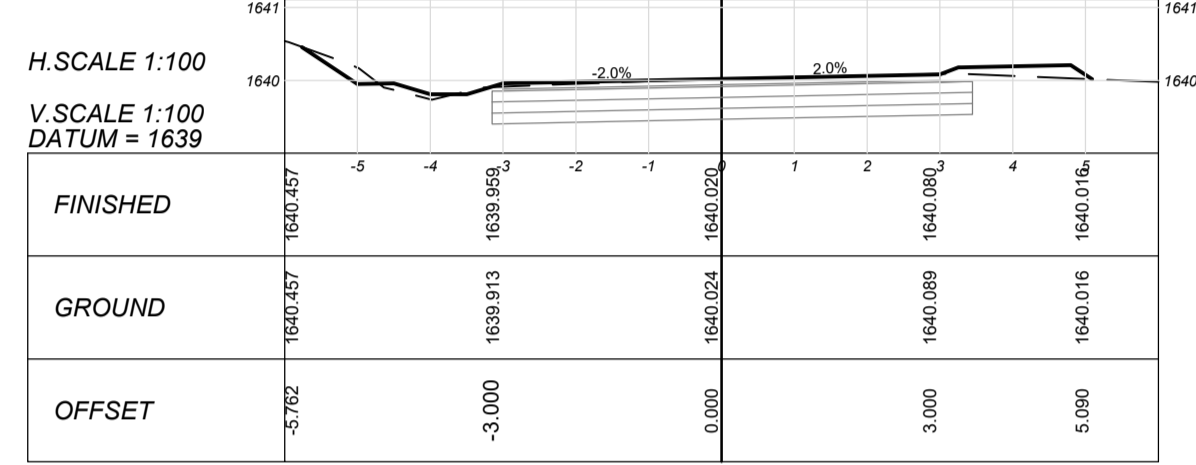
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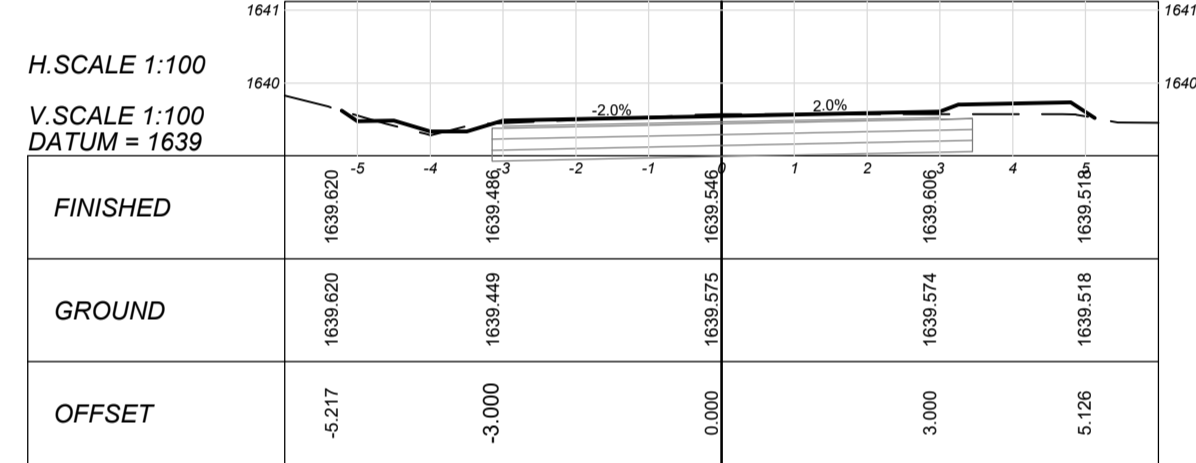
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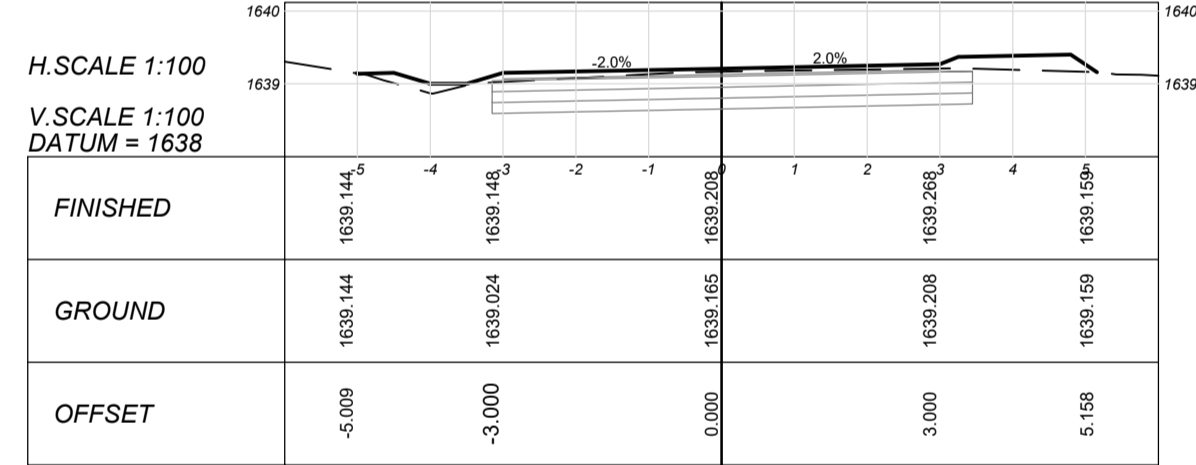
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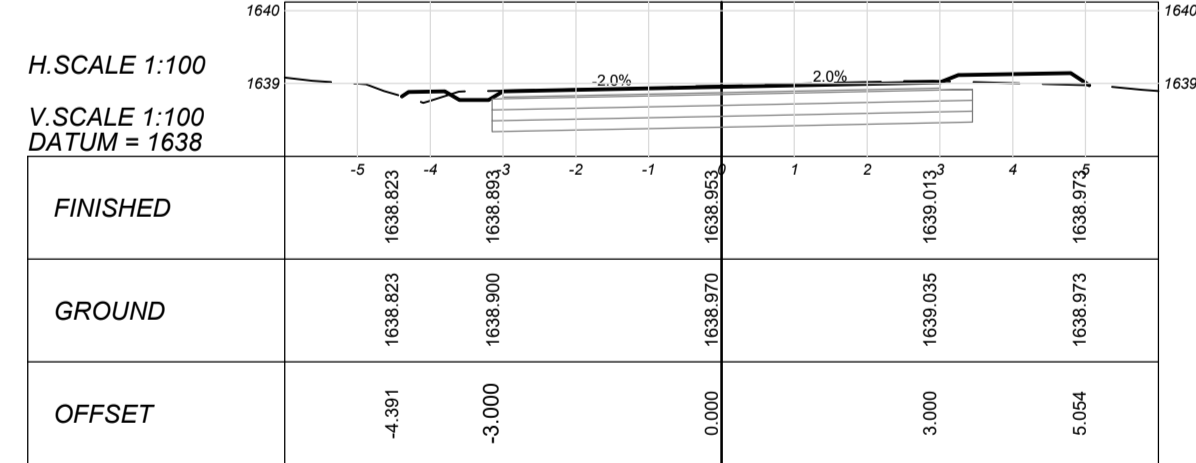
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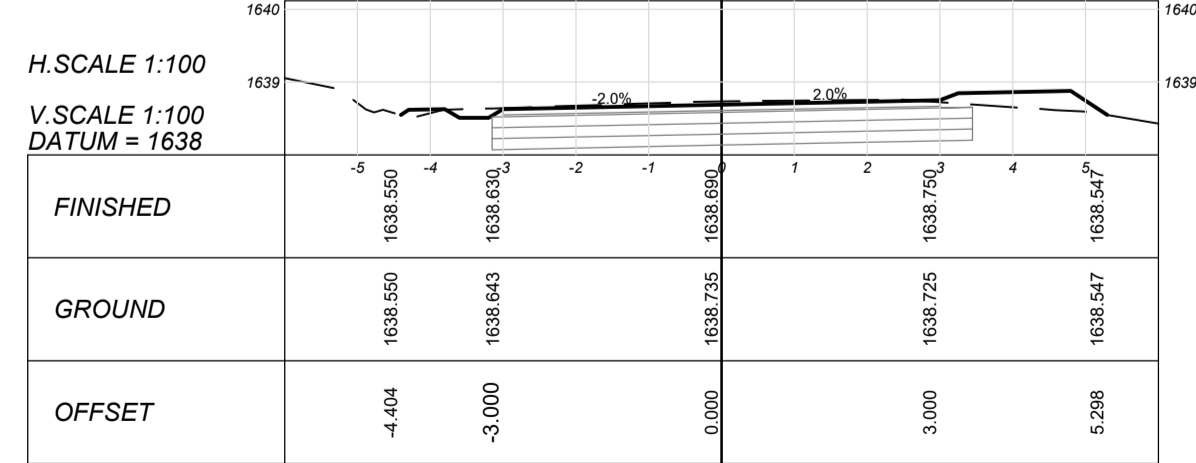
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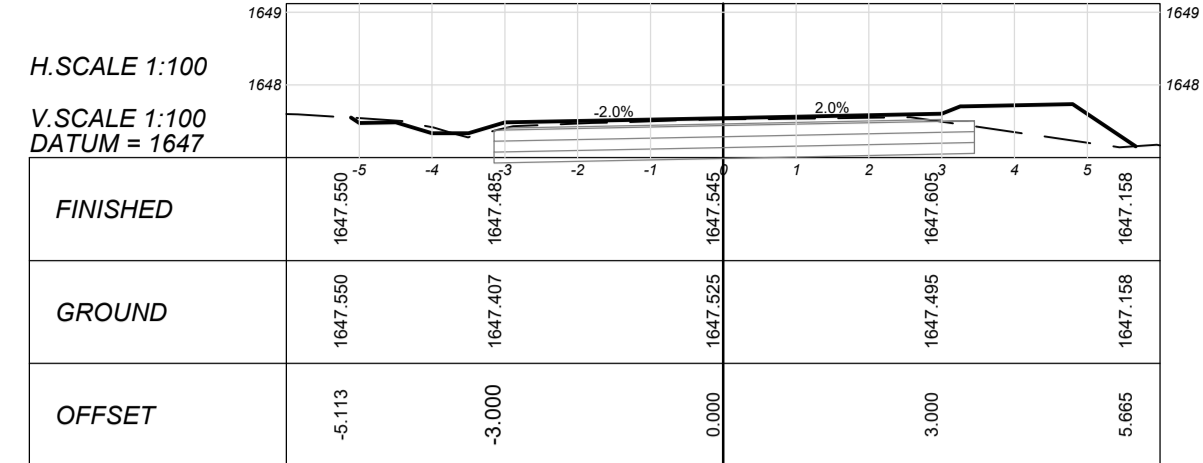


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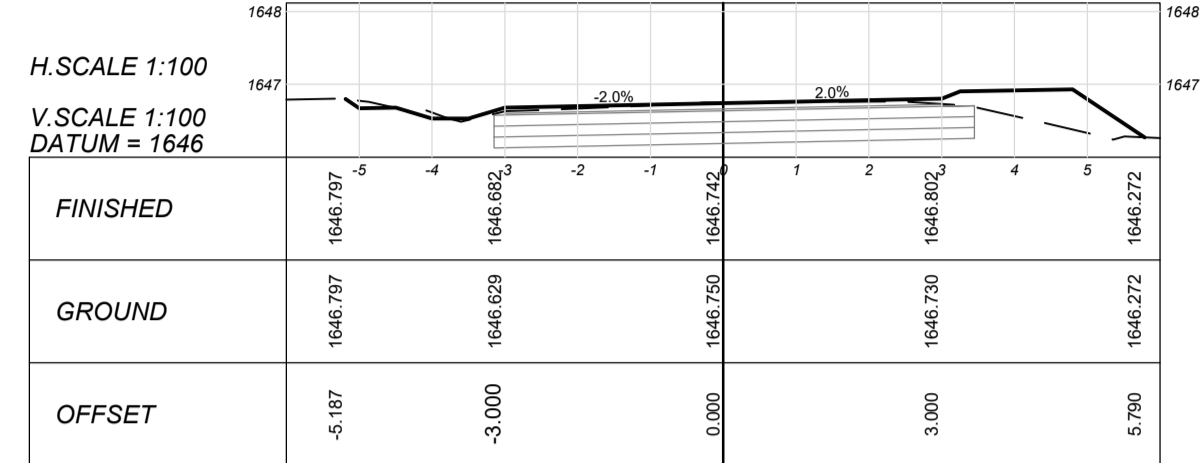


CLIENT: 19 Murray Street, Lady Grey 9755. Tel: (051) 603 1449. Email: vanzyt@senqu.gov.za

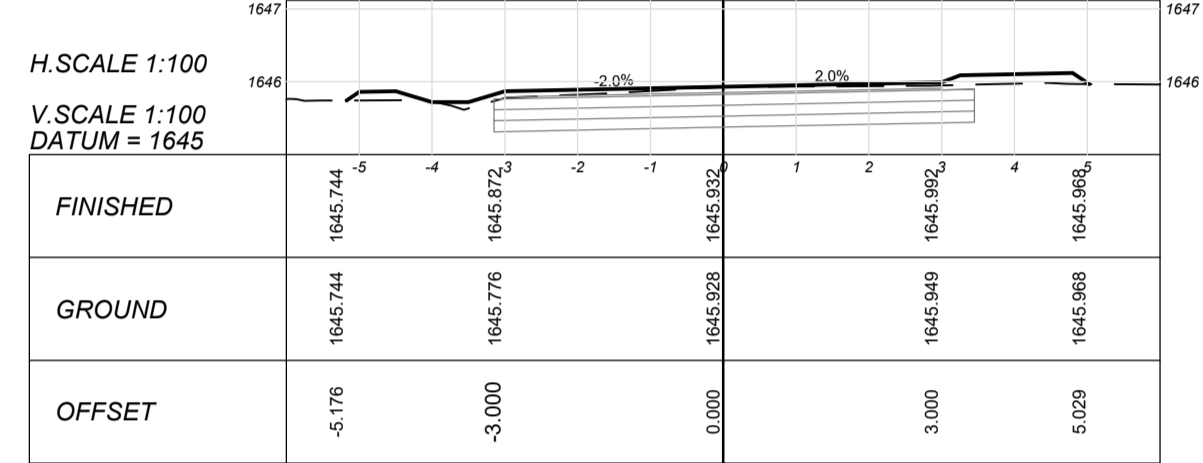
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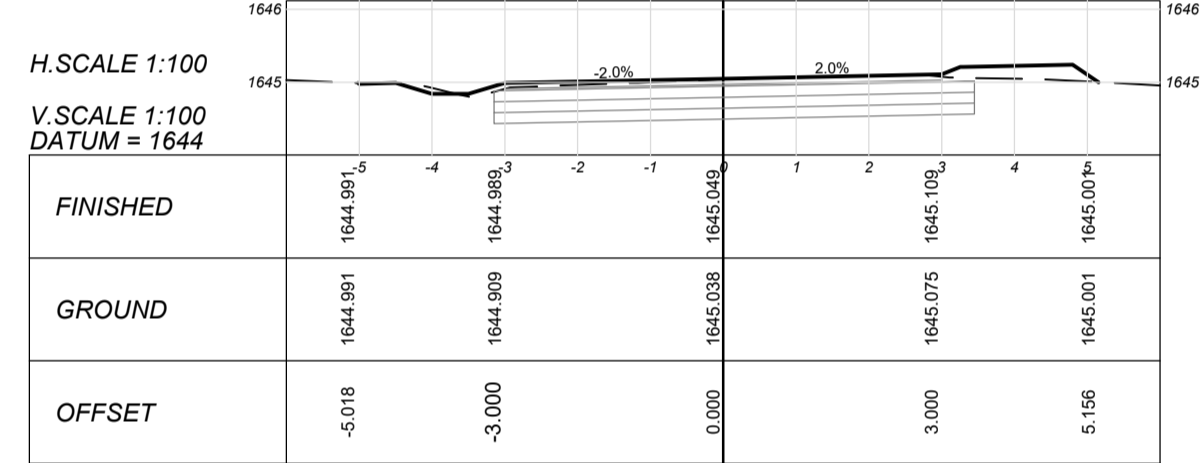
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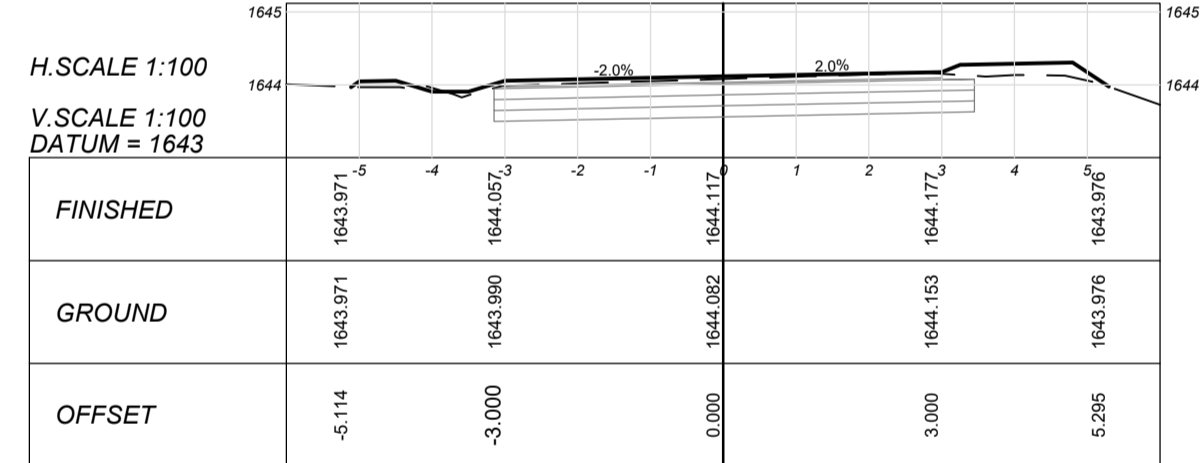
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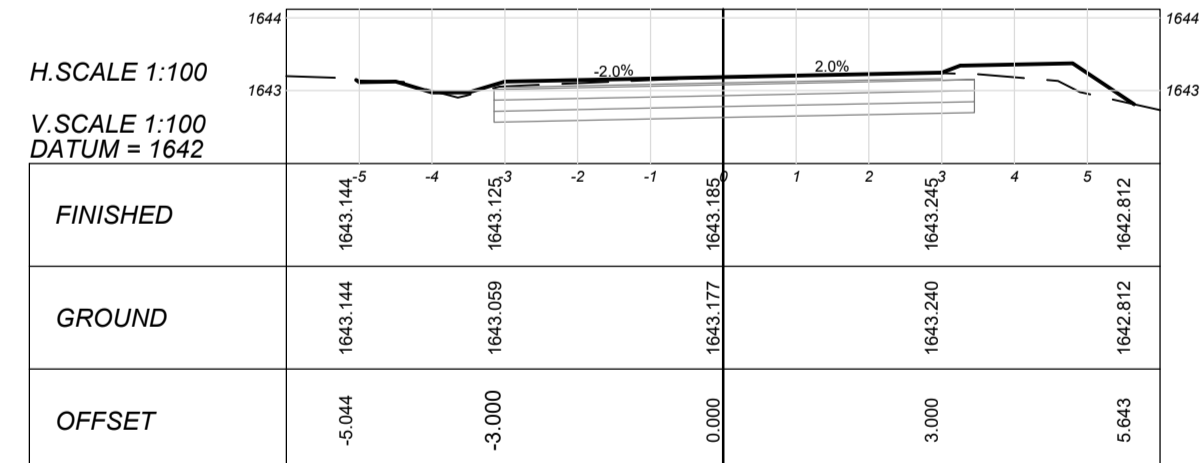
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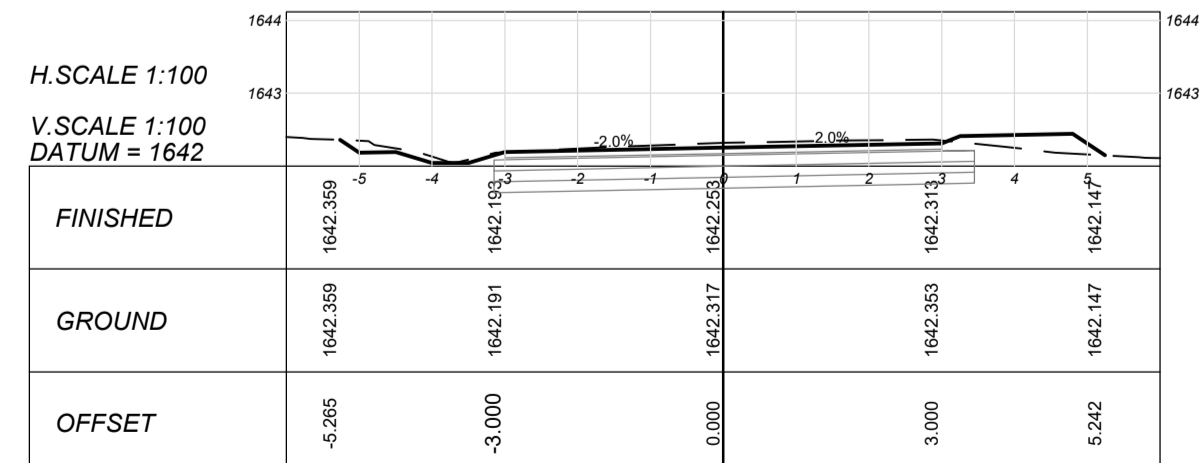
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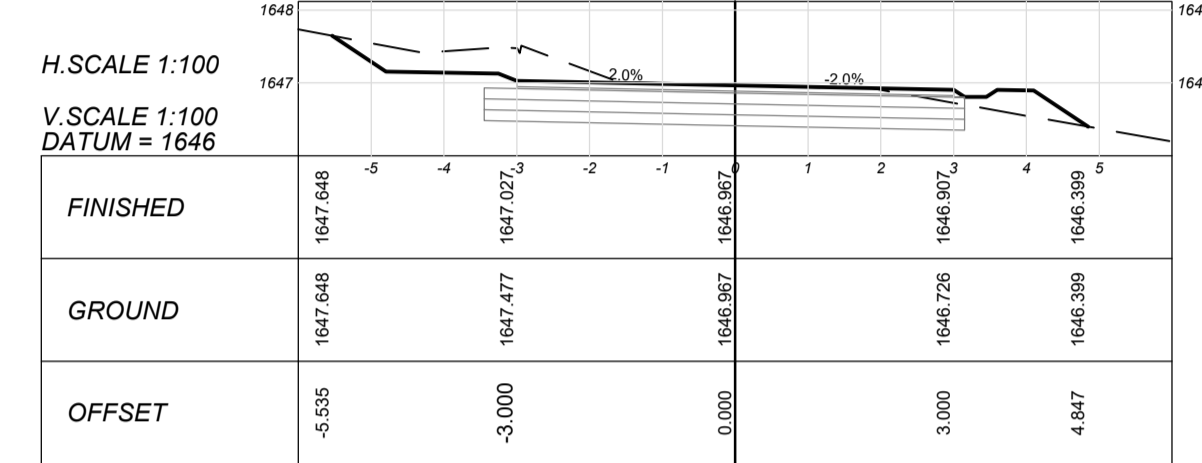
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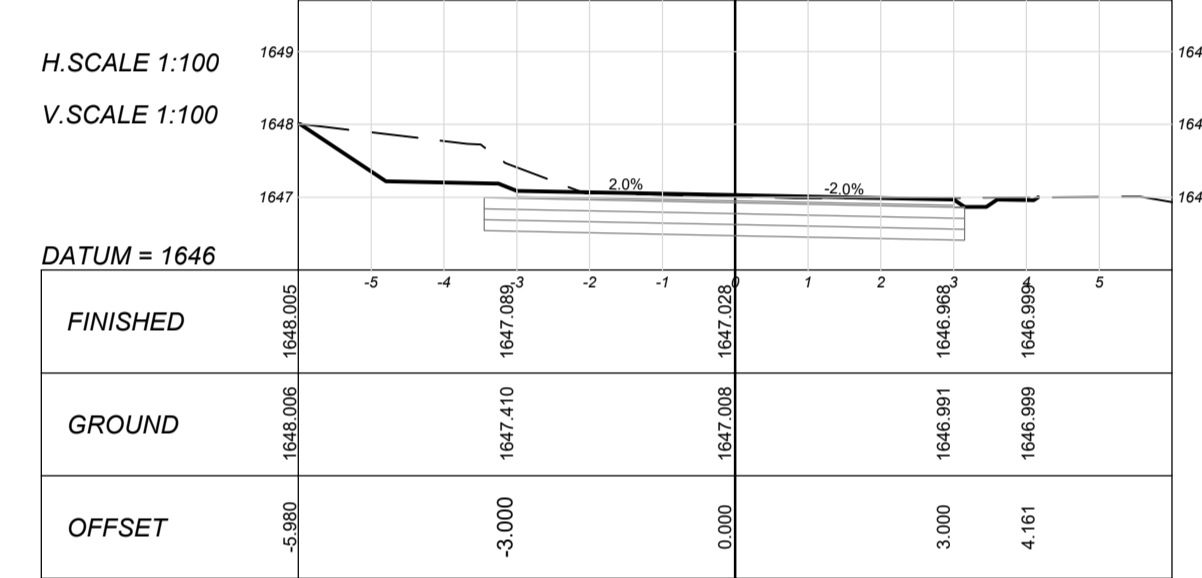
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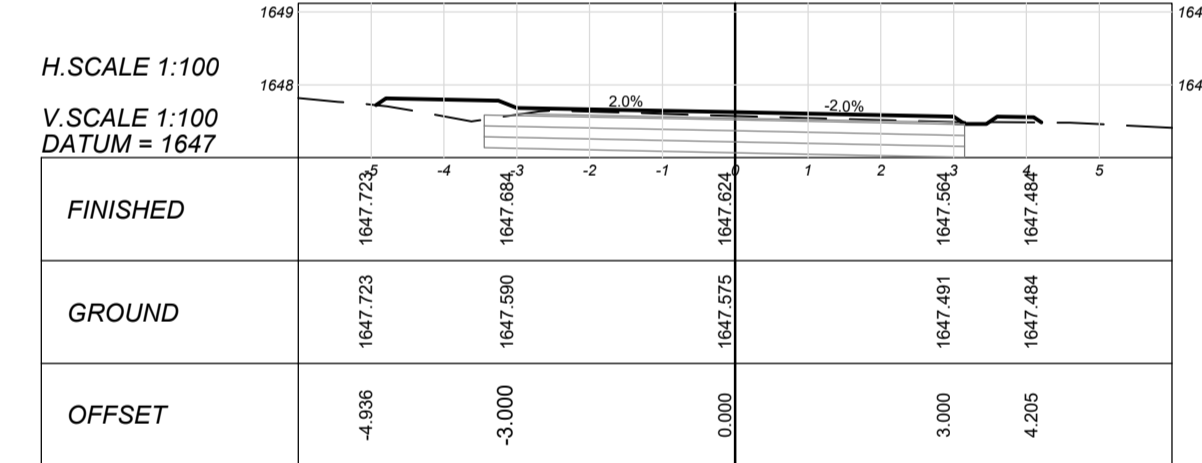
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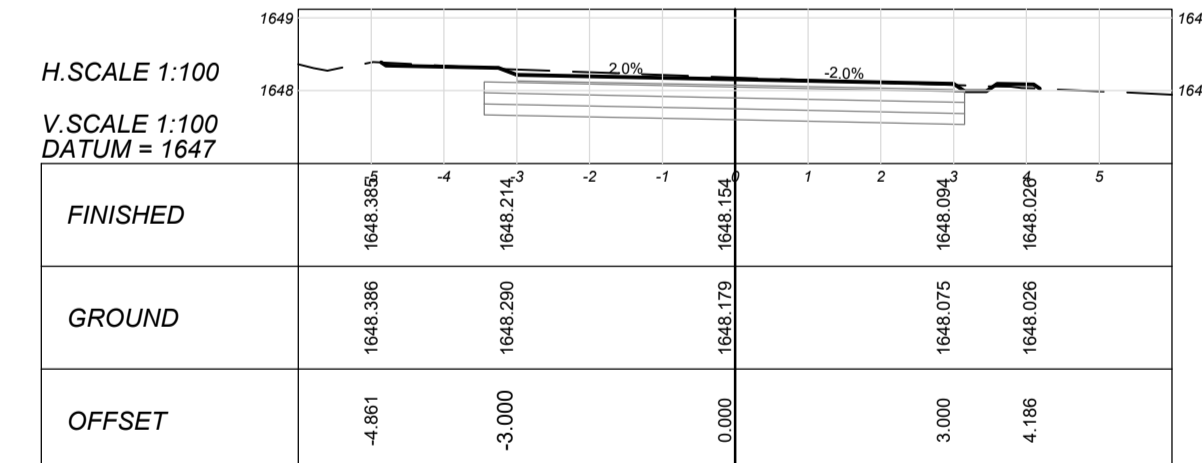
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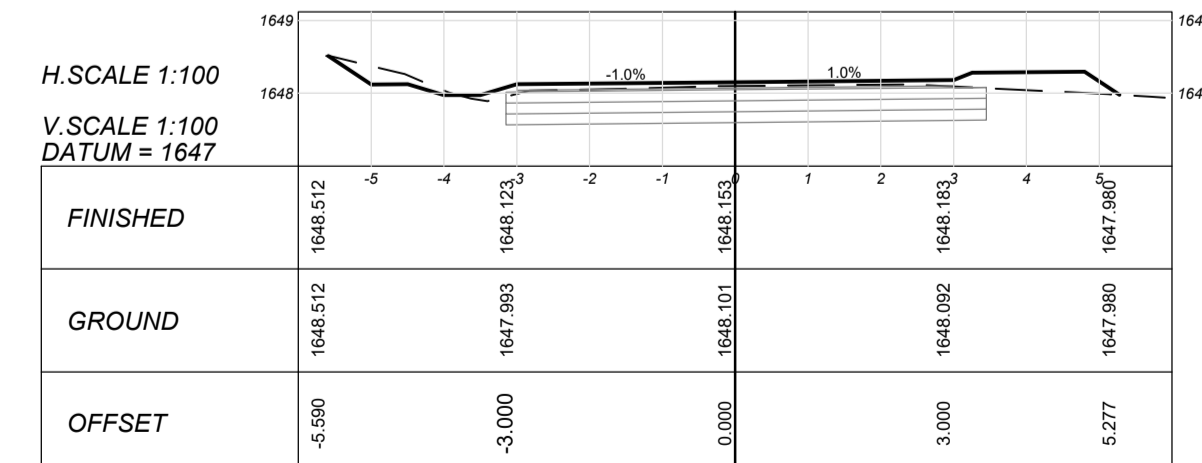
CHAINAGE 720




CHAINAGE 700



CHAINAGE 680



CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:



THEWO & SMMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS				
REV	DATE	DESCRIPTION	BY	L.M.
0	2024-03-25	ISSUED FOR TENDER		

PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

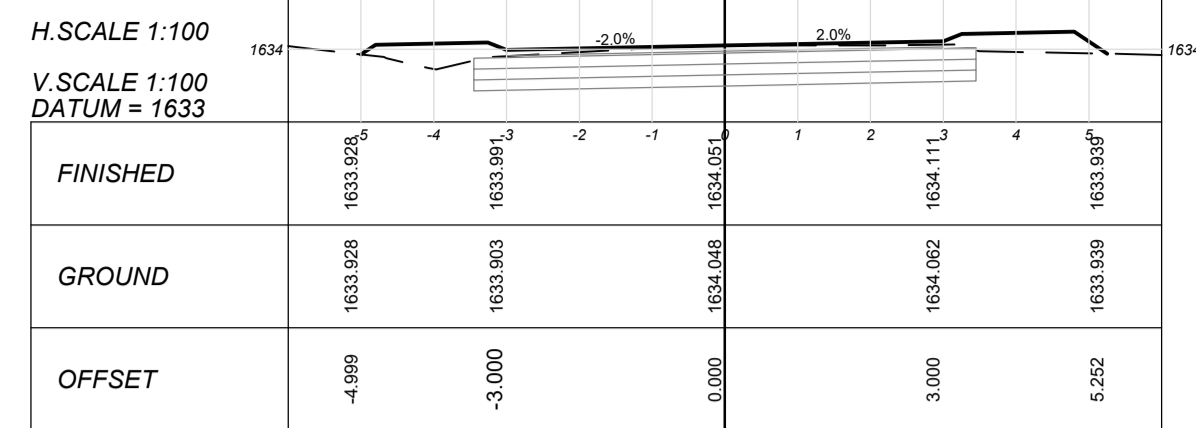
TITLE
ROAD 1 - DETAILED CROSS SECTIONS

PROJECT STATUS:
TENDER

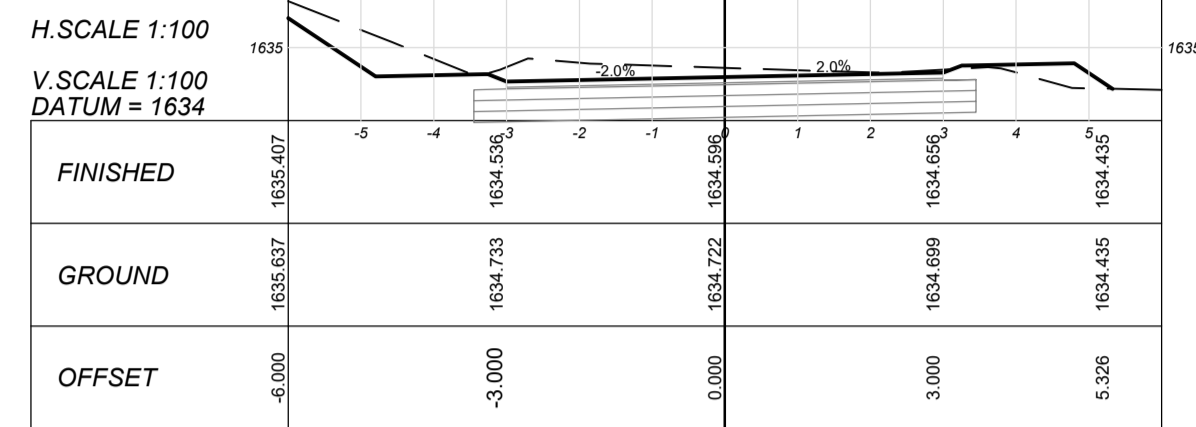
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2024-03-25	AS SHOWN	2 OF 2	0	

