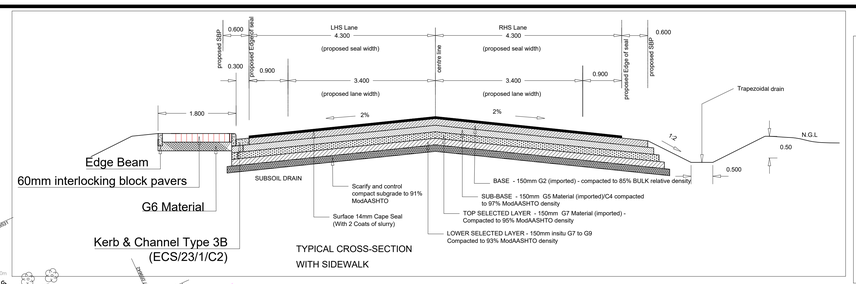
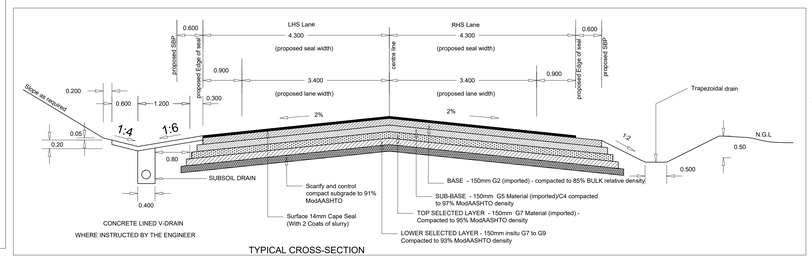
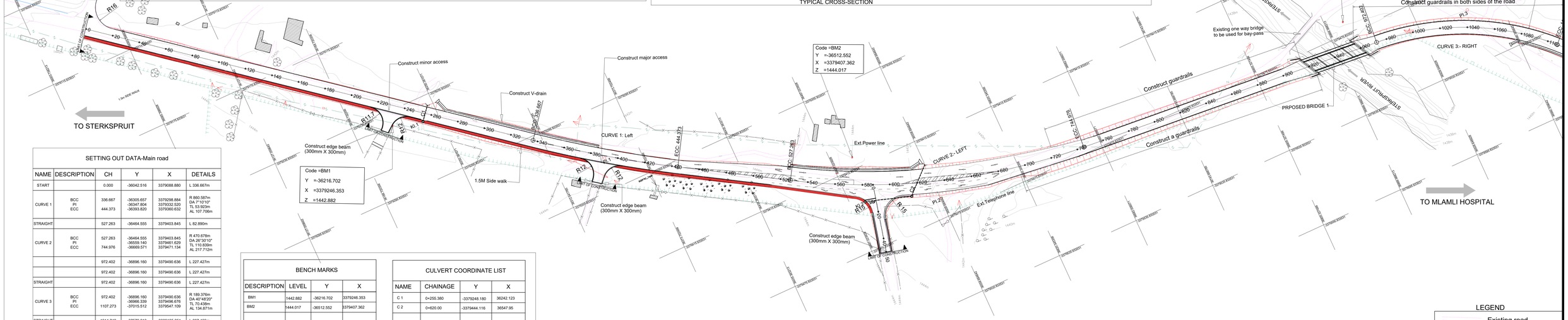


