

FOOTPATH TYPE 4 (CH: 0 - 51.189m)

SCALE : Vert 1 : 100 Hor 1 : 200 REFER TO LAYOUT DRAWING NO. 49287 SHEET 1	60	EXISTING ROAD					
LEGEND NATURAL GROUND LEVEL — — — FOOTPATH DESIGN LEVEL — 5	58					FOOTF	ATH DESIGN LE
DATUM 56.000		NATURAL GROUND LEVEL		600 CC RE)mm NCF NO-	WIDE TRAPEZODI RETE DRAIN WITH MATTRESS	
DISTANCE (m)	0	6	00	21	23	30	
GROUND LEVELS ON CL	59.672	59.008	58 665 58	58.661	58.004	57.730	
CENTRE LINE (CL)	59.672	59.158	58 644	58.582	58.004	57.730	
GRADE %		-{	5.19%	•	-50%	% -2 .	69%
FOUNDATION LAYERS	FOOTPATH TYPE A 100mm THICK CONCRETE 20MPa/19mm WITH REF. MESH 193 150mm INSITU MATERIAL TO BE COMPACTED TO 93% MOD AASHTO)	

FOOTPATH TYPE 1 (CH: 0 - 37.502m)

GI	ROUNE	D LEVEL							
		H	AN	DRA		DBEIN	NSTA		ED
6 0 F	00mm CONCR RENO-N	WIDE TF ETE DR/ MATTRES	RAF AIN SS	PEZ() Dial Th				
33	36	39	40	42			48	49	51.189
56.593	55.621	55.209	54.931	54.480			53.614	53.339	52.881
56.529	55.509	55.209	54.772	54.172			53.614	53.159	52.881
	-50%	-10%	_	50%	-	9.3%		-50	%109
SH)D ,	193 AASHTO)							

SCALE : Vert 1 : 100 Hor 1 : 200 REFER TO LAYOUT DRAWING NO. 49287 SHEET 1	58	
LEGEND NATURAL GROUND LEVEL — — — FOOTPATH DESIGN LEVEL ———	56	2
DATUM 54.000		
DISTANCE (m)	0	
GROUND LEVELS ON CL	56.712	
CENTRE LINE (CL)	56.712	
GRADE %		
FOUNDATION LAYERS		



ALE : Vert 1 : 100 Hor 1 : 200 EFER TO LAYOUT RAWING NO. 49287 SHEET 1 62	2										PATH DESIGN LEVEL
LEGEND IATURAL GROUND LEVEL — — — OOTPATH DESIGN LEVEL — 60		IAL			FP03					EXI	STING ROAD
58	RENO-MATTRESS		NATURAL GROUND LEVE			BASS STEPS OR SIMILAR APPROV	/ED				
OATUM 54.000											
DISTANCE (m)	9 0	5 71	30	31 31	38	20 20 20	8	70	80	6	98 628
GROUND LEVELS ON CL	55.634	55.605 55.892	56.298	56.332 56.761	57.418	58.210	58.416 58	59.101	59.605	60.598	60.884
or کو کی کو	55.567	55.528 55.846	56.170	56.332 56.761	57.206	587.76 58.103	58.405	59.055	59.679	60.326	60.884
GRADE %	-3.21%		2.77%	50%	6.36% 50	% 3.	11%		6.36	3%	
OUNDATION LAYERS	FOOTPATH TYPE A 100mm THICK CONCRETE 20MPa/19mm WITH REF. MESH 193 150mm INSITU MATERIAL TO BE COMPACTED TO 93% MOD AASHTO										

LONGSE SCALE : REFER TO DRAWING	CTION ROAD CHN 0 - 71m Vert 1 : 100 Hor 1 : 200 O LAYOUT G NO. 49287 SHEET 1	66 - 64 - 62 - 60 -	EXISTING ROAD				L=24.000m	R=200.000m			
DATUM :	58.00										
VERTIC GRADE	CAL PROFILE ES	-		-2.686%	BVC 27.424	⊲	VCL=2 K= 39.424	24.000m :2 64.293		EVC 51.424	14.687%
CS N	LEFT EDGE (HL)	65.352	65.084	64.815	64.615 5	64.530	63. <u>9</u> 33	63.882 62.735	62.531	61.271	
NAL DESI	CENTRE LINE (CL)	65.352	65.084	64.815	64.616	64.530	63.933	63.882 62.735	62.531	61.271	
н у	RIGHT EDGE (HR)	65.352	65.084	64.815	64.615	64.530	63.933	63.882 62.735	62.531	61.271	
GROUN	ND LEVELS ON CL	65.352	65.126	64.873	64.495	64.457	64.169	64.176 62.977	62.768	61.600	
DISTAN	ICE (m)	0	10	20	27	30	or R	50 40	51	60	

ACCESS ROAD 01 (CH: 0 - 71m)



FOOTPATH TYPE 2 (CH: 0 - 48.003m)

FOOTPATH TYPE 3 (CH: 0 - 98.628m)