DWG NO
P1027-BE-CIV-RD-CS01

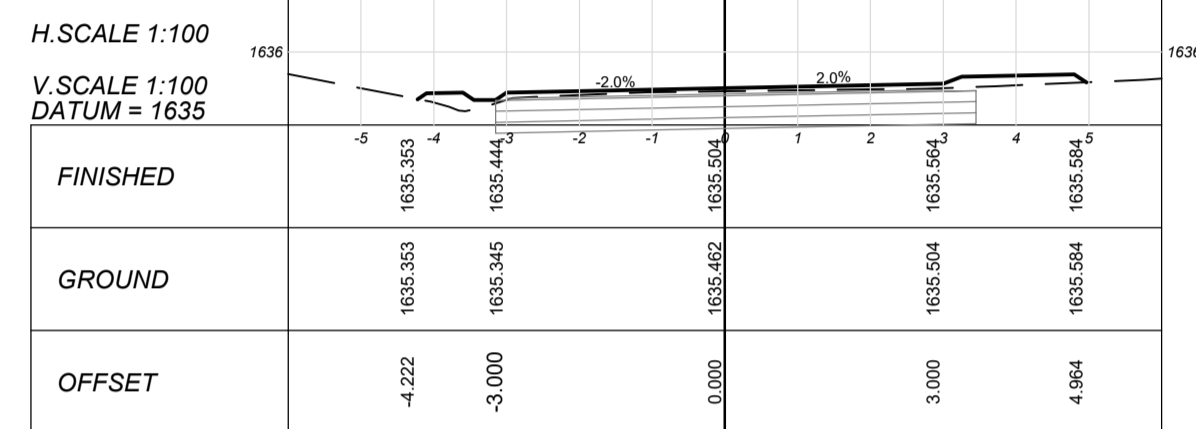
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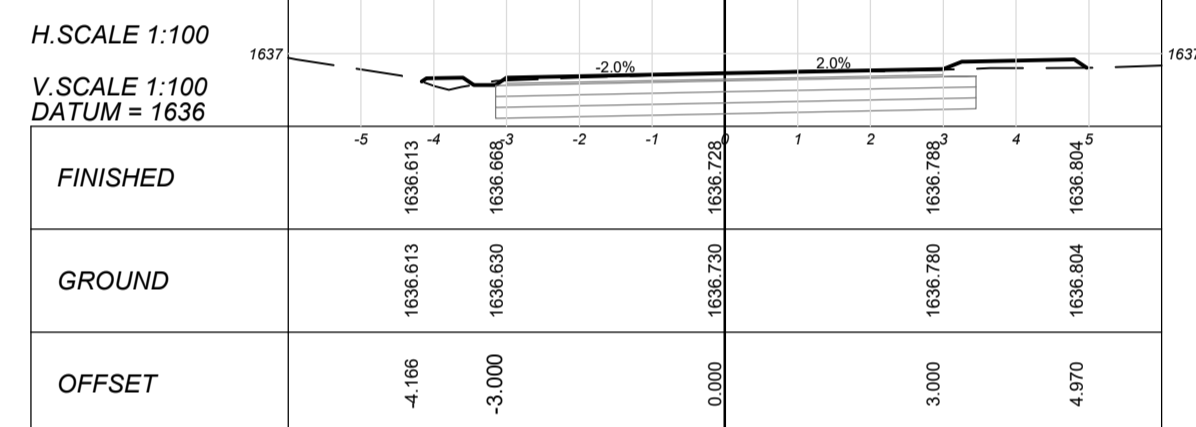
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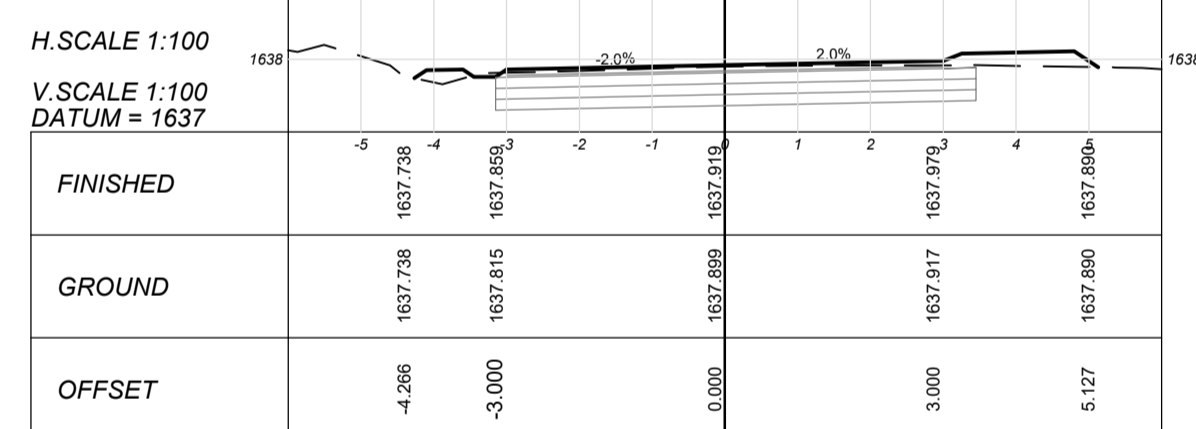
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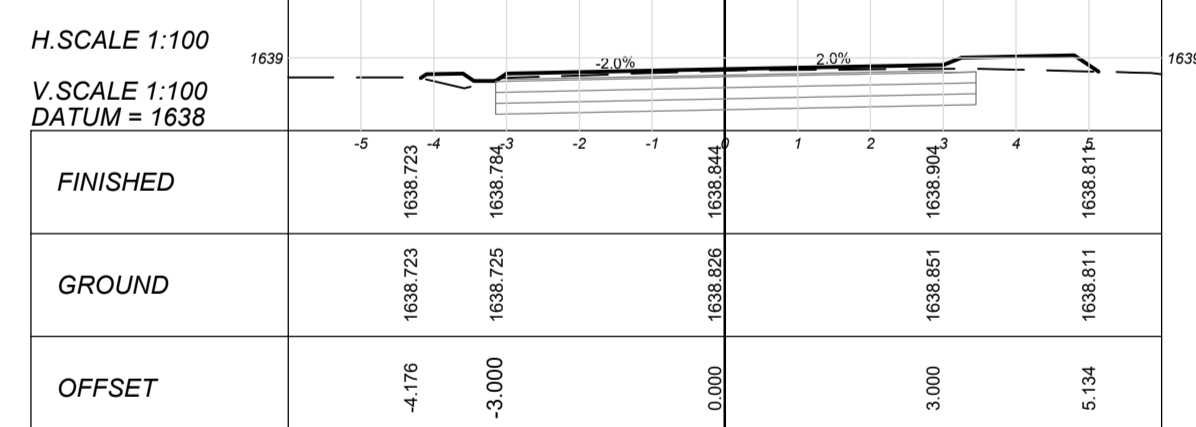
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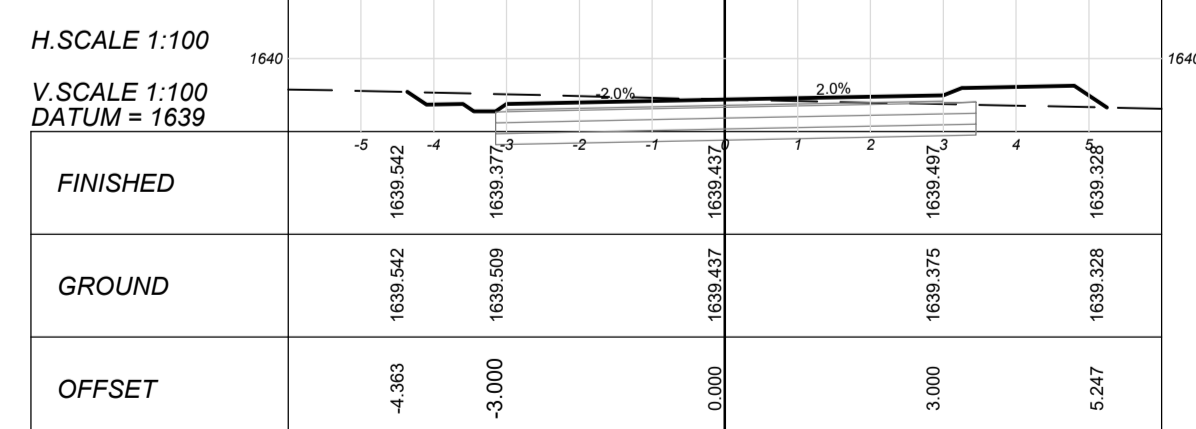
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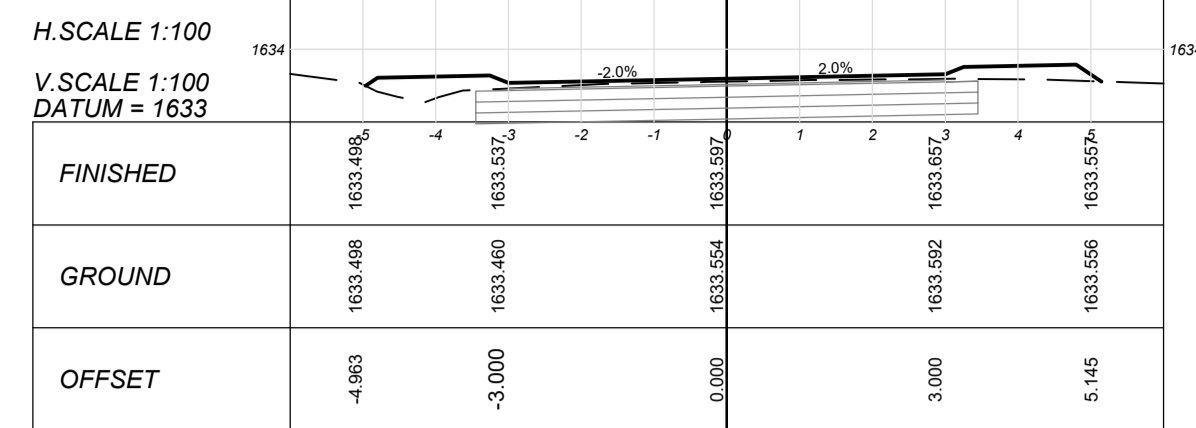
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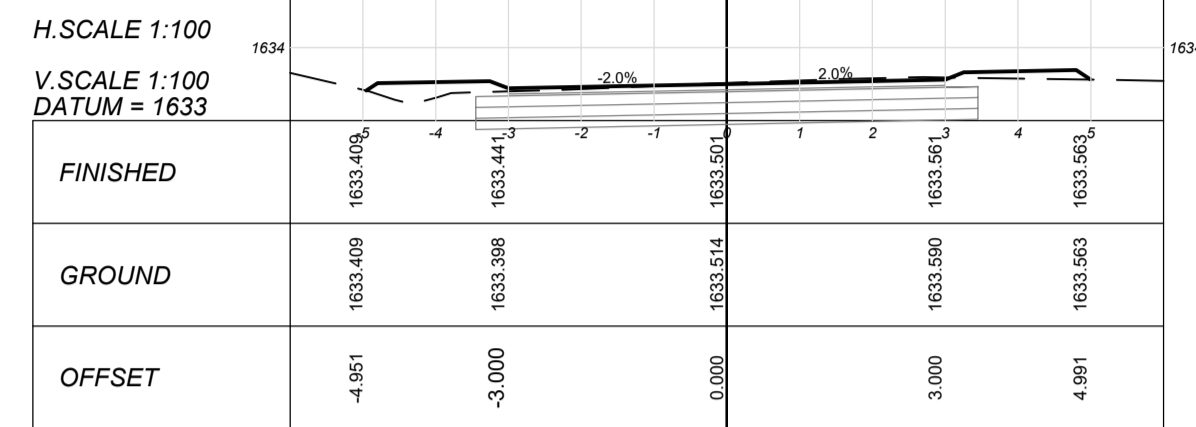
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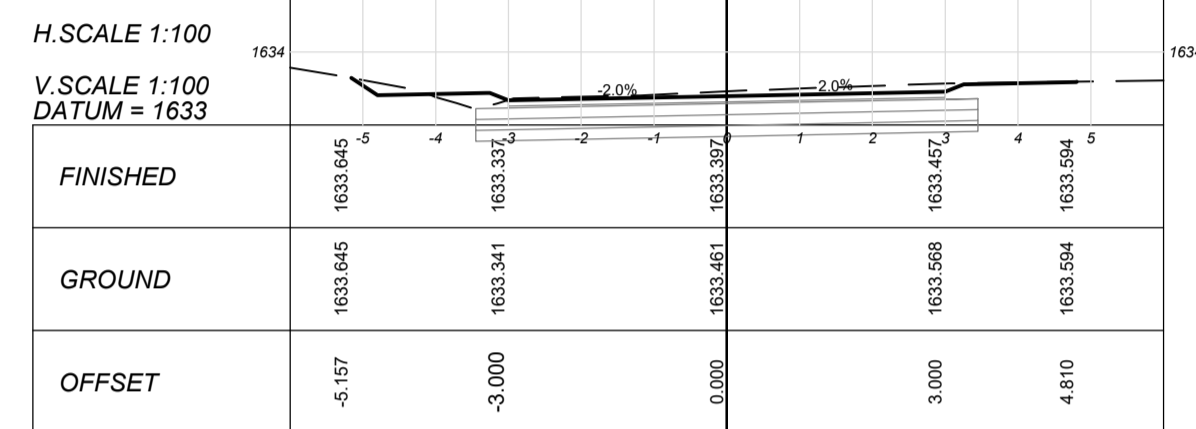
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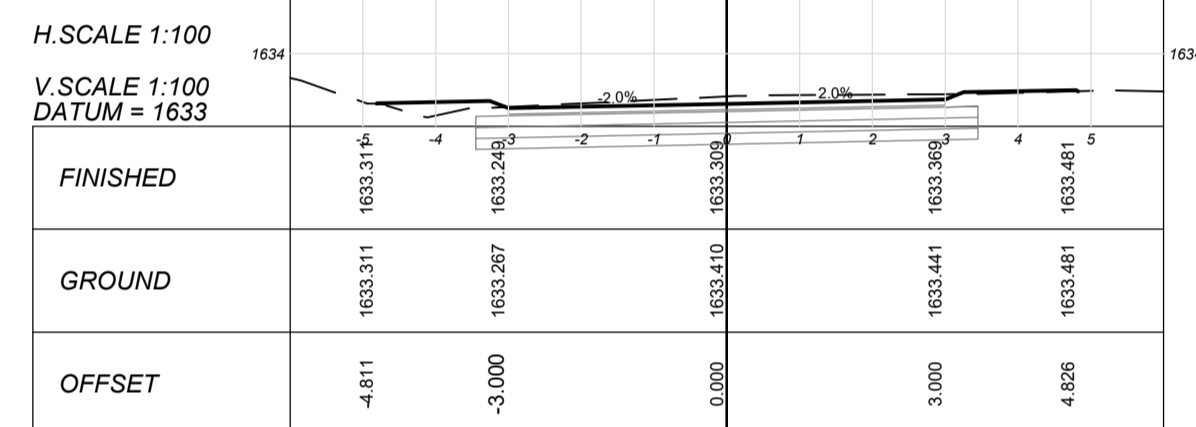
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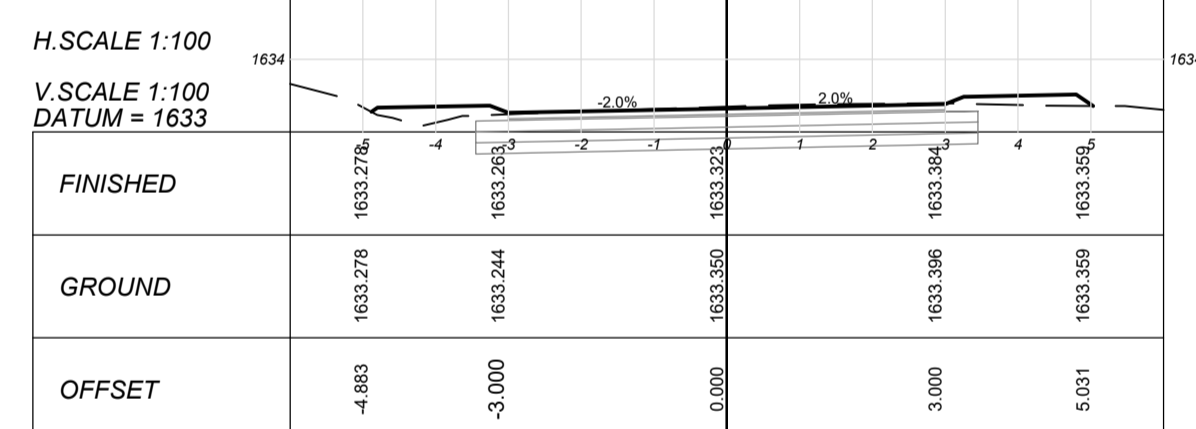
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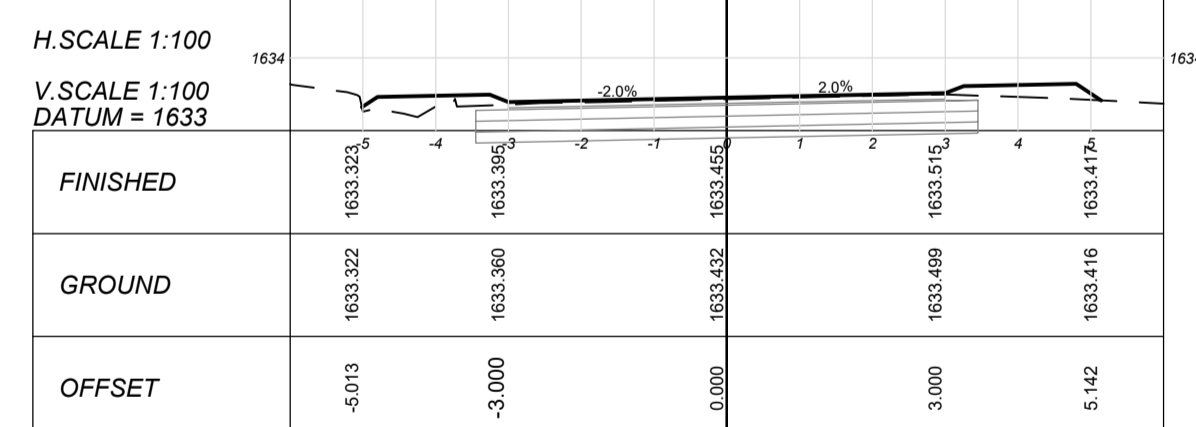
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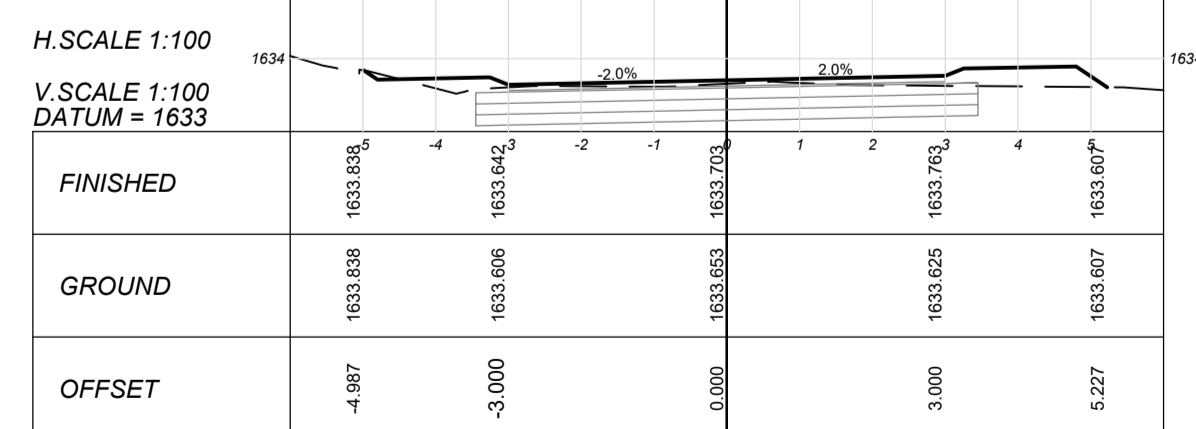
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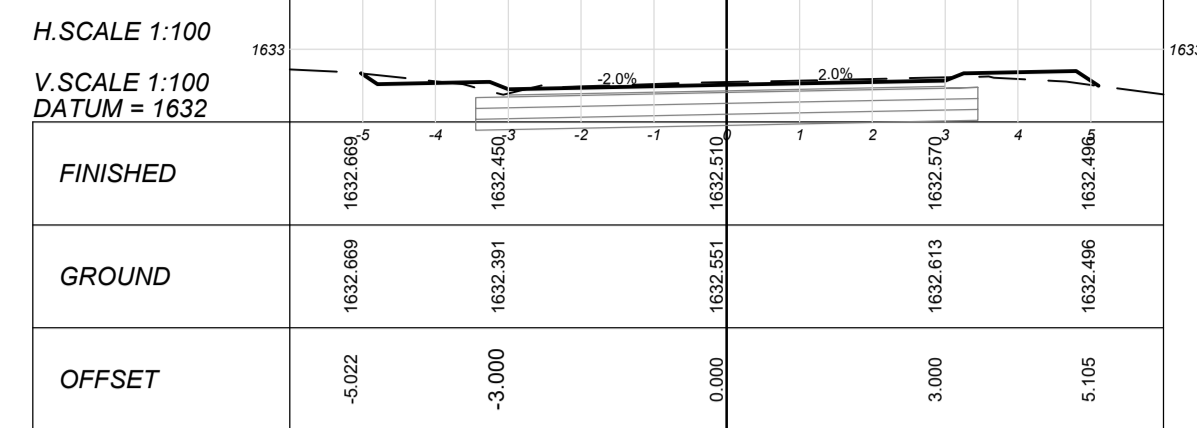
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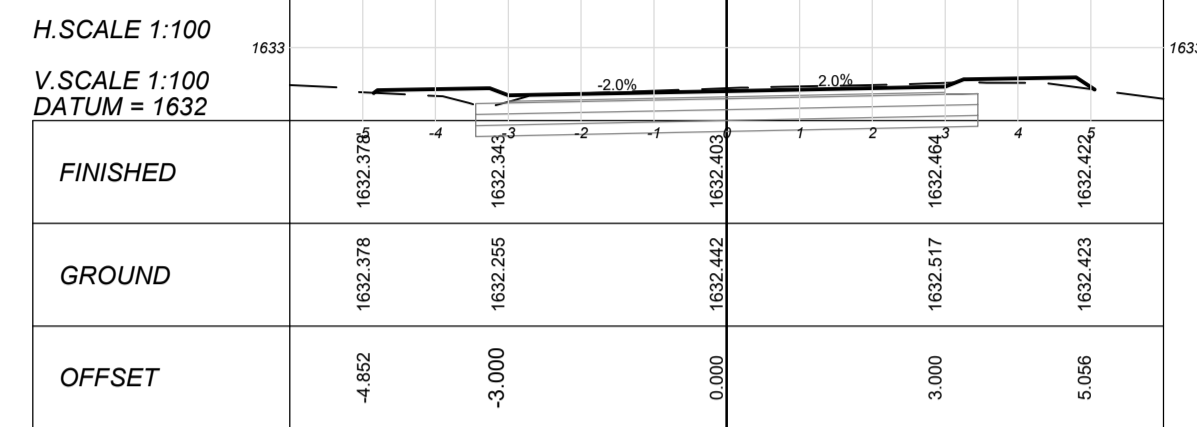
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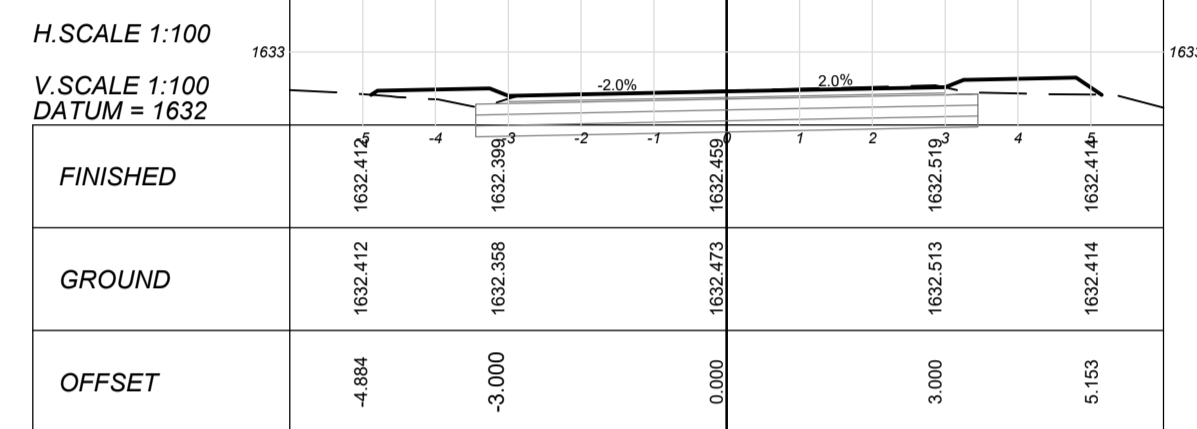
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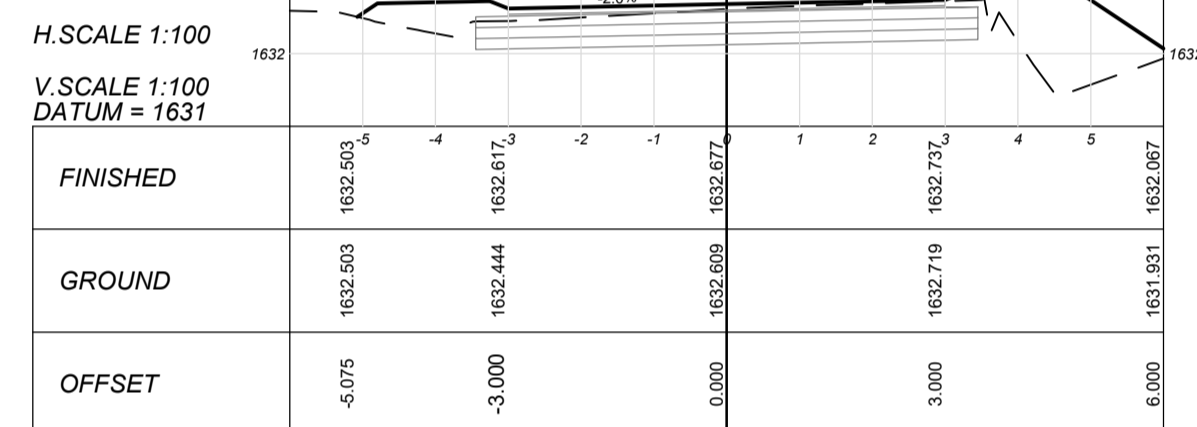
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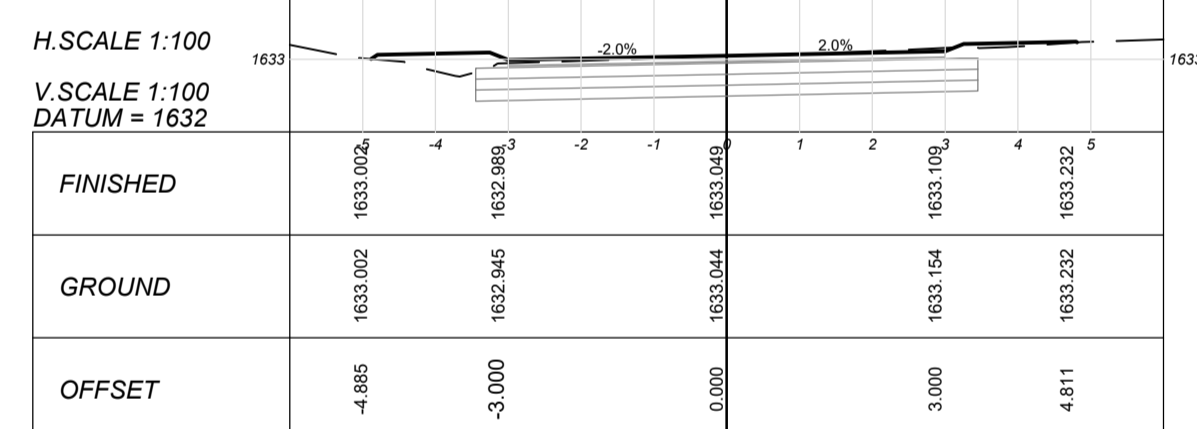
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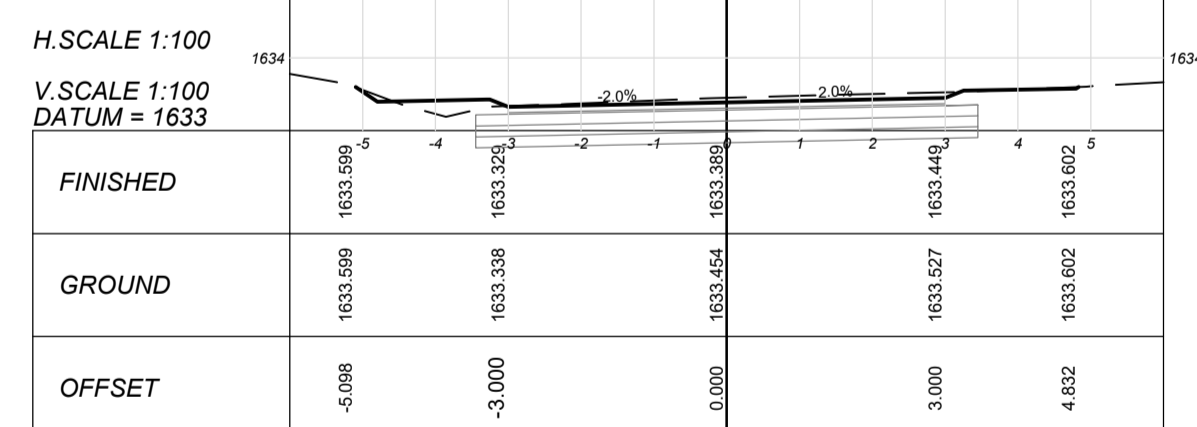
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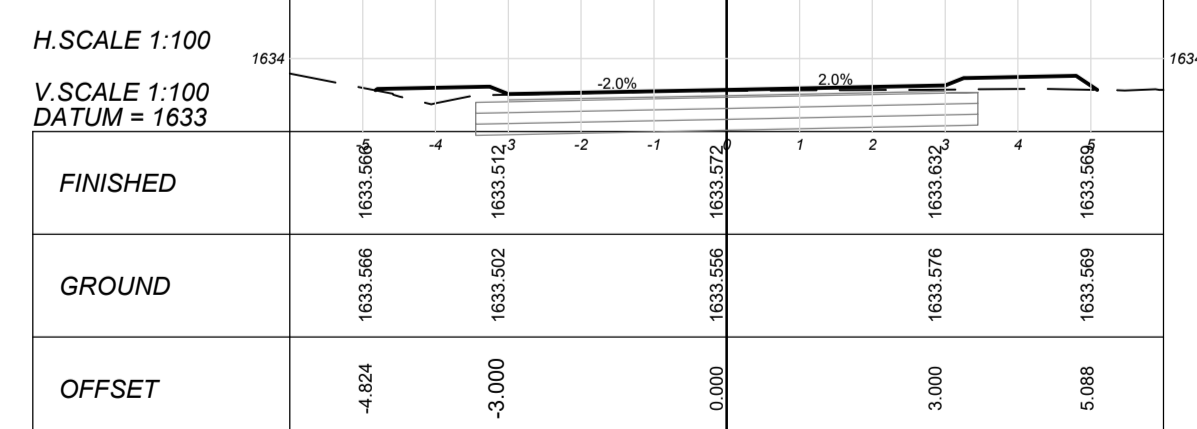
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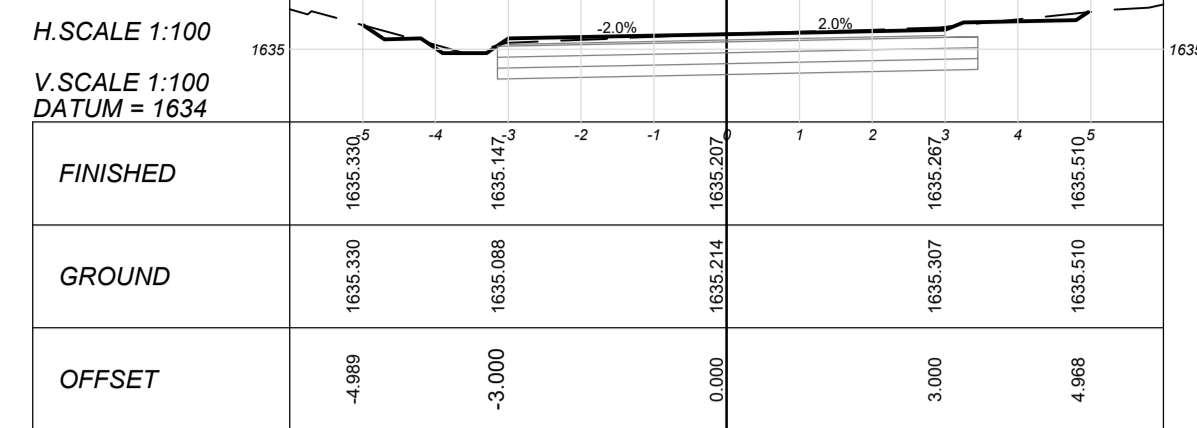
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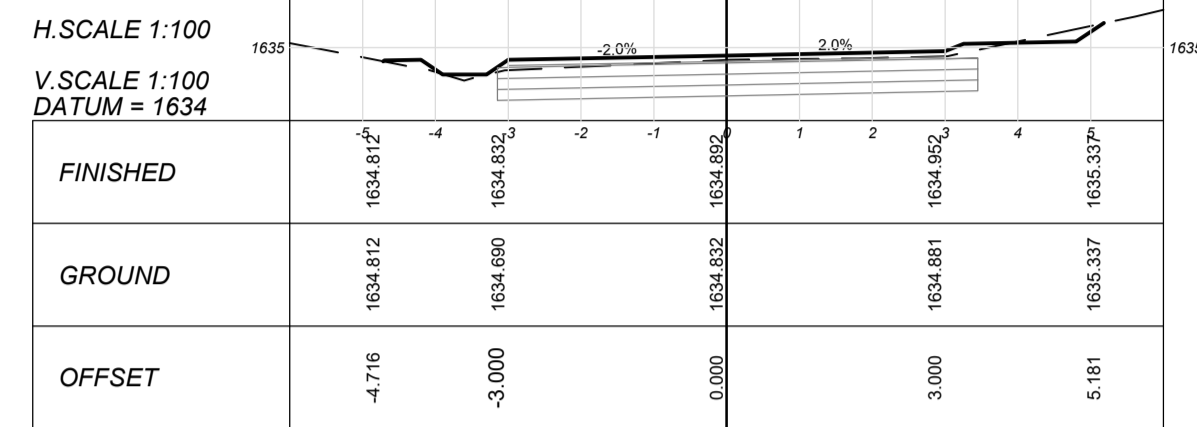
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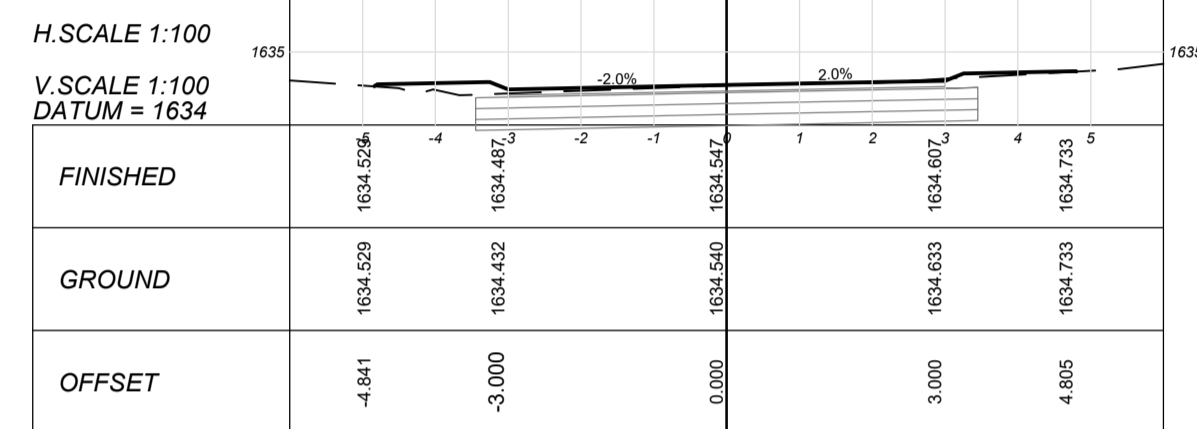
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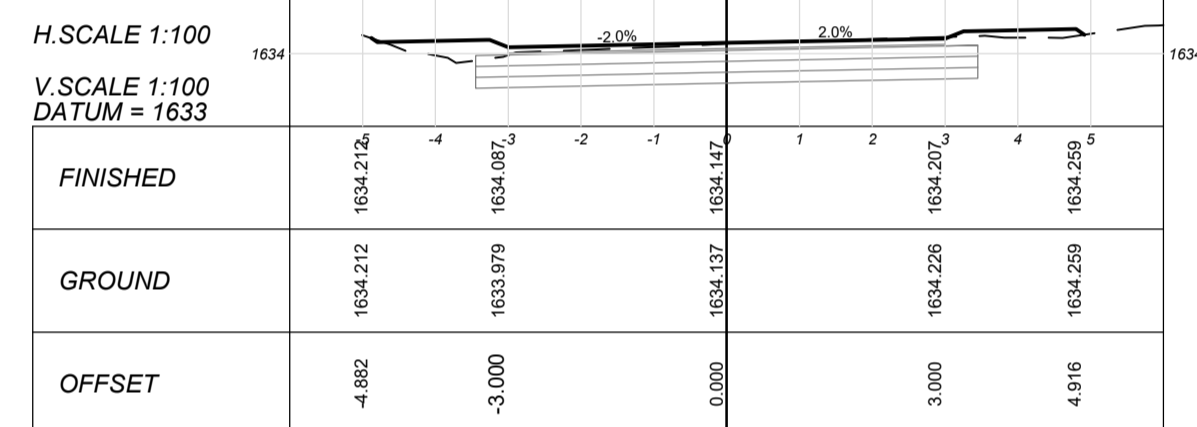
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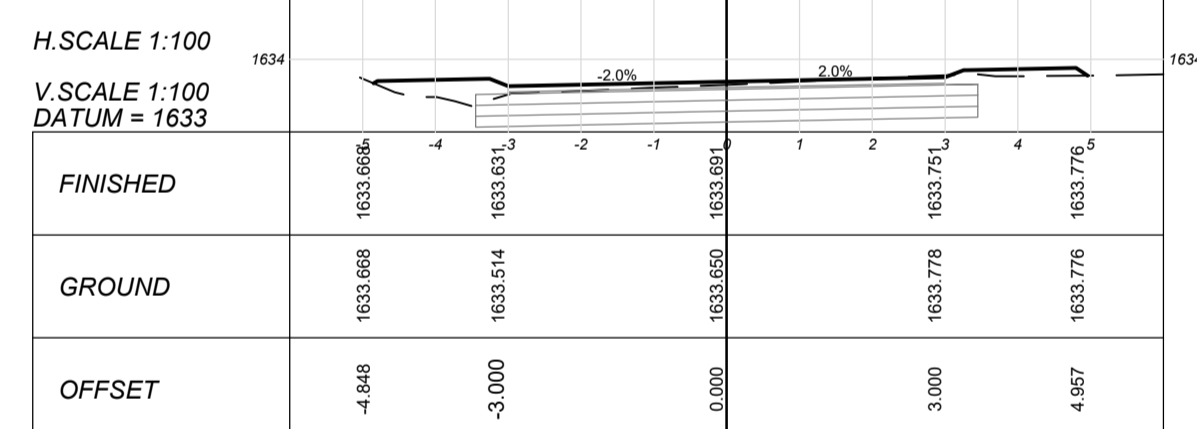
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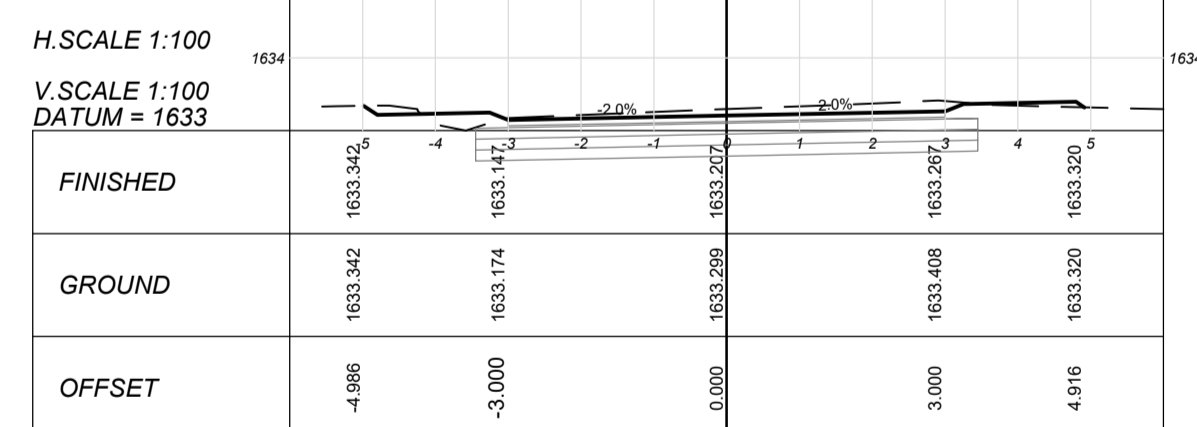
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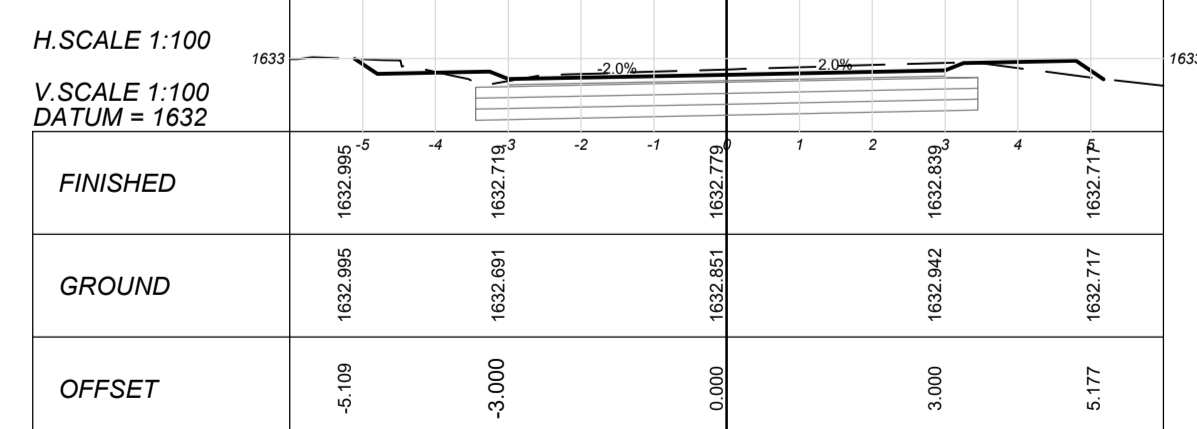
CHAINAGE 460



CHAINAGE 440



CHAINAGE 420



CLIENT: 19 Murray Street, Lady Grey 9755. Tel: (051) 603 1449. Email: vanzyt@senqu.gov.za

CONSULTANT: THEWO & SMMS - JV. 58 Brebner Road, Westdene, Bloemfontein 9301. Tel: +27 (051) 430 1321. Email: PMO@thewo.co.za

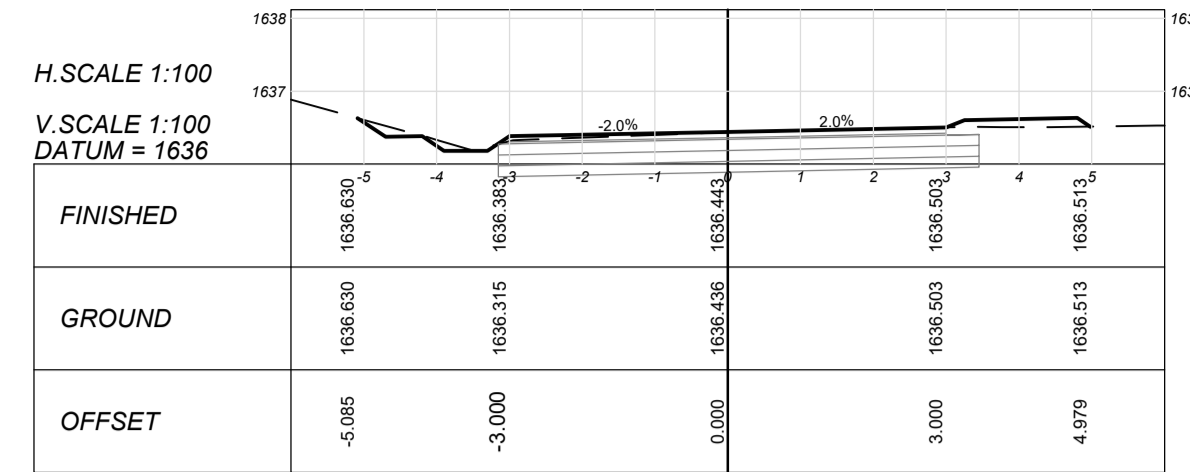
PROFESSIONAL ENGINEER: L. MARAH. PROF. Reg.No: 920281. DATE: 2024-03-25. SIGNATURE:

DESIGN BY: T. TSHABALALA. DRAWN BY: B. MVUKUZO. CHECKED BY: L. MARAH. APPROVED BY: L. MARAH

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

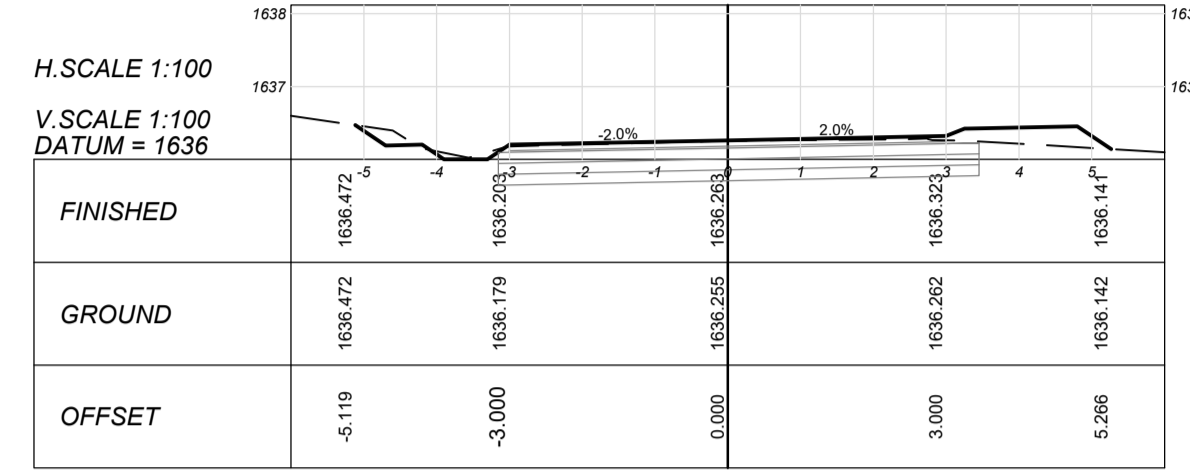
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V. SCALE 1:100
DATUM = 1636



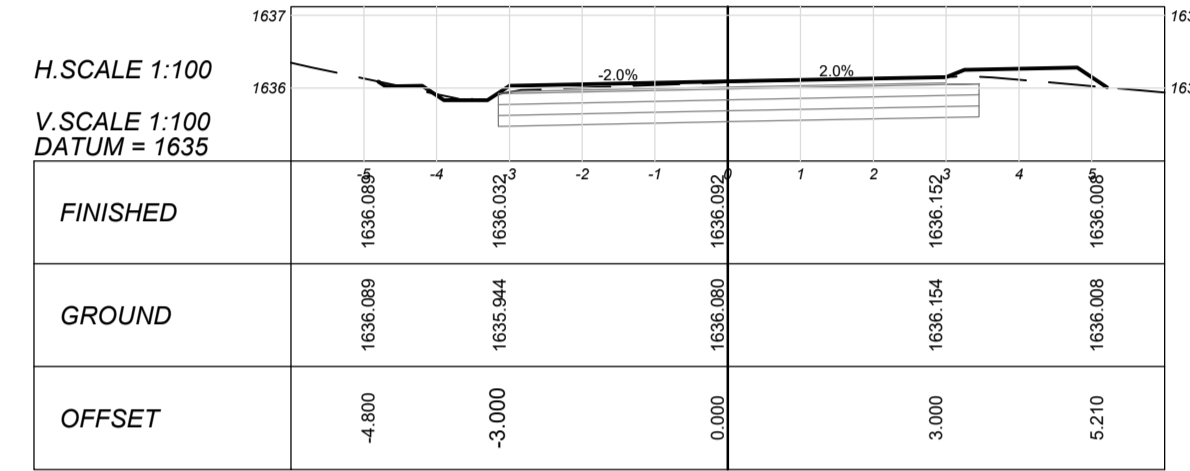
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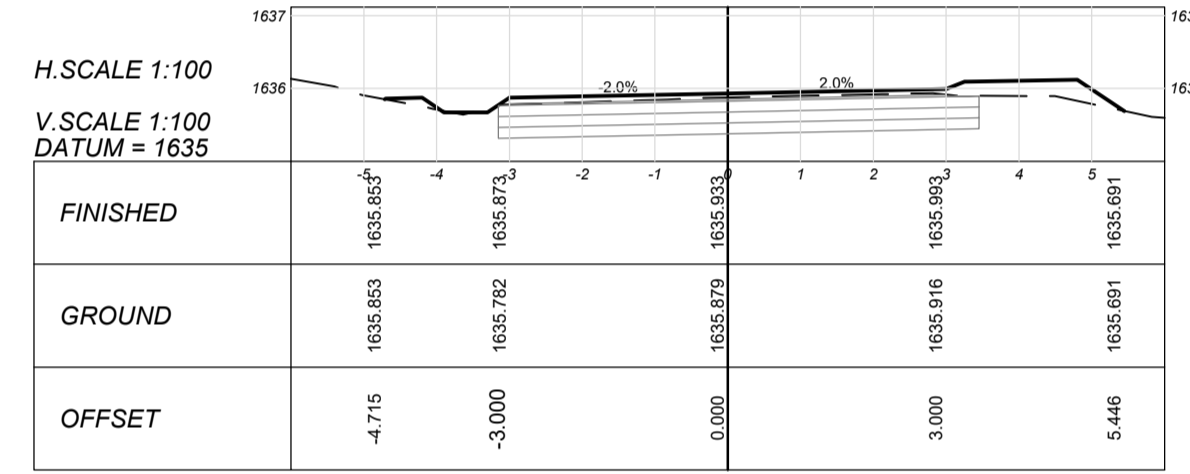
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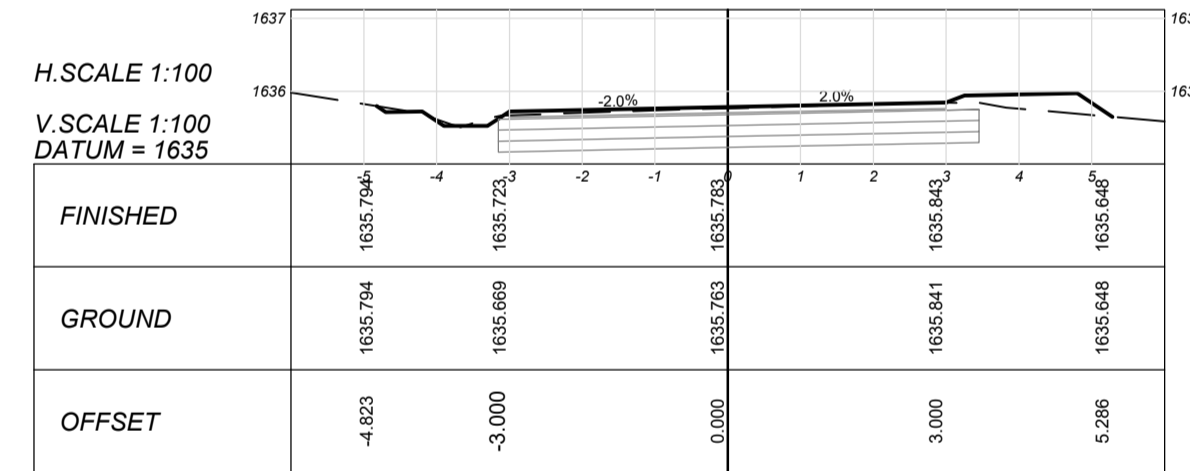
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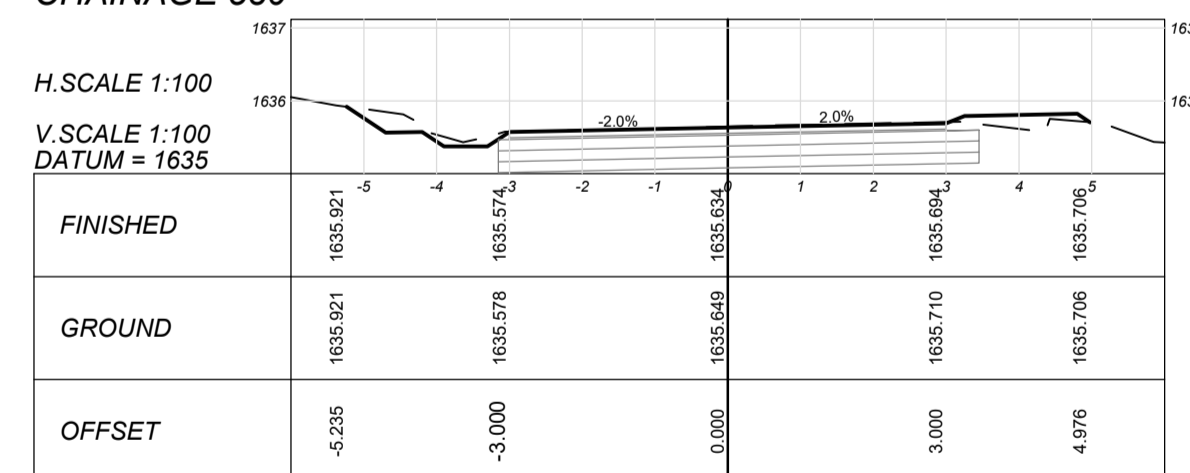
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V. SCALE 1:100
DATUM = 1635