TYPICAL CROSS-SECTION WITH SIDEWALK



TYPICAL CROSS-SECTION



SETTING OUT DATA-Main road

NAME	DESCRIPTION	CH	Y	X	DETAILS
START		0.000	-36042.516	3379088.880	L 336.667m
CURVE 1	BCC PI ECC	336.667 444.373	-36305.657 -36347.804 -36393.820	3379298.884 3379332.520 3379360.632	R 860.587m DA 7°10'10" TL 53.923m AL 107.706m
STRAIGHT		527.263	-36464.555	3379403.845	L 82.890m
CURVE 2	BCC PI ECC	527.263 744.976	-36464.555 -36559.140 -36669.571	3379403.845 3379461.629 3379471.134	R 470.678m DA 26°30'10" TL 110.839m AL 217.712m
		972.402	-36896.160	3379490.636	L 227.427m
		972.402	-36896.160	3379490.636	L 227.427m
STRAIGHT		972.402	-36896.160	3379490.636	L 227.427m
CURVE 3	BCC PI ECC	972.402 1107.273	-36896.160 -36966.339 -37015.512	3379490.636 3379496.676 3379547.109	R 189.376m DA 40°48'20" TL 70.438m AL 134.871m
STRAIGHT		1914.742	-37579.213	3380125.251	L 807.469m

BENCH MARKS

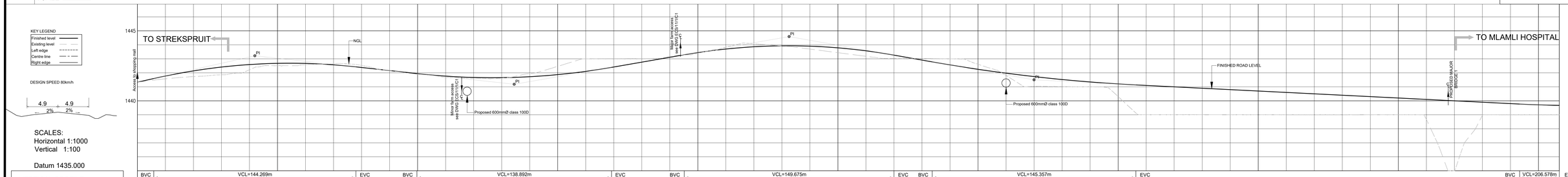
DESCRIPTION	LEVEL	Y	X
BM1	1442.882	-36216.702	3379246.353
BM2	1444.017	-36512.552	3379407.362

CULVERT COORDINATE LIST

NAME	CHAINAGE	Y	X
C 1	0+255.380	-3379248.180	36242.123
C 2	0+620.00	-3379444.116	36547.95

SCALE 0 500 1000

LEGEND
- Existing road
- Existing power line
- Existing telephone line
- Existing water line



SCALES:
Horizontal 1:1000
Vertical 1:100

Datum 1435.000

VERTICAL PROFILE GRADES

BVC 11.693 — VCL=144.269m K=43 — EVC 155.962
83.828 | 1443.220 | -1.101%
BVC 199.519 — VCL=138.892m K=49 — EVC 338.411
268.965 | 1441.182 | 1.736%
BVC 390.325 — VCL=149.675m K=43 — EVC 540.000
465.163 | 1444.588 | -1.766%
BVC 567.32 — VCL=145.357m K=115 — EVC 712.679
640.000 | 1441.500 | -0.500%
BVC 986.557 — VCL=206.578m K=86 — EVC 1193.136
1089.847 | 1439.251

