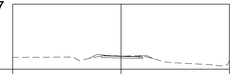
CHAINAGE 57



DATUM = 186

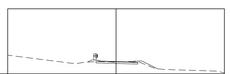
OFFSET	-10.000		-4.385	-3.820	-1.545	0.187	1.668	4.098	8.675	10.000
ELEVATION	187.085		187.120	186.813	187.276	187.200	187.263	186.659	186.301	186.401

CHAINAGE 50

DATUM = 185

OFFSET	-10.000	-7.922		-4.263	-3.592	-2.766	-1.664	-0.684	0.086	1.443	3.207	4.343	7.419	10.000
ELEVATION	186.559	186.501		186.749	186.250	186.058	186.222	186.229	186.202	186.248	186.205	186.159	185.895	185.708

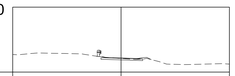
CHAINAGE 40



DATUM = 184

OFFSET	-10.000		-4.103	-2.851	-1.738	-1.542	-0.691	0.086	1.401	3.629	4.019	9.188	10.000
ELEVATION	185.720		184.971	185.071	185.153	185.089	185.180	185.180	185.180	184.475	184.083	184.207	184.083

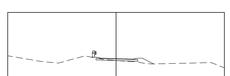
CHAINAGE 30



DATUM = 183

OFFSET	-10.000	-7.741	-5.345	-3.628	-2.067	-0.969	1.303	2.745	3.455	5.840	9.351	10.000
ELEVATION	184.629	184.768	184.720	184.683	184.438	184.335	184.168	184.221	183.961	183.740	183.693	183.765	183.742

CHAINAGE 20



DATUM = 182

OFFSET	-10.000	-6.826	-5.386	-2.887	-2.072	-1.217	0.431	2.003	3.225	8.899	10.000
ELEVATION	183.996	183.463	183.332	183.889	183.832	183.671	183.509	183.425	183.242	183.367	182.890

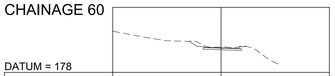
CHAINAGE 10

DATUM = 182

OFFSET	-10.000	-7.489	-5.178	-3.819	-2.663	-1.705	-0.543	0.475	2.167	4.426	8.422	9.003
ELEVATION	184.959	184.570	184.271	184.128	184.038	183.964	183.853	183.799	183.700	183.533	182.916	182.738

ROAD 3

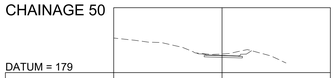
CHAINAGE 60



DATUM = 178

OFFSET	-10.000		-7.075	-5.054	-3.044	-2.418	-1.315	-0.957	1.231	2.070	3.063	4.317	5.247
ELEVATION	181.601		181.248	180.917	180.662	180.602	180.360	180.348	180.263	180.344	180.193	179.252	178.762

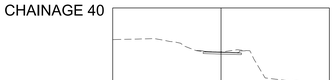
CHAINAGE 50



DATUM = 179

OFFSET	-10.000	-8.081	-6.788	-5.621		-3.625	-2.619	-1.019	-0.122	0.000	2.332	4.523	5.904
ELEVATION	182.199	181.995	181.813	181.762		181.325	180.910	180.684	180.711	180.734	181.133	180.541	179.860

CHAINAGE 40



DATUM = 177

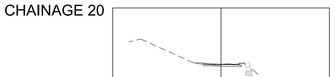
OFFSET	-10.000		-6.138	-5.355	-3.729	-2.759	-1.630	-0.633	0.239	1.504	2.665	4.067	7.861
ELEVATION	182.080		182.170	182.025	181.744	181.237	181.060	180.948	180.964	181.149	181.046	178.545	178.072

CHAINAGE 30

DATUM = 177

OFFSET	-10.000		-5.682	-4.576	-3.471	-2.330	-0.862	0.528	1.986	4.946	6.159	7.563	8.935	10.000
ELEVATION	182.144		181.924	181.703	181.549	181.465	181.237	181.218	181.064	178.873	178.416	177.189	177.129	178.018

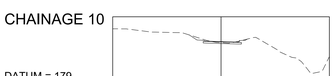
CHAINAGE 20



DATUM = 178

OFFSET	-8.490	-7.416		-2.544	-1.450	-0.704	0.458	1.147	2.166	2.944	4.143	6.086	7.796	8.485	9.515
ELEVATION	183.860	184.131		181.933	181.936	181.744	181.845	181.800	181.811	181.278	180.223	179.941	179.147	178.485	179.085