Y 3313484.475 3313479.044 3313473.613 3313473.613 3313473.345 3313472.236 3313469.92 3313469.92 3313465.47 H 2 CO-ORDINATE Y 3313462.287 3313452.055 3313449.064 3313448.642	X 13355.048 13363.445 13363.445 13371.841 13372.256 13377.747 13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
т 3313484.475 3313479.044 3313473.613 3313473.345 3313472.236 3313469.92 3313469.92 3313465.47 4 2 CO-ORDINATE Ý 3313462.287 3313456.262 3313452.055 3313449.064 3313448.642	× 13355.048 13363.445 13371.841 13372.256 13377.747 13380.89 13386.929 TABLE X 13419.113 13419.113 13411.131 13405.558 13405.165
3313484.475 3313479.044 3313473.613 3313473.345 3313472.236 3313469.92 3313465.47 H 2 CO-ORDINATE Y 3313462.287 3313462.287 3313456.262 3313452.055 3313449.064 3313448.642	13355.048 13363.445 13371.841 13372.256 13377.747 13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
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3313473.613 3313473.345 3313472.236 3313469.92 3313465.47 1 2 CO-ORDINATE Y 3313462.287 3313452.287 3313452.055 3313449.064 3313448.642	13371.841 13372.256 13377.747 13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
3313473.345 3313472.236 3313469.92 3313465.47 1 2 CO-ORDINATE Y 3313462.287 3313452.055 3313449.064 3313448.642	13372.256 13377.747 13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
3313472.236 3313469.92 3313465.47 4 2 CO-ORDINATE Y 3313462.287 3313462.287 3313456.262 3313452.055 3313449.064 3313448.642	13377.747 13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
3313469.92 3313465.47 H 2 CO-ORDINATE Y 3313462.287 3313456.262 3313452.055 3313449.064 3313448.642	13380.89 13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
3313465.47 H 2 CO-ORDINATE Y 3313462.287 3313456.262 3313452.055 3313449.064 3313448.642	13386.929 TABLE X 13419.113 13411.131 13405.558 13405.165
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3313452.055 3313449.064 3313448.642	13405.558 13405.165
3313449.064 3313448.642	13405.165
3313448.642	
	13405.11
3313441.539	13405.67
3313439.249	13404.8
3313438.732	13404.603
3313432.947	13399.942
3313430.955	13399.624
3313429.128	13399.333
3313423.771	13396.306
H 3 CO-ORDINATE	TABLE
Y	Х
3313461.636	13446.798
3313455.688	13438.759
3313455.197	13438.096
3313455.141	13433.347
3313457.274	13429.47
3313462.093	13420.708
3313462.711	13419.584
3313470.714	13416.126
3313477.053	13413.386
3313478 691	13410 761
3313483.883	13402 435
3313484.06	13402.498
3313492 599	13405 552
3313493 419	13405 993
3313/08 //	13408 607
0040500.047	13400.097
3313502.317	13410.552
3313511.337	13414.868
3313519.12	13418.592
H 4 CO-ORDINATE	TABLE
Y	Х
3313497.292	13472.907
3313487.337	13473.85
3313477.381	13474.793
3313476.08	13474.916
3313468.888	13479.799
00/0/0/0	13/82 02
3313464.292	13402.92
3313464.292 3313464.418	13487.362
3313464.292 3313464.418 3313464.578	13482.92 13487.362 13493.002
3313464.292 3313464.418 3313464.578 3313461.808	13482.92 13487.362 13493.002 13496.366
	3313438.732 3313432.947 3313430.955 3313429.128 3313429.128 3313423.771 H 3 CO-ORDINATE Y 3313461.636 3313455.688 3313455.688 3313455.141 3313455.141 3313457.274 3313462.093 3313462.711 3313462.093 3313462.711 3313470.714 3313477.381 3313476.08 3313468.888



PLAN DESCRIPTION	DWG. NO.	SHEET NO.
CONTINUED FROM		
CONTINUED ON		
CROSS SECTIONS		
TYPICAL CROSS SECTION		
SURVEY LAYOUT		

REDUCED PLAN USE SCALE BELOW



DESIGN CONSULTANT



Vis	it or cor	ntact us	onli	ne at	. wi	ww.bvi	group.o	co.za	
OVINCE	OFFICE			2				E	-MAIL
ZN —	Durban		+27	31 2	66	8382		dbn@b	vikn.co
Approved				Reg.	No.				Date

TO 24-01-2024 TENDER PURPOSES Revision Date Description NOTE:No construction work to commence until land and servitude

acquisitions have been completed Acquisitions completed DATE Engineer

UNDERGROUND SERVICES CHECKED							
SERVICE	DATE	SIGNATURE					
S.W.DRAINS							
SEWERS							
WATER MAINS							
G.P.O.CABLES							
ELECTRIC CABLES							
S.A.R. CABLES							
E.S.C. CABLES							

NOTE: Only underground services affected by new construction work are shown.Care must be taken during excavations for road foundations, trenches etc...to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Wherever possible these must be located before work proceeds.

