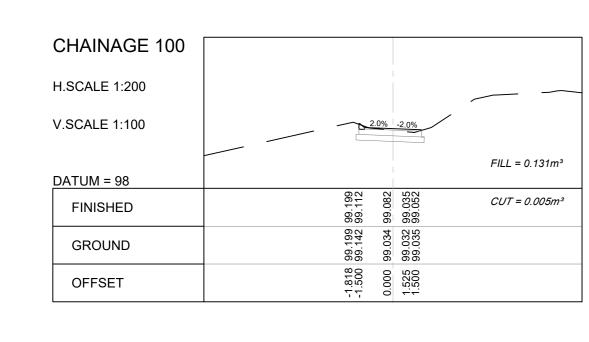


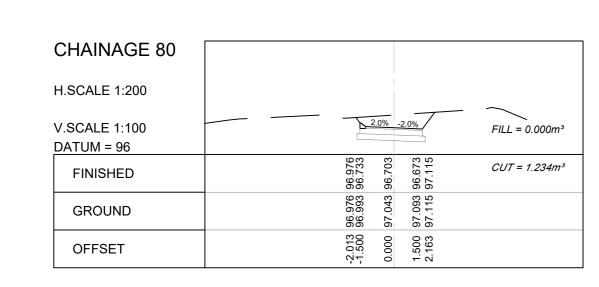
(	CHAINAGE 260				
I	H.SCALE 1:200				
	V.SCALE 1:100 DATUM = 117		0% -2.0%		FILL = 0.105m <sup>3</sup>
	FINISHED	117.469	117.393	-	$CUT = 0.000m^3$
	GROUND	117.4691	117.4161	-	
	OFFSET	-1.926 -1.500	0.000	<u>.</u>	

CHAINAGE 400				
H.SCALE 1:200				
V.SCALE 1:100 DATUM = 140			2.0% -2.0%	FILL = 0.000m <sup>3</sup>
FINISHED		148.663	140.574 140.544 140.831	CUT = 0.924m³
GROUND		148.768148.663	140.88714 140.83111	
OFFSET		-1:827	0.000	
•	•			



CHAINAGE 240				
H.SCALE 1:200	2	.0%	-2.0%	
V.SCALE 1:100				$FILL = 0.000m^3$
DATUM = 114				
FINISHED	115.468 115.130	115.100	115.070	CUT = 1.466m <sup>3</sup>
GROUND	115.4681	115.5011	115.506	
OFFSET	-2.156	0.000	1.500	
			-	

CHAINAGE 380			
H.SCALE 1:200			
V.SCALE 1:100			
		2.0% -2.0%	
			_
			$FILL = 0.745m^{3}$
DATUM = 135			$FILL = 0.745m^3$
DATUM = 135 FINISHED	137.136 137.232	137.202 137.096	FILL = 0.745m <sup>3</sup> CUT = 0.000m <sup>3</sup>
	137.136137.136 137.041137.232	136.952137.202 137.086137.056	



CHAINAGE 220		
H.SCALE 1:200		
V.SCALE 1:100 DATUM = 112	 2.0% -2.0%	FILL = 0.111m <sup>3</sup>
FINISHED	12.543 12.543 12.543 12.483	CUT = 0.110m <sup>3</sup>
GROUND	112.4491 112.5291 112.5291 112.5981 112.5061	
OFFSET	-2.091 -1.500 0.000 1.585	

CHAINAGE 360					
H.SCALE 1:200	_				
V.SCALE 1:100		\o_{	2.0% -	2.0%	
DATUM = 133					FILL = 0.792m <sup>3</sup>
FINISHED		134.849 134.887	134.857	134.827	$CUT = 0.000m^3$
GROUND		134.84913	134.6261	134.65213	
OFFSET		-2.006	0.000	1.500	

CHAINAGE 60		
H.SCALE 1:200		
V.SCALE 1:100 DATUM = 94	2.0% -2.0%	FILL = 0.001m <sup>3</sup>
FINISHED	94.734 94.114 94.084	CUT = 0.715m <sup>3</sup>
GROUND	94.234 94.322 94.395	
OFFSET	-1.80 <del>5</del> 0.000 1.500	

CHAINAGE 200		
H.SCALE 1:200	2.0% -2.0%	-
V.SCALE 1:100		FILL = 0:004m <sup>3</sup>
DATUM = 109		
FINISHED	109.832 109.832 109.832	CUT = 0.090m³
GROUND	109.9571 109.8571 109.8221 109.8221	
OFFSET	-1.831 -1.500 0.000 1.515	