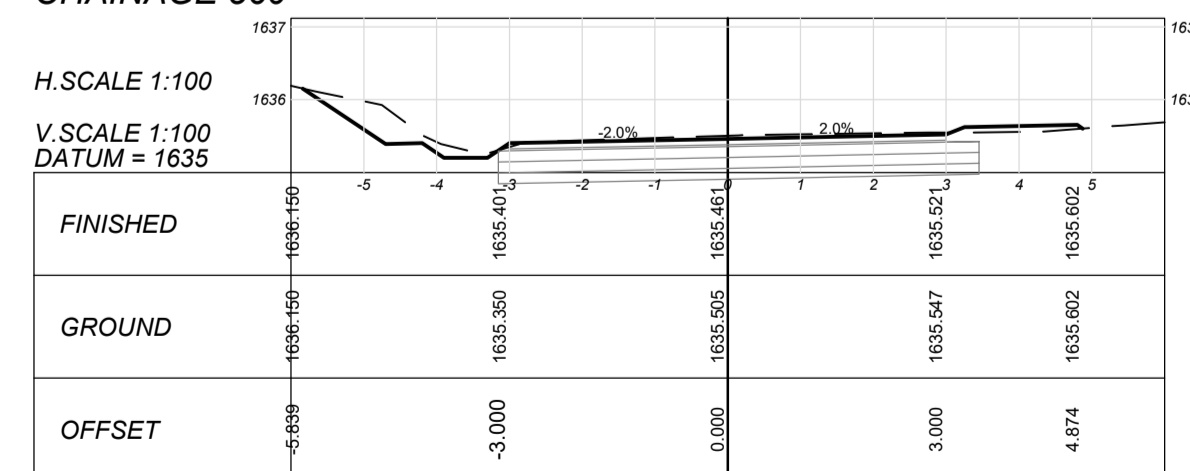
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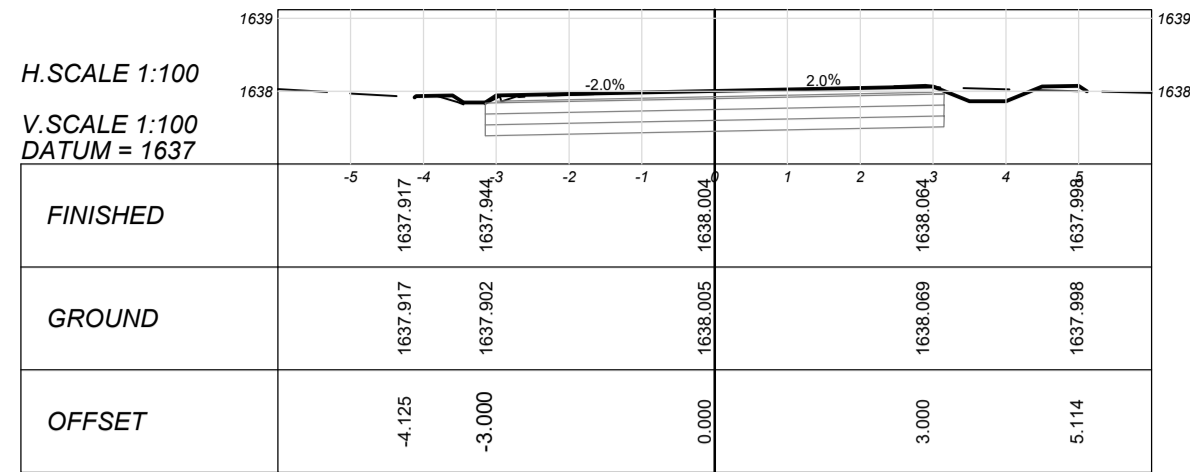
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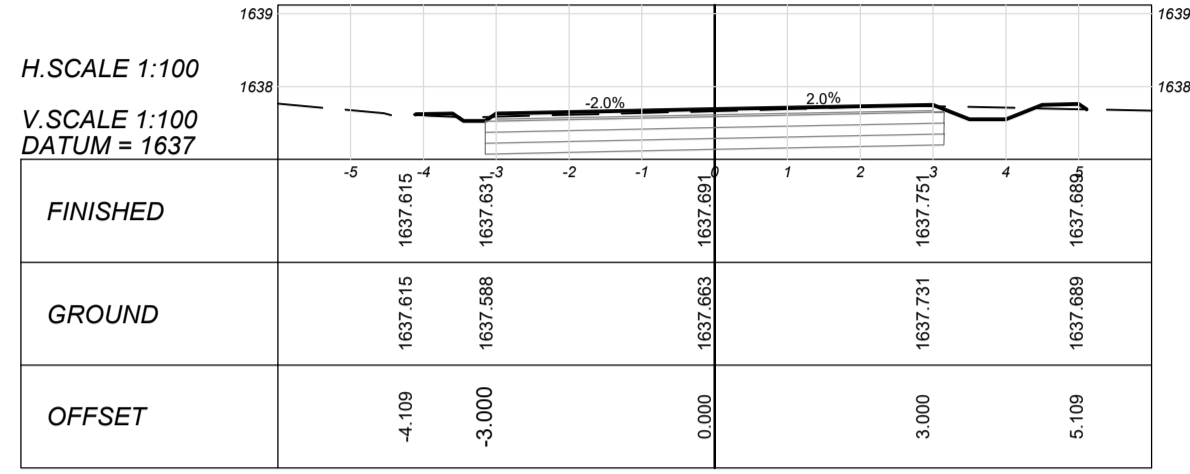
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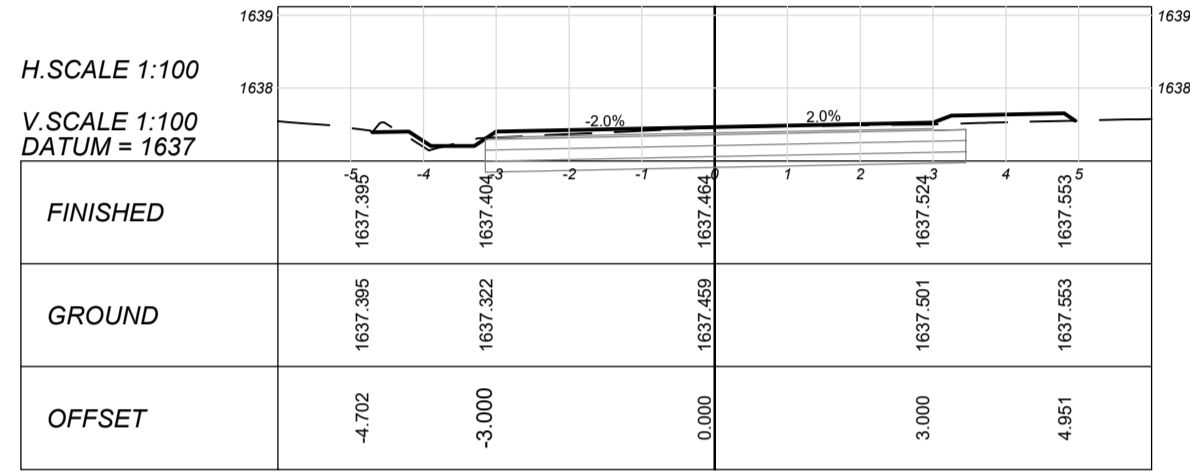
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DATUM = 1637



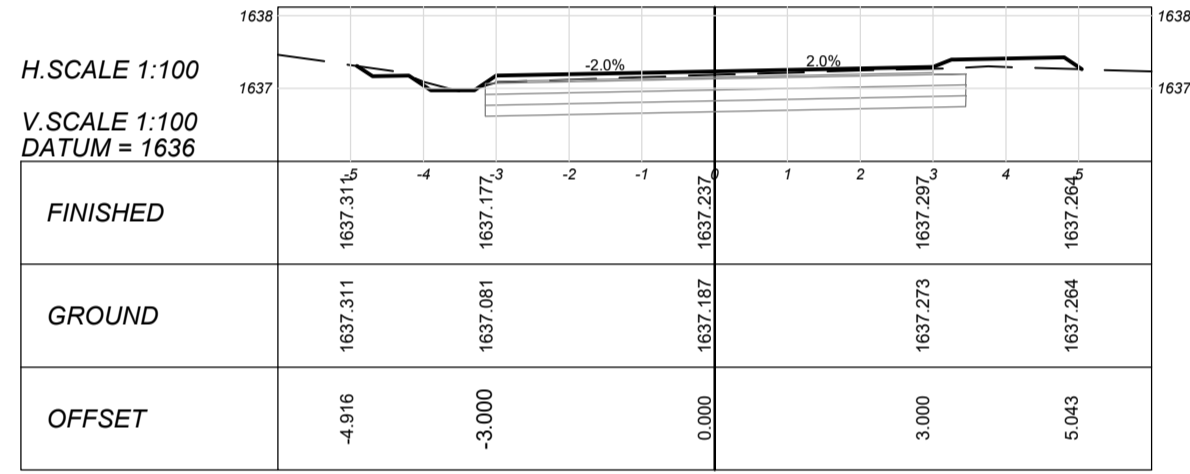
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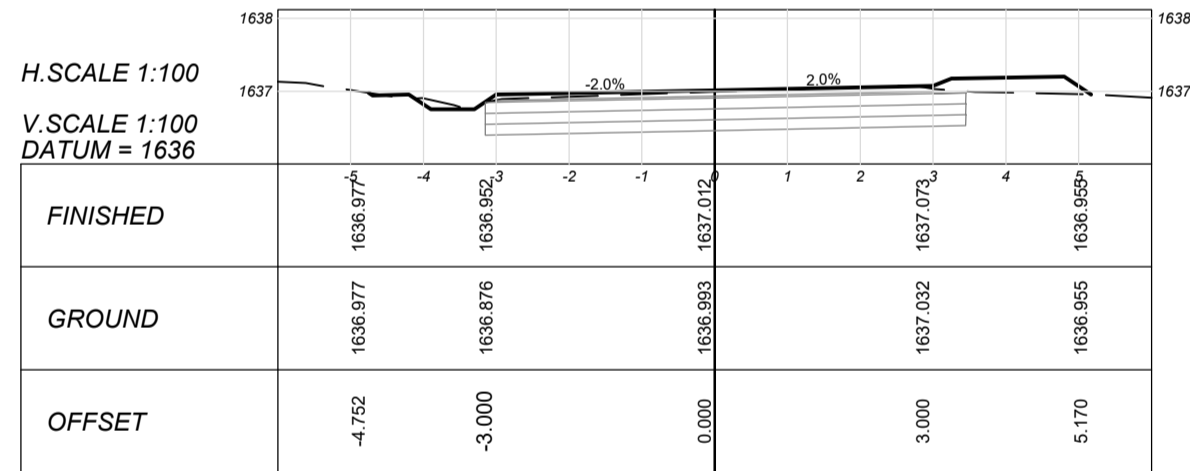
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DATUM = 1636



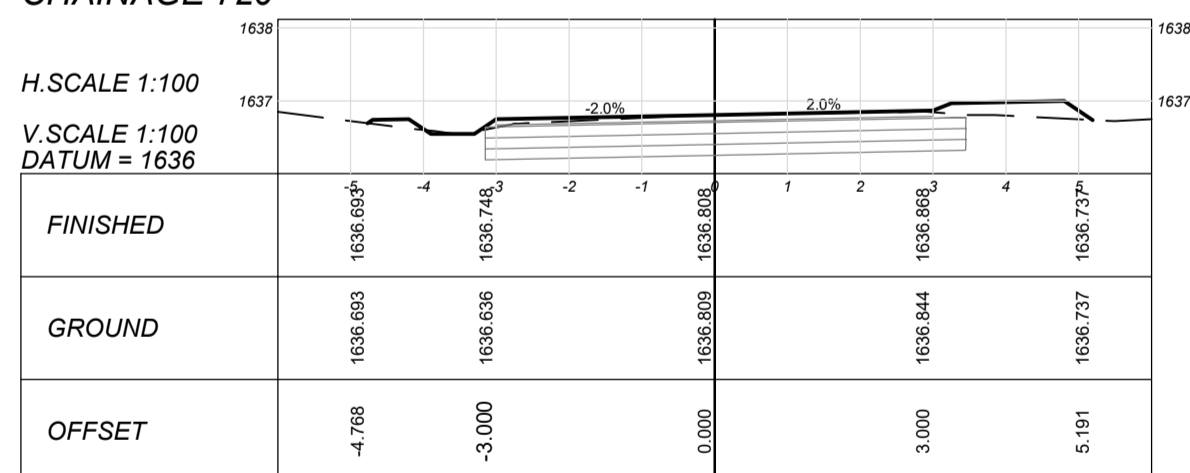
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DATUM = 1636



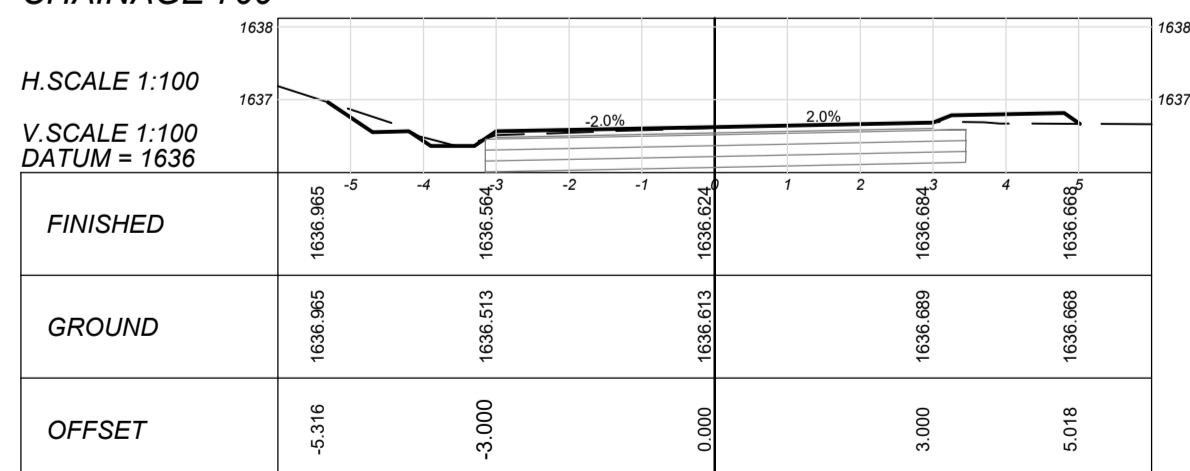
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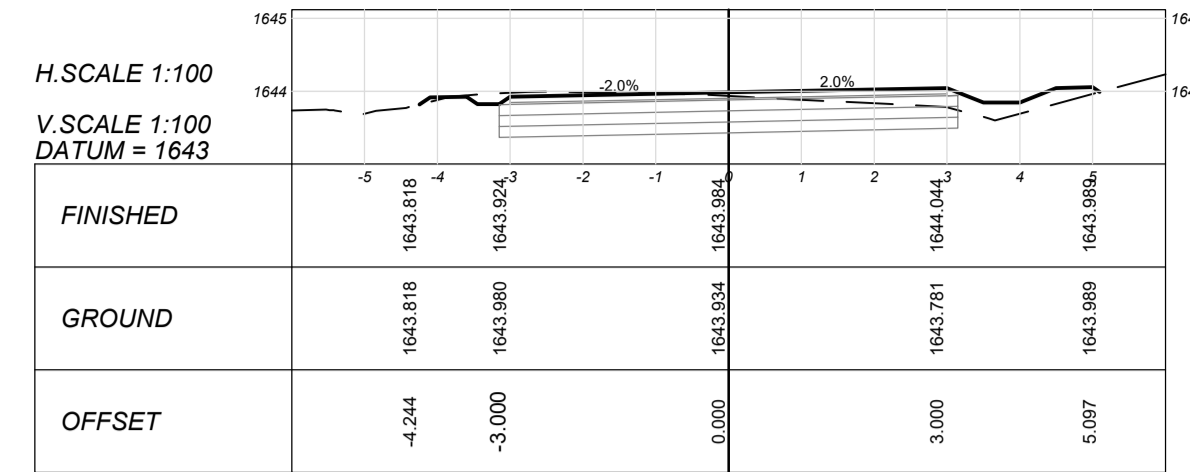
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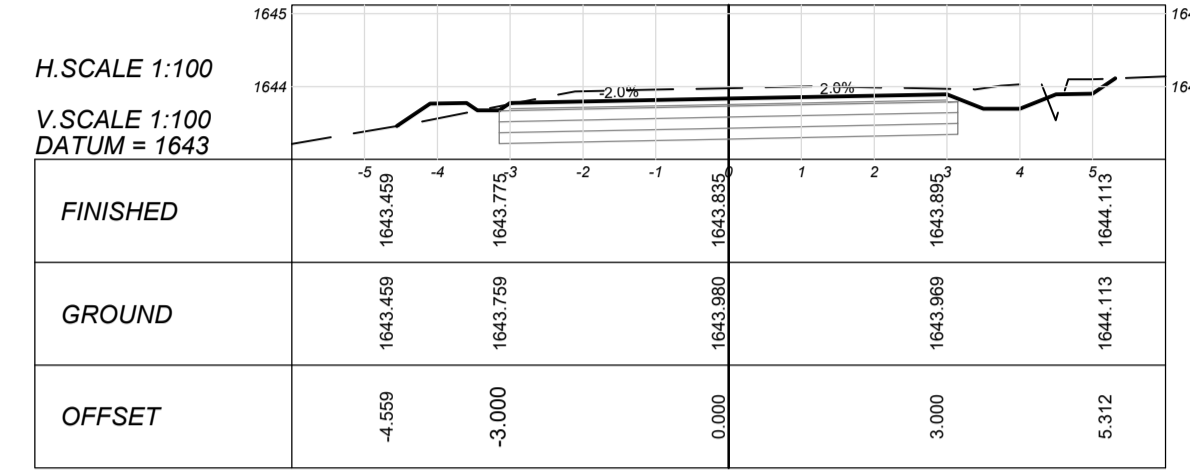
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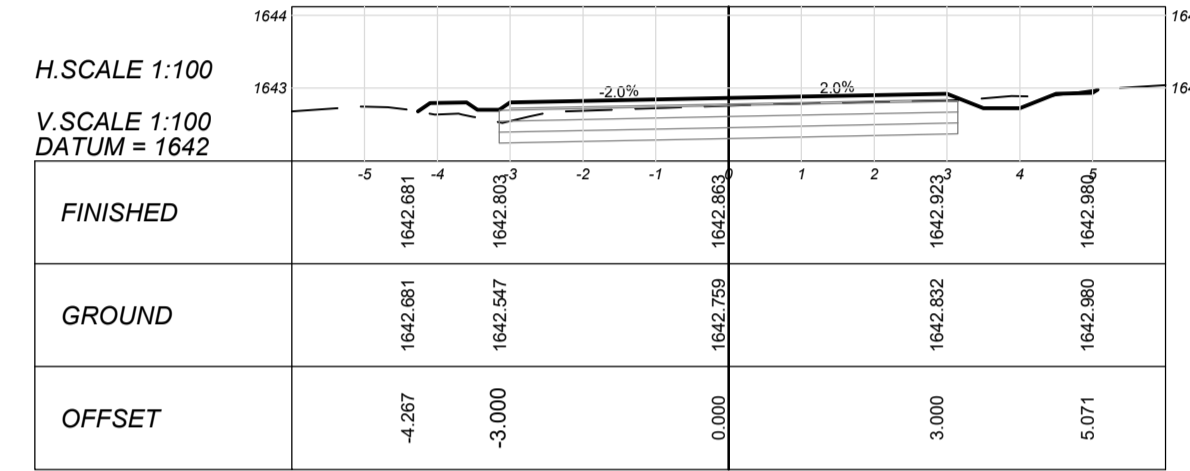
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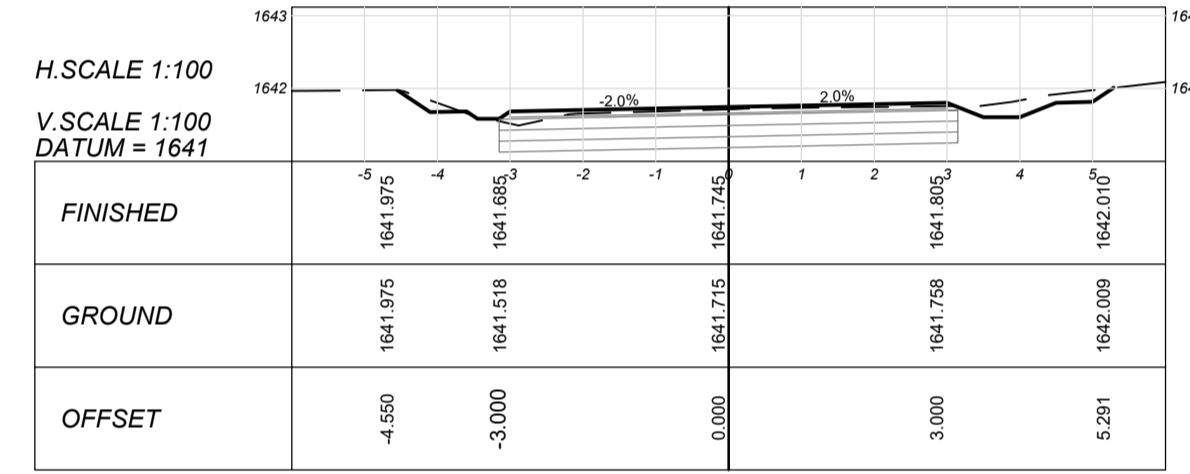
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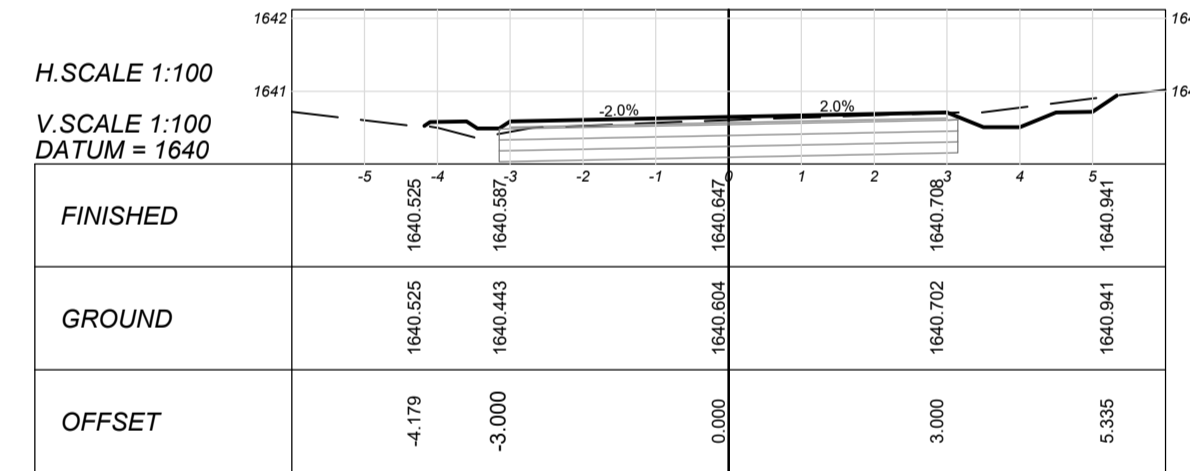
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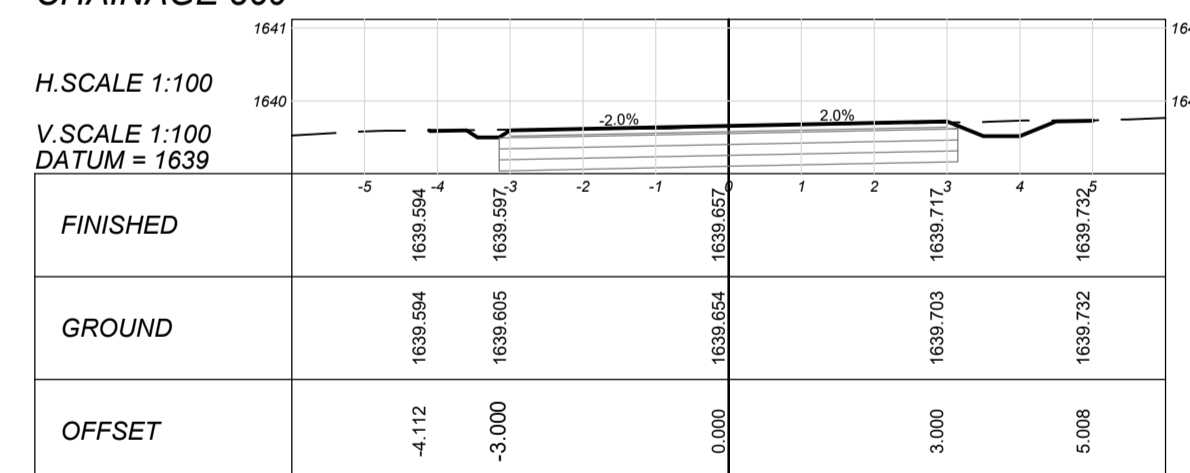
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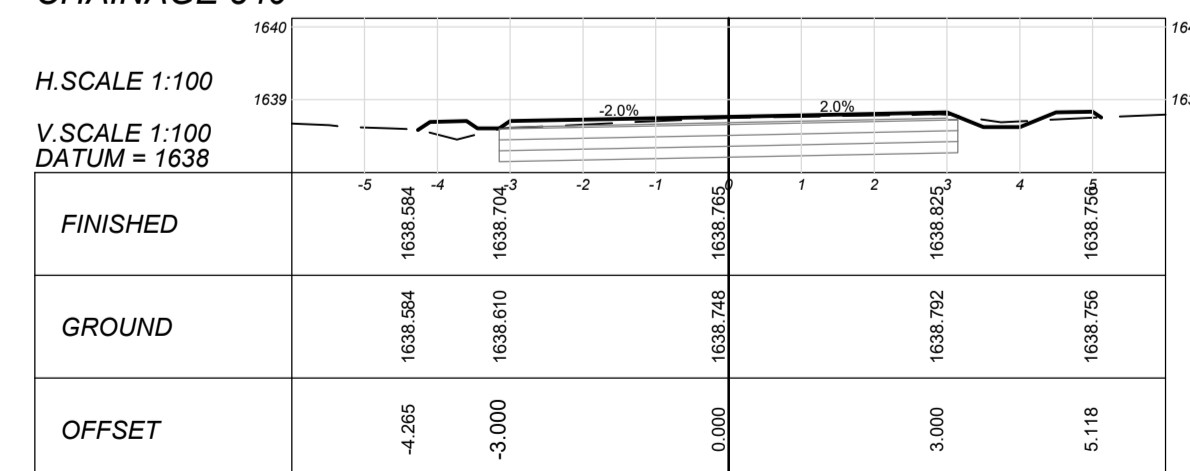
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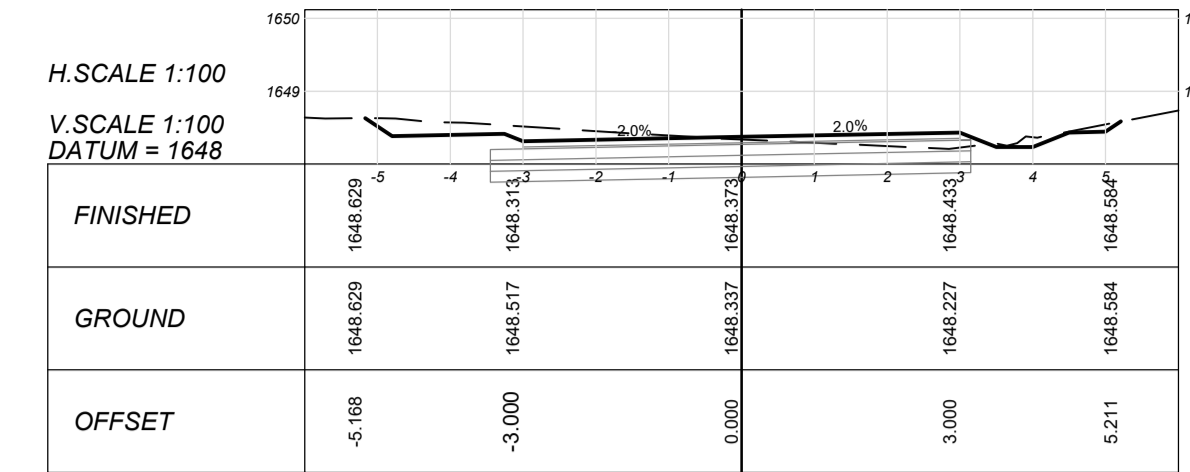
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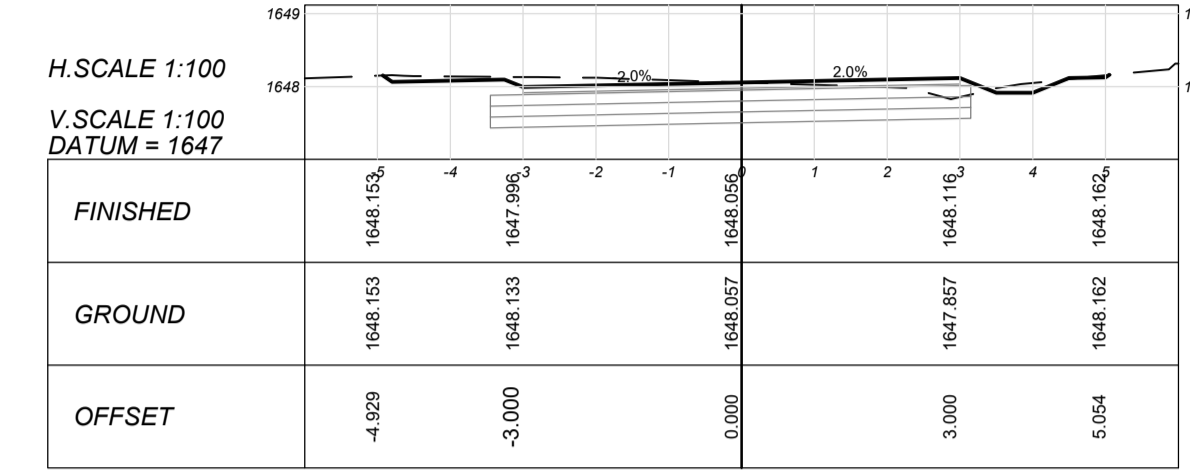
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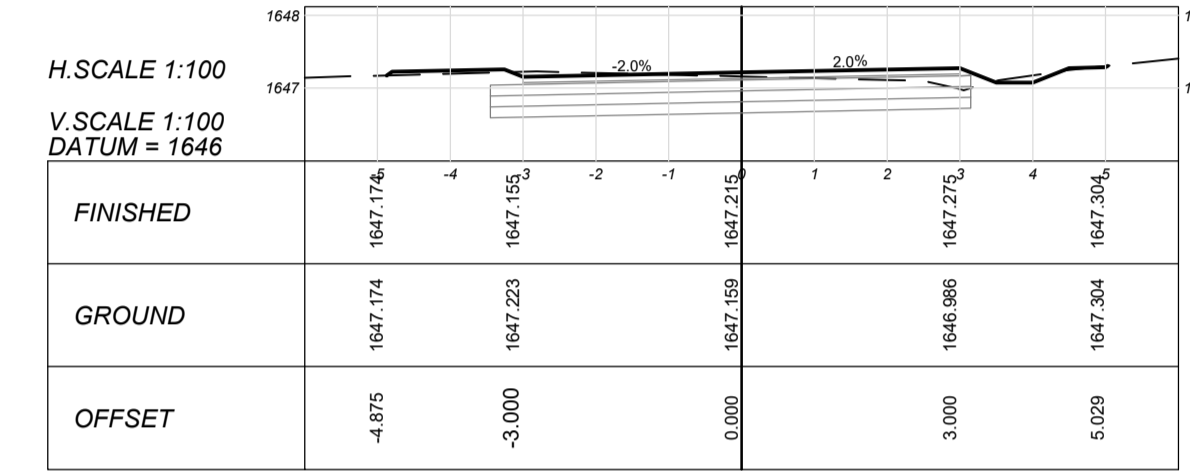
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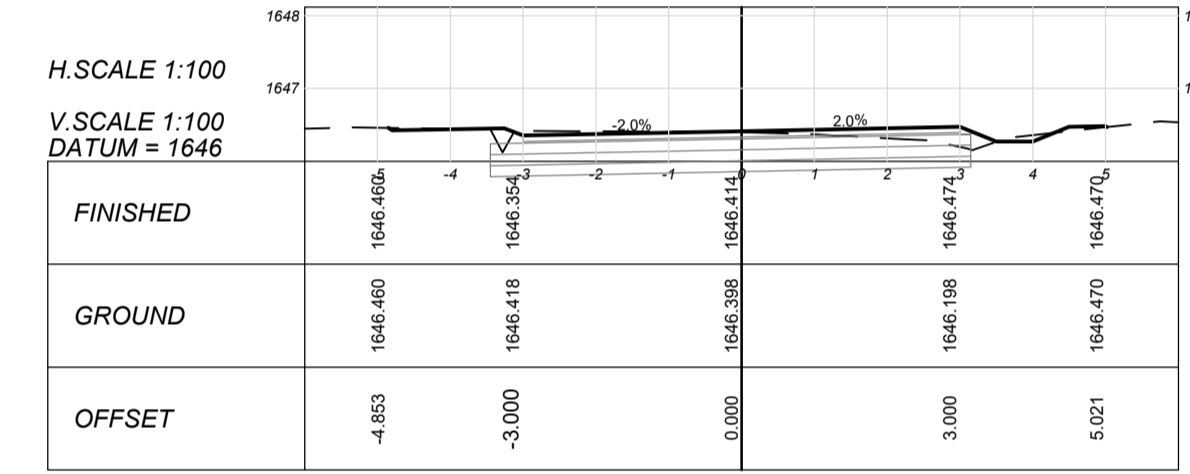
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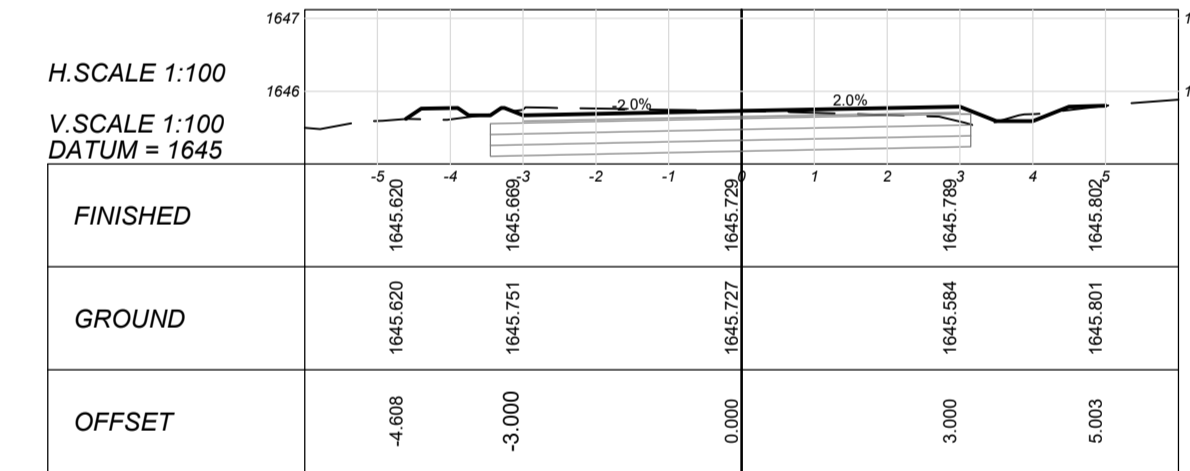
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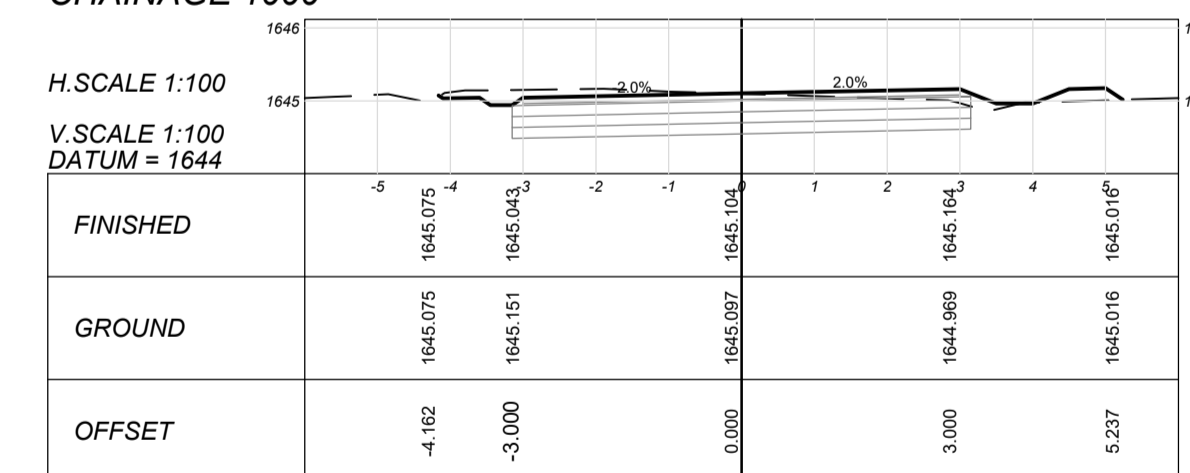
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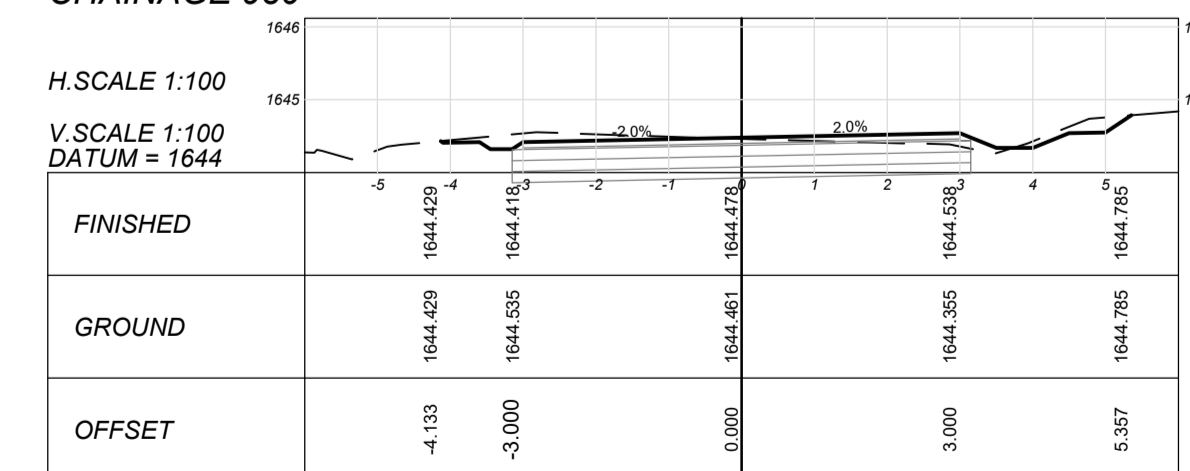
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H. SCALE 1:100
V. SCALE 1:100
DATUM = 1644



CHAINAGE 980

H. SCALE 1:100
V. SCALE 1:100
DATUM = 1644



CLIENT:

19 Murray Street
Lady Grey
9755

Tel: (051) 603 1449
Email: vanzyit@senqu.gov.za

CONSULTANT:

THEWO & SMMS - JV

58 Brebner Road
Westdene
Bloemfontein
9301

Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:

L. MARAH

PROF. Reg.No:
920281

DATE:
2024-03-25

SIGNATURE:

DESIGN BY:

T. TSHABALALA

DRAWN BY:

B. MVUKUZO

CHECKED BY:

L. MARAH

APPROVED BY:

L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

ROAD 2 - DETAILED CROSS SECTIONS

PROJECT STATUS:

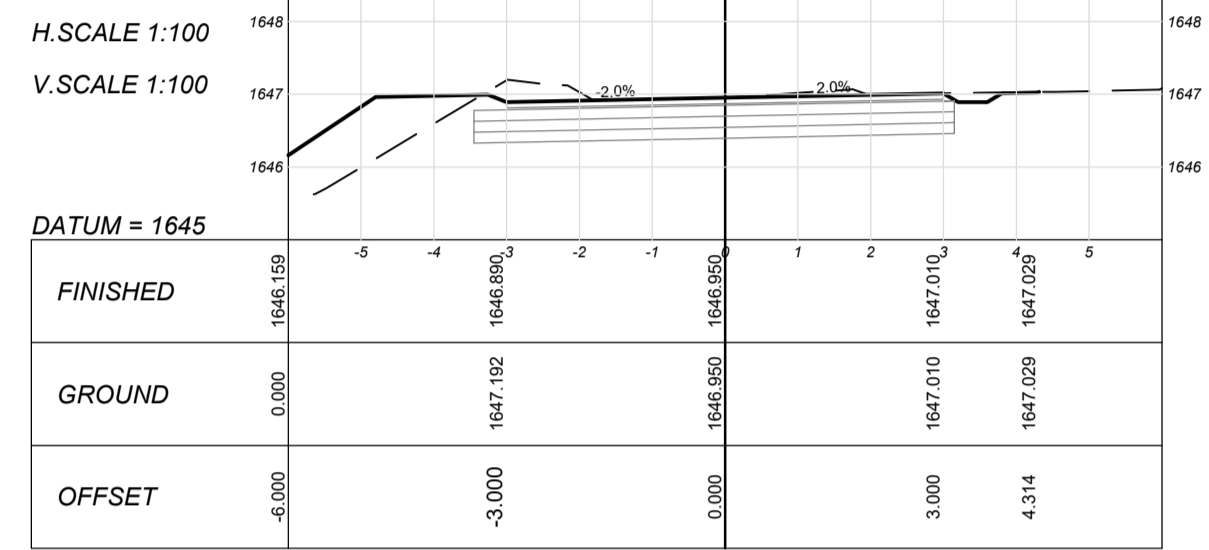
TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	2 OF 3	0	A1

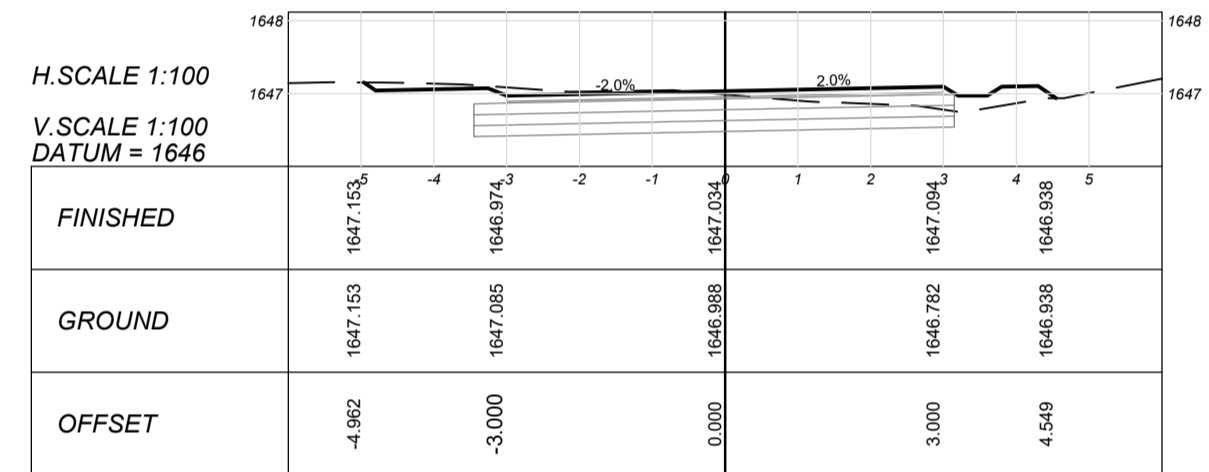
DWG NO

P1027-BE-CIV-RD-CS02

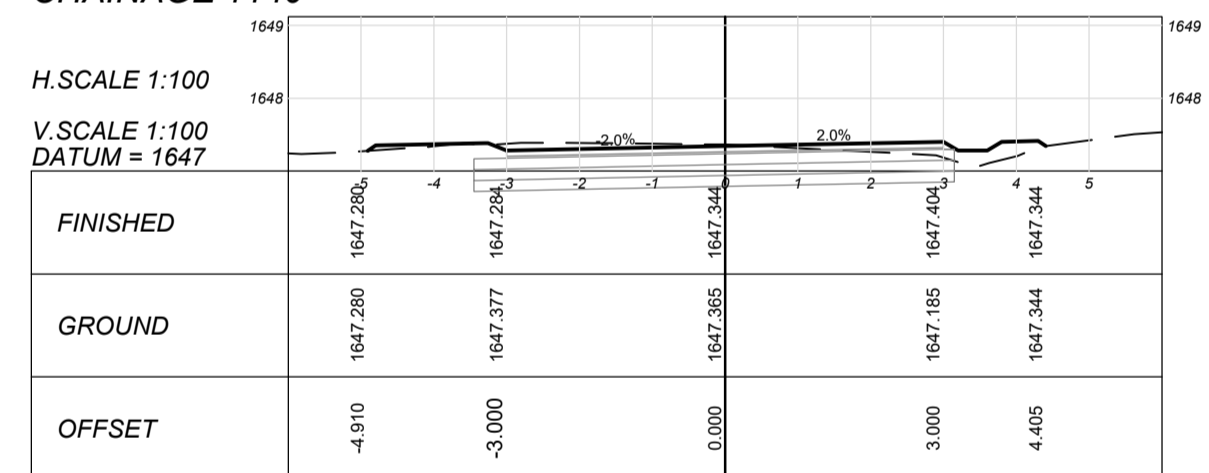
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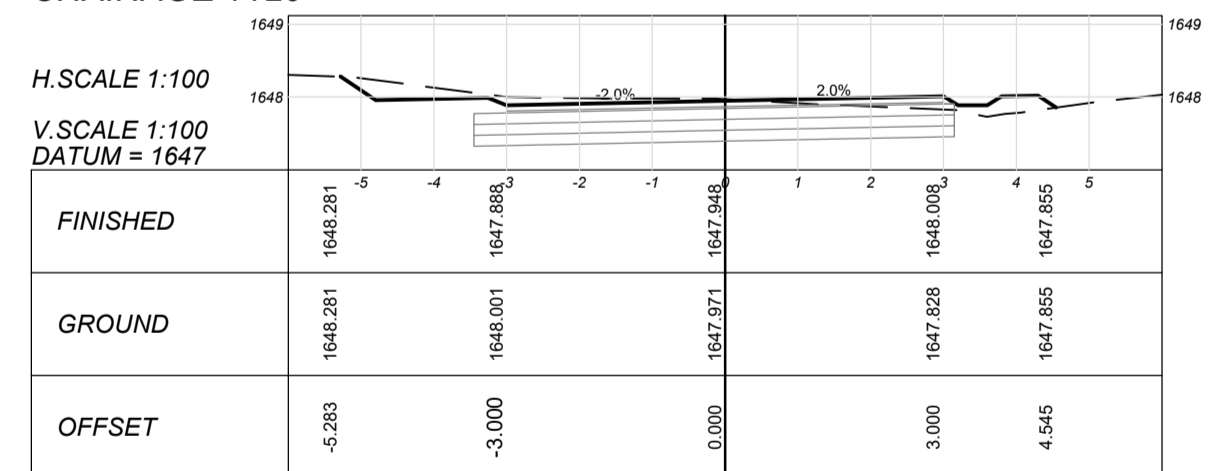
CHAINAGE 1160