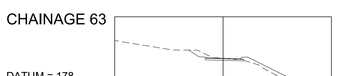
CHAINAGE 10



DATUM = 179

OFFSET	-10.000	-8.739	-6.430	-3.614	-1.322	-0.488	-0.333	1.583	2.951	5.216	6.542	7.436	8.852	9.294	10.000
ELEVATION	183.891	183.879	183.587	183.526	182.813	182.693	182.688	182.726	183.071	181.934	181.247	180.844	179.153	179.952	181.324

CHAINAGE 63



DATUM = 178

OFFSET	-10.000		-4.688	-2.495	-0.936	1.136	3.244	5.643
ELEVATION	181.805		180.934	180.920	180.214	180.047	179.572	178.220

ROAD 4

FOR TENDER

GENERAL NOTES

NOTES :

1. PROVE ALL SERVICES PRIOR TO CONSTRUCTION.
2. ALL LEVELS, DIMENSIONS AND SETTING OUT TO BE VERIFIED ON SITE.
3. ALL SETTING OUT TO BE UNDERTAKEN BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
4. ALL SURVEY AND SETTING OUT DATA PROVIDED IS BASED ON (WGS 84).
5. ALL WORK AREAS TO BE REINSTATED (PREMIX, CONCRETE, ETC.)
6. MUNICIPALITY TO EXECUTE ALL CONNECTIONS INTO MUNICIPAL LINES.
7. UNLESS OTHERWISE AGREED WITH ENGINEER, CONTRACTOR TO SUPPLY ENGINEER WITH RESULTS OF COMPACTION TESTS, AND WHEN APPLICABLE, PERCENTAGE STABILIZATION TESTS ON BACKFILL.
8. ALL WORKS IN ACCORDANCE WITH UMNGENI LOCAL MUNICIPALITY SPECIFICATIONS,SANS 1200 AND COTO 2020.
9. THE ENGINEER REQUIRES 24 HOURS NOTICE FOR ALL INSPECTIONS.
10. THIS DRAWING IS FOR INFORMATION PURPOSES IN ORDER TO ASSIST THE CONTRACTOR FOR THE SETTING OUT AND CONSTRUCTION OF THE WORKS. IT MUST BE NOTED THAT SITE CONDITIONS MAY CHANGE ON SITE AND CONSTRUCTION OF WORKS MAY BE AFFECTED. THE CONTRACTOR IS TO TIMEOUSLY INFORM THE ENGINEER OF ANY CHANGES ENCOUNTERED ON SITE PRIOR TO UNDERTAKING ANY WORK.

MATERIAL COMPLIANCE TESTING :

1. RESULTS OF COMPACTION AND CBR TESTS ON INSITU SUB-BASE MATERIAL AND FILLED SUB-BASE MATERIAL MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE THE UPPER LAYER WORKS ARE IMPORTED TO THE SITE AND PLACED.
2. CONCRETE CUBE TEST RESULTS FOR 7 AND 28 DAYS FOR EACH SEPERATE CONCRETE ITEM TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
3. PRIOR TO IMPORTING ANY MATERIAL ONTO SITE, MATERIALS CLASSIFICATIONS AND OR ASPHALT MIS DESIGNS AND OR CONCRETE FOR THE ALL REQUIRED MATERIALS ARE TO BE FIRST SUBMITTED TO THE ENGINEER FOR APPROVAL.
4. ALL MATERIALS TESTING ARE TO BE UNDERTAKEN BY AN ACCREDITED SANAS ACREDITED LABORATORY.

FREQUENCY OF TESTS :

1. CBR TESTS 1 PER 50m².
2. COMPACTION TESTS 1 PER 50m² NOTE : COMPACTION TESTS WILL BE REQUIRED FOR EACH OF THE VARYING LAYER THAT IS INSITU OR IMPORTED AND COMPACTED IN PLACE.

RETAINING WALL :

1. ALL LEVELS AND DIMENSIONS TO BE CHECKED ON SITE.
2. ALL CONCRETE WORK IS TO COMPLY WITH SANS 1200G.
3. CONCRETE GRADE :- FOUNDATION 25 / 19
4. ALL FOUNDATION EXCAVATIONS ARE TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
5. ALL REINFORCING FIXING IS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
6. SIX CONCRETE CUBES TO BE TAKEN PER BATCH. THREE CUBES TO BE TESTED AT SEVEN DAYS, THE REMAINDER AT TWENTY EIGHT DAYS. THE RESULTS ARE TO BE FORWARDED TO THE ENGINEER FOR REVIEW AND APPROVAL.
7. SET BOTTOM ROW OF BLOCKS IN WET CONCRETE.
8. ALL BACKFILL TO BE COMPACTED TO 93% MOD AASHTO DENSITY
9. STORM WATER BEHIND THE TOP OF THE WALL TO BE MANAGED IN SUCH A MANNER AS TO OBVIATE SCOUR BEHIND OR OVER - TOPPING OF THE WALL.