CHAINAGE 340				
H.SCALE 1:200				
V.SCALE 1:100	 		0% -2.0%	FILL = 0.173m <sup>3</sup>
DATUM = 131				
FINISHED		131.625 131.708	131.678 131.655 131.648	CUT = 0.001m <sup>3</sup>
GROUND		131.6251	131.6431 131.6551 131.6551	
OFFSET		-2.073 -1.500	0.000	

CHAINAGE 40					
H.SCALE 1:200			2.08/	3.00	
V.SCALE 1:100 DATUM = 91		- 12	2.0%	2.0%	$FILL = 0.002m^3$
FINISHED		91.559	91.525	91.495 91.953	CUT = 0.648m³
GROUND		91:629	91.707	91.782	
OFFSET		-1:838	0.000	1.500	

CHAINAGE 180					
H.SCALE 1:200					
V.SCALE 1:100 DATUM = 107			2.0% -7		FILL = 0.00 <del>0m<sup>3</sup></del>
FINISHED		07 43	107.242	107.182 107.350	CUT = 0.638m³
GROUND		107 437	107:4321	107.3581	
OFFSET		943	0.000	1.500	
	1				

CHAINAGE 320		
H.SCALE 1:200		
V.SCALE 1:100 DATUM = 127	2.0% -2.0%	FILL = 0.490m <sup>3</sup>
FINISHED	127.747 127.997 127.967 127.9637 127.993	CUT = 0.012m³
GROUND	127.7471. 127.7841. 127.8551. 127.99111.	
OFFSET	-2.324 -1.500 0.000 1.500	

CHAINAGE 20		
H.SCALE 1:200		2.0% -2.0%
V.SCALE 1:100 DATUM = 88	/	FILL = 0.811m <sup>3</sup>
FINISHED	88.414 88.473	(C)
GROUND	88.414 88.436	88 88 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
OFFSET	-2.337	-1.500 0.000 1.950 1.953

CHAINAGE 160		
H.SCALE 1:200		
V.SCALE 1:100	2.0%   -2.0%	FILL = 0.000m <sup>3</sup>
DATUM = 105		
FINISHED	105.629 105.062 105.032 105.002	CUT = 2.135m <sup>3</sup>
GROUND	105.6291 105.6071 105.5721 105.5381	
OFFSET	-2.501 -1.500 0.000 1.500 2.278	

CHAINAGE 300		
H.SCALE 1:200	2.0% -2.0%	
V.SCALE 1:100		FILL = 0.284m³
DATUM = 123		
FINISHED	24.27 24.27 24.257 24.151	CUT = 0.000m <sup>3</sup>
GROUND	124.2731 124.2731 124.17411 124.1521	
OFFSET	0.000 0.000 1.614	

CHAINAGE 430			
H.SCALE 1:200			
V.SCALE 1:100			FILL = 0.843m <sup>3</sup>
DATUM = 146			
FINISHED	146.372	146.606	9 6 7 8 7 8 7 8 8 7 8 8 8 8 8 8 8 8 8
GROUND	146.8151	146.613 146.565	146.248146
OFFSET	-5.066	000 0000 0000 0000 0000 0000 0000 0000 0000	5.066

		-ر
	<u> </u>	FILL = 0.077m <sup>3</sup>
86.397 86.391	86.305	CUT = 0.000m <sup>3</sup>
86.307 86.311 86.358	86.358	
-1.840	0.000	
	.840 86.307 .717 86.311	.840 86.307 .717 86.311 .000 86.358

CHAINAGE 140	
H.SCALE 1:200	
V.SCALE 1:100 DATUM = 103	2.0% -2.0% FILL = 0.254m <sup>3</sup>
FINISHED	103.210 103.210 103.003.210 103.00431 103.00431 103.00431 103.00431 103.000m <sub>3</sub>
GROUND	103.2210103. 103.2210103. 103.043103. 103.041103.
OFFSET	0.000 1.654 1.654

CHAINAGE 280			
H.SCALE 1:200			
V.SCALE 1:100 DATUM = 120	2.	0% -2.0%	FILL = 0.168m <sup>3</sup>
FINISHED	00 00 00 00 00 00 00 00 00	20.546 20.392 20.516	CUT = 0.005m <sup>3</sup>
GROUND	120.624120.6 <u>5</u> 4	20.4981 20.3921 20.3921	
OFFSET	-1.867	1.500	

CHAINAGE 420				
H.SCALE 1:200			2.0% -2.0%	
V.SCALE 1:100				FILL = 1.882m <sup>3</sup>
DATUM = 143				
FINISHED		144.336	144.570 144.540 143.955	
GROUND		144.3361	144.071144.570 143.995144.540 143.955143.955	
OFFSET		-2.346	0.000	