CHAINAGE 1140



CHAINAGE 1120



CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyit@senqu.gov.za

CONSULTANT:



THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
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PROFESSIONAL ENGINEER:

L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
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DESIGN BY:

T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

ROAD 2 - DETAILED CROSS SECTIONS

PROJECT STATUS:

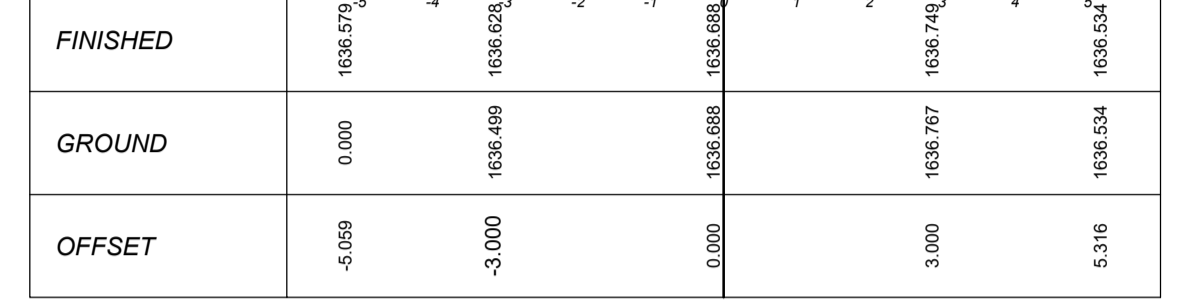
TENDER

DATE	SCALE	SHEET	REV	BY
2024-03-25	AS SHOWN	3 OF 3	0	A1

DWG NO
P1027-BE-CIV-RD-CS02

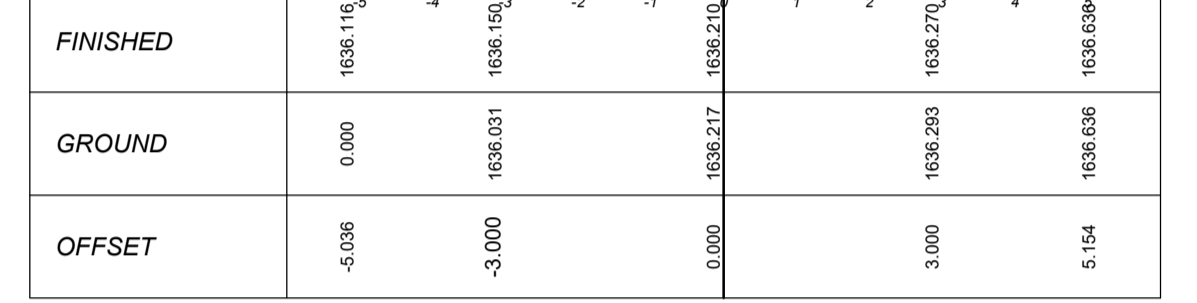
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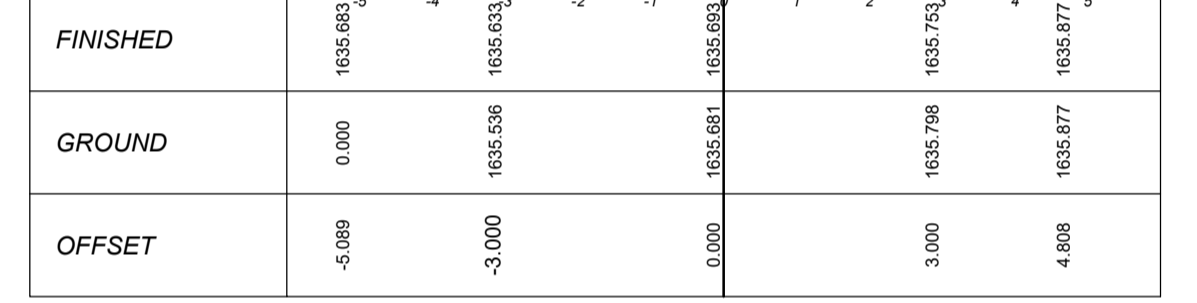
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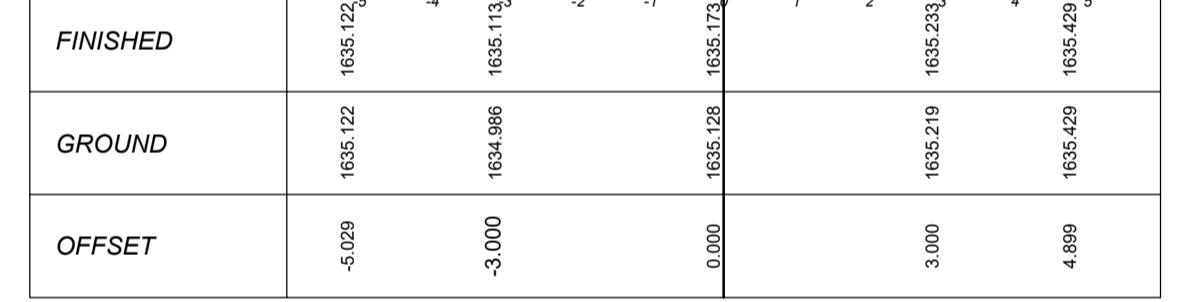
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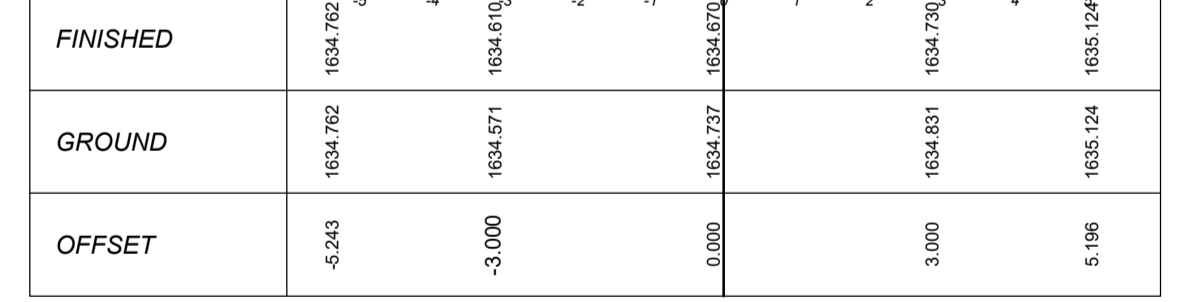
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DATUM = 1634



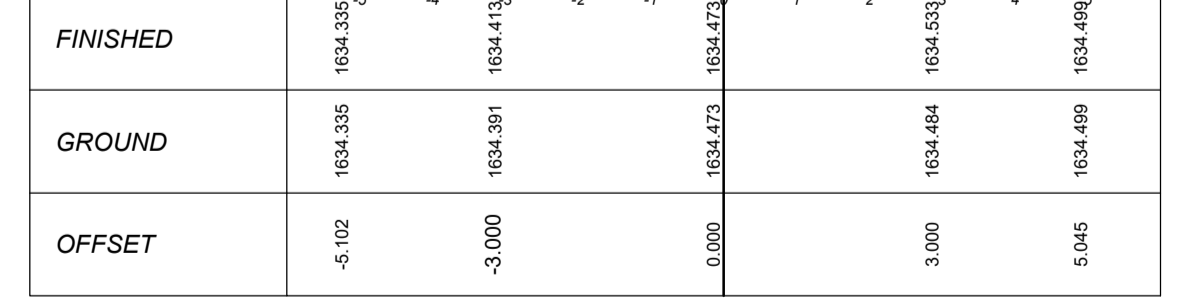
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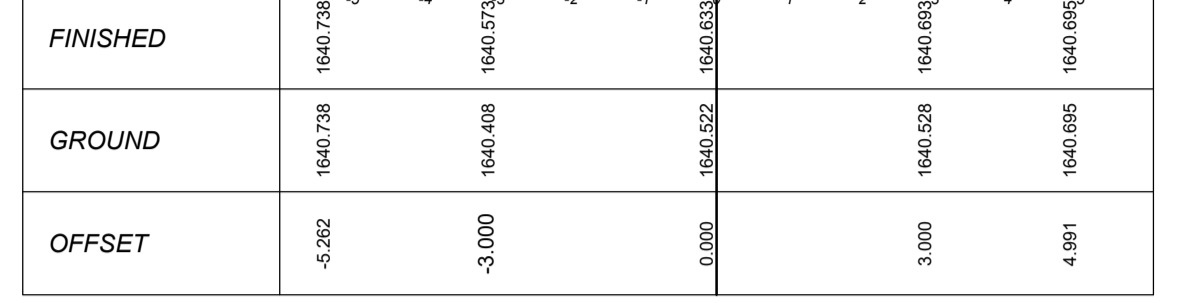
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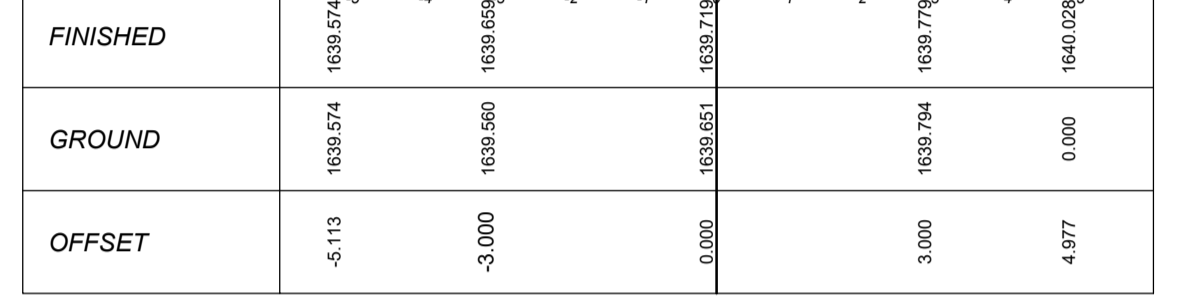
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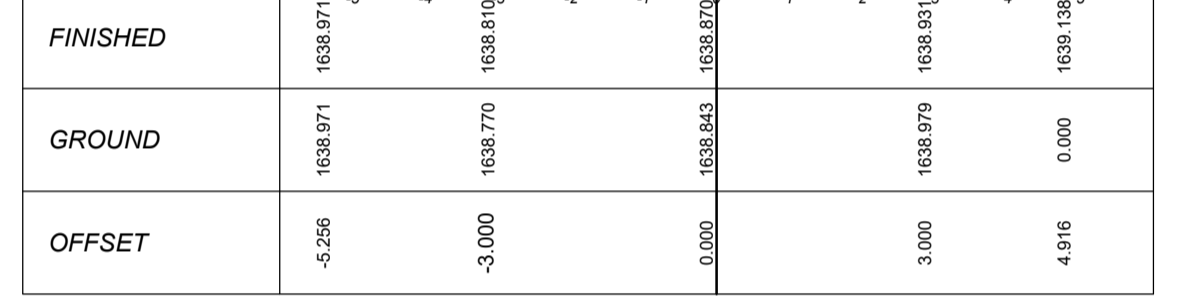
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DATUM = 1639



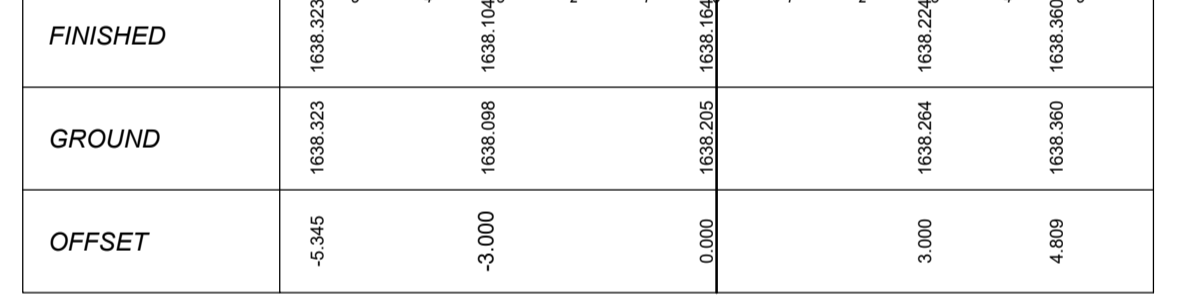
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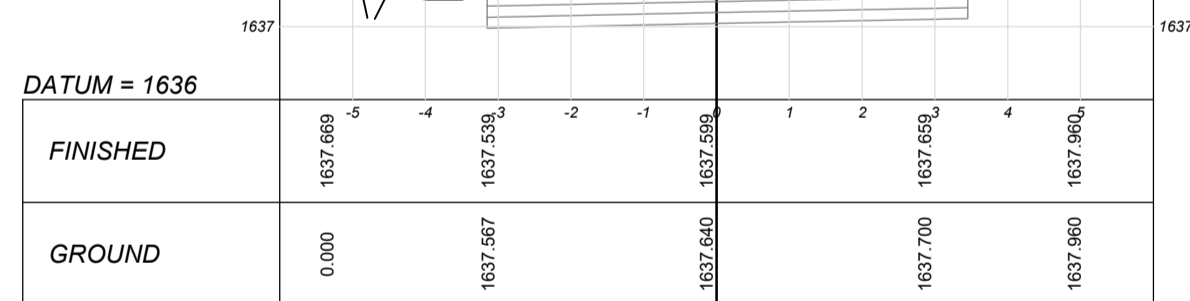
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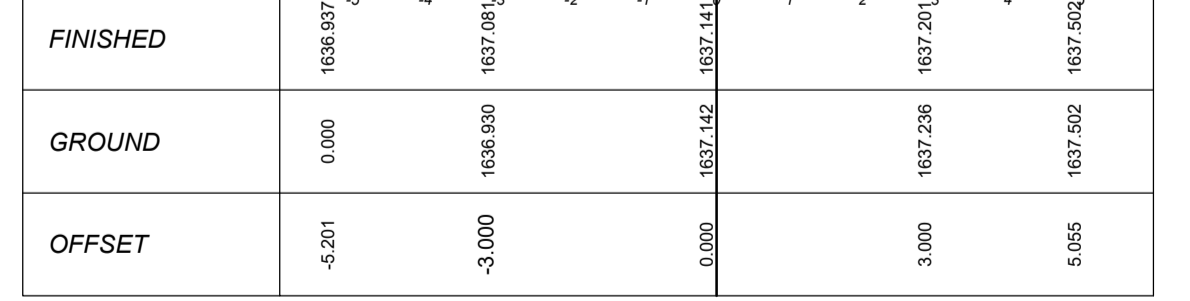
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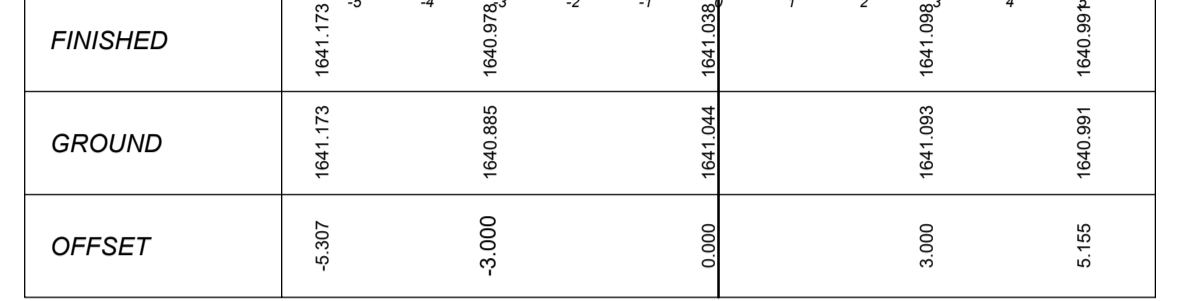
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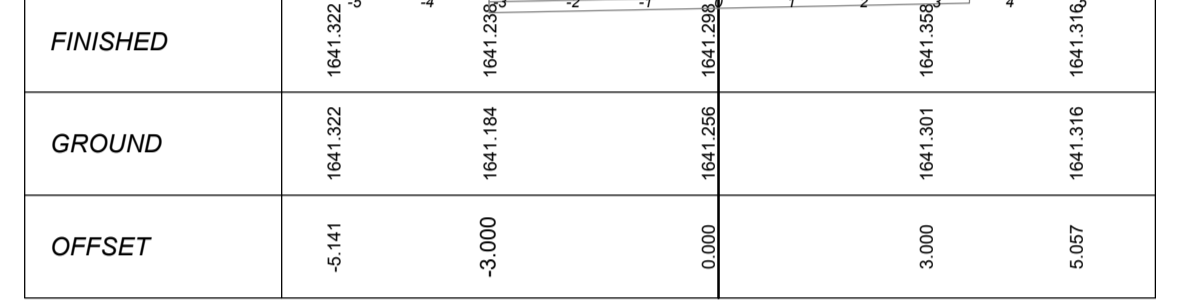
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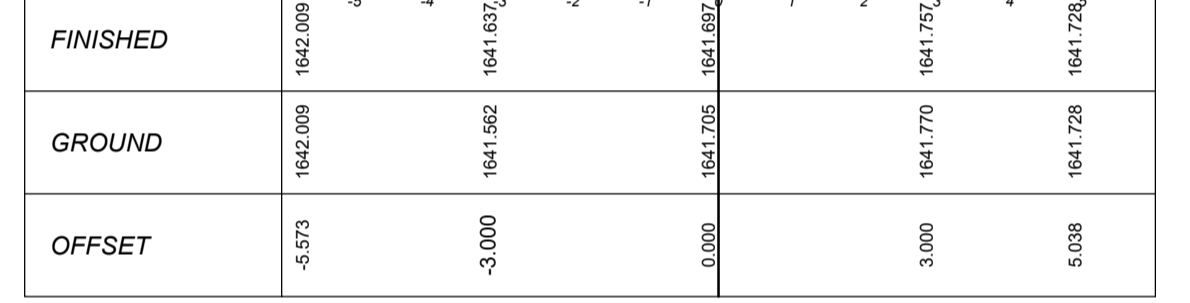
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DATUM = 1641



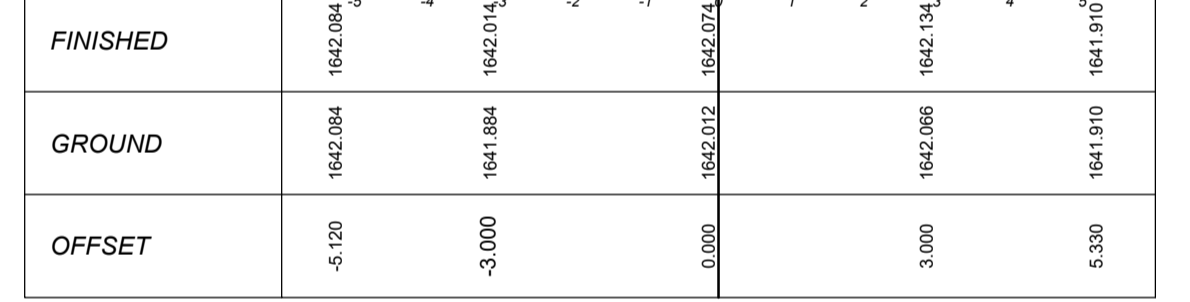
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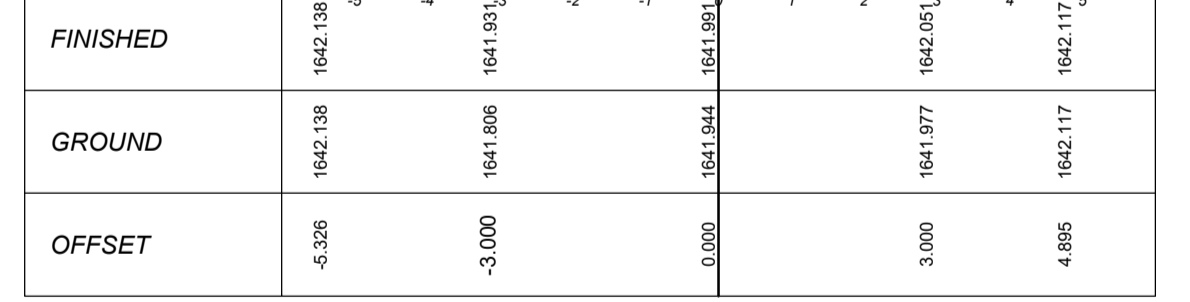
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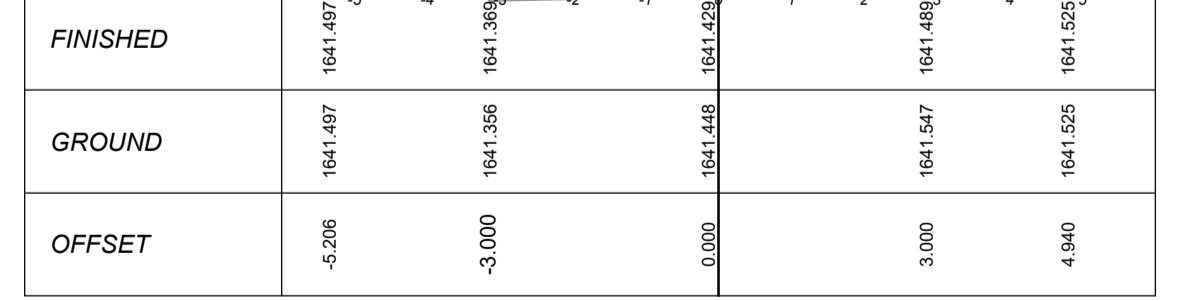
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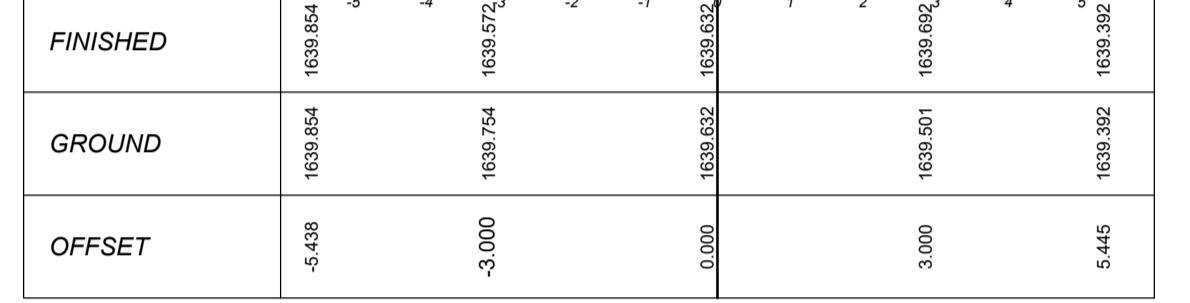
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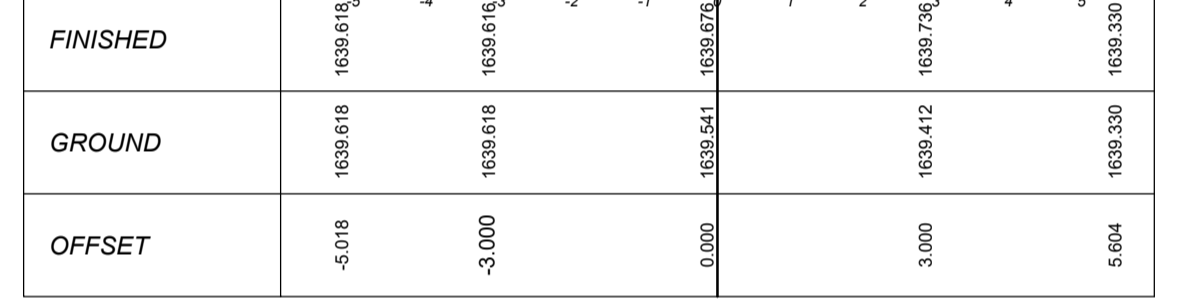
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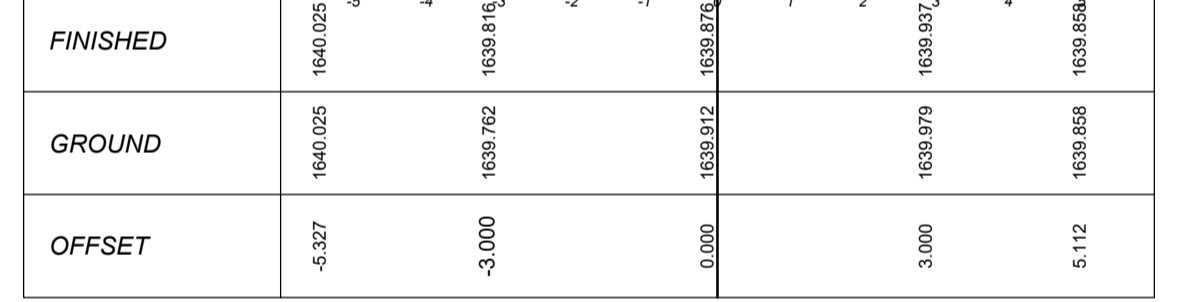
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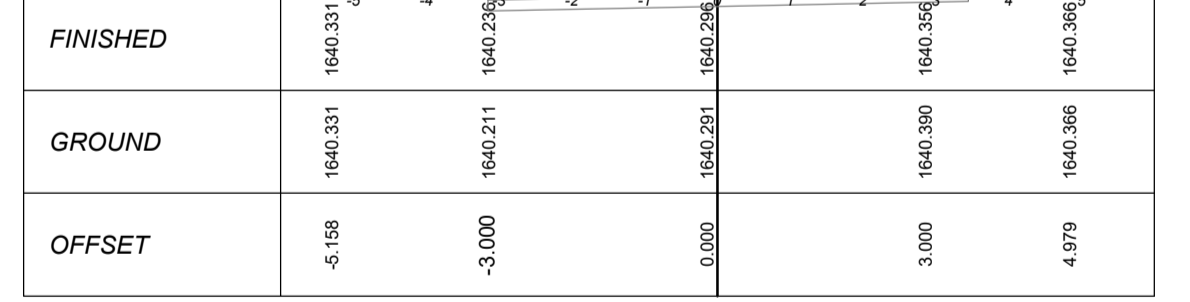
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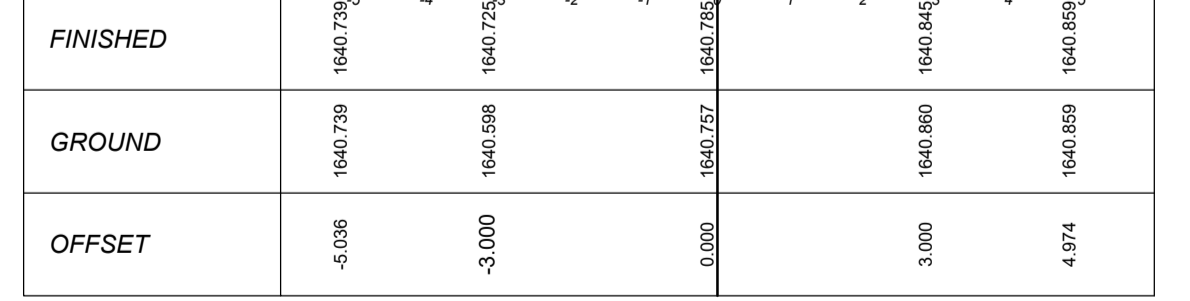
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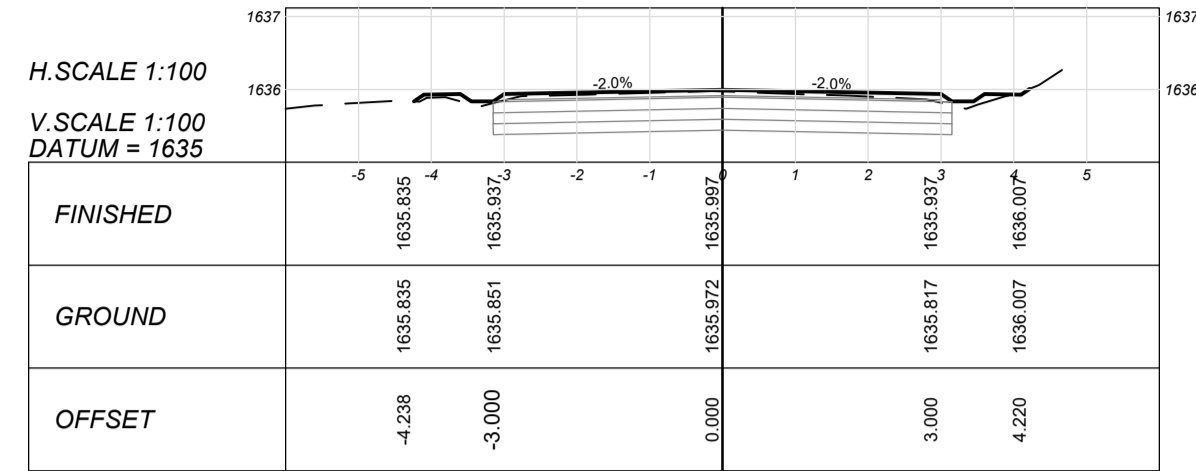
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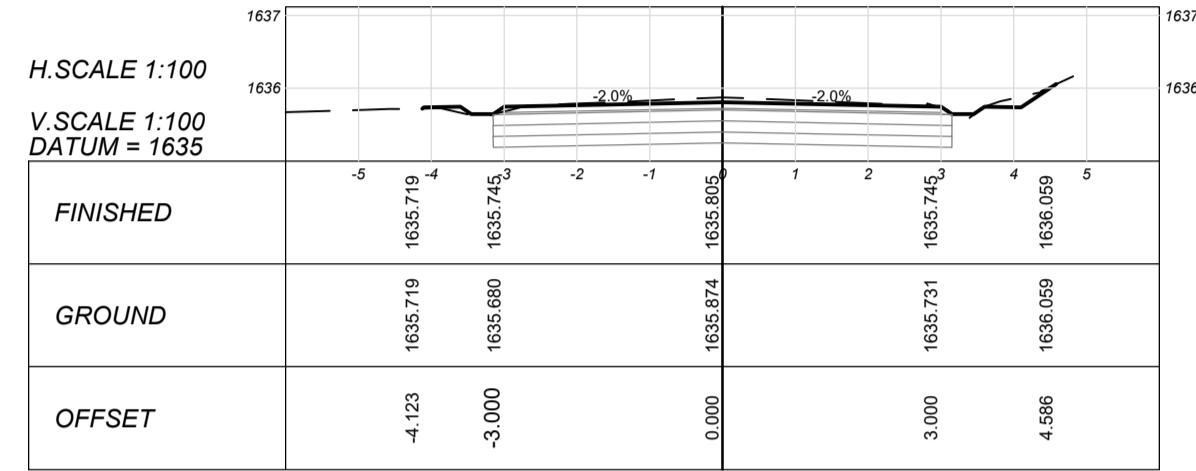


 <p>CLIENT: 19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyit@senqu.gov.za</p>	<p>CONSULTANT: THEWO & SMMS - JV  58 Brebner Road Westdene Bloemfontein 9301 Tel: +27 (051) 430 1321 Email: PMO@thewo.co.za</p>	<p>PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: 2024-03-25 SIGNATURE:</p>	<p>DESIGN BY: T. TSHABALALA DRAWN BY: B. MVUKUZO CHECKED BY: L. MARAH APPROVED BY: L. MARAH</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> <tr> <td>0</td> <td>2024-03-25</td> <td>ISSUED FOR TENDER</td> <td>L.M.</td> </tr> </table>	REV	DATE	DESCRIPTION	BY	0	2024-03-25	ISSUED FOR TENDER	L.M.	<p>PROJECT NAME SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER</p> <p>TITLE ROAD 3 - DETAILED CROSS SECTIONS</p>	<p>PROJECT STATUS: TENDER</p> <table border="1"> <tr> <th>DATE</th> <th>SCALE</th> <th>SHEET</th> <th>REV</th> <th>A1</th> </tr> <tr> <td>2024-03-25</td> <td>AS SHOWN</td> <td>1 OF 1</td> <td>0</td> <td>A1</td> </tr> </table> <p>DWG NO P1027-BE-CIV-RD-CS03</p>	DATE	SCALE	SHEET	REV	A1	2024-03-25	AS SHOWN	1 OF 1	0	A1
				REV	DATE	DESCRIPTION	BY																	
0	2024-03-25	ISSUED FOR TENDER	L.M.																					
DATE	SCALE	SHEET	REV	A1																				
2024-03-25	AS SHOWN	1 OF 1	0	A1																				
<p>CLIENT: THEWO & SMMS - JV</p>																								

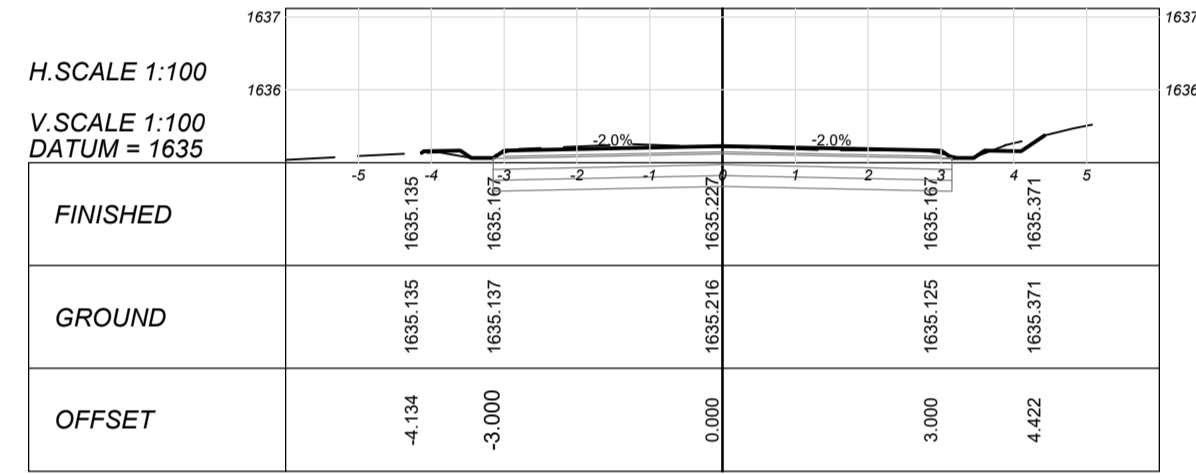
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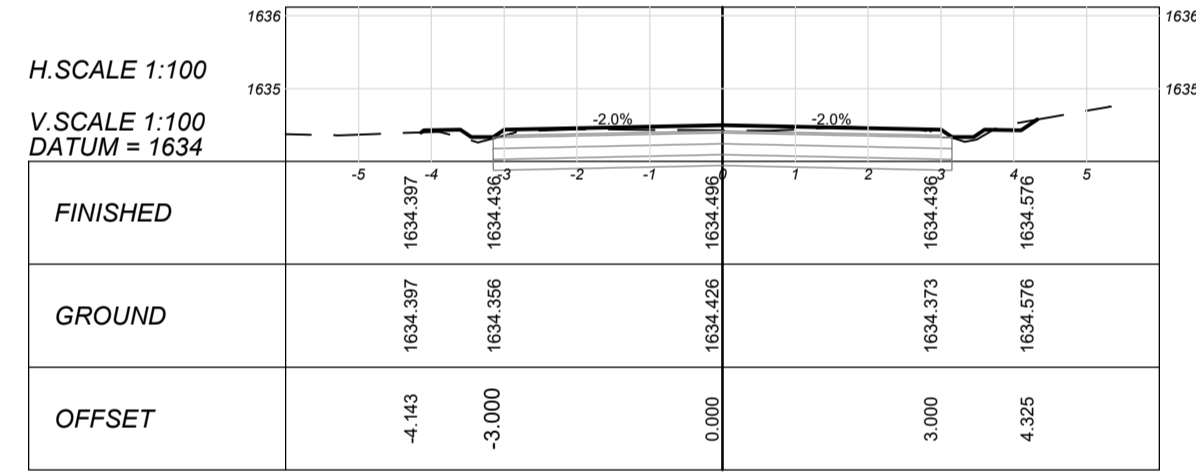
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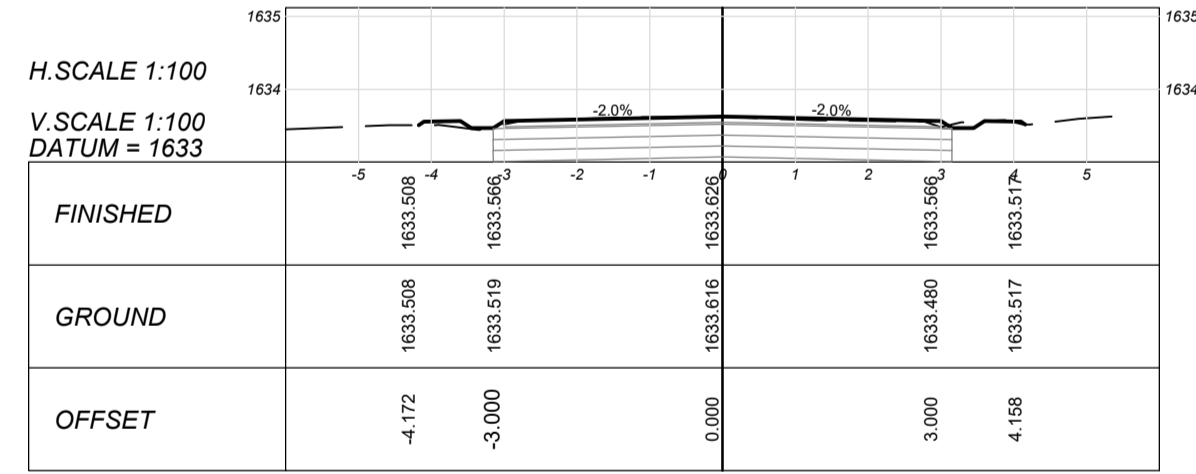
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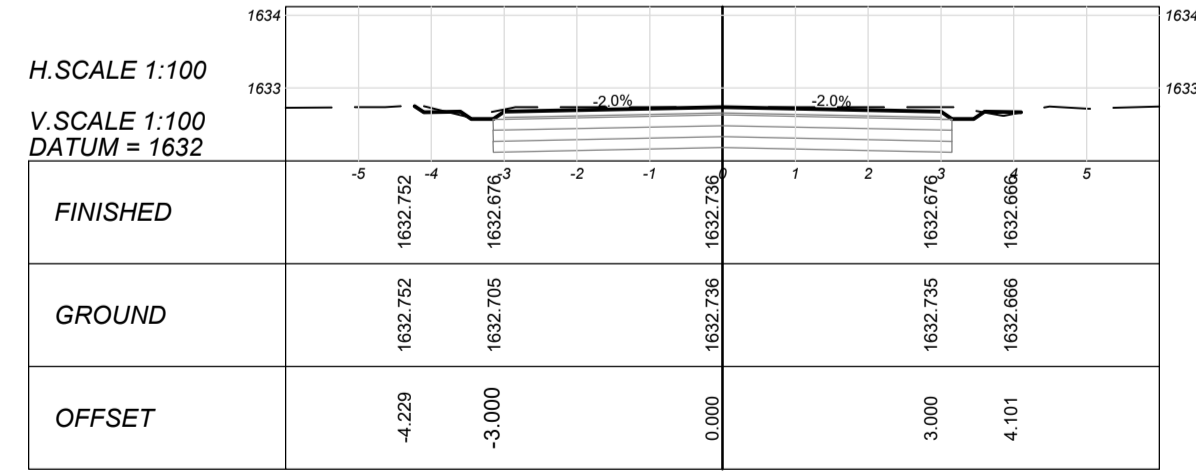
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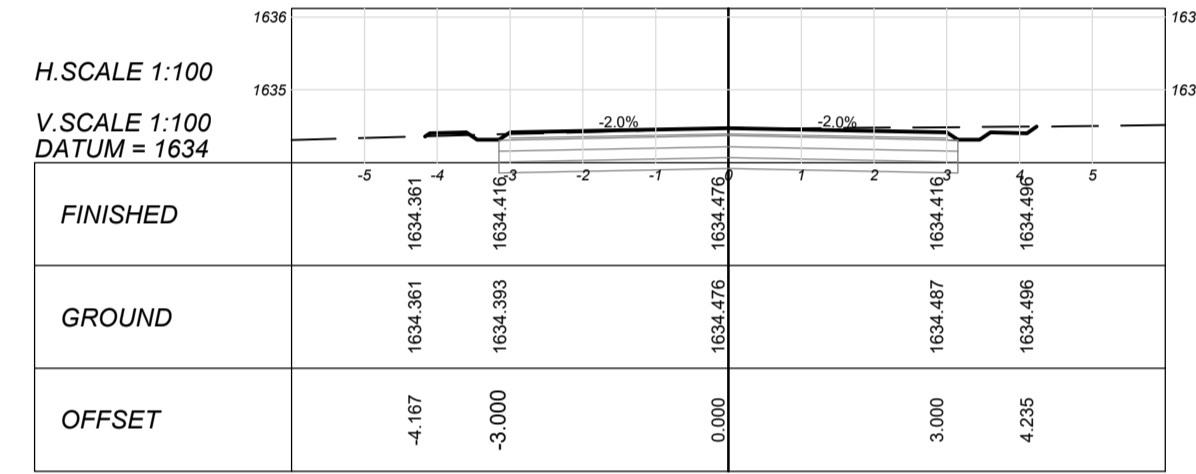
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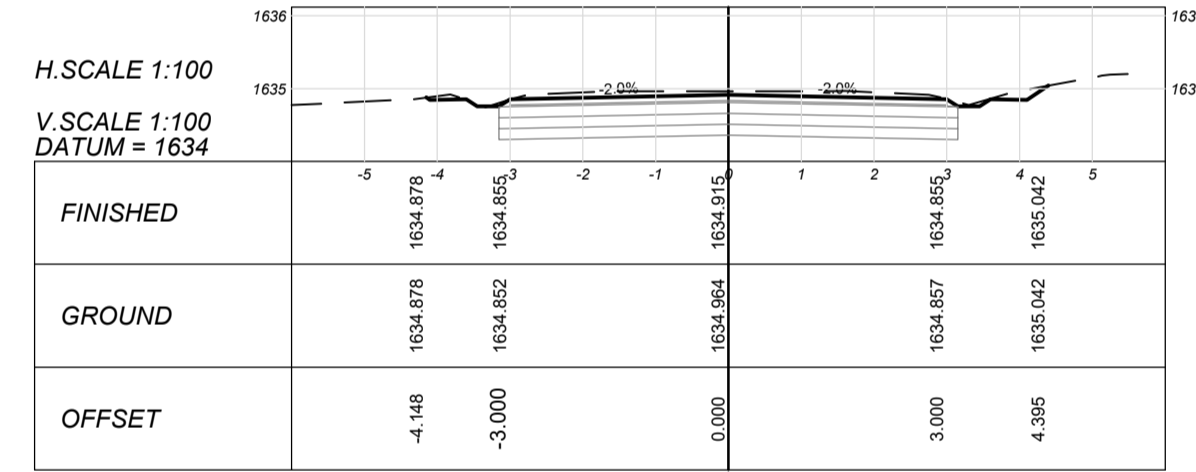
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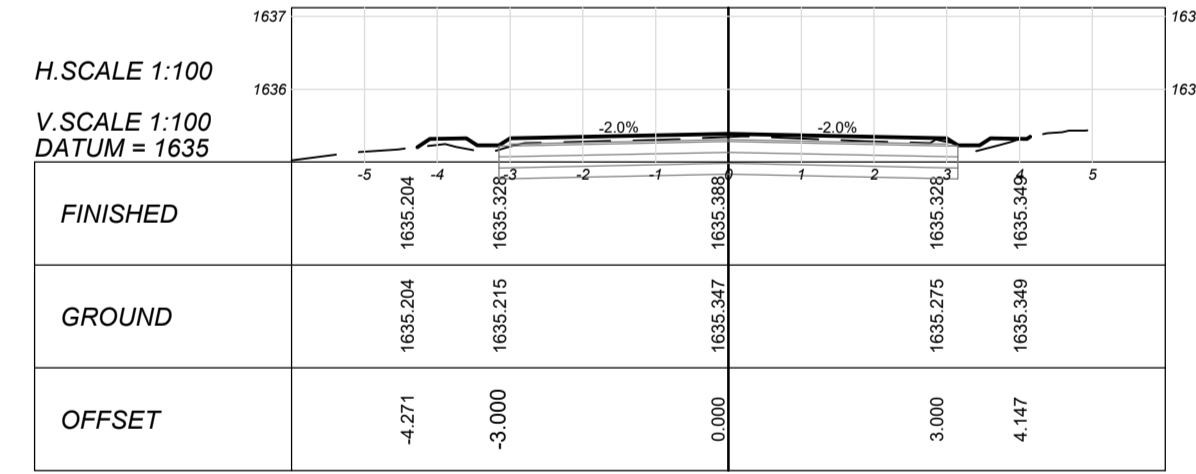
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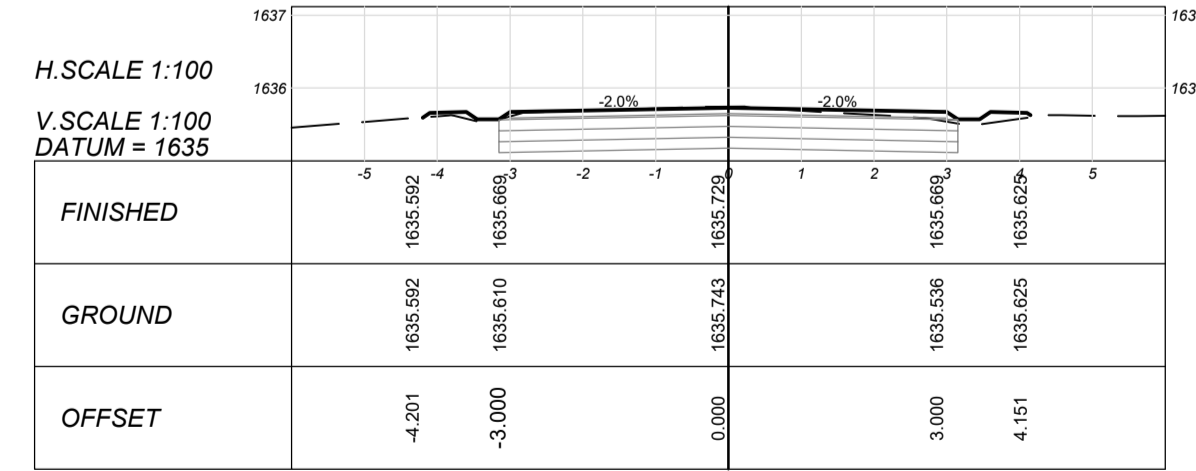
CHAINAGE 160



