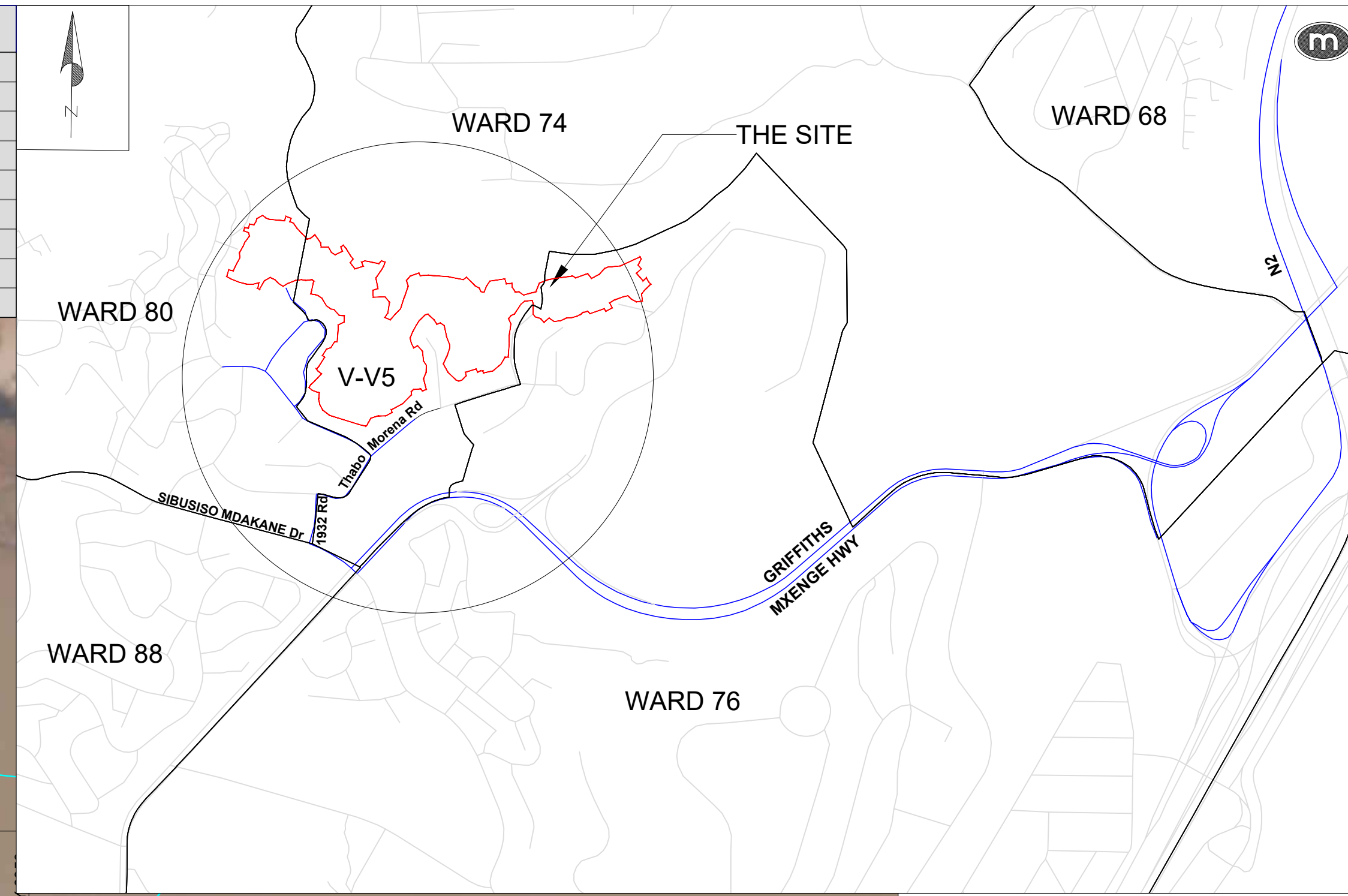


BENCH MARKS SYSTEM WG31			
CODE	Y	X	Z
VX02	7011.107	3315029.529	41.108
VX03	7355.532	3314827.888	63.420
VX04	7349.136	3314814.747	63.783
QS01	7247.988	3314864.424	42.216
QS07	7124.199	3314946.520	63.728
QS08	7117.231	3314981.167	71.971
BASE	6585.542	3315119.749	86.782
VX1	6554.551	3315102.881	90.048