SIDEWALKS :

1. ALL LEVELS, DIMENSIONS AND SETTING OUT DETAILS TO BE VERIFIED BY CONSULTANT AND CONTRACTORS ON SITE PRIOR TO CONSTRUCTION.
2. THE POSITIONS OF DRIVEWAY ACCESSES ARE TO BE DETERMINED IN CONSULTATION WITH THE LOCAL COMMUNITY / RESIDENTS AS EXACT POSITIONS MAY VARY ONSITE.
3. CONCRETE WEDGES ACCORDING TO CIVIL ENGINEERS DETAILS AND SPECIFICATIONS MAY BE USED IN PLACE OF SURFACED BELL-MOUTHS FOR ACCESSES SERVING SINGLE RESIDENTIAL PROPERTIES.
4. EXISTING ROAD SIGNS, SERVICES AND FENCING AFFECTED BY CONSTRUCTION ARE TO BE REMOVED/RELOCATED ON INSTRUCTION BY THE CIVIL ENGINEER.
5. NEW FILLS AND EXPOSED CUTS ARE TO BE TOP-SOILED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.

KERBS :

1. ALL CAST IN SITU CONCRETE IS TO BE GRADE 20 / 19.
2. THE SURFACES OF THE CAST IN SITU CHANNEL / FILLET ARE TO HAVE A STEEL FLOAT FINISH.
3. EXPANSION JOINTS TO BE FORMED THROUGH THE KERBING, CHANNEL / FILLET AND FOUNDATIONS AT INTERVALS NOT EXCEEDING 18.0m.
4. CONTRACTION JOINTS TO BE FORMED THROUGH THE CHANNEL / FILLET AT 20m INTERVALS.
5. WHERE KERB RADIUS IS LESS THAN 25m THE KERB LENGTH SHALL BE 300mm. WHERE THE KERB RADIUS IS LESS THAN 2m THE KERBING SHALL BE CAST IN SITU.
6. PRECAST KERBS ARE TO BE LAID WITH A 13mm GAP BETWEEN KERBS, WHICH SHALL THEN BE FILLED WITH A CEMENT MORTAR.
7. EXTRUDED KERBS:

a) ASPHALT KERB:
1. ASPHALT TO COMPLY WITH THE REQUIREMENTS OF SANS.

b) CONCRETE KERB:
1. THE CONCRETE IS TO HAVE A CUBE STRENGTH OF 20MPa AT 28 DAYS.
2. THE CONCRETE MIX DESIGN IS TO BE APPROVED BY THE ENGINEER.
3. CONTRACTION JOINTS TO BE FORMED AT 2.0m INTERVALS
4. EXPANSION JOINTS ARE TO FORMED AT 6.0m INTERVALS ON STRAIGHTS AND 2.0m INTERVALS WHERE THE KERB RADIUS IS LESS THAN 50m.

FOR TENDER

SCALE (mm)

No.	REFERENCE DRAWINGS
631/RICH/904	TYPICAL DRY STACK RETAINING WALLS
631/RICH/903	TYPICAL DETAILS
631/RICH/902-2	ROADS CROSS SECTIONS
631/RICH/902-1	FOOTPATHS CROSS SECTIONS
631/RICH/901-3	ROADS LONG SECTIONS
631/RICH/901-2	ROADS LONG SECTIONS
631/RICH/901-1	FOOTPATHS LONG SECTIONS
631/RICH/900	ROADS & FOOTPATHS LAYOUT & DETAILS

REV	DESCRIPTION	BY	DATE
T1	ISSUED FOR TENDER	Y.R.	11/02/2026

Professional person : L Singh — Registration : 201370301

CLIENT

ETHEKWINI MUNICIPALITY

PROJECT

eTHEKWINI: PROVISION OF INCREMENTAL SERVICES TO INFORMAL SETTLEMENTS: RICHMOND FARM B

DETAILS

ROADS 3 & 4
CROSS SECTION

MAP AFRICA CONSULTING
SABS ISO 9001 — CESA
SUITE GR01A,GROUND FLOOR BUSINESS PARTNERS CENTRE, 23 JAN HOFMEYR ROAD, WESTVILLE
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DESIGNED	L.S	COPYRIGHT RESERVED	SCALES AS SHOWN
DRAWN	Y.R.		
APPROVED	L.S	PL	DATE 11/02/2026

CONTRACT No. 4V-34029

DRAWING No. 631/RICH/902-3 REV T1