CHAINAGE 140



CHAINAGE 120



CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyit@senqu.gov.za

CONSULTANT:



THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:

L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:

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DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

ROAD 4 - DETAILED CROSS SECTIONS

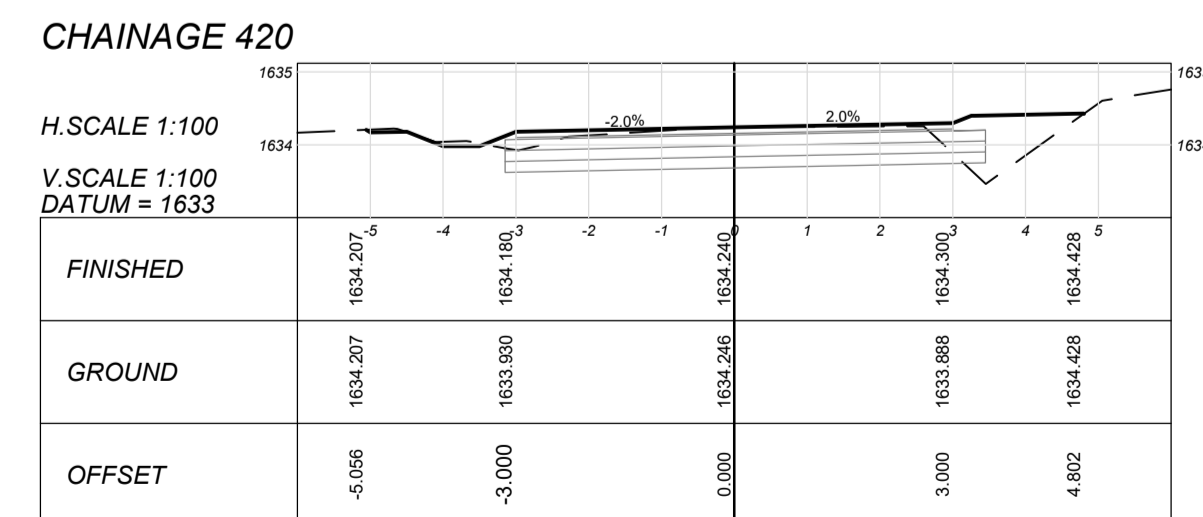
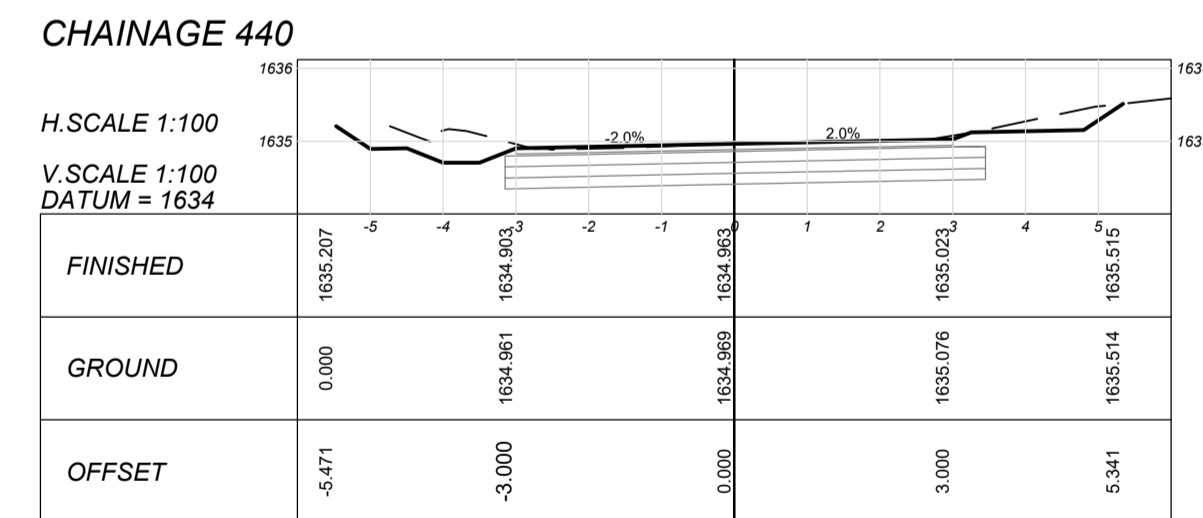
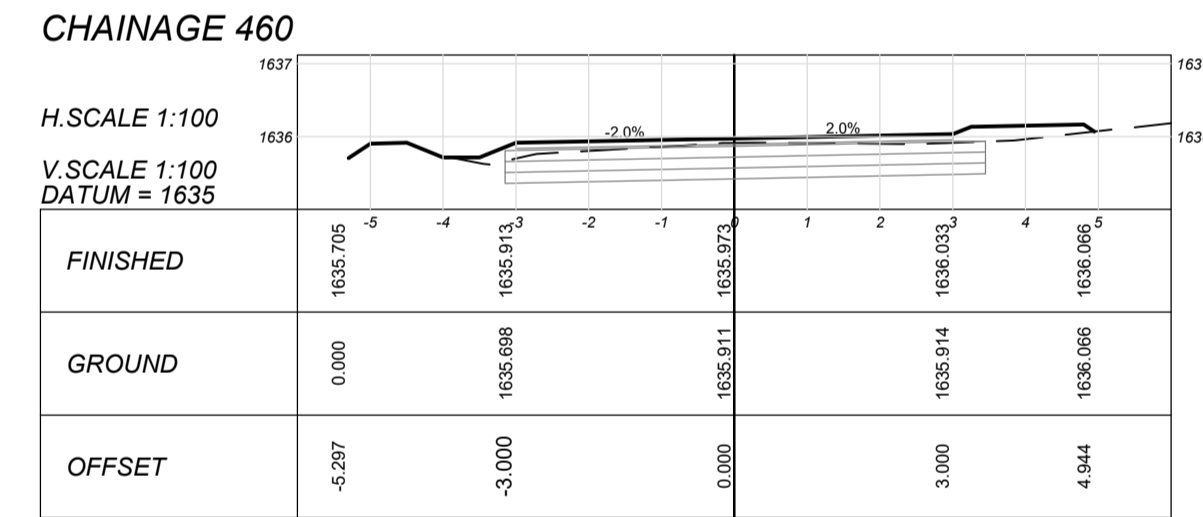
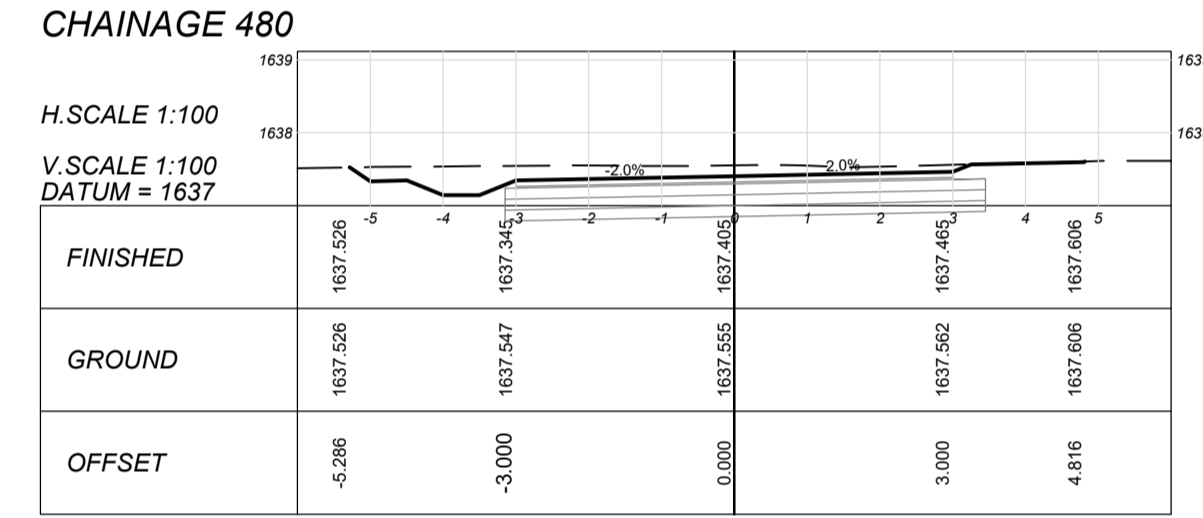
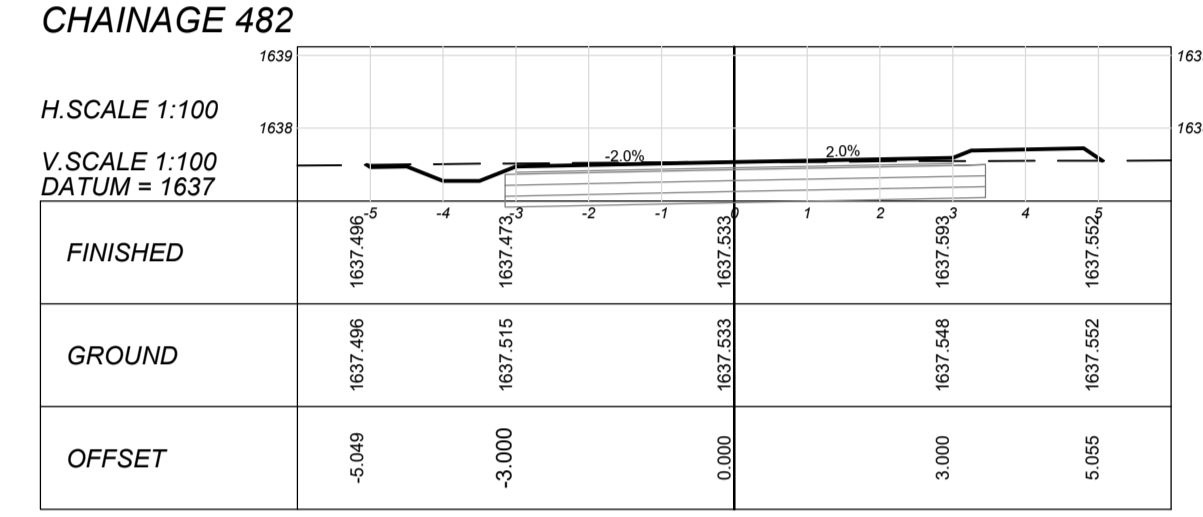
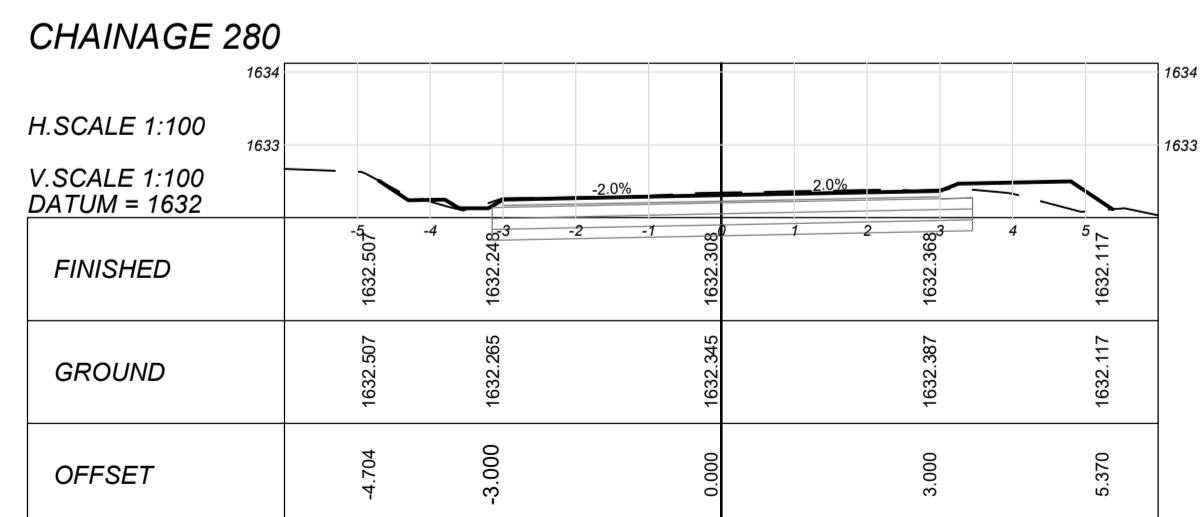
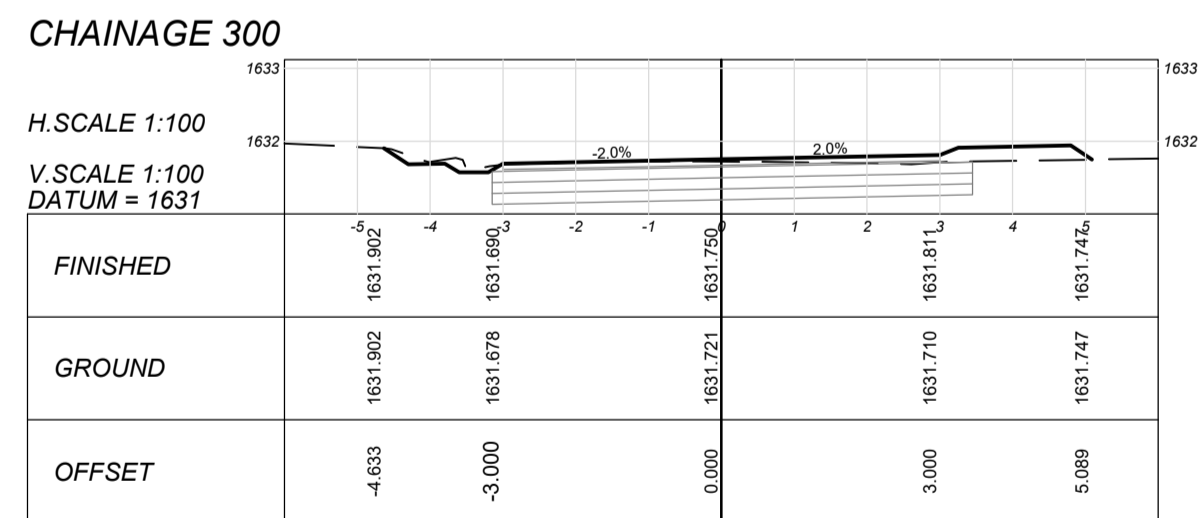
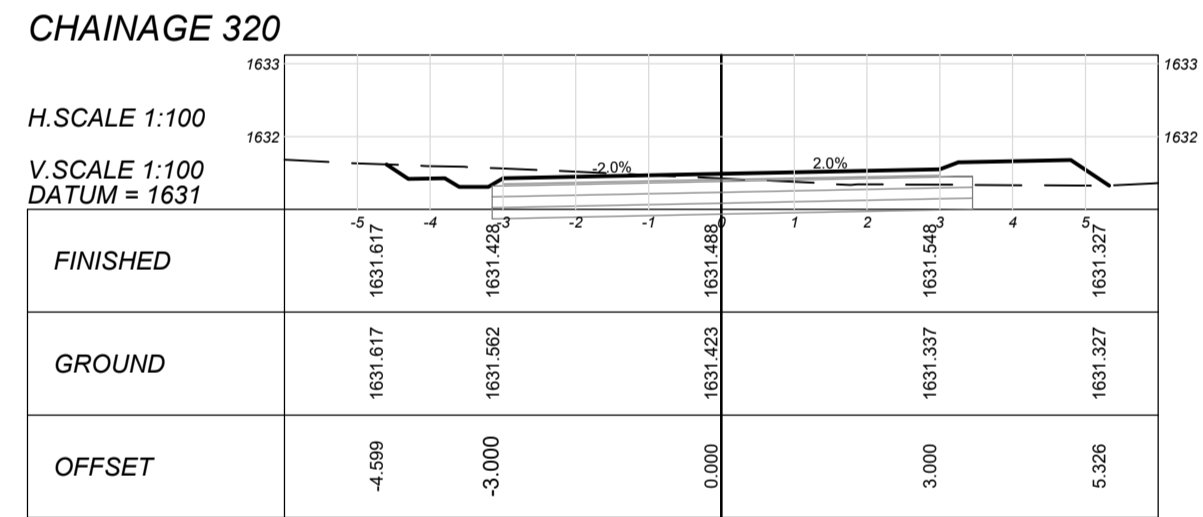
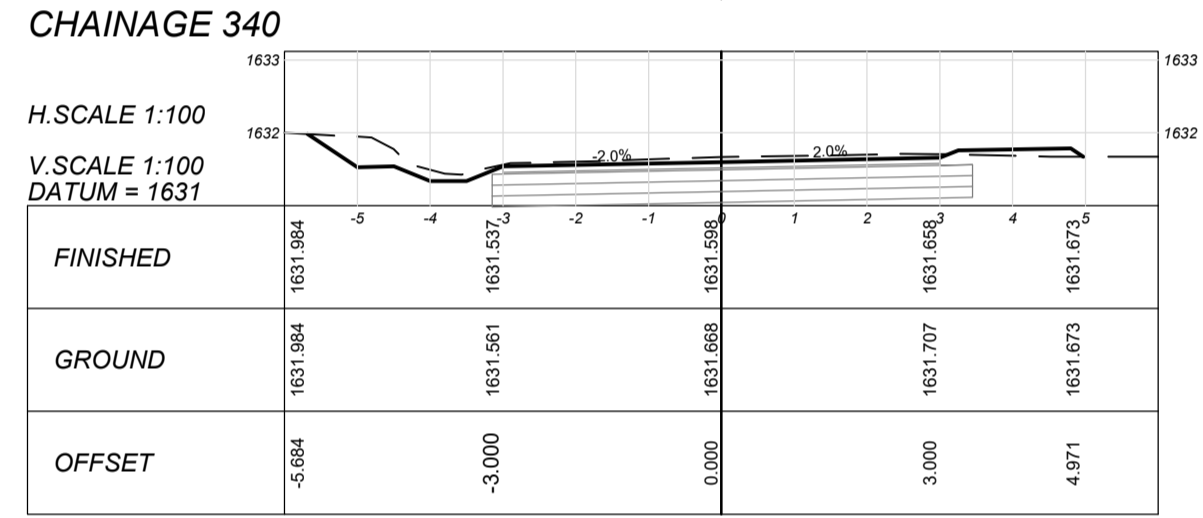
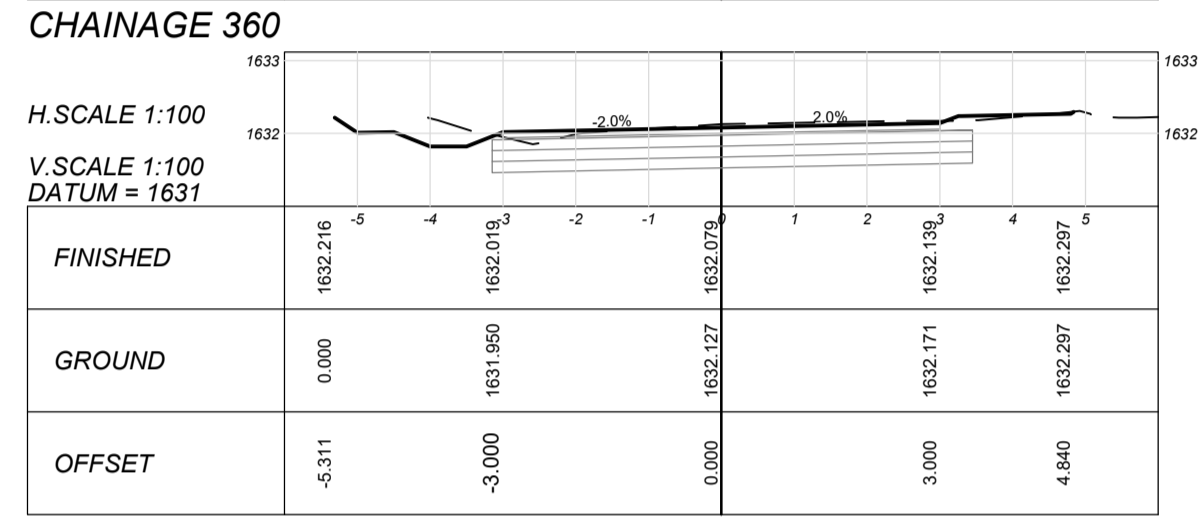
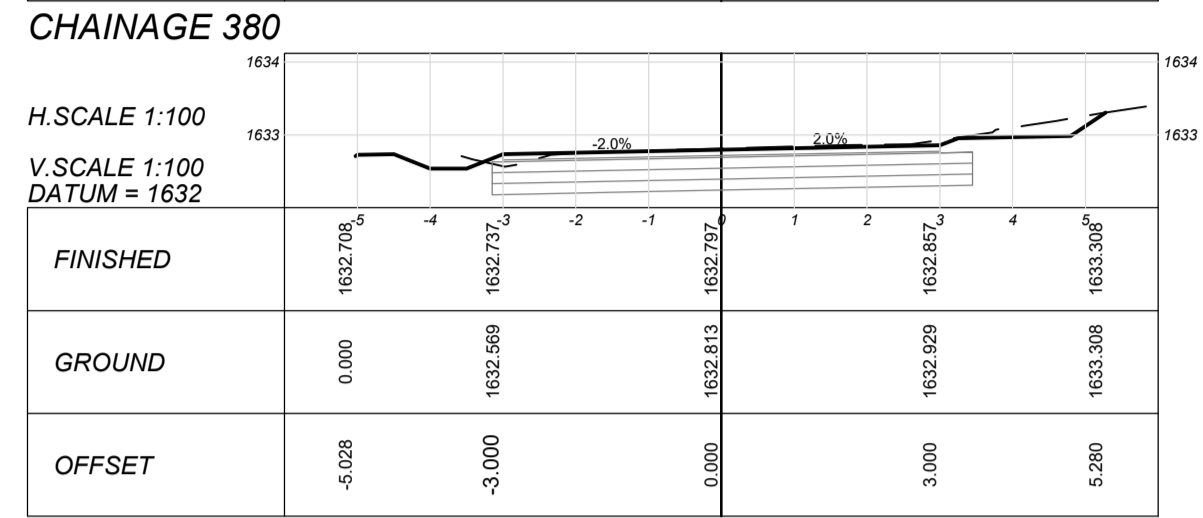
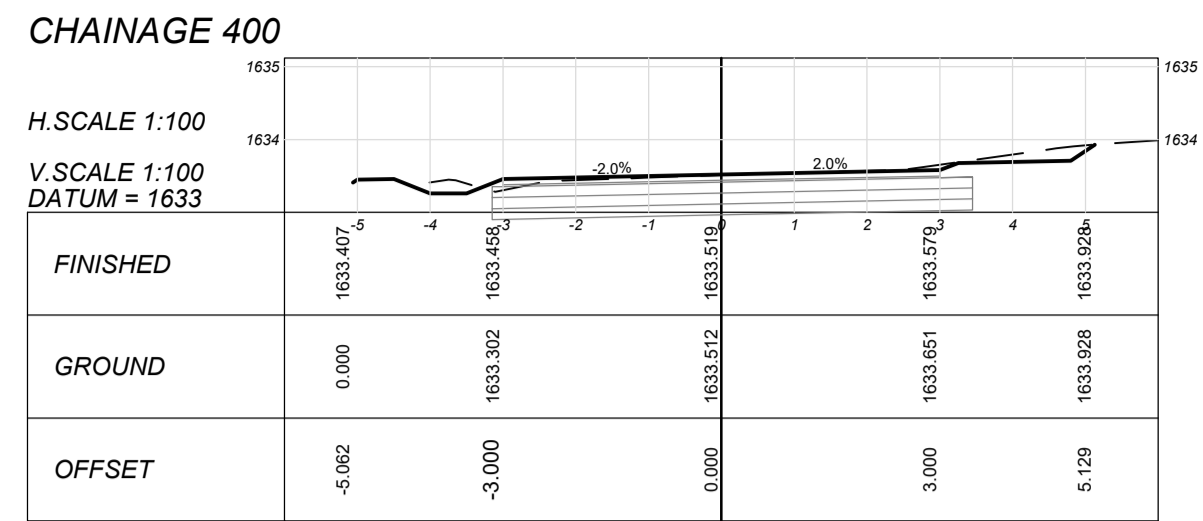
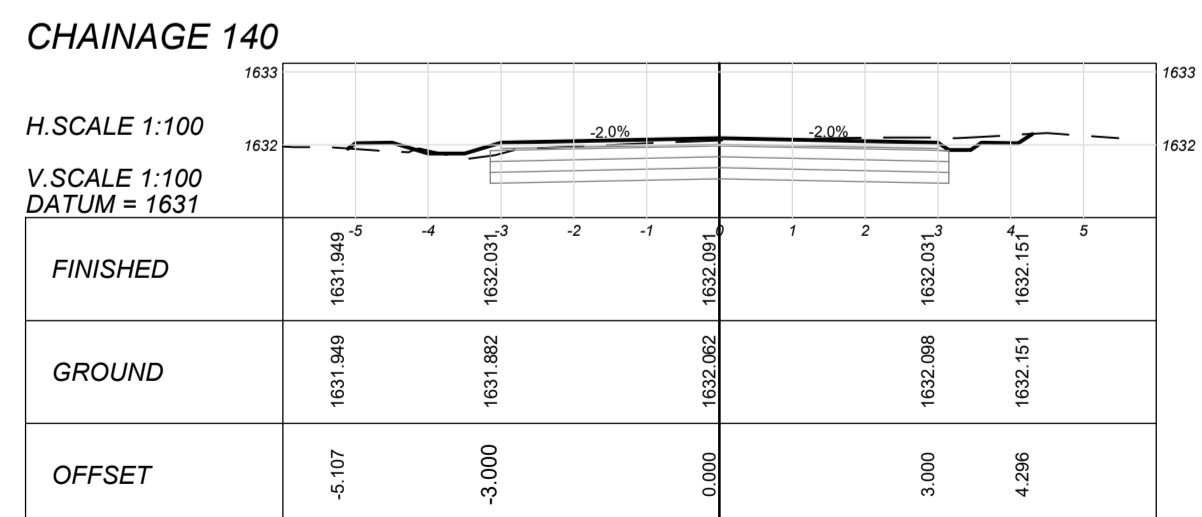
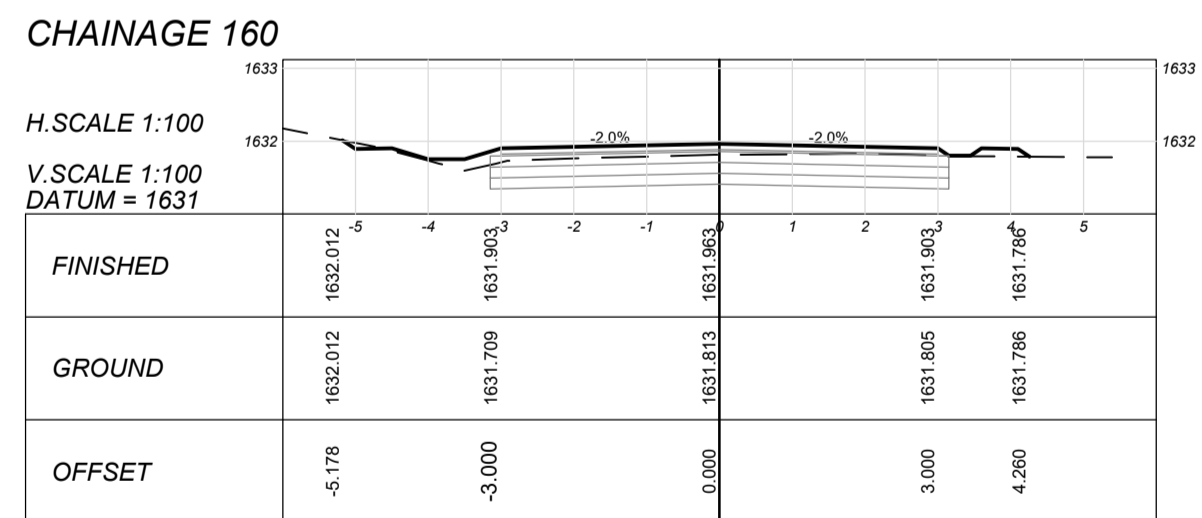
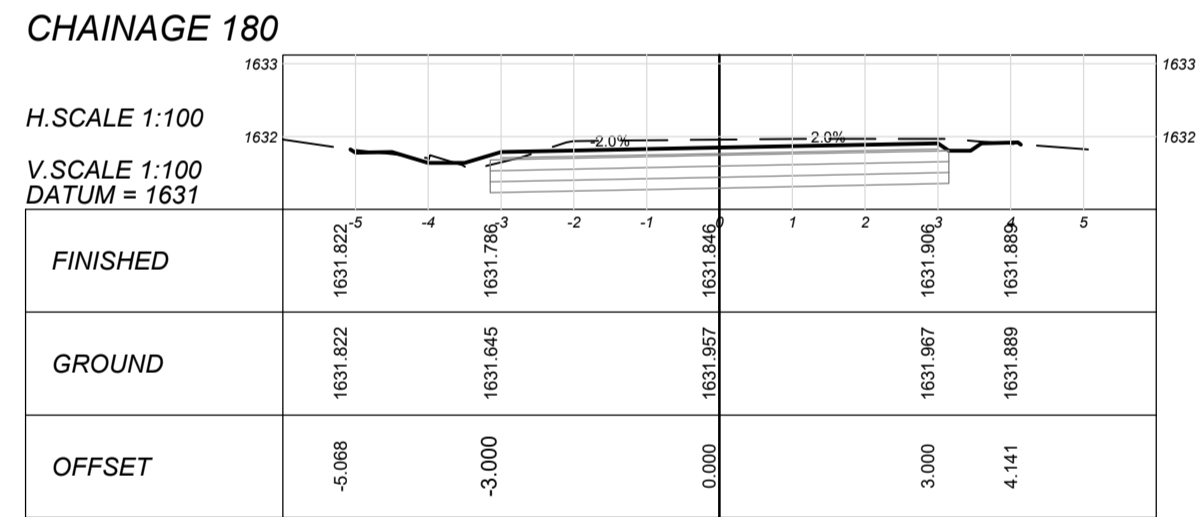
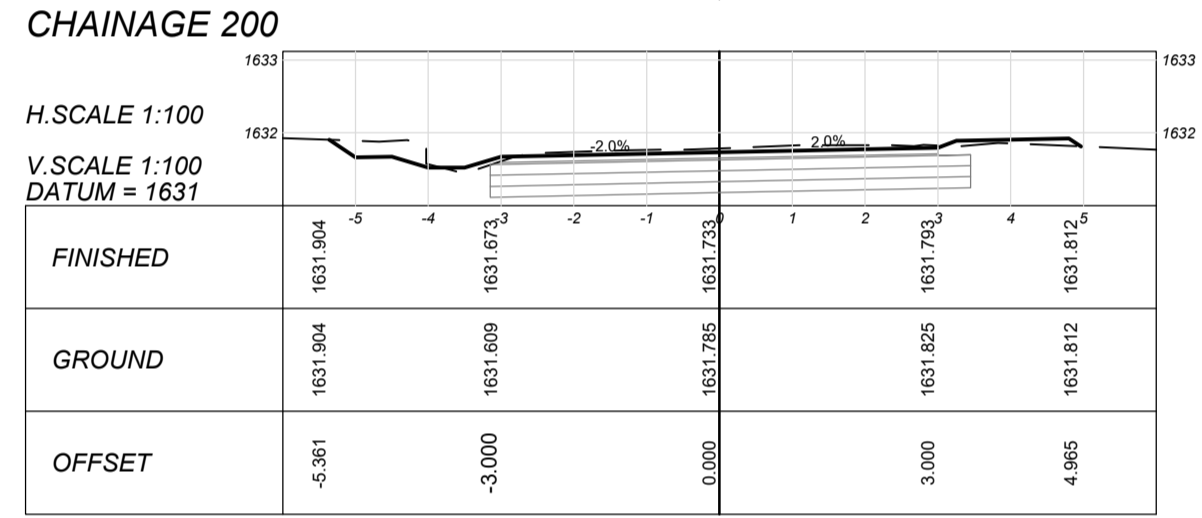
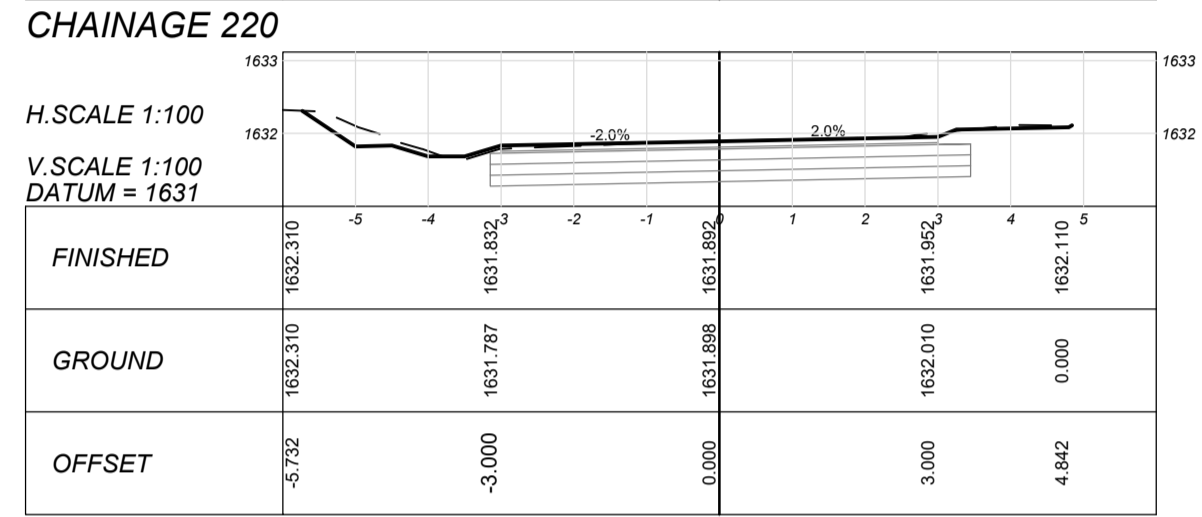
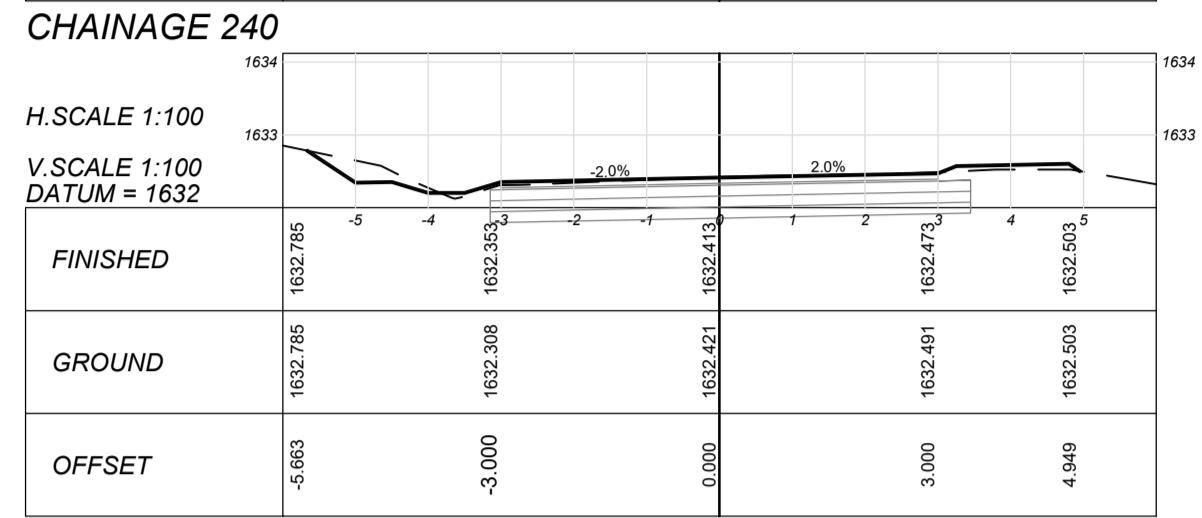
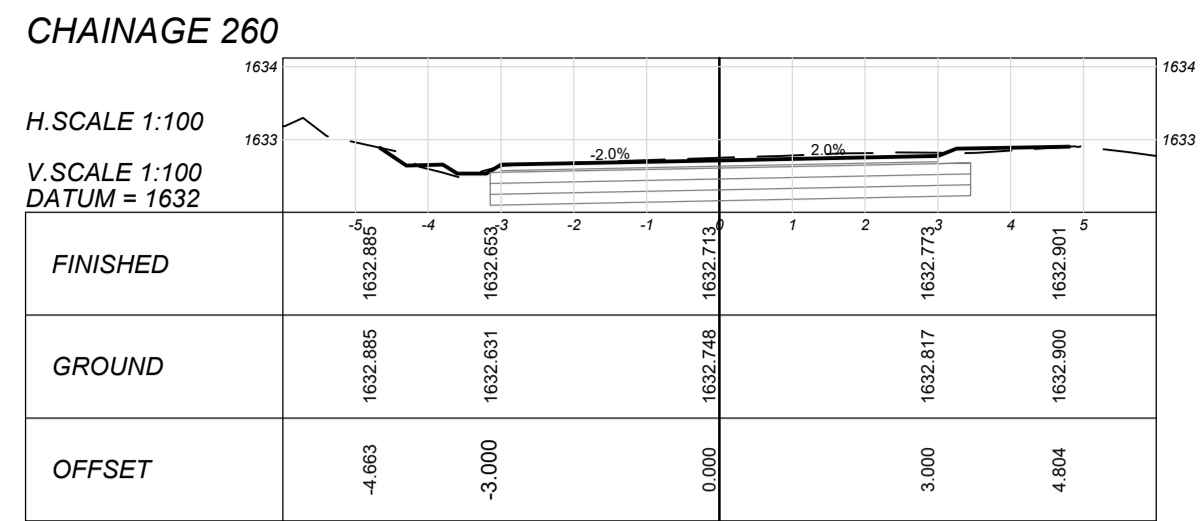
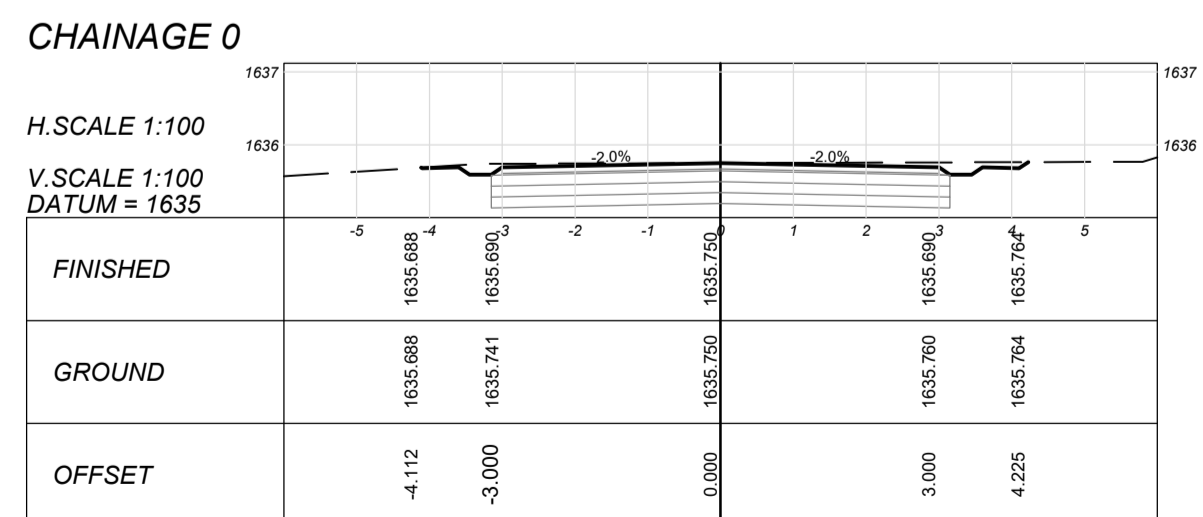
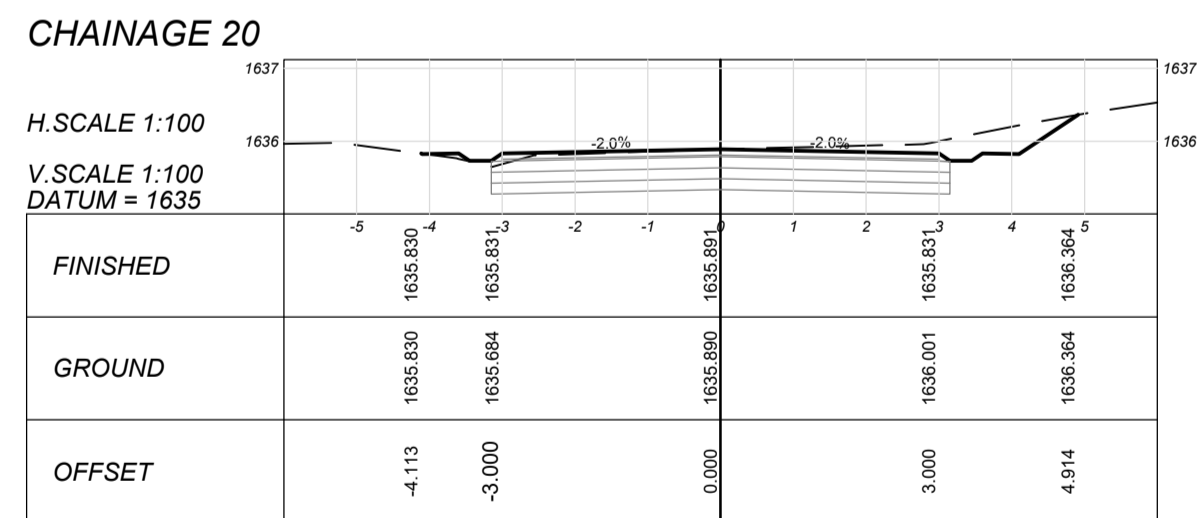
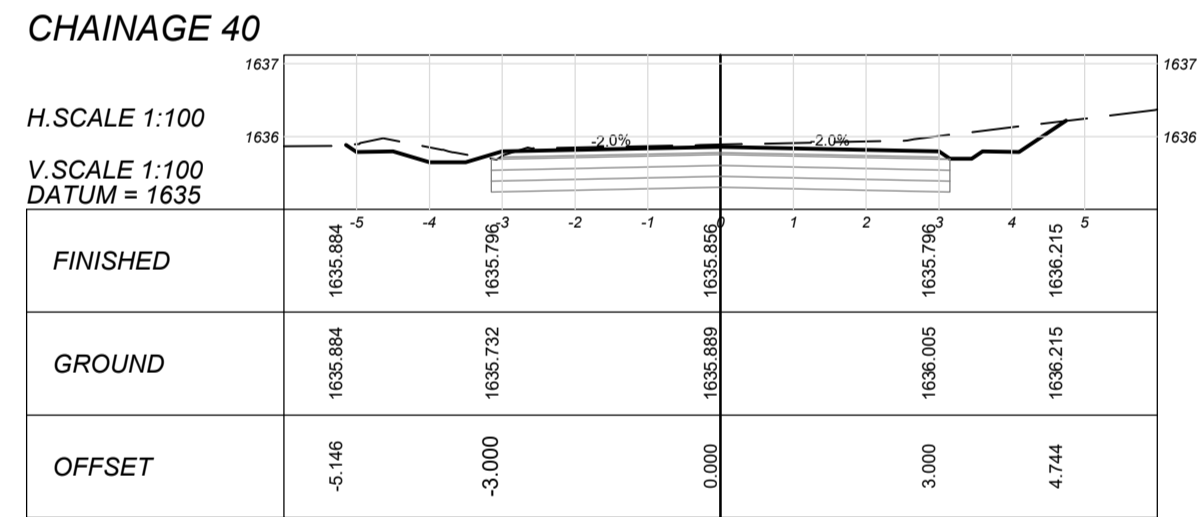
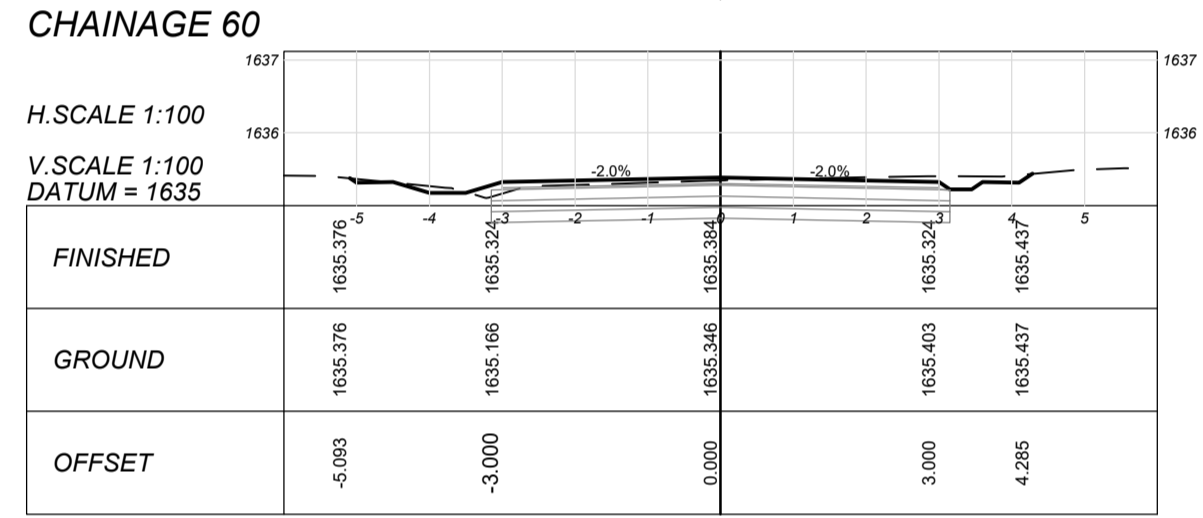
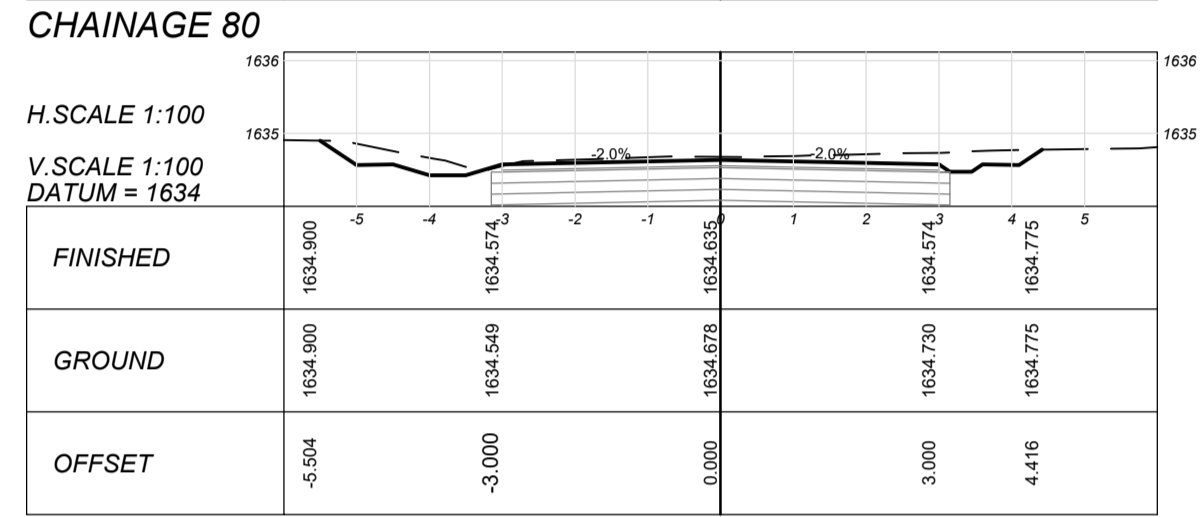
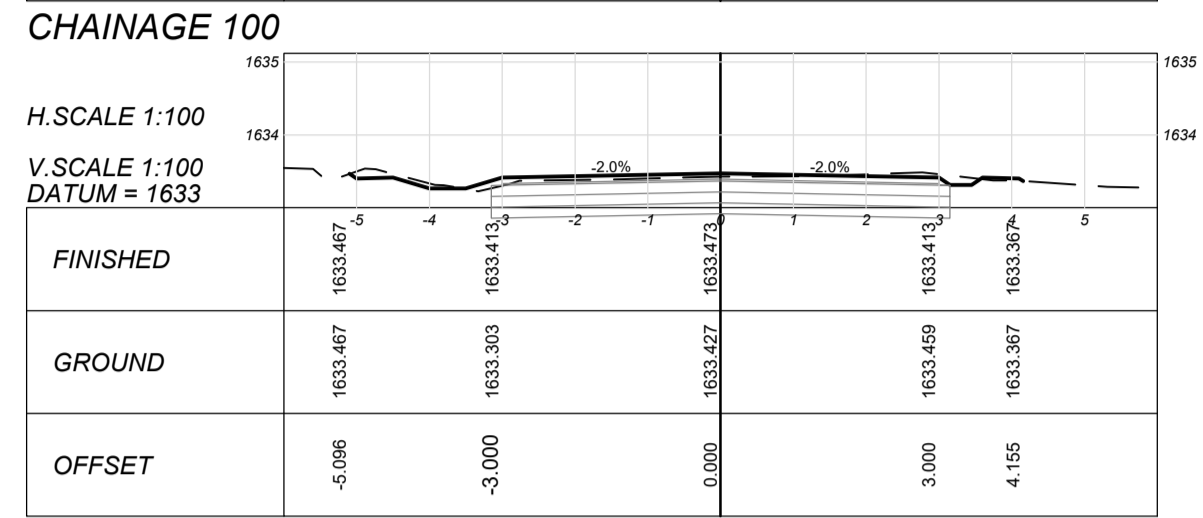
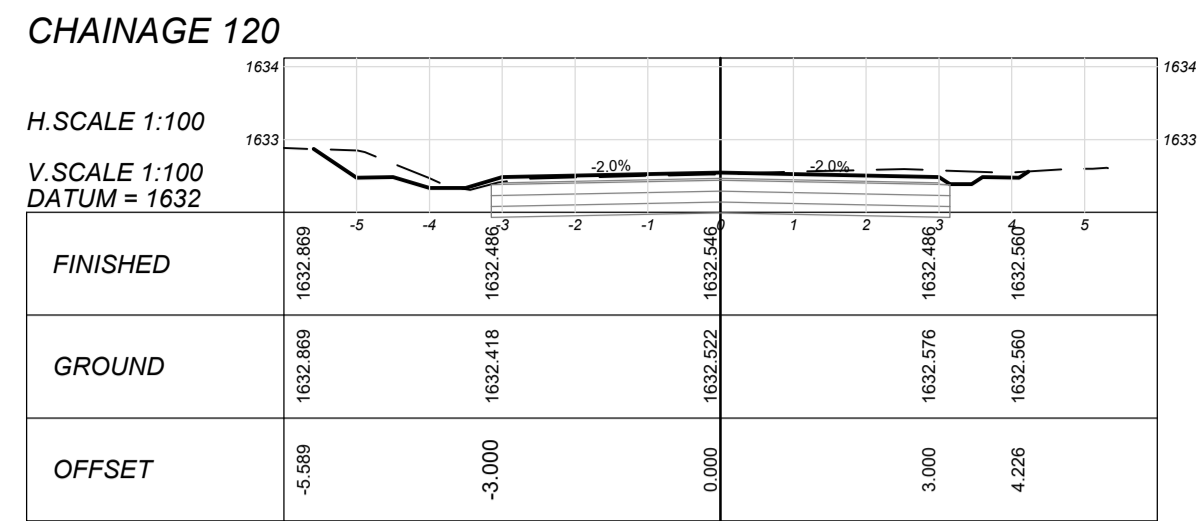
PROJECT STATUS:

TENDER

DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

DWG NO

P1027-BE-CIV-RD-CS04



CLIENT:
19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:
THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

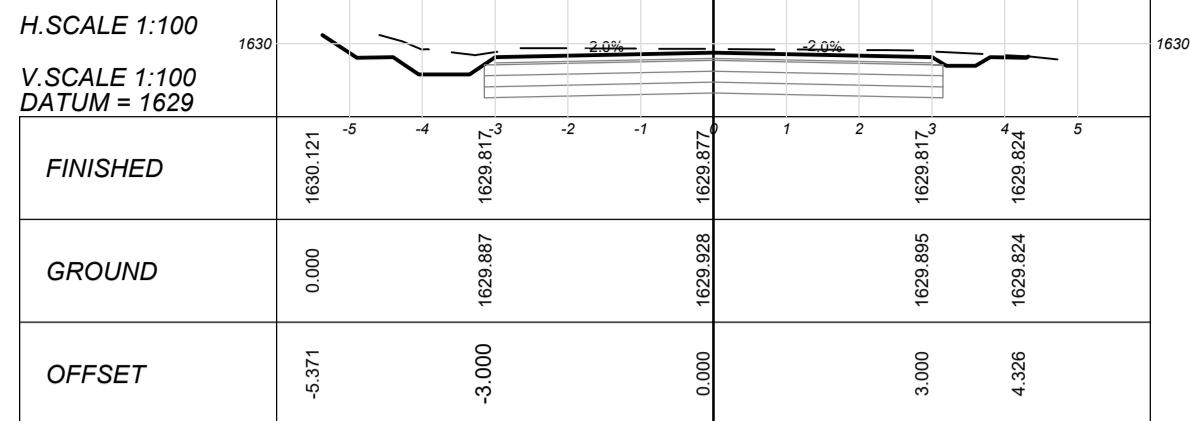
DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS				
REV	DATE	DESCRIPTION	BY	
0	2024-03-25	ISSUED FOR TENDER	L.M.	

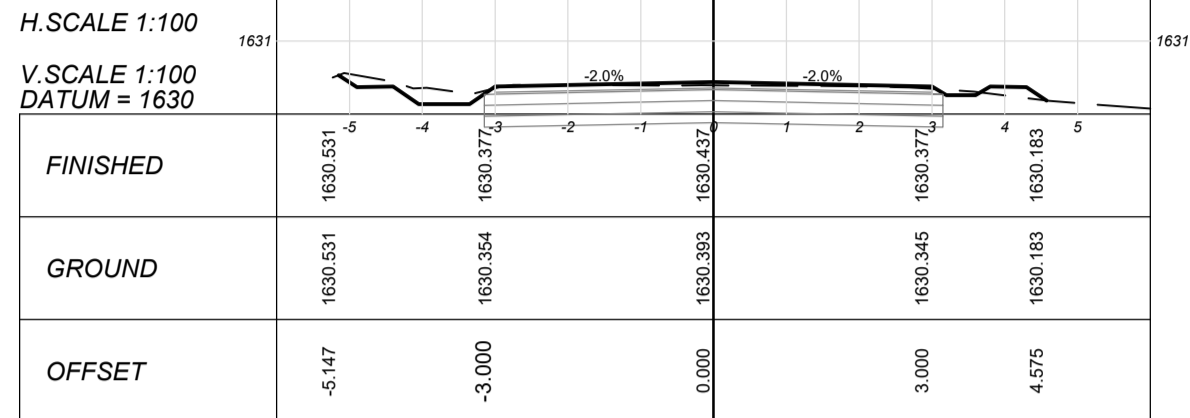
PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER
TITLE
ROAD 5 - DETAILED CROSS SECTIONS

PROJECT STATUS:
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DATE: 2024-03-25
SCALE: AS SHOWN
SHEET: 1 OF 1
REV: 0
A1
DWG NO: P1027-BE-CIV-RD-CS05