OIL PIPE LINE

Contract No. Project Title

Drawing Title

PROVISION OF INCREMENTAL SERVICES TO SETTLEMENT EMLAZA J17

3V - 28530

WARD 111

FOOTPATHS AND ROAD LONGSECTIONS

Reference

Scales AS SHOWN

Checked	Date		Signature
KP	05 / 02	2 / 24	
Designed			
PT	05 / 0	2 / 24	
Drawn by			
MS	05 / 0	2 / 24	

Senior Manager: Development Engineering (South)

Deputy Head: Development Engineering

Head : Engineering Sheet 2 Drawing No 49287 of 3 Sheets M:\DELTEK PROJECT\D34729.00 - ETHEKWINI RFS\CIVIL\DESIGN DRAWINGS\DETAIL DESIGN\EMLAZA J17\49287-002.DWG

- 1.5 COMPACTION TESTING TO BE DONE AS FOLLOWS: (a) 1 TEST PER LAYER FOR EACH 25m LENGTH OF FOOTPATH
- 1.6 BOLLARDS TO BE CONSTRUCTED ONLY WHEN INSTRUCTED BY THE ENGINEER. 1.7 WHERE THE COVER LEVELS OF THE EXISTING MANHOLES LOCATED IN THE ALIGNMENT OF NEW FOOTPATHS IS HIGHER THAN THE FINISHED DESIGN LEVEL OF THE FOOTPATH, MANHOLE RINGS ARE TO BE CUT SUCH THAT THE NEW MANHOLE COVER LEVEL IS CONSISTENT WITH THE LEVEL AND SLOPE OF THE FOOTPATH. EXISTING MANHOLE LIGHT DUTY COVERS AND FRAME ARE TO BE REPLACED WITH HEAVY DUTY COVER AND FRAME. EXPOSED REINFORCING MUST BE PAINTED WITH SIKA TOP AMATEC 110 EC OR SIMILAR APPROVED
- 1.8 THESE DESIGNS OR DRAWINGS ARE NOT TO BE SOLD AND ARE SUBJECT TO RECALL. REPRODUCTION OR COPYING RIGHTS ARE RESERVED SOLELY BY BVI CONSULTING ENGINEERS UNDER COPYRIGHT LAW. THESE DRAWINGS HAVE BEEN ISSUED AND RECEIVED ON THE FOLLOWING CONDITIONS: (a) THAT THEY ARE NOT USED IN ANY WAY AGAINST THE INTERESTS AND BENEFITS OF BVI
- THAT THESE DRAWINGS AND ALL COPIES WILL BE RETURNED TO BVI IMMEDIATELY ON DEMAND. THAT ALL INFORMATION DISCLOSED BY THESE DRAWINGS SHALL BE DEEMED TO BE CONFIDENTIAL.
- 1.9 FOR ALL DETAILS REFER TO STANDARD DETAIL DRAWING D3 49248 003
- 1.10 NEW DRY STACK RETAINING WALL POSITIONS AND HEIGHT WILL BE FINALIZED ON SITE. 1.11 STORMWATER MANHOLES AND HEADWALL LEVELS TO BE FINALIZED DURING CONSTRUCTION.
- 1.12 THE POSITION OF EXISTING STORMWATER AND SEWER PIPELINES ARE APPROXIMATE AND NOT SHOWN TO FULL EXTENT

2. CONCRETE

- 2.1 CONCRETE WORKS TO COMPLY WITH STANDARD SPECIFICATION PART C AND SANS1200 SECTION G AND SANS 0100 PART 2
- 2.2 THE FREQUENCY OF CONCRETE WORKS TESTING MUST BE DONE AS FOLLOWS : (a) AT LEAST ONE SET(3 NO. CUBES) OF SAMPLES FOR EVERY 50m³ OF CONCRETE PLACED.
 (b) AT LEAST ONE SET OF SAMPLES SHALL BE TAKEN FROM EACH
- DAY CASTING C) TESTING MUST BE BE CARRIED OUT IN ACCORDANCE TO SANS METHOD 861 AND TESTED BY AN APPROVED LABORATORY RESULTS TO BE BE SUBMITTED TO THE ENGINEER.
- A) ON THE BASIS IF IMPORTANCE, WHERE DIRECTED BY THE ENGINEER, A SET OF SAMPLES MAY BE REQUESTED.
 B) UNLESS OTHERWISE ADVISED, NO SAMPLE SHALL BE TAKEN OF ANY CONCRETE UNTIL AT LEAST 1m³ OF SUCH CONCRETE
- HAS BEEN MIXED AND DISCHARGED FOR THE FOOTPATHS 3 CURING AND PROTECTION SHALL BE ACCORDING TO
- SANS 0100 II-1980, 5.8.8 2.4 ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP, AT LEAST 7 DAYS AFTER CASTING.
- 2.5 CONCRETE POURING WILL ONLY BE DONE UPON THE APPROVAL OF THE SHUTTERING AND FIXING OF THE REINFORCEMENT FOR THE FOOTPATHS/DRAINS 2.6 MIN.CONCRETE CUBE STRENGTH AT 28 DAYS:
- FOOTPATH 20 MPa DRAINS 20 MPa KERB BASE AND HAUNCH20 MPaSTEP CONCRETE BASE15 MPaRETAINING WALL BASE20 MPa