ENGINEERING UNIT
DEVELOPMENT ENGINEERING

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

REDUCED PLAN USE SCALE BELOW

70mm ON ORIGINAL PLAN



FP1 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7280.3563	-3314885.4
CD1	-7268.7141	-3314871
CD2	-7264.5241	-3314879.4
CD3	-7263.0685	-3314882.4
CD4	-7262.3808	-3314888.1
CD5	-7261.0478	-3314894.2
CD6	-7261.2328	-3314900
CD7	-7258.0265	-3314906.8
CD8	-7260.0724	-3314910
CD9	-7268.2285	-3314911.3
CD10	-7275.9689	-3314913.5
CD11	-7277.7958	-3314916.4
CD12	-7272.272	-3314925.8
CD13	-7271.94	-3314929
CD14	-7274.651	-3314933
CD15	-7283.092	-3314933
CD16	-7297.771	-3314926.8
CD17	-7301.252	-3314929
END	-7315.7813	-3314954.2

FP4 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7170.764	-3314953.89
CD1	-7167.832	-3314941.89
CD2	-7167.61	-3314933.23
CD3	-7170.124	-3314924.86
CD4	-7170.415	-3314920.22
CD5	-7162.127	-3314911.53
CD6	-7152.886	-3314907.45
CD7	-7149.006	-3314899.34
END	-7141.62	-3314884.19

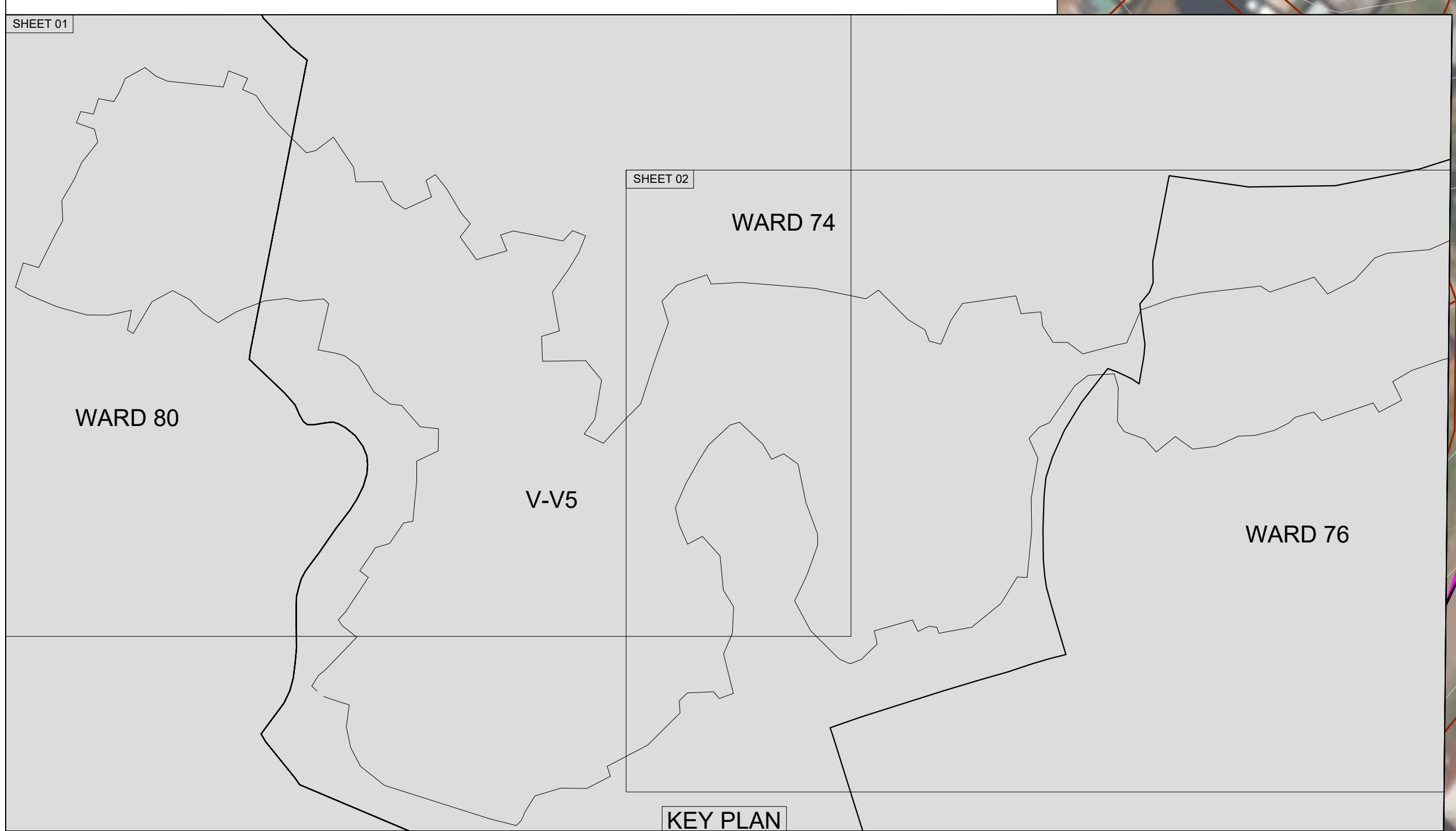
FP6 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7106.178	-3315130.06
CD1	-7098.676	-3315135.8
CD2	-7090.701	-3315137.56
CD3	-7086.771	-3315131.48
CD4	-7087.518	-3315130.95
CD5	-7081.287	-3315122.1
CD6	-7069.413	-3315127.99
CD7	-7053.592	-3315138.01
CD8	-7048.057	-3315131.97
CD9	-7040.504	-3315128.43
CD10	-7036.898	-3315135.92
CD11	-7036.113	-3315141.26
CD12	-7024.682	-3315148.34
CD13	-7017.995	-3315152.15
END	-7020.096	-3315162.37