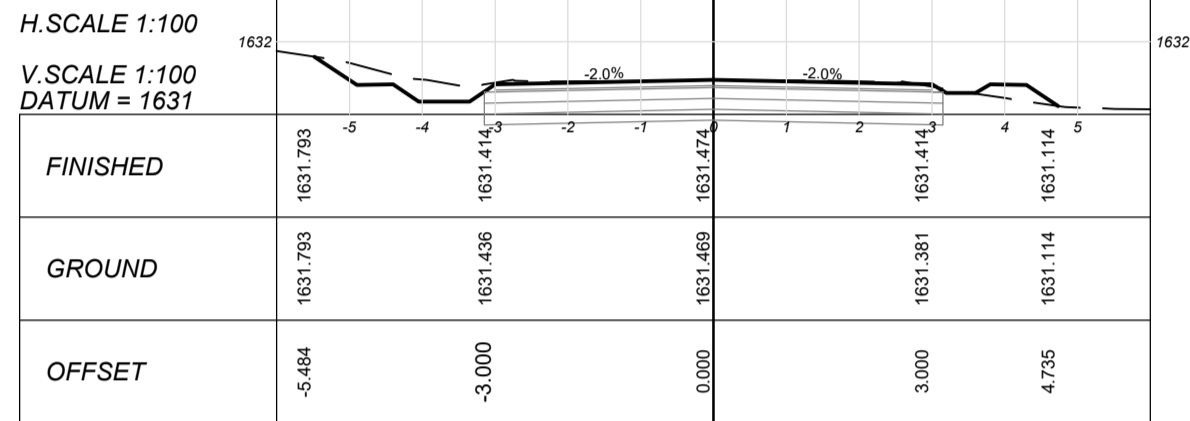
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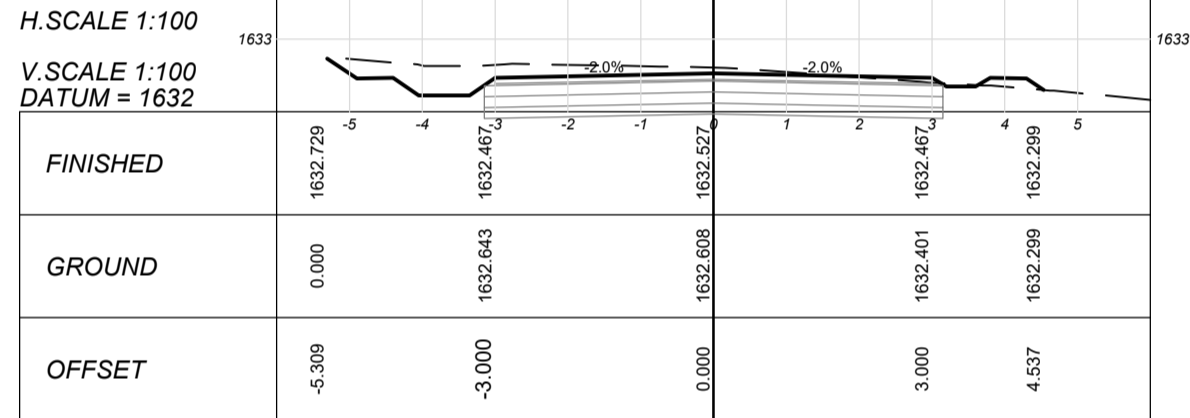
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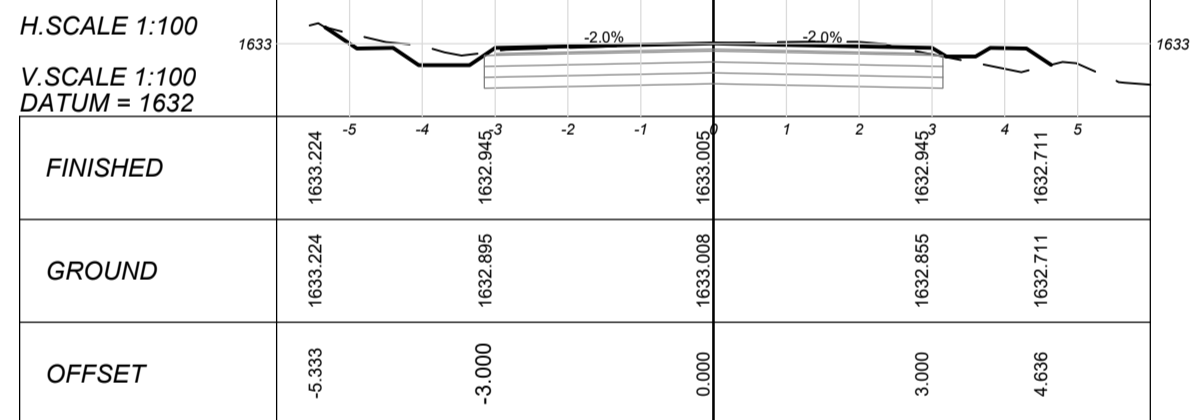
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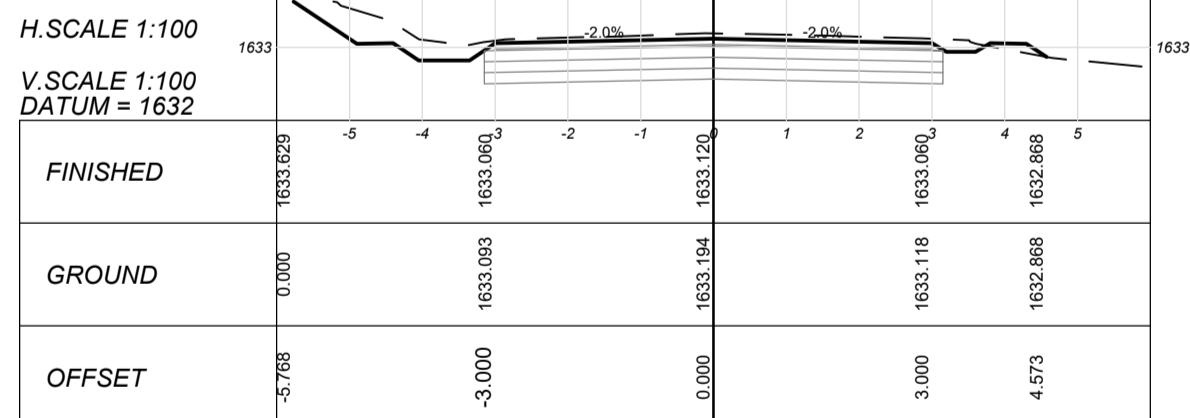
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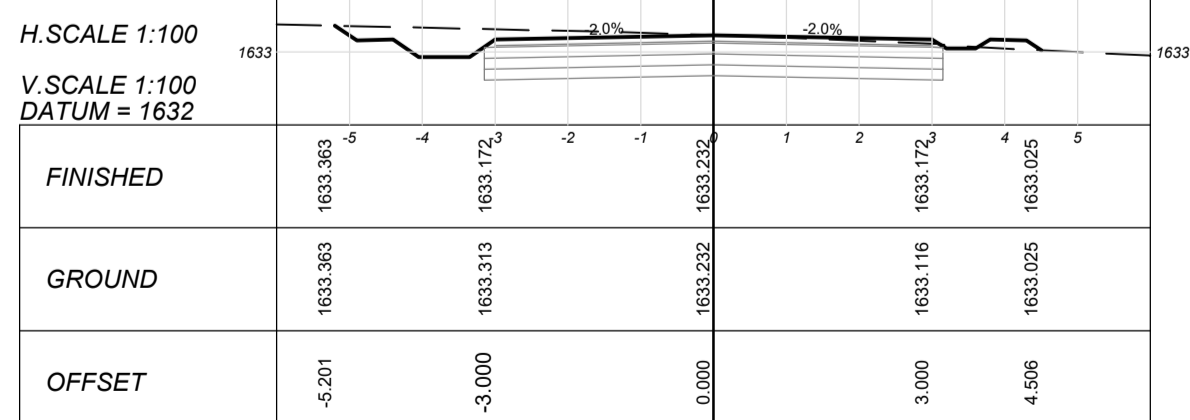
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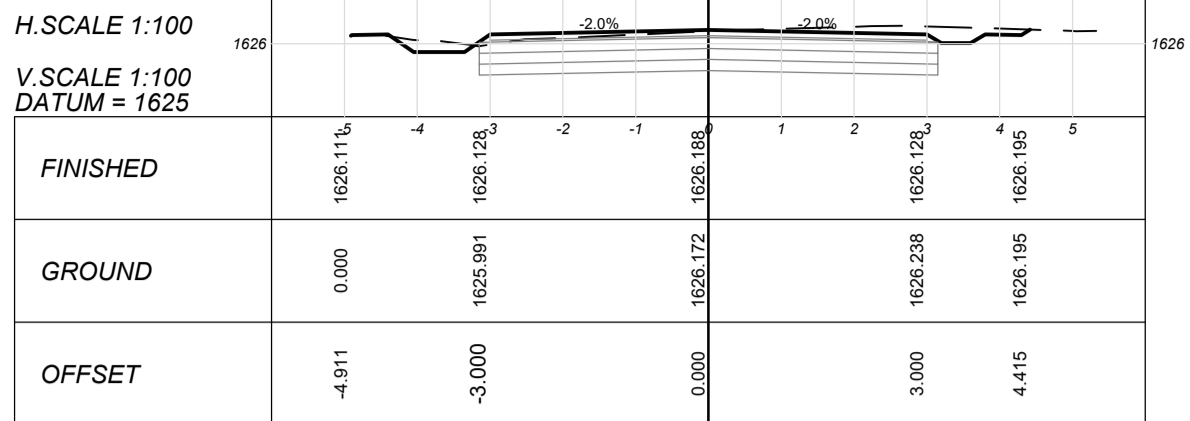
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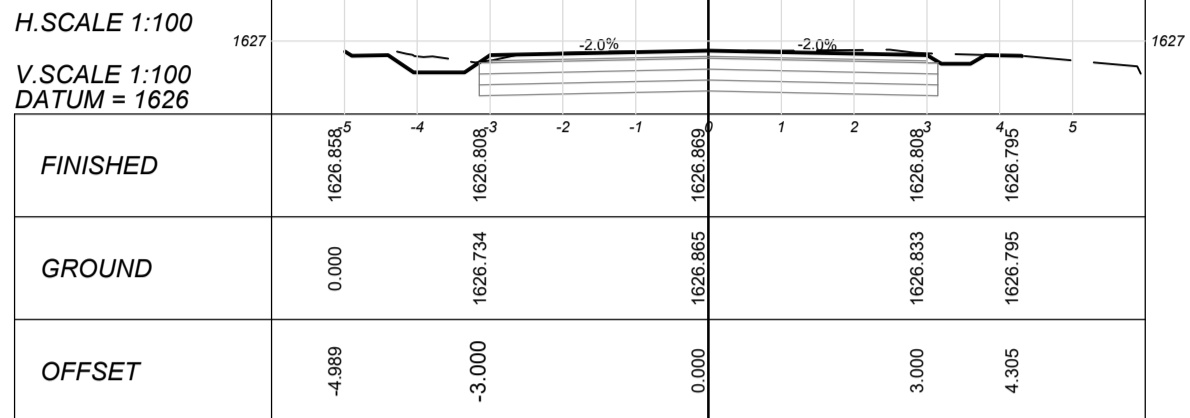
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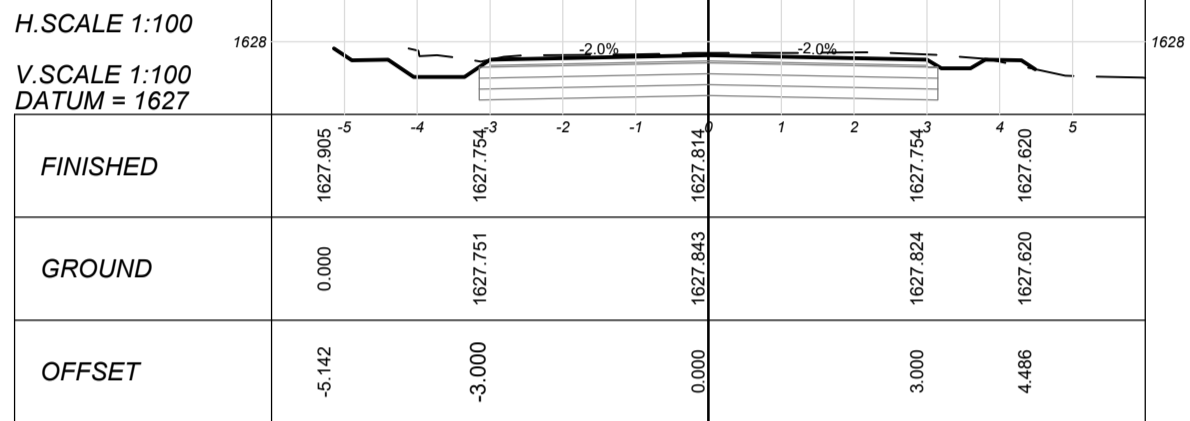
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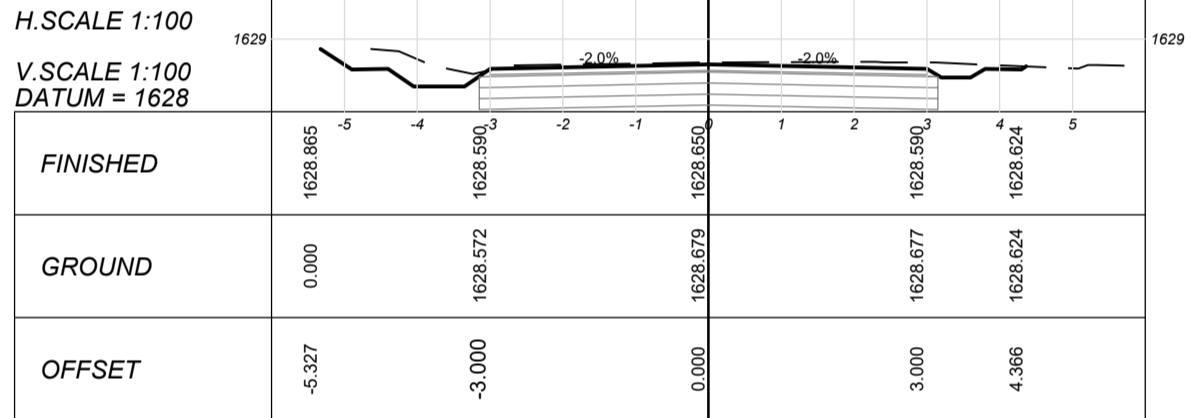
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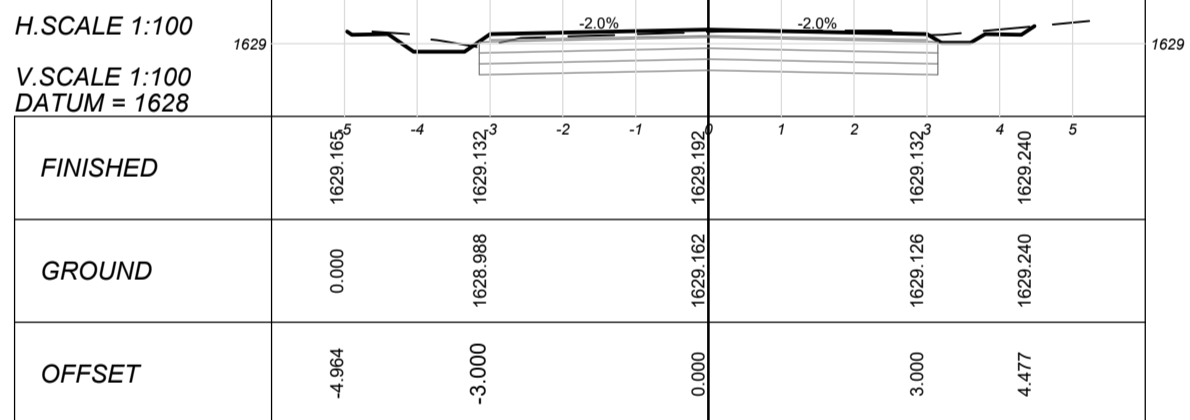
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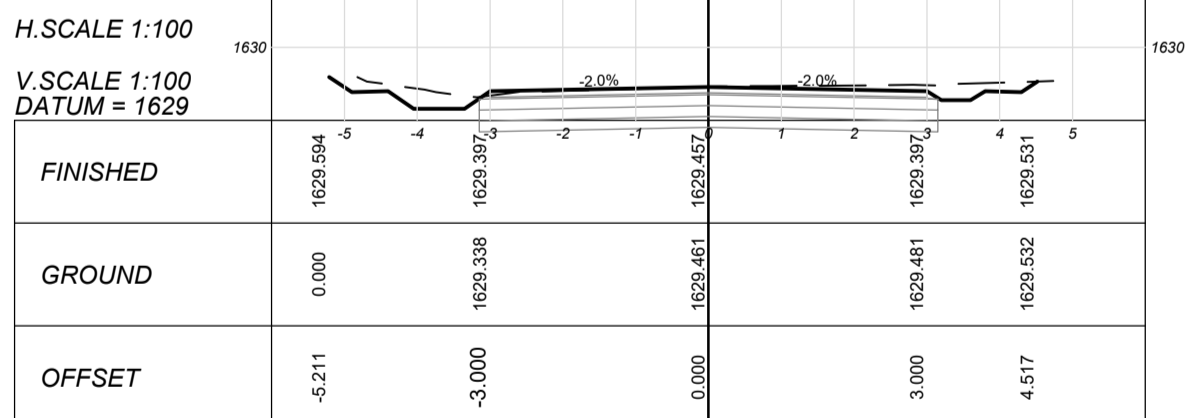
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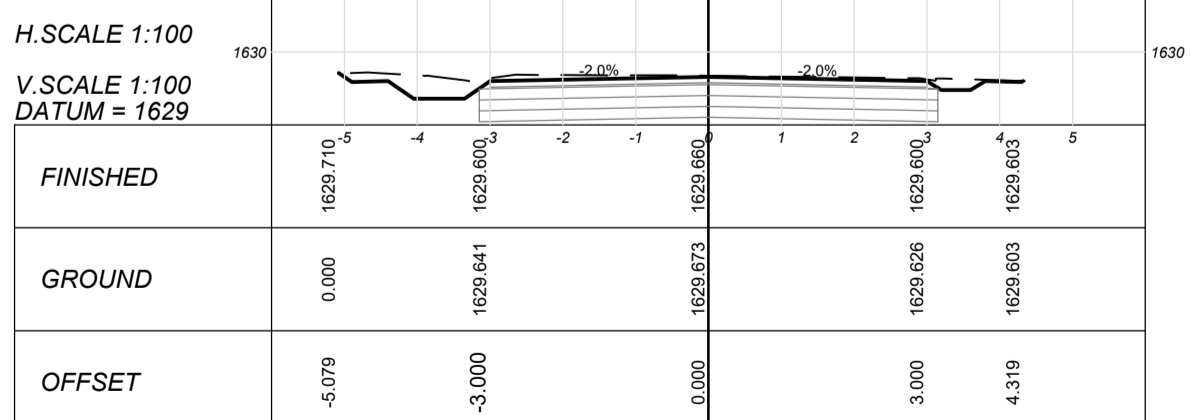
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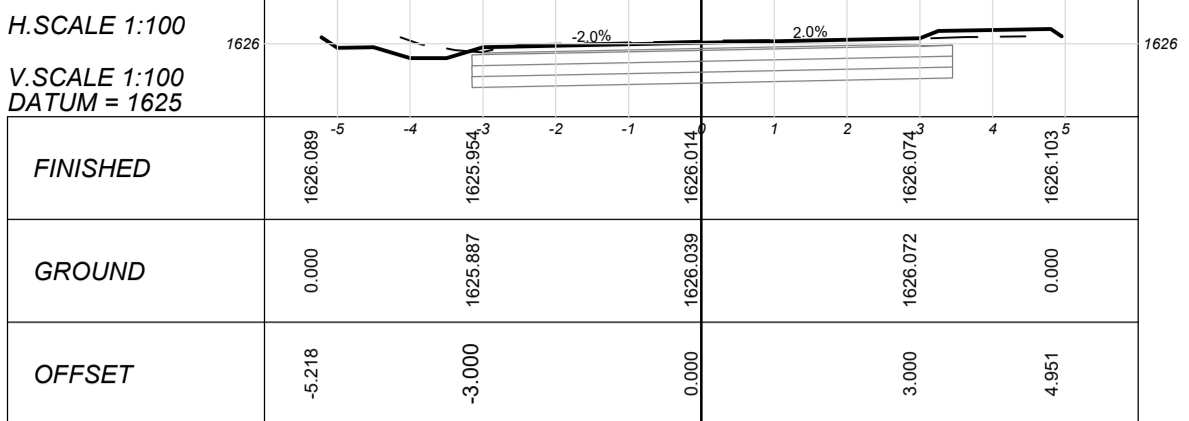
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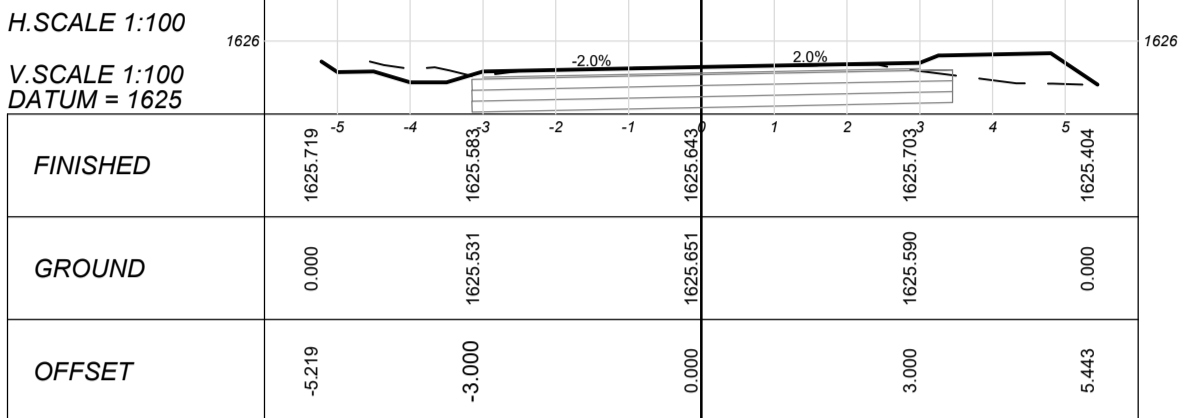
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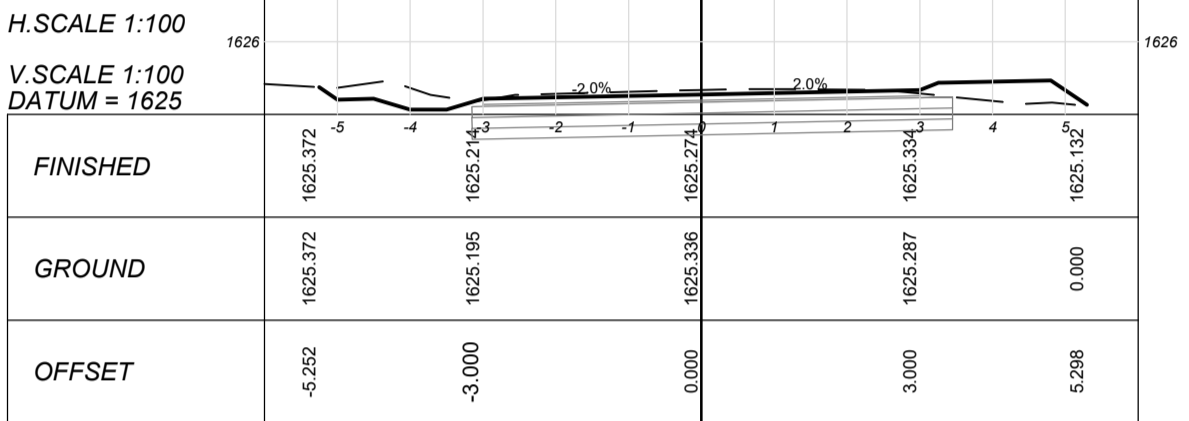
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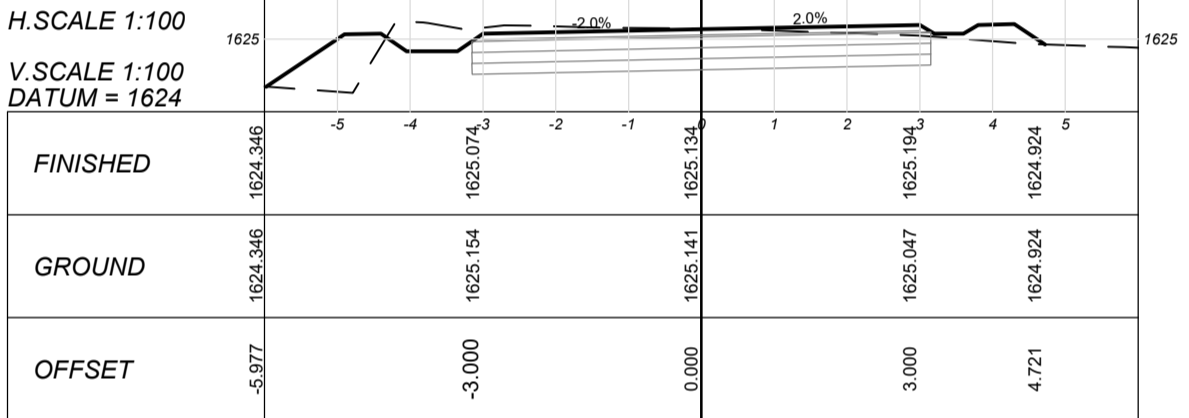
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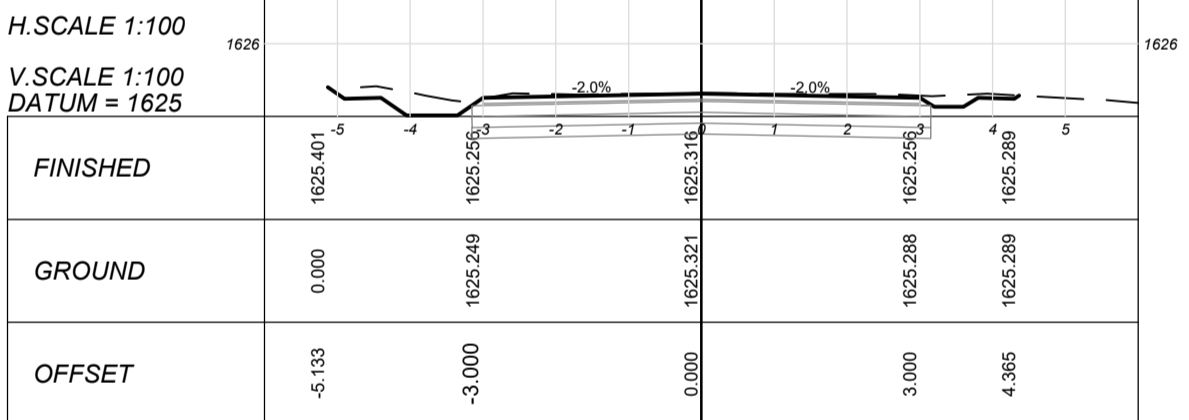
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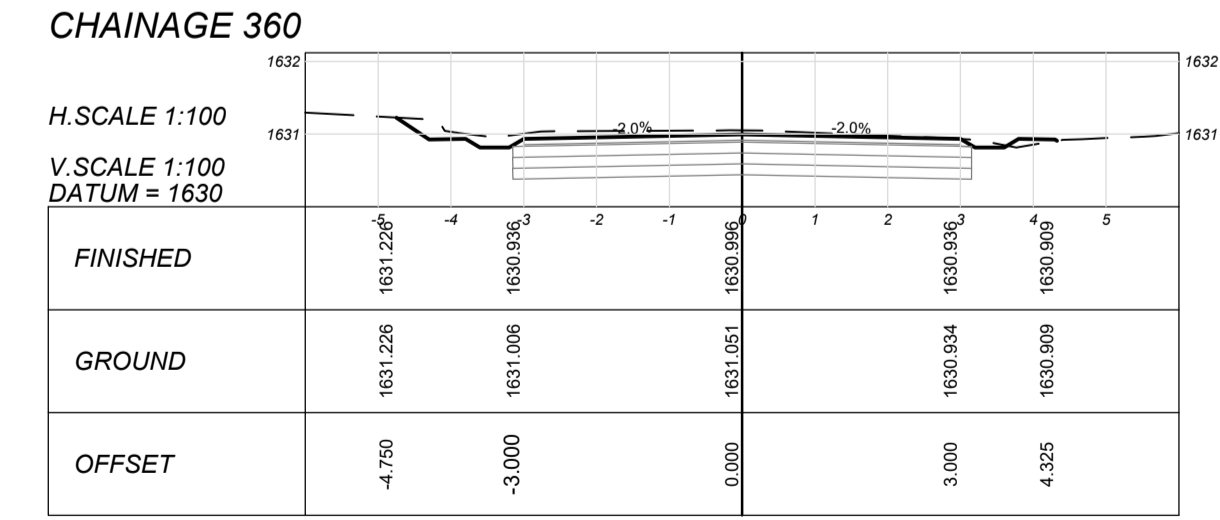
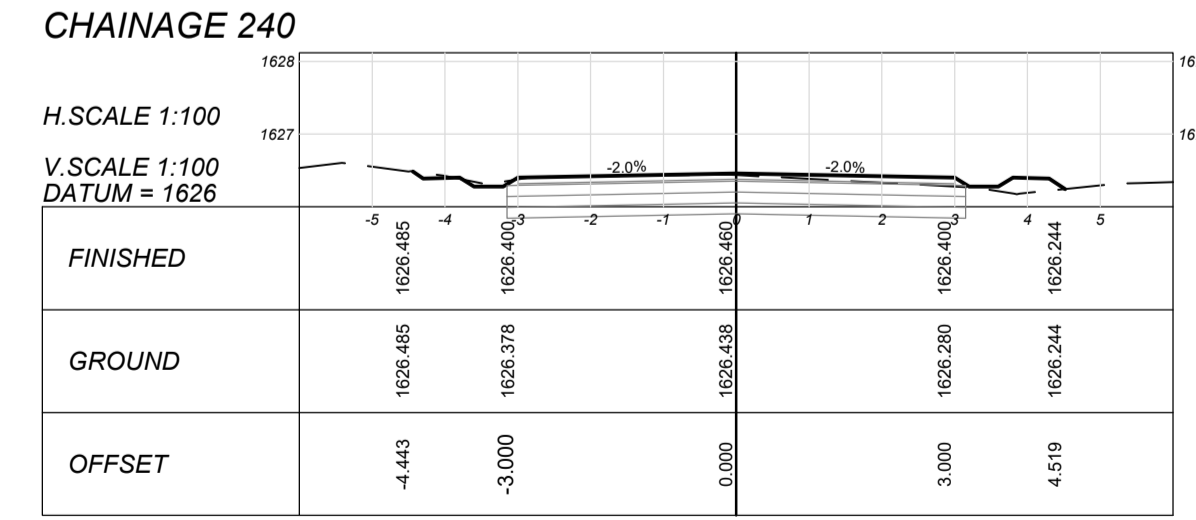
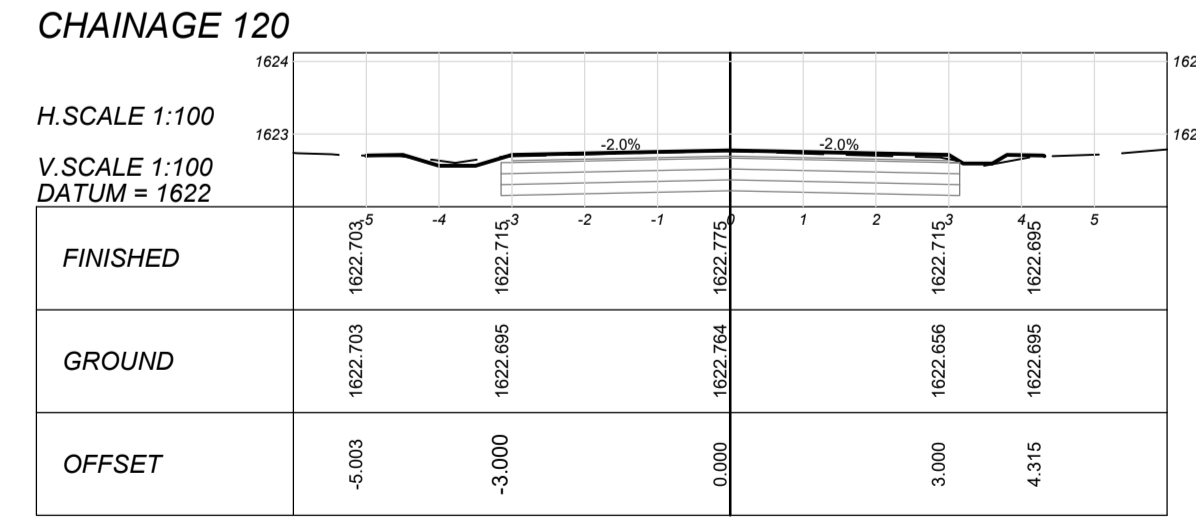
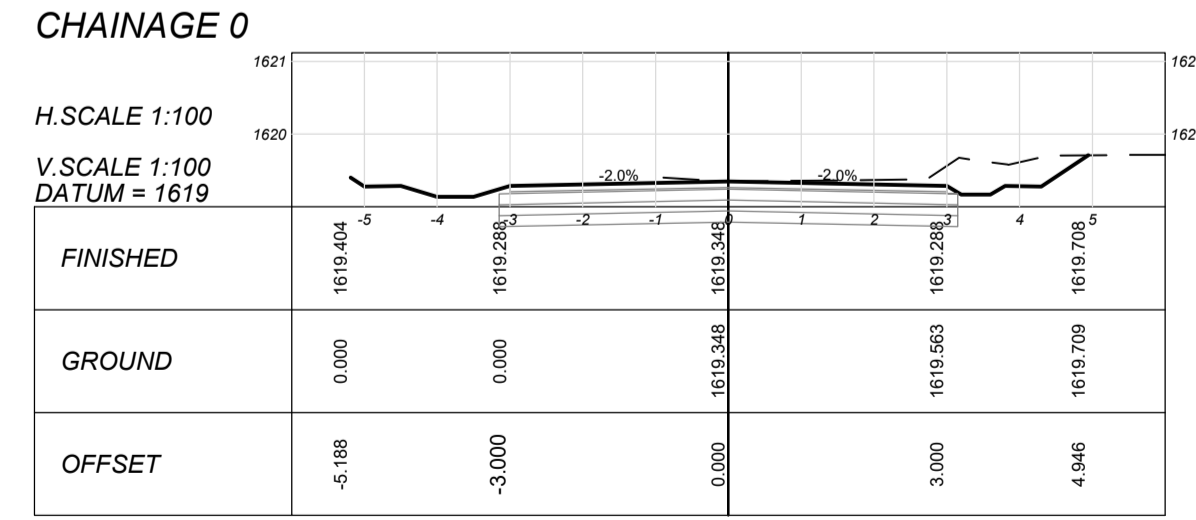
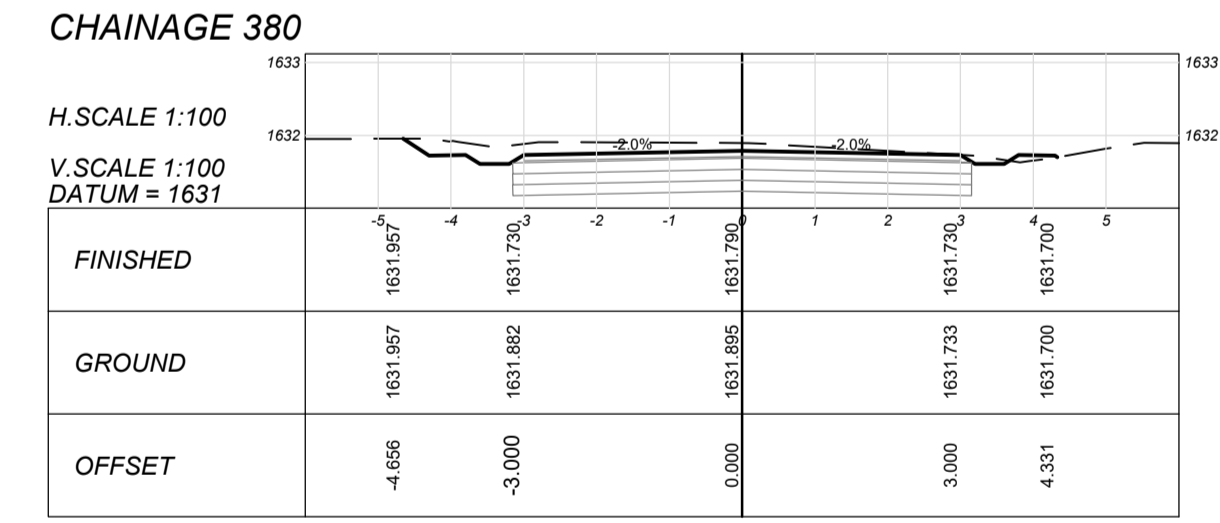
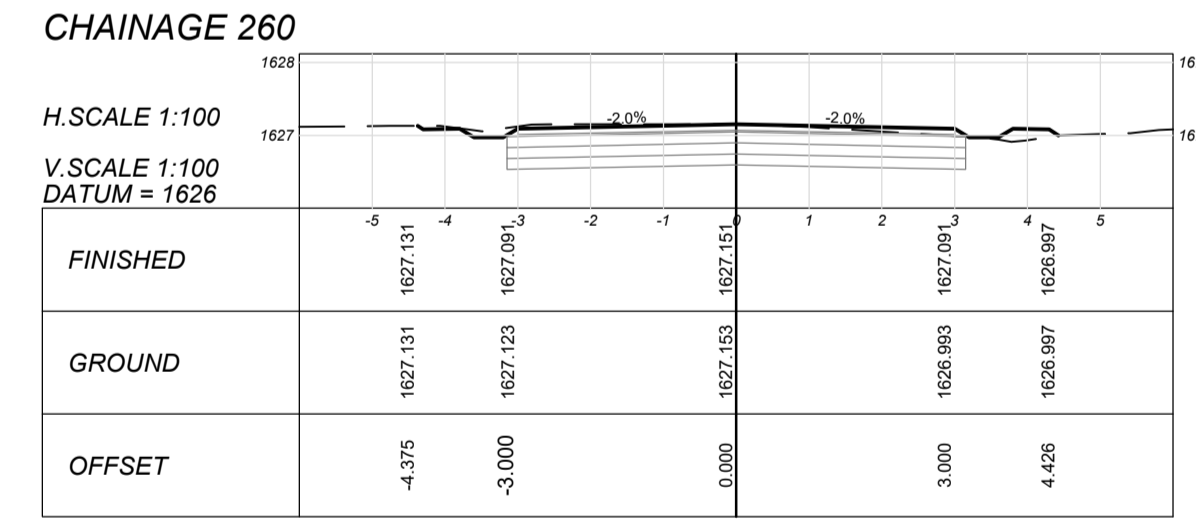
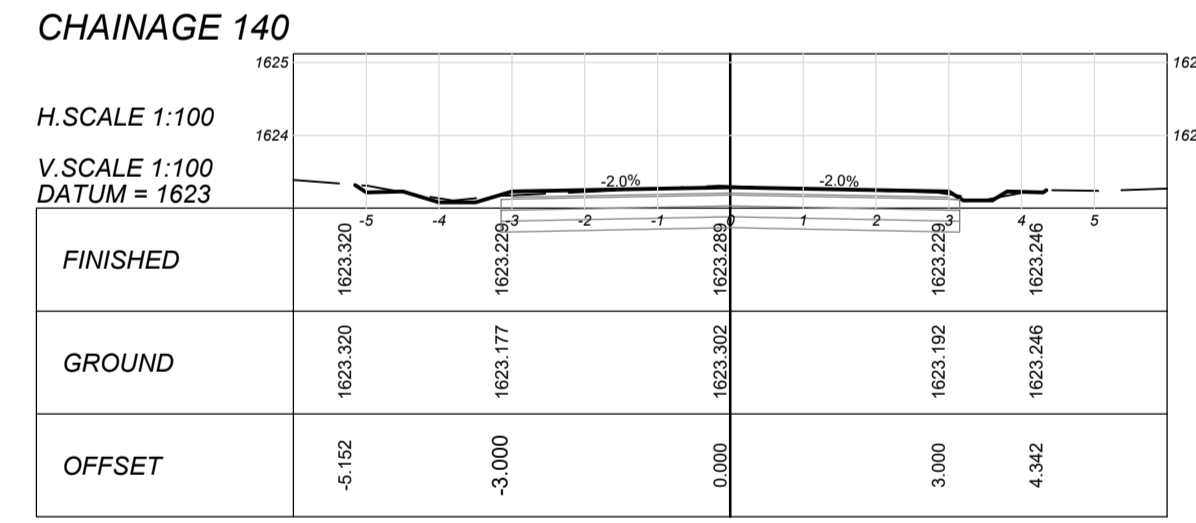
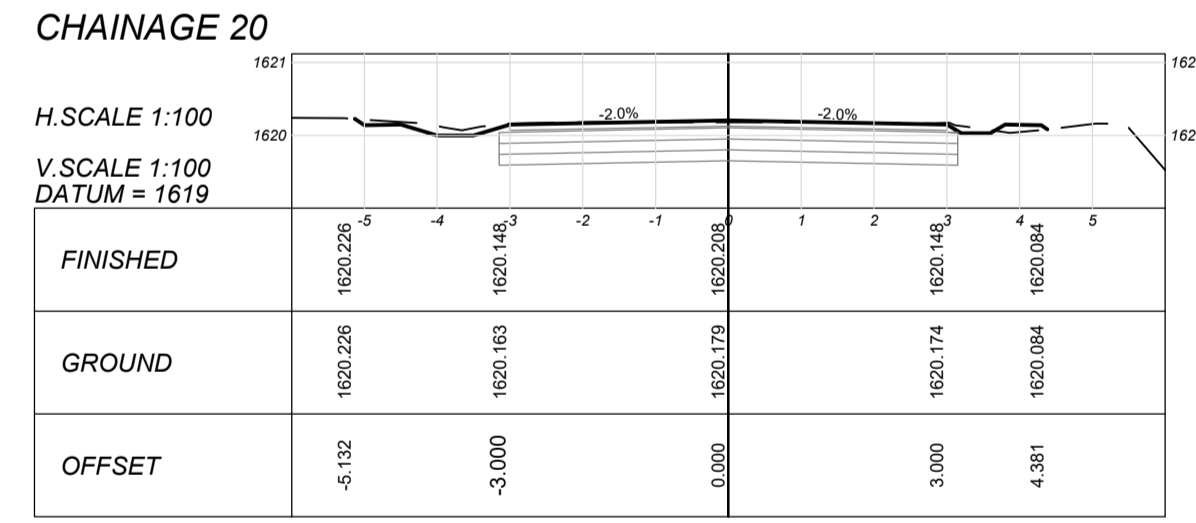
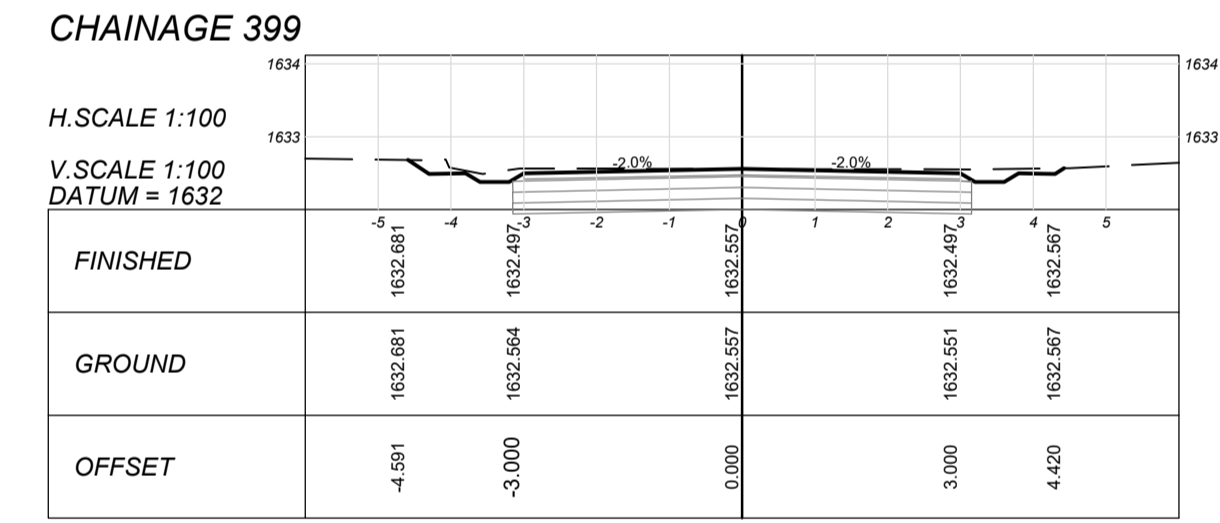
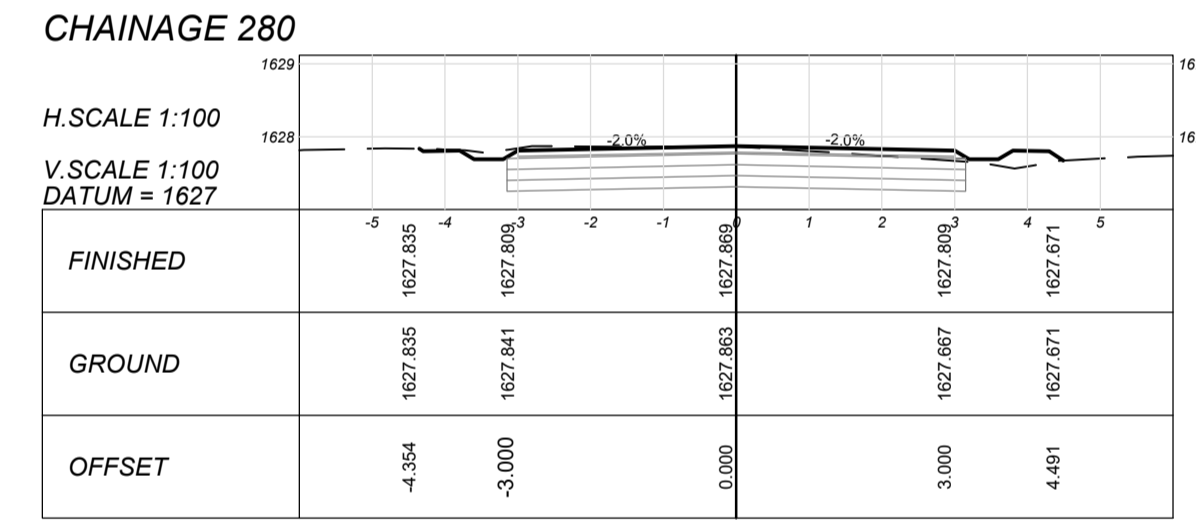
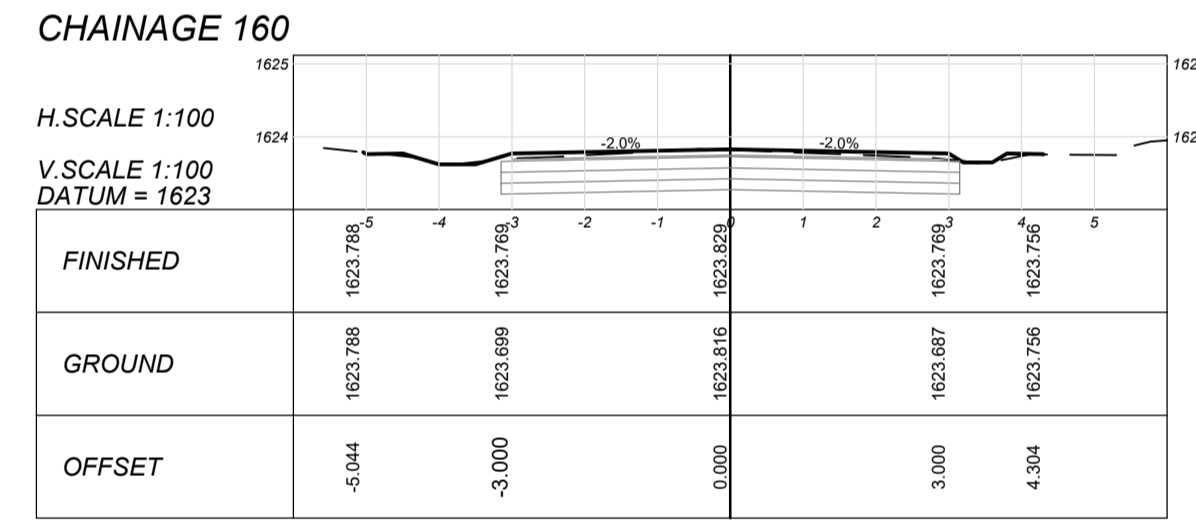
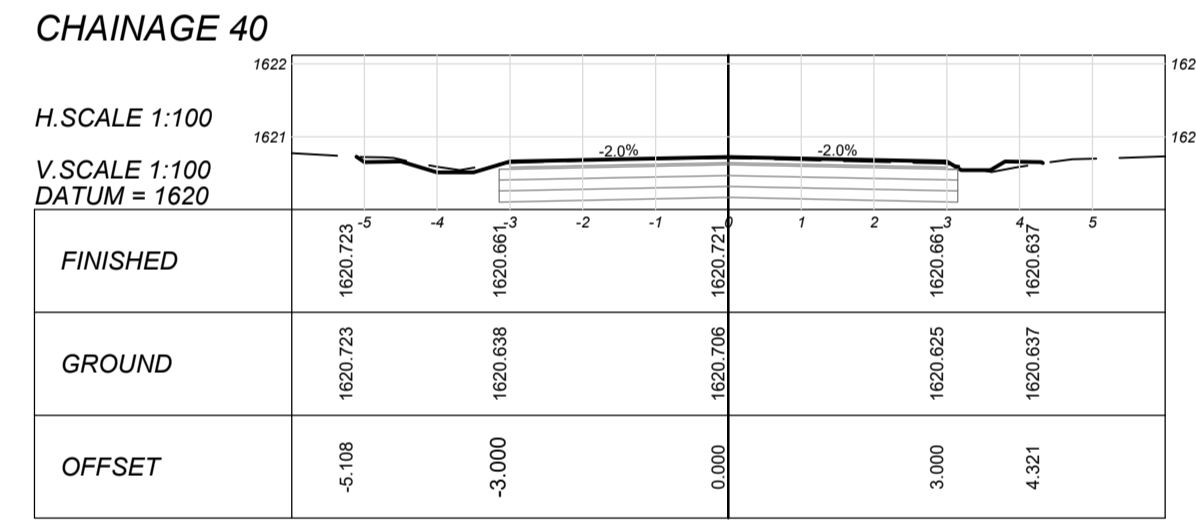
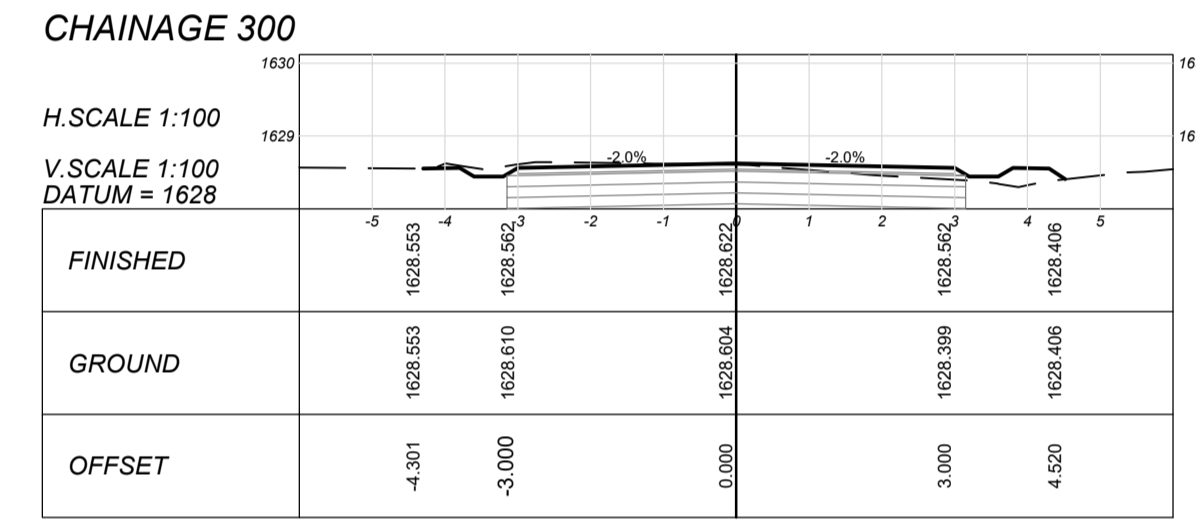
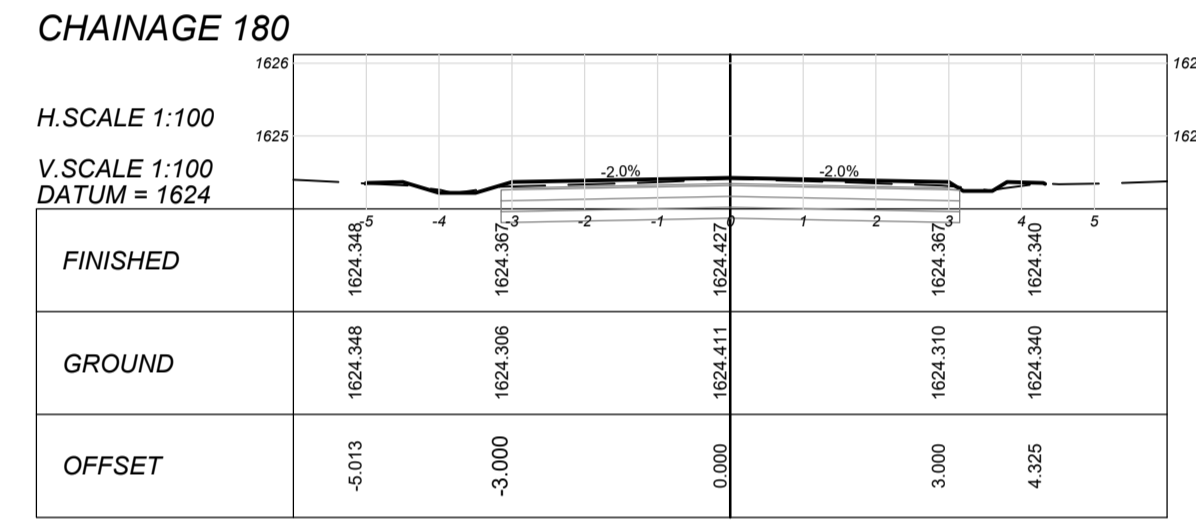
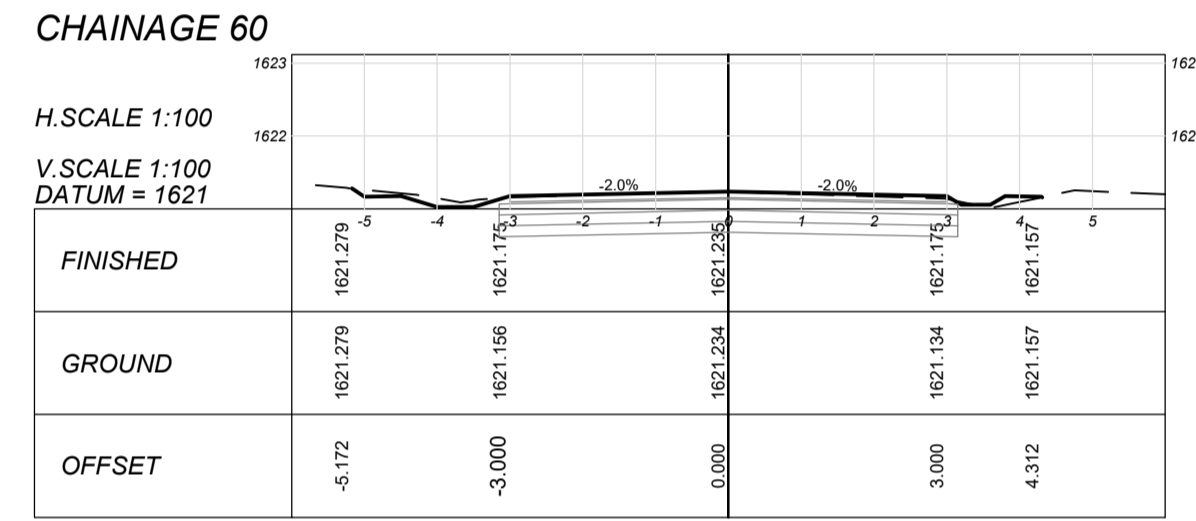
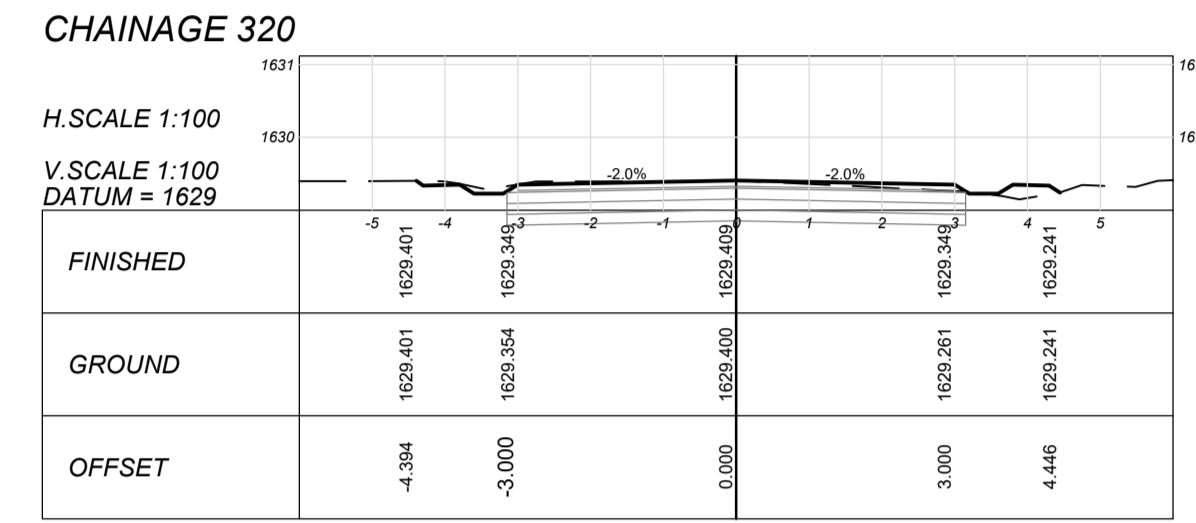
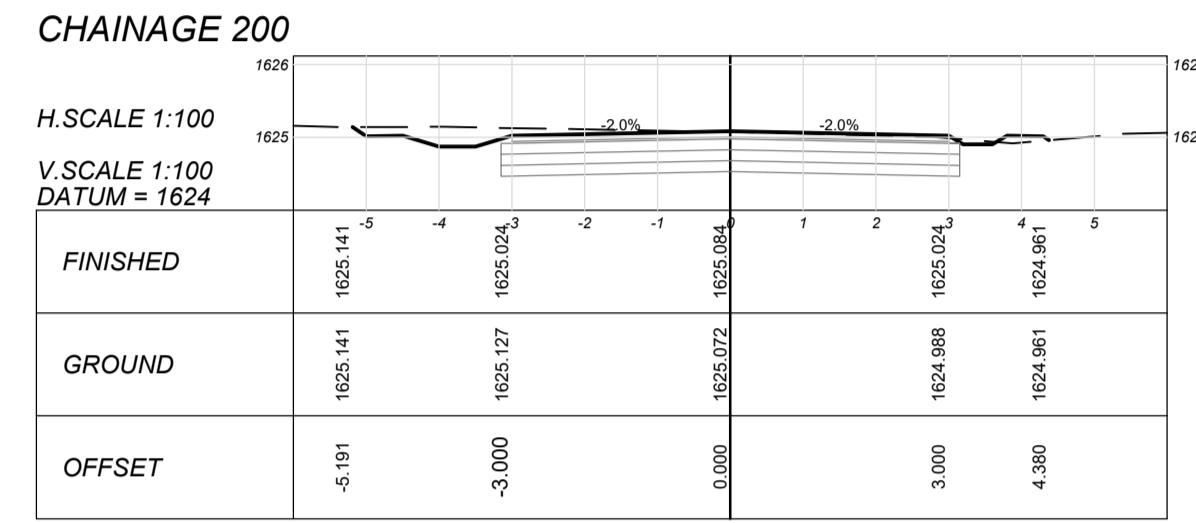
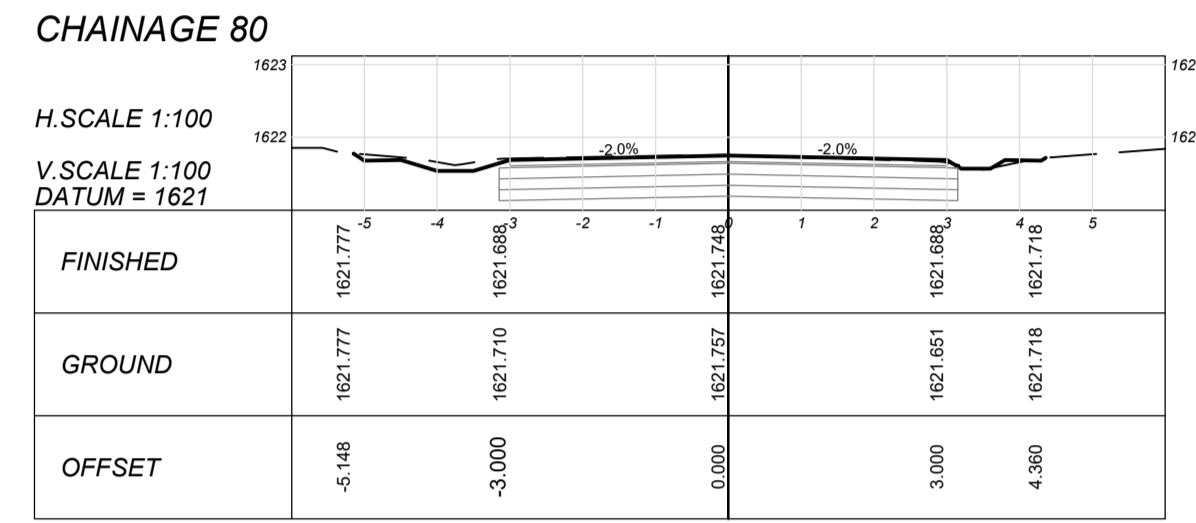
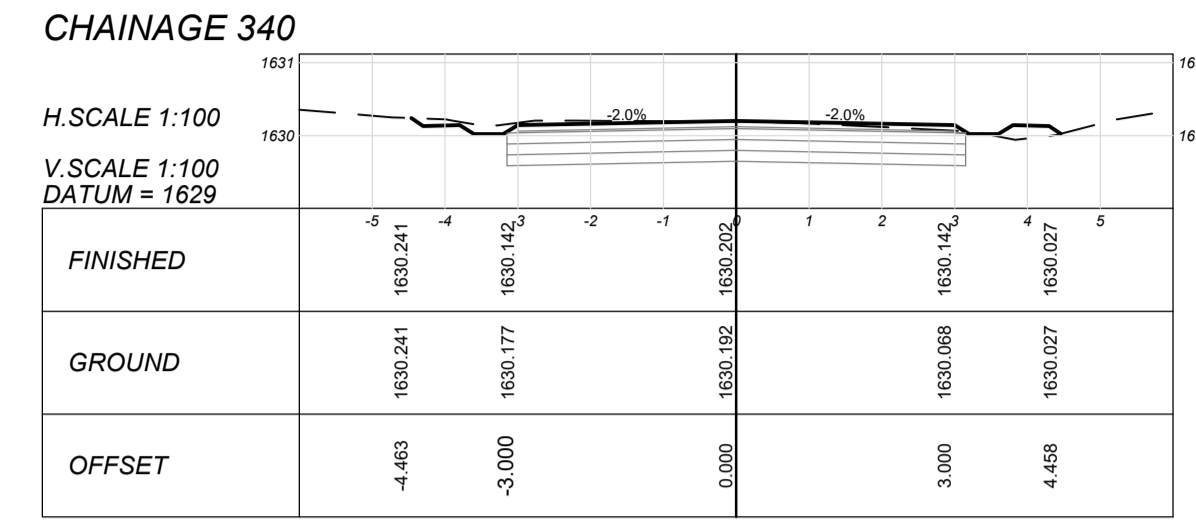
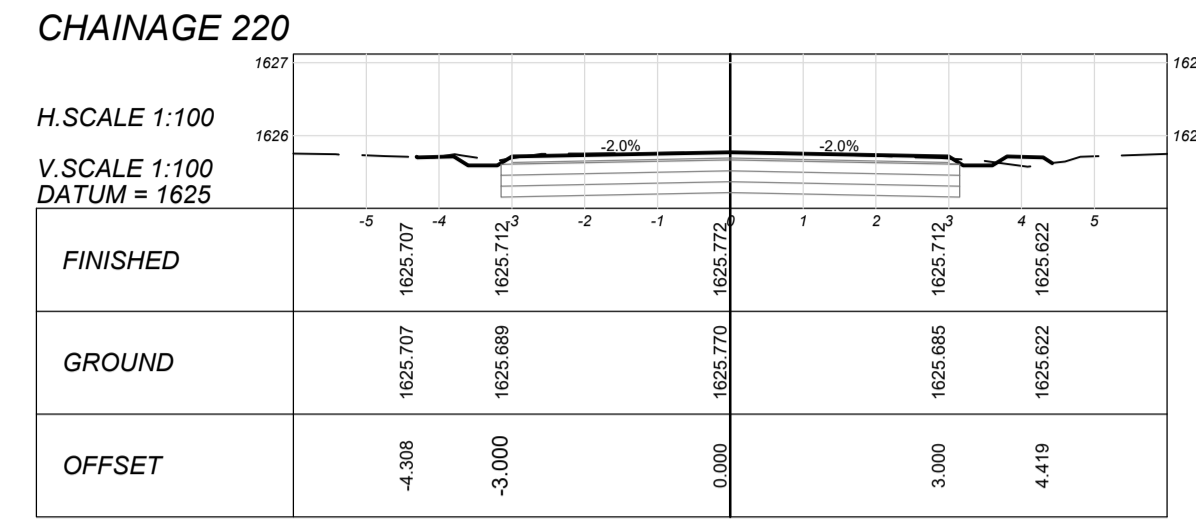
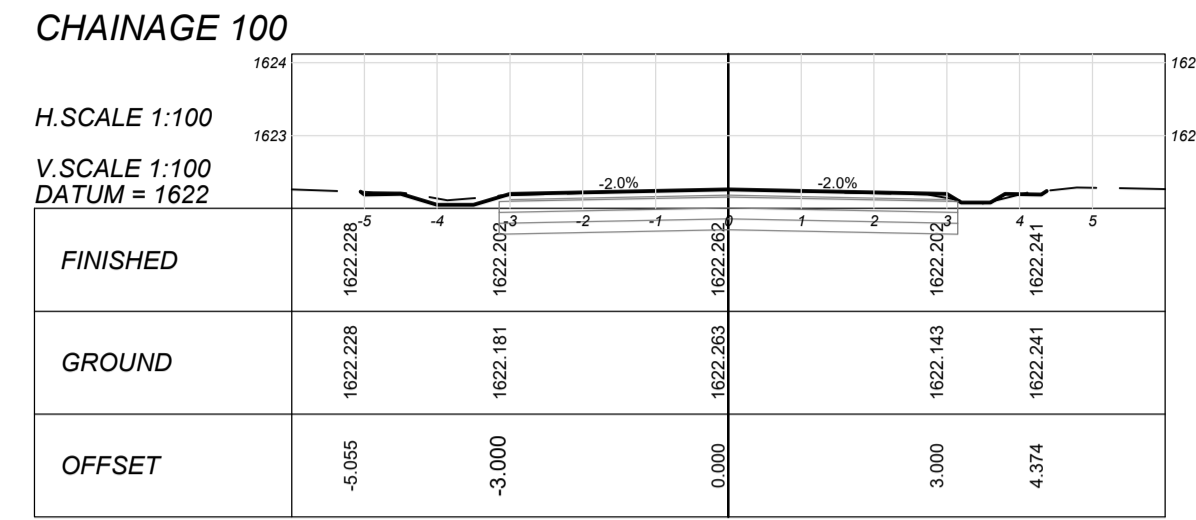
CHAINAGE 340




CHAINAGE 320



CHAINAGE 300



CLIENT:




19 Murray Street
Lady Grey
9755

Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:

THEWO & SMMS - JV



58 Brebner Road
Westdene
Bloemfontein
9301

Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:

L. MARAH

PROF. Reg.No:
920281

DATE:
2024-03-25

SIGNATURE:

DESIGN BY:

T. TSHABALALA

DRAWN BY:

B. MVUKUZO

CHECKED BY:

L. MARAH

APPROVED BY:

L. MARAH

REVISIONS			
REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

ROAD 7 - DETAILED CROSS SECTIONS

PROJECT STATUS:

TENDER

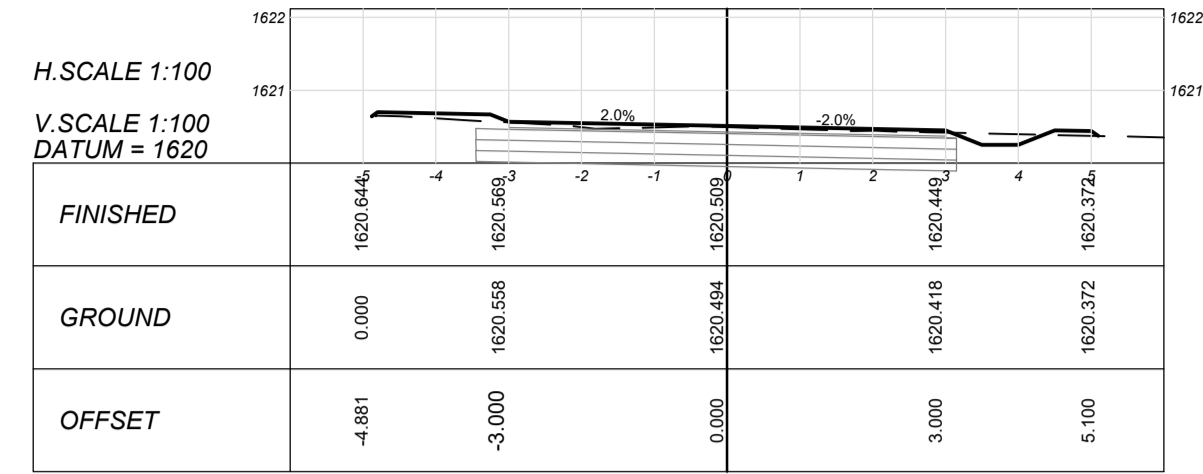
DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