Road1 - Ch. 4 to 430

GENERAL:

- 1. PROVE ALL SERVICES PRIOR TO CONSTRUCTION. 2. ALL LEVELS AND DIMENSIONS 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
- 5. ALL WORK AREAS TO BE REINSTATED (PREMIX, CONCRETE, ETC.) 6. MUNICIPALITY TO EXECUTE ALL CONNECTIONS INTO MUNICIPAL
  - '. UNLESS OTHERWISE AGREED WITH ENGINEER, CONTRACTOR TO SUPPLY ENGINEER WITH RESULTS OF COMPACTION TESTS, AND WHEN APPLICABLE, PERCENTAGE STABILIZATION TESTS ON
  - 8. ALL WORKS IN ACCORDANCE WITH CITY OF DURBAN SPECIFICATIONS AND SANS 1200 9. THE ENGINEER REQUIRES 24 HOURS NOTICE FOR ALL

INSPECTIONS. MATERIAL COMPLIANCE TESTING:

- 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.
- FREQUENCY OF TESTS:
- . CBR TESTS 1 PER 300m<sup>2</sup>. 2. COMPACTION TESTS 1 PER 200m<sup>2</sup> NOTE : COMPACTION TESTS WILL BE REQUIRED FOR EACH OF THE VARYING LAYER THAT IS IMPORTED AND COMPACTED IN PLACE.
- RETAINING WALL:

PROPERTIES.

- 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
- 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. ROADS AND FOOTPATHS:

ENGINEER FOR REVIEW AND APPROVAL.

- 1. ALL LEVELS, DIMENSIONS AND SETTING OUT DETAILS TO BE VERIFIED BY CONSULTANT AND CONTRACTORS ON SITE PRIOR TO CONSTRUCTION.
- 2. THE POSITIONS OF ACCESSES ARE TO BE DETERMINED IN CONSULTATION WITH THE LOCAL COMMUNITY. DAYLIGHT REQUIREMENTS ARE TO BE DECIDED BY THE ENGINEER ON SITE. CONCRETE WEDGES ACCORDING TO CIVIL ENGINEERS DETAILS AND SPECIFICATIONS MAY BE USED IN PLACE OF SURFACED BELL-MOUTHS FOR ACCESSES SERVING SINGLE RESIDENTIAL
- EXISTING ROAD SIGNS, SERVICES AND FENCING AFFECTED BY CONSTRUCTION ARE TO BE REMOVED/RELOCATED ON INSTRUCTION BY THE CIVIL ENGINEER. 8. UNDERGROUND SERVICE CROSSINGS AND MARKERS ARE TO BE
- ACCORDING TO CIVIL ENGINEERS DETAILS AND SPECIFICATIONS. 9. ALL NEW ROAD SIGNS AND ROAD MARKING REQUIREMENTS ARE
- TO CONFORM TO THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL (SADC - RTSM). 10. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH "COLTO SPECIFICATIONS FOR ROAD AND BRIDGE WORKS FOR STATE
- ROAD AUTHORITIES". 11. NEW FILLS AND EXPOSED CUTS ARE TO BE TOP-SOILED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT
- STORMWATER: . ALL STORMWATER PIPES ARE CLASS 100D CONCRETE AND HD CL
- 34 uPVC PIPES. 2. ALL STORMWATER CONCRETE PIPES TO COMPLY WITH SANS 677 STANDARDS.
- ALL uPVC PIPES TO COMPLY WITH SANS 966 STANDARDS.
   ALL JOINTS TO BE 'SPIGOT AND SOCKET' TYPE.
- 5. ALL STORMWATER PIPES TO BE LAID ON CLASS B BEDDING. 6. ALL EXISTING DRAINAGE CULVERTS ARE TO BE INSPECTED, AND
- ANY FOUND IN UNSERVICEABLE CONDITION ARE TO BE REPLACED ON INSTRUCTION BY THE CIVIL ENGINEER. Y. CULVERT INVERTS ARE TO BE DECIDED BY CIVIL ENGINEER ON
- SITE UNLESS SHOWN OTHERWISE. MIN. COVER = 600mm, MIN.

REFERENCE DRAWINGS

REV	DESCRIPTION		BY	DATE
P1	ISSUED FOR TENDER		Z.M	2023.05.3
Professional person S.SIRPUTH PrTechEng			jistration 2	201470135



eTHEKWINI INCREMENTAL SERVICES AMAOTANA (ZWELISHA)

**CROSS SECTIONS -**

SHEET 2

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