FINAL DESIGN ROAD LEVELS

Chainage	LEFT EDGE (HL)	CENTRE LINE (CL)	RIGHT EDGE (HR)	GROUND LEVELS ON CL
0	1441.232	1441.330	1441.232	1441.572
20	1441.675	1441.773	1441.675	1441.732
40	1442.040	1442.138	1442.040	1441.856
60	1442.313	1442.411	1442.313	1442.220
80	1442.493	1442.591	1442.493	1442.512
100	1442.580	1442.678	1442.580	1442.585
120	1442.573	1442.671	1442.573	1442.641
140	1442.574	1442.672	1442.574	1442.532
160	1442.283	1442.381	1442.283	1442.167
180	1442.093	1442.161	1442.093	1441.897
200	1441.843	1441.941	1441.843	1441.650
220	1441.666	1441.764	1441.666	1441.606
240	1441.570	1441.668	1441.570	1441.624
260	1441.556	1441.654	1441.556	1441.946
280	1441.624	1441.722	1441.624	1442.462
300	1441.782	1441.872	1441.782	1443.002
320	1442.121	1442.103	1442.121	1443.014
340	1442.566	1442.415	1442.566	1443.015
360	1442.958	1442.782	1442.958	1443.167
380	1443.336	1443.110	1443.336	1443.388
400	1443.642	1443.446	1443.642	1443.839
420	1443.897	1443.701	1443.897	1444.077
440	1444.019	1443.863	1444.019	1443.922
460	1443.956	1443.931	1443.956	1443.698
480	1443.807	1443.905	1443.807	1443.440
500	1443.795	1443.786	1443.795	1443.182
520	1443.719	1443.573	1443.719	1443.025
540	1443.537	1443.266	1442.895	1443.026
560	1443.207	1442.913	1442.619	1443.002
580	1442.861	1442.587	1442.273	1442.610
600	1442.547	1442.253	1441.959	1441.817
620	1442.298	1441.974	1441.680	1441.028
640	1442.024	1441.730	1441.436	1441.011
660	1441.815	1441.521	1441.227	1441.002
680	1441.640	1441.346	1441.052	1440.302
700	1441.501	1441.207	1440.913	1439.006
720	1441.394	1441.100	1440.806	1439.007
740	1441.230	1441.000	1440.770	1439.007
760	1440.993	1440.900	1440.787	1439.003
780	1440.757	1440.800	1440.702	1439.001
800	1440.602	1440.700	1440.602	1438.999
820	1440.502	1440.600	1440.502	1438.998
840	1440.402	1440.500	1440.402	1438.997
860	1440.302	1440.400	1440.302	1439.000
880	1440.202	1440.300	1440.202	1439.000
900	1440.102	1440.200	1440.102	1439.000
920	1440.022	1440.100	1440.022	1438.872
940	1440.042	1440.000	1439.901	1435.000
960	1440.078	1439.900	1439.722	1438.973
980	1440.113	1438.800	1438.487	1438.998
990	1440.102	1438.711	1439.319	1438.997
1000	1440.064	1438.672	1439.280	1438.995
1015				

SUPERELEVATION: -2.0% | 4.0% | -4.0% | -2.0% | 2.0% | -2.0% | 6.0% | -6.0% | -2.0% | 8.0% | -8.0%

HORIZONTAL ALIGNMENT: DIRECTION 308° 35' 30" — BCC 336.667 — CURVE 1 LEFT R=860.587m l=305° 00' 20" — ECC 444.373 — DIRECTION 301° 25' 20" — BCC 527.263 — CURVE 2 LEFT R=470.678m l=288° 10' 10" — ECC 744.976 — DIRECTION 274° 55' 10" — BCC 972.402 — CURVE 3 RIGHT R=189.376m l=295° 19' 20" — ECC 1107.273

DISTANCE (m): 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300, 320, 340, 360, 380, 400, 420, 440, 460, 480, 500, 520, 540, 560, 580, 600, 620, 640, 660, 680, 700, 720, 740, 760, 780, 800, 820, 840, 860, 880, 900, 920, 940, 960, 980, 1000, 1015

LONGSECTION MAIN ROAD
From 0.000 to 1014.857

ISSUED FOR TENDERING

Drawing Nr	Reference Drawing	Date	Chkd	Apprv

Rev	Description	Date	Chkd	Apprv

Client: Province of the EASTERN CAPE TRANSPORT

Project: THE COMPLETION OF UPGRADING TO A SURFACE STANDARD DR08606(+/- 12Km) STERKSPRUIT TO MLAMLI

Consultant: MASILAKHE CONSULTING — DEVELOPMENT MANAGERS

Approved: Name S.K.Anthony Date: 07-02-2020

Drawing Title: HORIZONTAL AND VERTICAL ALIGNMENT Ch 0+000 TO Ch 1+015.000

Proj. Engineer	S.K.Anthony
Designed	M.Gadlela
Drawn	M.Gadlela
Checked	S.K.Anthony
Proj. Manager	S.K.Anthony

Scale: 1:1000
Sheet No. 1 OF 12
Project No. E 240
Drawing No. H.V.A-001
Revision 0