DWG NO

P1027-BE-CIV-RD-CS07

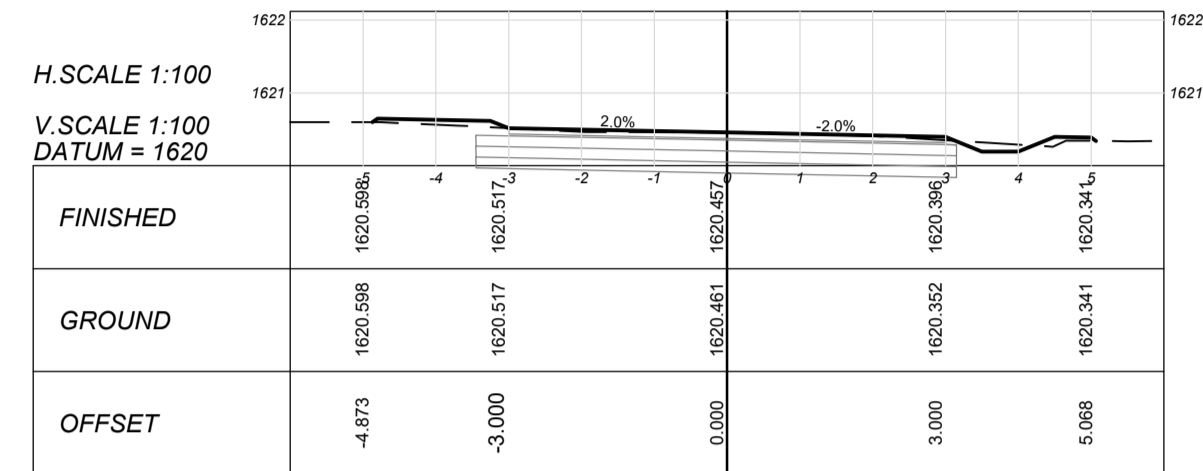
CHAINAGE 100

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V.SCALE 1:100
DATUM = 1620



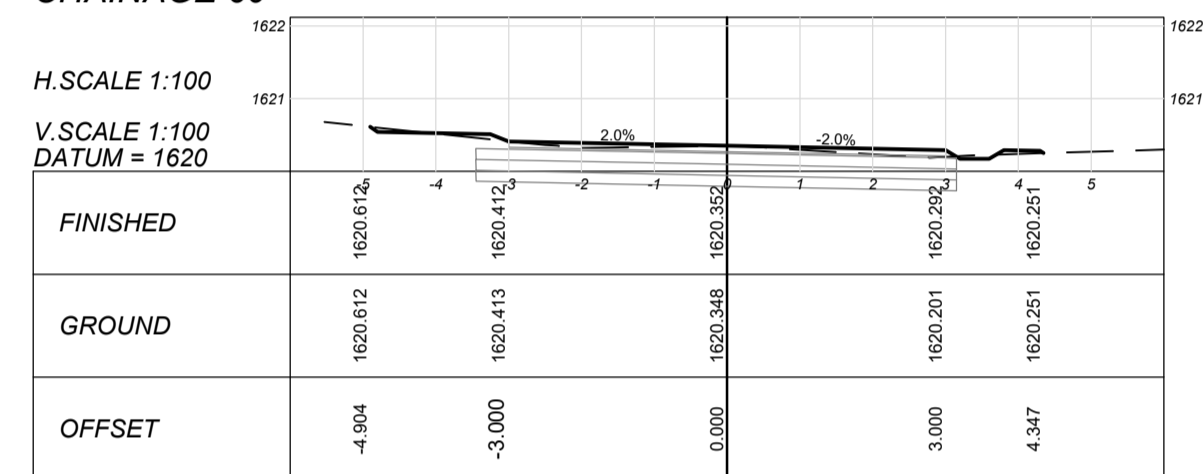
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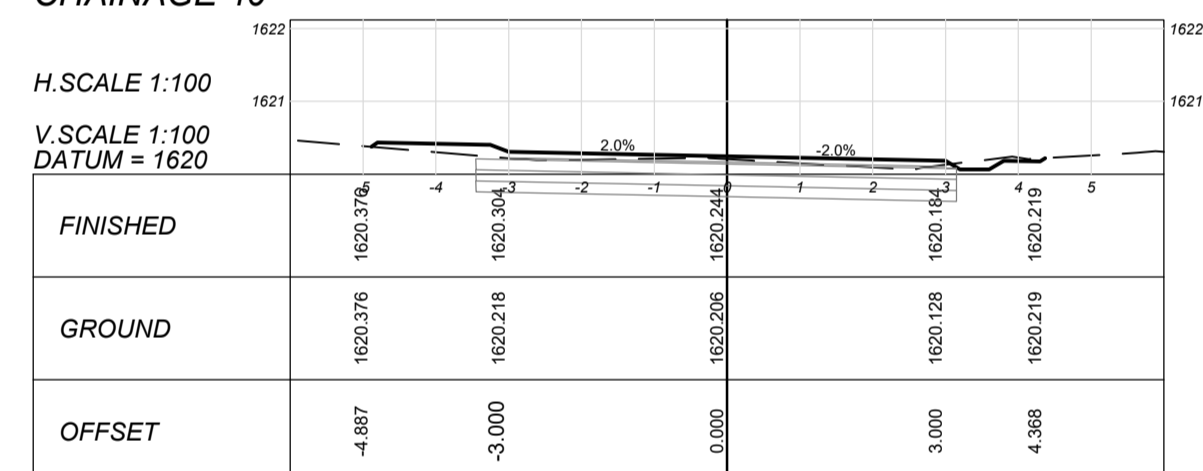
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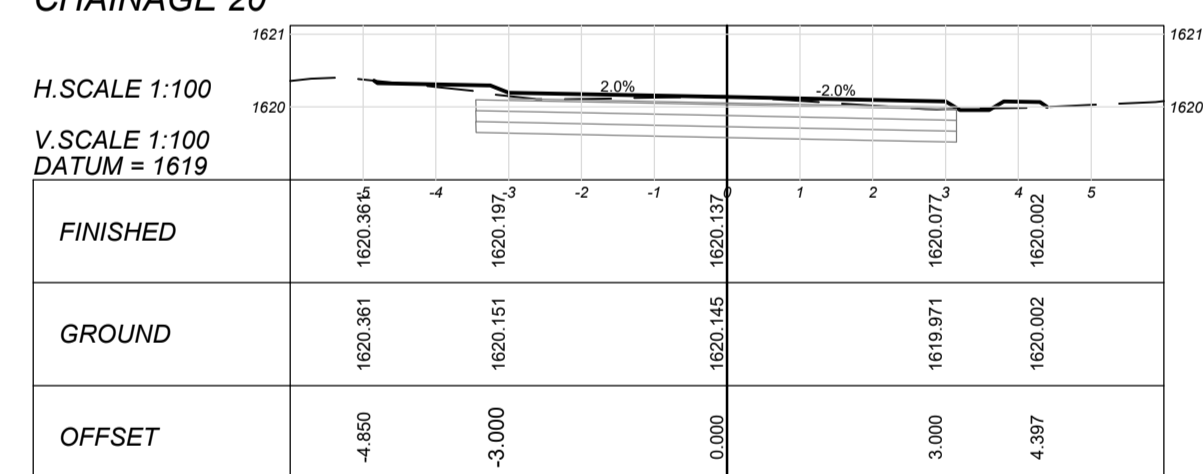
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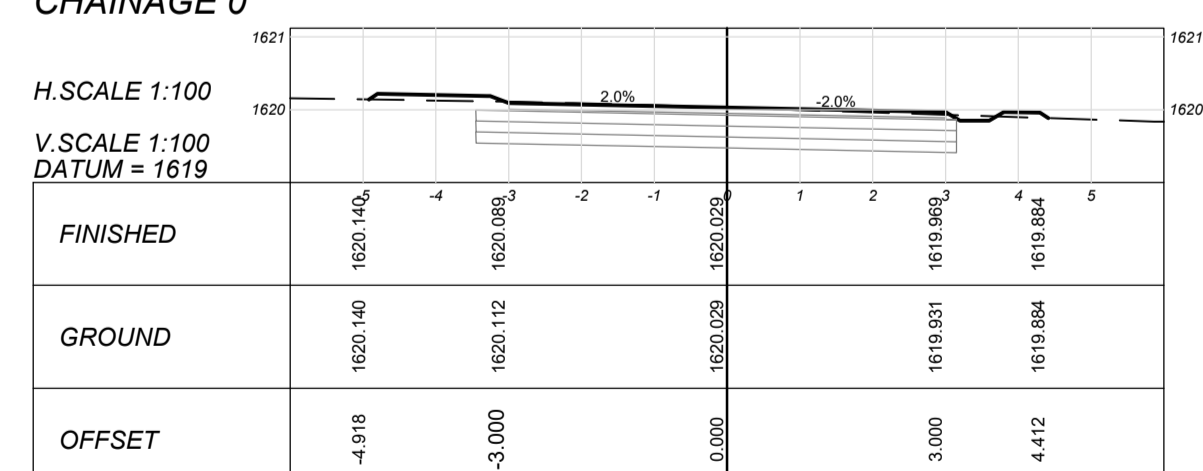
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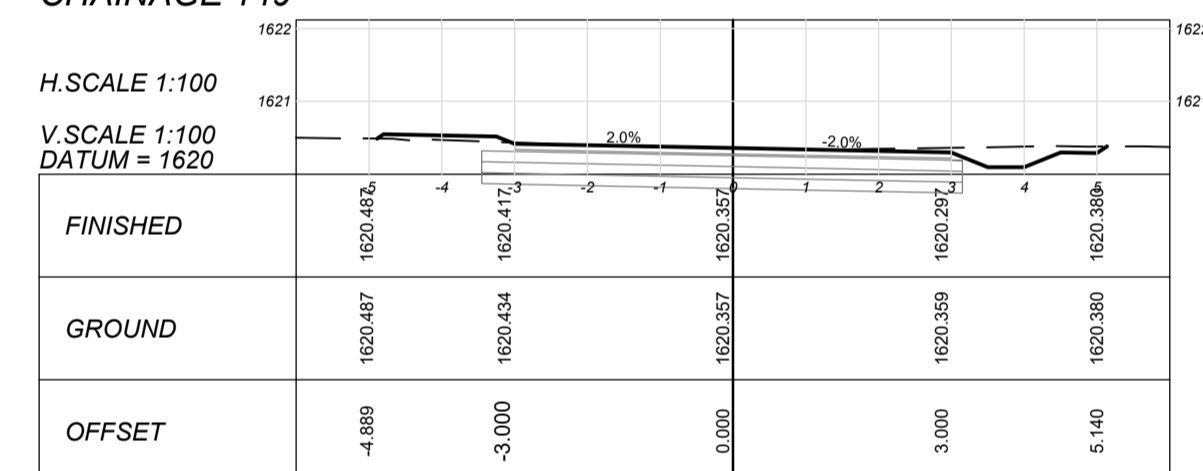
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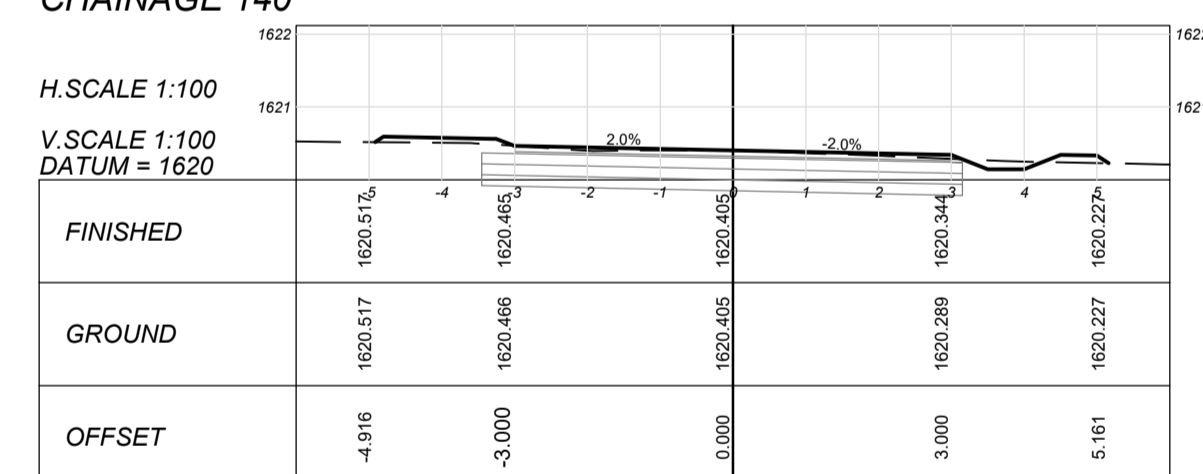
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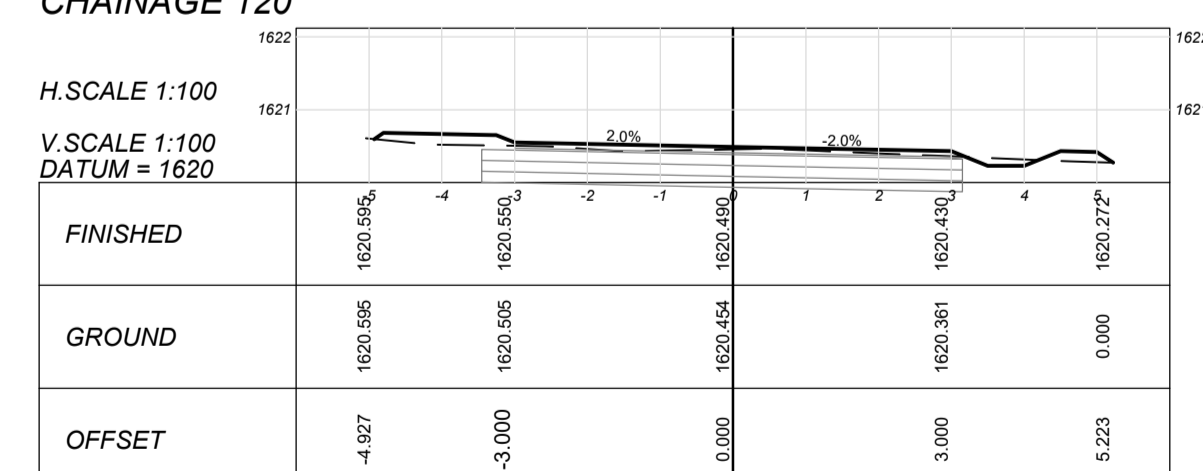
CHAINAGE 140

H.SCALE 1:100
V.SCALE 1:100
DATUM = 1620



CHAINAGE 120

H.SCALE 1:100
V.SCALE 1:100
DATUM = 1620



CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:



THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:

L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:

T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS

REV	DATE	DESCRIPTION	BY
0	2024-03-25	ISSUED FOR TENDER	L.M.

PROJECT NAME

SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE

ROAD 8 - DETAILED CROSS SECTIONS

PROJECT STATUS:

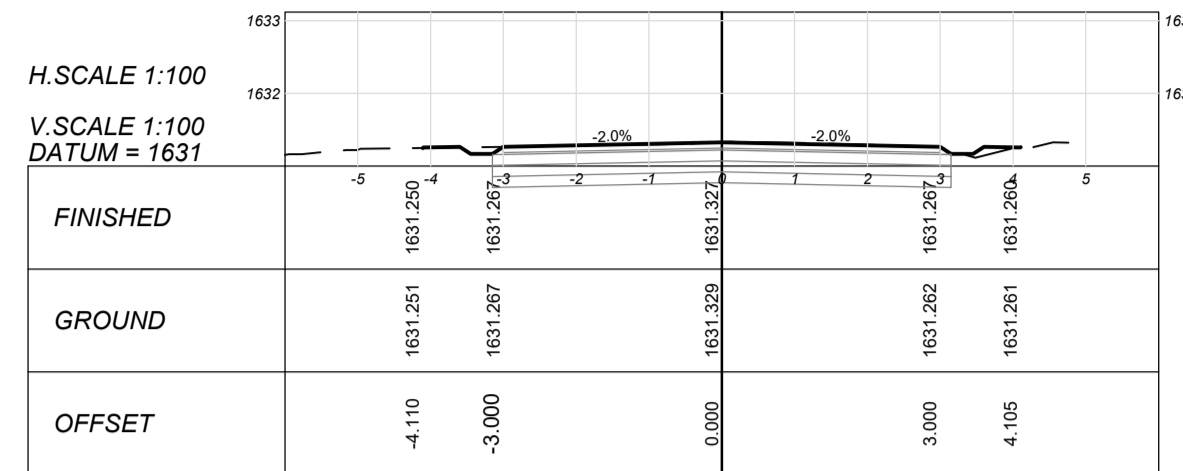
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DATE	SCALE	SHEET	REV	A1
2024-03-25	AS SHOWN	1 OF 1	0	A1

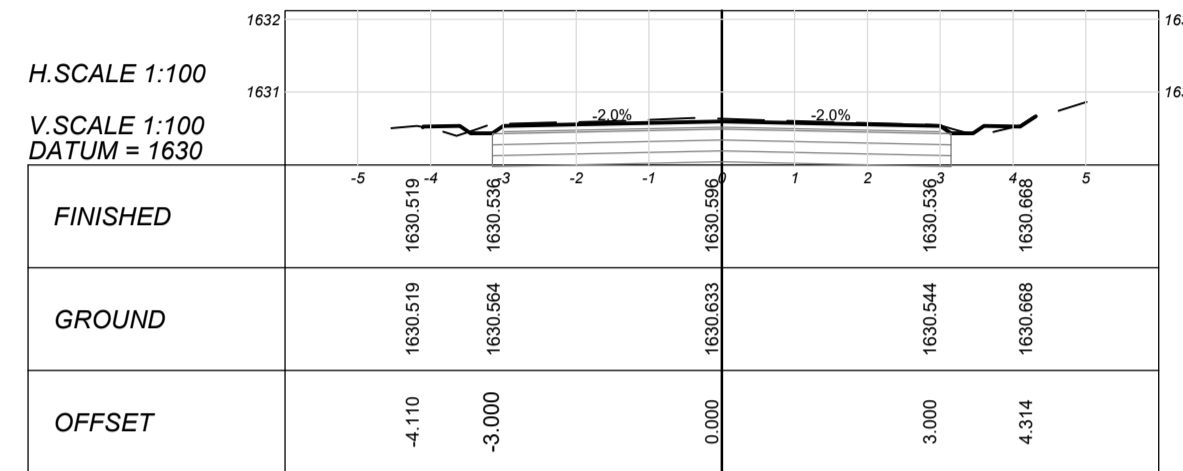
DWG NO

P1027-BE-CIV-RD-CS08

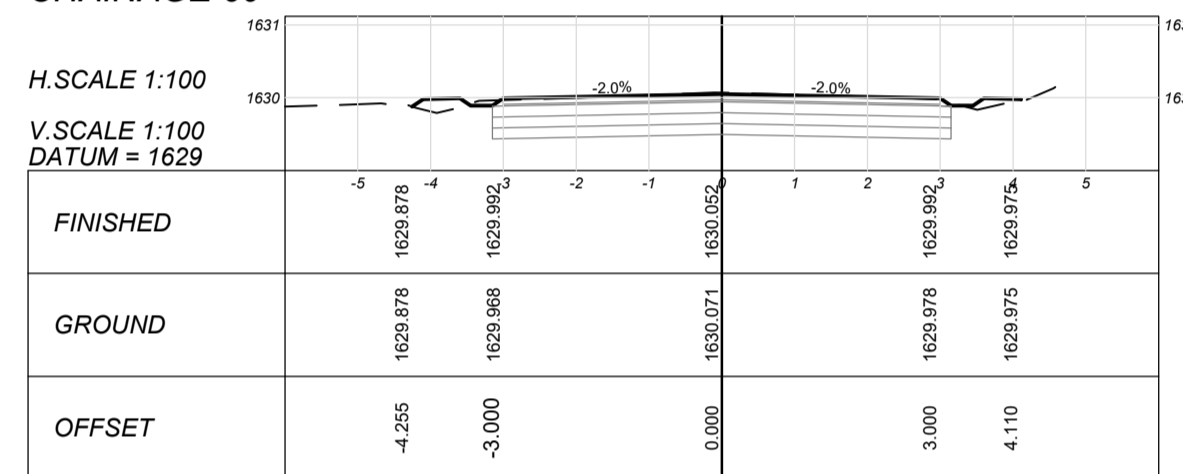
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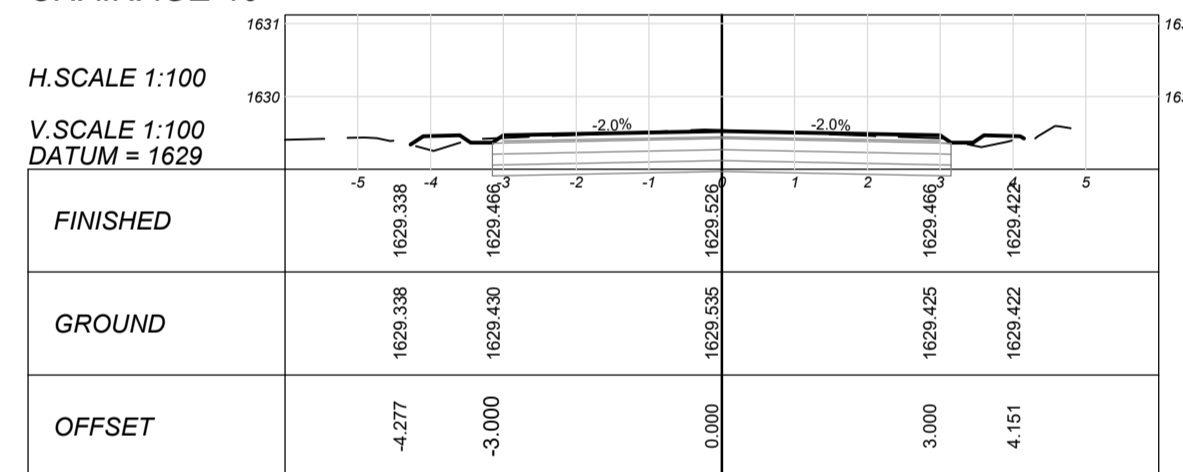
CHAINAGE 80



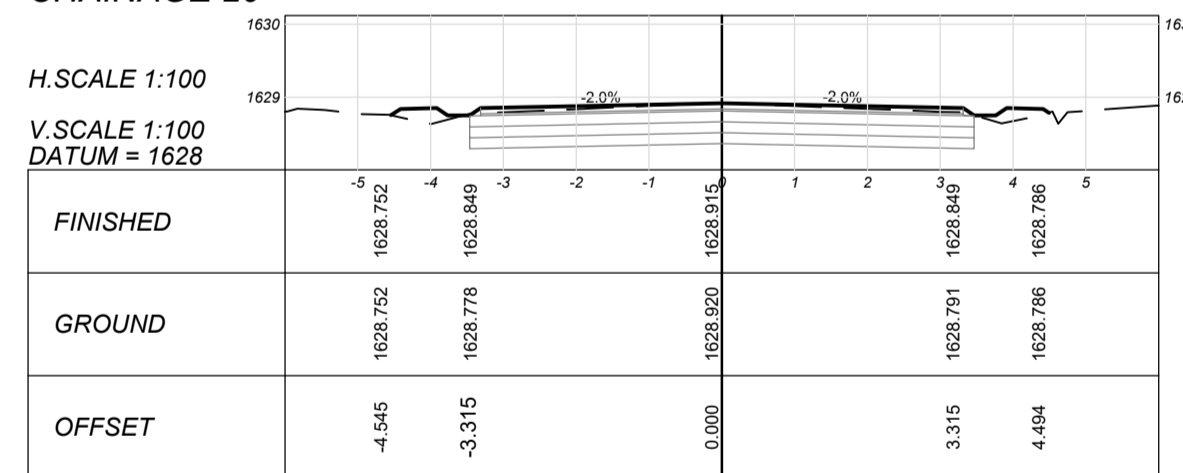
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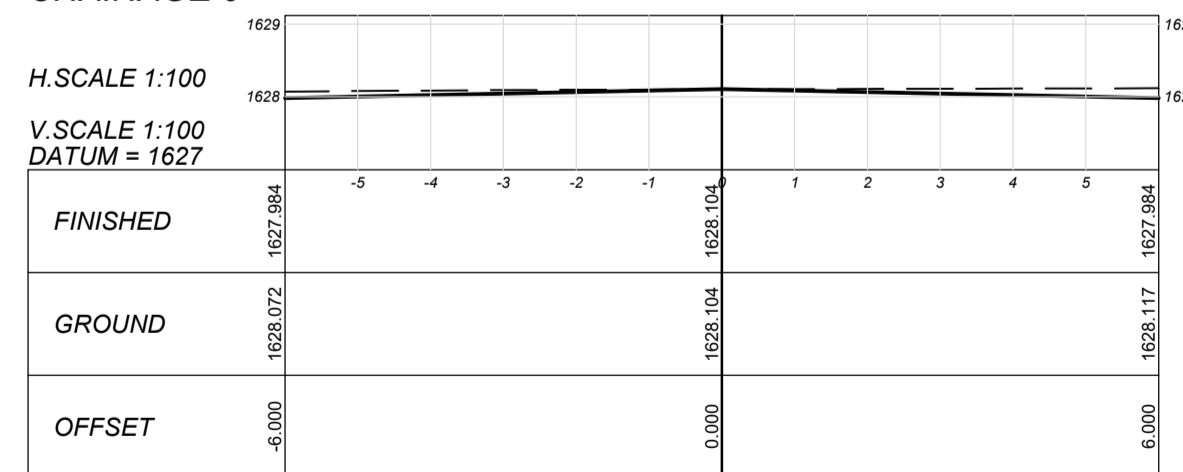
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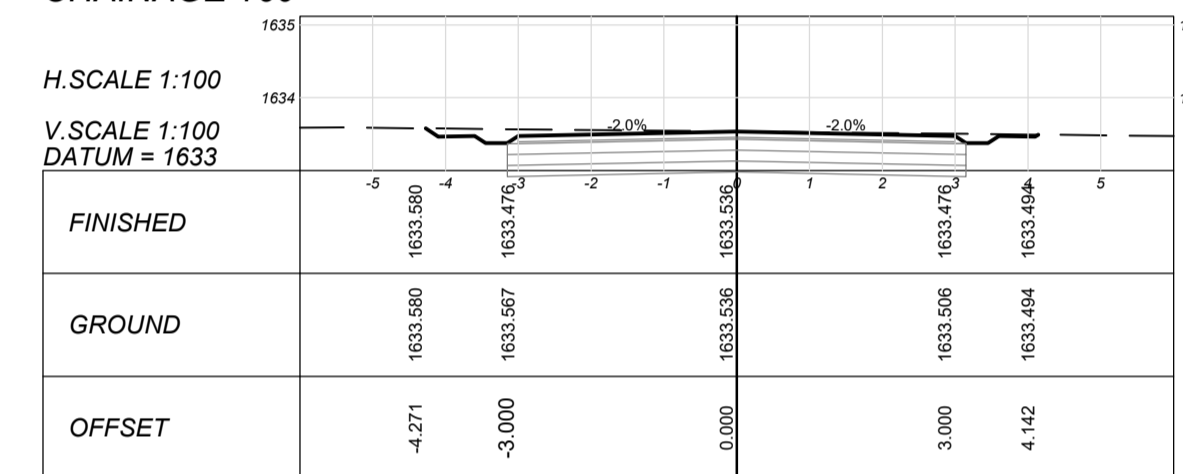
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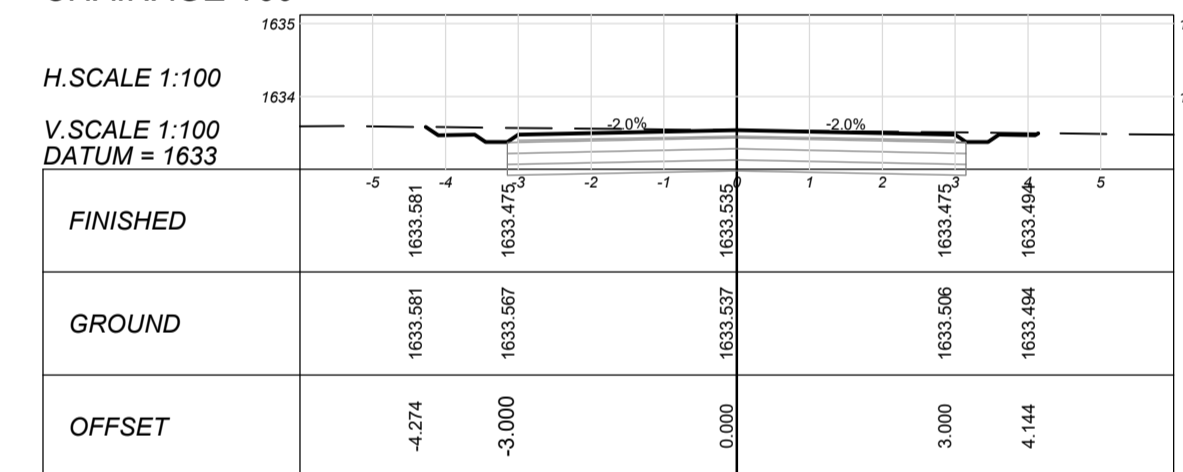
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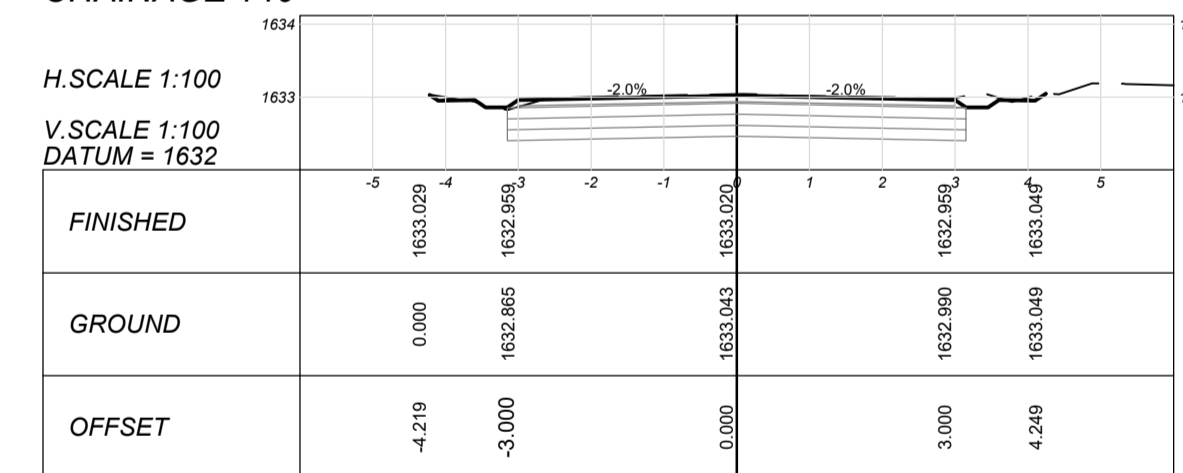
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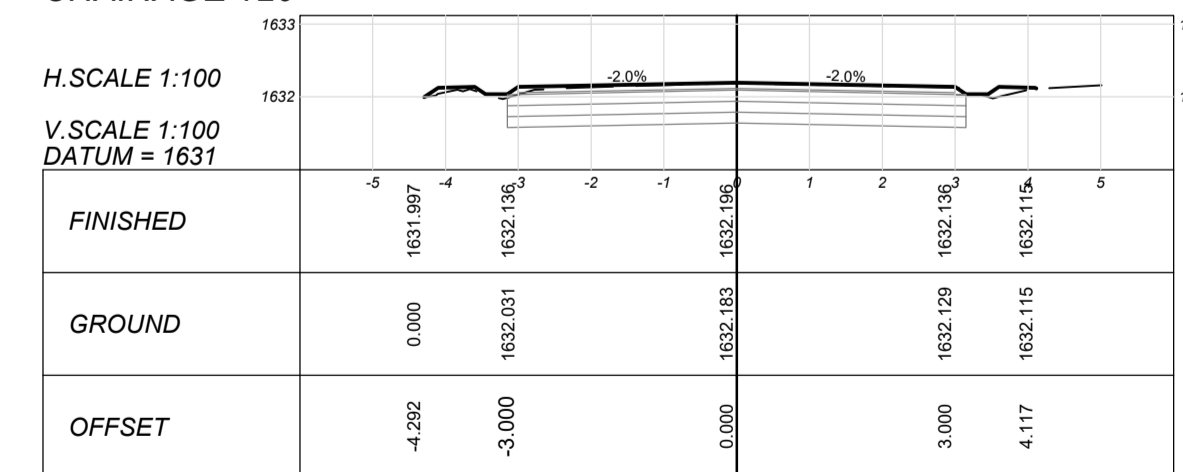
CHAINAGE 160




CHAINAGE 140



CHAINAGE 120




CLIENT:



19 Murray Street
Lady Grey
9755
Tel: (051) 603 1449
Email: vanzyt@senqu.gov.za

CONSULTANT:



THEWO & SMMS - JV
58 Brebner Road
Westdene
Bloemfontein
9301
Tel: +27 (051) 430 1321
Email: PMO@thewo.co.za

PROFESSIONAL ENGINEER:
L. MARAH
PROF. Reg.No:
920281
DATE:
2024-03-25
SIGNATURE:

DESIGN BY:
T. TSHABALALA
DRAWN BY:
B. MVUKUZO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS				
REV	DATE	DESCRIPTION	BY	L.M.
0	2024-03-25	ISSUED FOR TENDER		

PROJECT NAME
SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER

TITLE
ROAD 9 - DETAILED CROSS SECTIONS

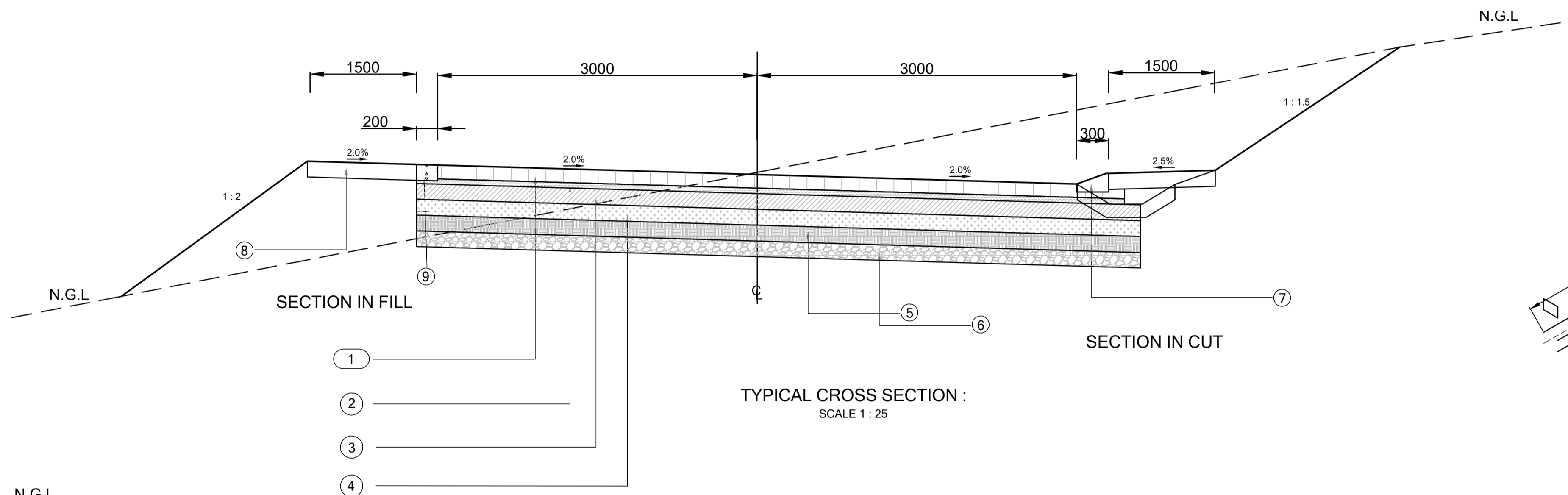
PROJECT STATUS:
TENDER

DATE	SCALE	SHEET	REV	REV
2024-03-25	AS SHOWN	1 OF 1	0	A1

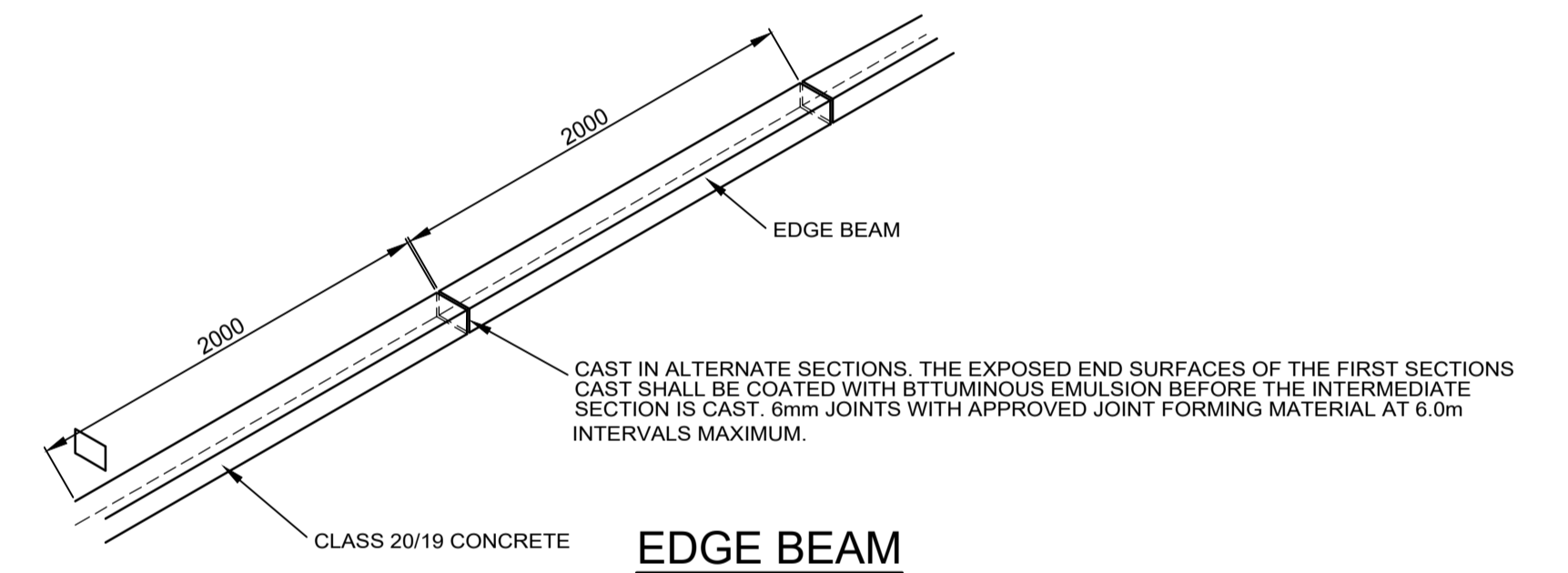
DWG NO
P1027-BE-CIV-RD-CS09

MATERIAL REQUIREMENTS												
LAYER	LAYER No	THICKNESS (mm)	DESCRIPTION	TRH 14 MATERIAL AND/OR COLTO CLASSIFICATION	COLTO SPECIFICATION	Min COMPACTION REQUIREMENT	PLASTICITY INDEX	GRADING MODULUS (MIN)	CBR @ % OF Mod AASHTO Density	UCS @ 100% Mod AASHTO DENSITY (Mpa)	ITS @ 100% Mod AASHTO DENSITY (kPa)	MAX CBR SWELL @ 100 Mod AASHTO
SURFACING	①	80	INTERLOCKING CONCRETE BLOCKS	S-A	7300	--	--	--	--	--	--	--
BEDDING SAND	②	25	BEDDING SAND LAYER	SND	7300	--	--	--	--	--	--	--
BASE	③	150	CEMENTED NATURAL GRAVEL (G5)	C3	3400 & 3500	97%	6 MAX	1.2	25 @ 95%	1.5 MIN	250 MIN	0.5%
SUB BASE	④	150	NATURAL GRAVEL	G6	3400	96%	12 MAX	1.2	25 @ 93%	--	--	1.0%
SELECTED FILL	⑤	150	IMPORTED SELECTED LAYER	G7/G8/G9	3400	93%	--	--	15/10/7 @ 93%	--	--	1.5%
ROCKFILL	⑥	150	ROCKFILL LAYER	--	3200	--	--	--	--	--	--	--
KERB	⑦	1000 X 300 X 200	FIGURE 8C MOUNTABLE KERB	--	2300	--	--	--	--	--	--	--
PAVED SIDEWALK	⑧	150	PAVED SIDEWALK	G6	3400	90%	12 MAX	1.2	25 @ 93%	--	--	1.0%
EDGE BEAM	⑨	200 X 150	CONCRETE EDGE BEAM	--	2300	--	--	--	--	--	--	--
OPEN DRAIN	⑩	SIZE VARIES	CLASS 30/19 CONCRETE V-DRAIN	--	2300	--	--	--	--	--	--	--

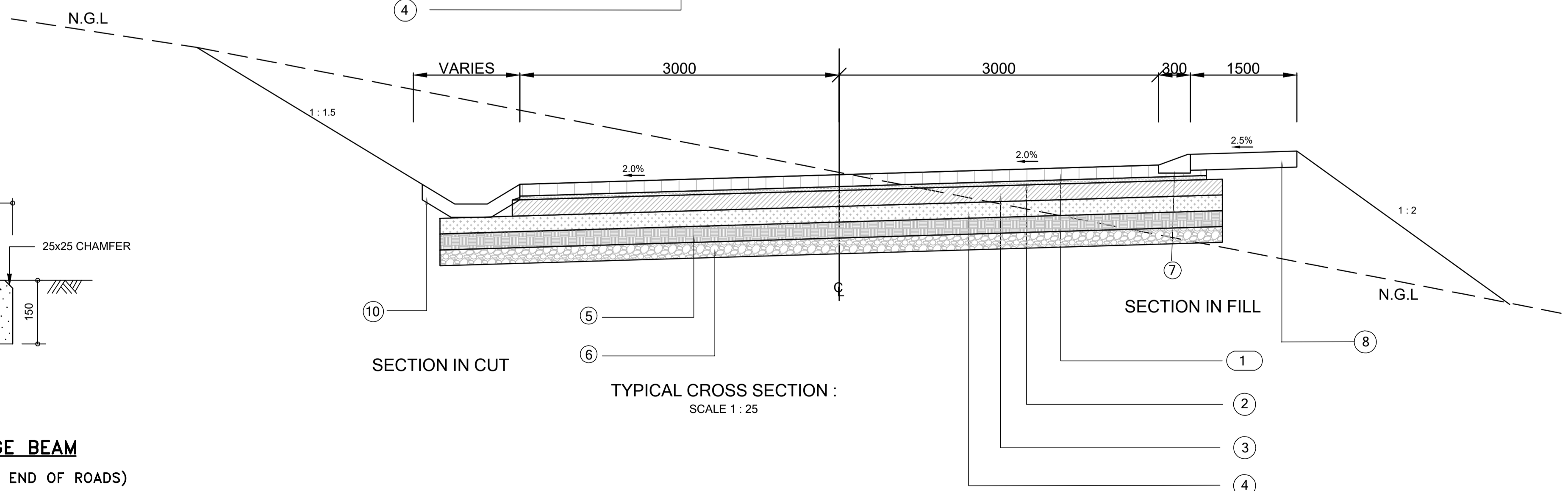
NOTES: VIM - DESIGN VOIDS IN MIX
ARD - APPARENT RELATIVE DENSITY



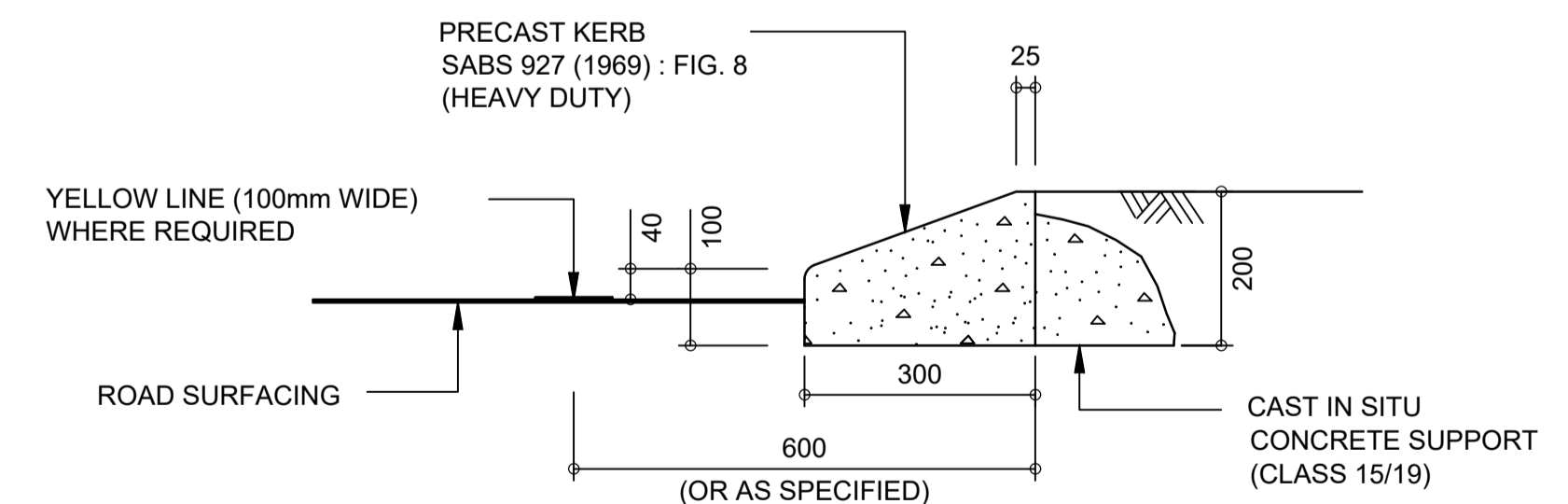
TYPICAL CROSS SECTION :
SCALE 1 : 25



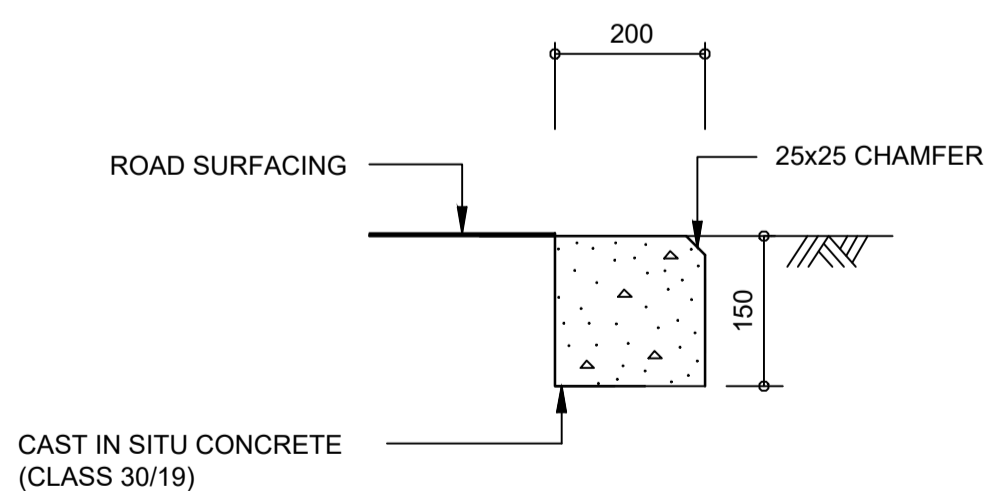
EDGE BEAM



TYPICAL CROSS SECTION :
SCALE 1 : 25





MOUNTABLE KERB TYPE 8



CONCRETE EDGE BEAM

(AT ROAD JUNCTIONS AND END OF ROADS)

CLIENT:  19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyit@senqu.gov.za	CONSULTANT: THEWO & SMMS - JV  58 Brebner Road Westdene Bloemfontein 9301 Tel: +27 (051) 430 1321 Email: PMO@thewo.co.za	PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: 2024-03-25 SIGNATURE:	DESIGN BY: T. TSHABALALA DRAWN BY: B. MVUKUZO CHECKED BY: L. MARAH APPROVED BY: L. MARAH	REVISIONS	PROJECT NAME SENQU MUNICIPALITY UPGRADING, REHABILITATION & RECONSTRUCTION OF ROADS & STORMWATER TITLE TYPICAL CROSS SECTION AND PAVEMENT DESIGN	PROJECT STATUS: TENDER															
				<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>L.M.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>2024-03-25</td> <td>ISSUED FOR TENDER</td> <td></td> <td></td> </tr> </tbody> </table>		REV	DATE	DESCRIPTION	BY	L.M.	0	2024-03-25	ISSUED FOR TENDER			<table border="1"> <thead> <tr> <th>DATE</th> <th>SCALE</th> <th>SHEET</th> <th>REV</th> <th>A1</th> </tr> </thead> <tbody> <tr> <td>2024-03-25</td> <td>AS SHOWN</td> <td>1 OF 1</td> <td>0</td> <td>A1</td> </tr> </tbody> </table>	DATE	SCALE	SHEET	REV	A1
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P1027-BE-CIV-RD-TD01