FP2 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7208.62	-3314857.77
CD1	-7232.223	-3314859.3
CD2	-7246.554	-3314863.35
CD3	-7246.009	-3314870.53
CD4	-7258.972	-3314878.48
END	-7263.402	-3314881.91

FP5 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7100.58	-3315121.826
CD1	-7096.893	-3315117.645
CD2	-7092.29	-3315111.149
CD3	-7083.231	-3315091.419
CD4	-7083.317	-3315095.432
CD5	-7081.418	-3315032.732
CD6	-7085.752	-3315020.497
CD7	-7088.971	-3315018.92
CD8	-7098.765	-3315007.962
CD9	-7091.808	-3314996.263
CD10	-7108.934	-3314989.521
CD11	-7124.86	-3314958.918
CD12	-7138.093	-3314954.025
CD13	-7171.253	-3314954.853
CD14	-7179.082	-3314956.266
CD15	-7188.784	-3314957.061
CD16	-7200.015	-3314961.557
CD17	-7209.415	-3314968.082
CD18	-7210.854	-3314971.44
END	-7198.563	-3314981.627

FP7 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7027.279	-3315144.952
CD1	-7022.21	-3315136.055
CD2	-7020.139	-3315129.849
CD3	-7019.998	-3315114.142
CD4	-7015.043	-3315107.889
CD5	-7014.676	-3315103.889
CD6	-7016.664	-3315086.455
CD7	-7015.929	-3315079.089
CD8	-7015.757	-3315058.005
CD9	-7016.504	-3315044.376
CD10	-7012.023	-3315032.948
CD11	-7006.952	-3315026.826
CD12	-7008.913	-3315007.833
CD13	-7010.536	-3315004.747
END	-7009.326	-3314995.273

FP3 CO-ORDINATE TABLE		
POINTS	Y	X
0	-7202.139	-3314963.44
CD1	-7230.244	-3314935.36
CD2	-7231.525	-3314931.03
CD3	-7226.781	-3314921.46
CD4	-7223.553	-3314911.63
CD5	-7221.365	-3314897.8
CD6	-7204.321	-3314890.28
CD7	-7203.363	-3314887.35
CD8	-7210.599	-3314880.41
CD9	-7208.62	-3314857.77
CD10	-7201.998	-3314857.29
CD11	-7199.024	-3314850.27
CD12	-7198.306	-3314835.51
CD13	-7195.082	-3314830.85
END	-7188.961	-3314828.21



- GENERAL NOTES
 - NO SCALING-OFF IS PERMITTED. ONLY WRITTEN DIMENSIONS MAY BE DEEMED CORRECT. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
 - ALL WORK TO COMPLY WITH THE LATEST EDITION OF THE SANS 1200 SPECIFICATIONS.
 - ALL CUT SLOPES TO BE SHAPED TO 1:1.5 AND FILL SLOPES TO 1:2 UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
 - FILL MATERIAL TO BE COMPACTED IN LAYERS OF MAX. 150mm TO 80% MOD. AASHTO. STEPS TO BE FORMED PRIOR TO FILLING. HEIGHT OF STEPS TO BE APPROXIMATELY 300mm LIFTS.
 - COMPACTION TESTING TO BE DONE AS FOLLOWS:
 - 1 TEST PER LAYER FOR EACH 25m LENGTH OF FOOTPATH
 - BOLLARDS TO BE CONSTRUCTED ONLY WHEN INSTRUCTED BY THE ENGINEER.
 - WHERE THE COVER LEVELS OF THE EXISTING MANHOLES LOCATED AT THE ALIGNMENT OF NEW FOOTPATHS IS HIGHER THAN THE COVERED 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 SIKATOP-AMATEC 110 EC OR SIMILAR APPROVED.
 - THESE DESIGNS OR DRAWINGS ARE NOT TO BE SOLD AND ARE SUBJECT TO RECAL. REPRODUCTION OR COPIES ARE RESERVED SOLELY BY BVI CONSULTING ENGINEERS UNDER COPYRIGHT LAW. THESE DRAWINGS HAVE BEEN REVIEWED AND RECEIVED ON THE FOLLOWING CONDITIONS:
 - 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.

- CONCRETE
 - CONCRETE WORKS TO COMPLY WITH SANS 1200 SECTION G AND SANS 5010 PART 2.
 - THE FREQUENCY OF CONCRETE WORKS TESTING MUST BE DONE AS FOLLOWS:
 - AT LEAST ONE SET (3 NO. CUBES) OF SAMPLES FOR EVERY 50m³ OF CONCRETE PLACED.
 - AT LEAST ONE SET OF SAMPLES SHALL BE TAKEN FROM EACH DAY OF CASTING.
 - TESTING MUST BE CARRIED OUT IN ACCORDANCE TO SANS 5010 AND TESTED BY AN APPROVED LABORATORY. RESULTS TO BE SUBMITTED TO THE ENGINEER.
 - IF THE BASIS OF IMPORTANCE, WHERE DIRECTED BY THE ENGINEER, A SET OF SAMPLES MAY BE REQUESTED. UNLESS OTHERWISE ADVISED, NO SAMPLE SHALL BE TAKEN OF ANY CONCRETE UNITS AT LEAST 1m³ OF SUCH CONCRETE HAS BEEN MIXED AND DISCHARGED FOR THE FOOTPATHS.
 - CURING AND PROTECTION SHALL BE ACCORDING TO SANS 5010 8-1965, 8.8.
 - ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING.
 - CONCRETE POURING SHALL ONLY BE DONE UNDER THE APPROVAL OF THE SHUTTERING AND FIXING OF THE REINFORCEMENT FOR THE FOOTPATHS/RAMP.
 - MIN CONCRETE CURE STRENGTH AT 28 DAYS:

FOOTPATH	20 MPa
DRAIN	20 MPa
KERB BASE AND HAUNCH	20 MPa
STEP CONCRETE BASE	15 MPa
RETAINING WALL BASE	20 MPa

DESIGN CONSULTANT

BVI Consulting Engineers KwaZulu-Natal PTY (LTD)

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Revision	Date	Description
A	26-01-2024	ISSUED FOR TENDER

Acquisitions completed

Underground Services Checked

SERVICE	DATE	SIGNATURE
S.W. DRAINS		
SEWERS		
WATER MAINS		
G.P. CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		

Contract No. **3V-28529**

Project Title

PROVISION OF INCREMENTAL SERVICES TO V-V5

LEGEND

- PROPOSED FOOTPATH
- FIGURE 12 KERB
- INFORMAL SETTLEMENT BOUNDARY
- CONTROL POINTS
- CADASTRAL BOUNDARY
- ABLUTION FACILITIES
- EXISTING SURFACE ROAD
- EXISTING FOOTPATH
- PROPOSED RETAINING WALL
- EXISTING SEWER MANHOLE (EX SMH)
- EXISTING SEWER PIPE
- EXISTING STORMWATER MANHOLE (EX SWMH)
- EXISTING STORMWATER PIPE
- EXISTING HEADWALL
- STORMWATER PIPE
- STORMWATER MANHOLE
- 600mm CONCRETE DRAIN
- FUTURE WORKS
- RENO MATRESS

Drawing Title

FOOTPATH LAYOUT

Scales Reference

1:500

Checked	Date	Signature
KP		
Designed		
PT		
Drawn by		
MS		

Senior Manager: Development Engineering (South)

Deputy Head: Development Engineering

Head: Engineering

Drawing No. **49288**

Sheet 1 of 5 Sheets

ISSUED FOR TENDER PURPOSES