

**NOTES AND SPECIFICATIONS**

- GENERAL**
- 1 ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
  - 2 ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED).
  - 3 DO NOT SCALE FROM THESE DRAWINGS.
  - 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
  - 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTM DETAIL DRAWINGS.
  - 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE).
  - 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
  - 8 THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
  - 9 THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
  - 10 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

- ROADS:**
- 1 KERBING TO BE AS PER STANDARD DETAIL PLANS (WIDTH AND SECTION OF VOLUME 1 OF CONTRACT DOCUMENT).
  - 2 TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL, THIRD EDITION.
  - 3 ALL VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROAD SURFACE, WITH A MINIMUM CROSS FALL OF 3% (IF APPLICABLE).
- STORMWATER**
- 1 MINIMUM PIPE DIAMETER TO BE 450mm.
  - 2 MINIMUM FALL TO BE 1:150.
  - 3 PIPE BEDDING TO BE CLASS 8 UNLESS OTHERWISE SPECIFIED.
  - 4 ALL EXCAVATIONS AND BEDDING MUST BE PROTECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES.
  - 5 CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).

- CHANNEL IMPROVEMENT AREA
- NATURAL SPRUIT CHANNEL
- 1:100 YEAR FLOOD LINE
- 1:50 YEAR FLOOD LINE
- SHALLOW ATTENUATION INSIDE CHANNEL IMPROVEMENT
- SHALLOW ATTENUATION OUTSIDE CHANNEL IMPROVEMENT
- EXISTING POND/DAM TO BE KEPT
- RENO MATRESS
- 180mm CONCRETE PAVEMENT
- 60mm OBLONG BLOCKS
- 80mm INTERLOCKING BLOCKS
- 500 --- EXISTING SEWER PIPE
- EXISTING WATER PIPE
- 50 --- EXISTING STORM WATER PIPE
- NEW FENCE
- EXISTING FENCE TO BE MOVED AND REINSTATED
- BENCH MARKS

**AMENDMENTS**

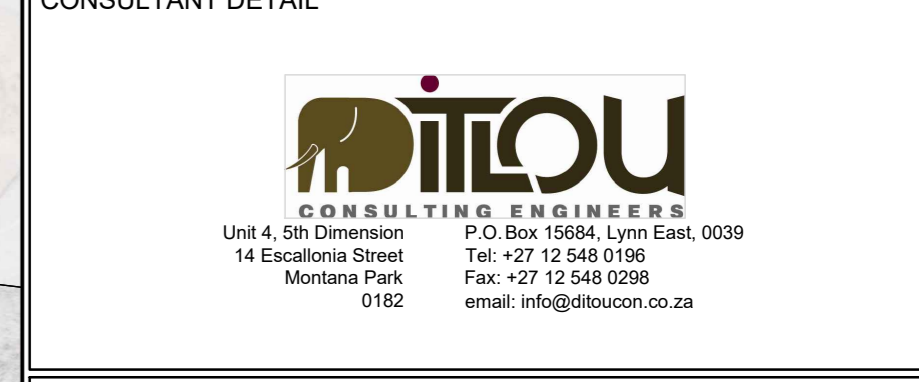
NO.	DATE	APPROVED	DESCRIPTION	PAGE
A	JUNE 2018		ISSUED FOR TENDER	
B	AUG 2018		ISSUED FOR APPROVAL	

**PROJECT STATUS**

DESIGNED BY M RAMONDIANE	CHECKED BY M RAMONDIANE
DESIGNED/CHECKED BY P.J. VAN RENSBURG	DETAILED/REVISIONS/TECHNICAL INFORMATION M RAMONDIANE D.J. CHALMERS

**CONSULTANT DETAIL**

PROJECT ENGINEER/CONSULTANT P.J. VAN RENSBURG	DATE 2017/07/22
INITIALS AND SURNAME P.J. VAN RENSBURG	SIGNATURE AND P. NO. [Signature]
INITIALS AND SURNAME P.J. VAN RENSBURG	DATE 2017/07/22
INITIALS AND SURNAME P.J. VAN RENSBURG	SIGNATURE AND P. NO. [Signature]



**CITY OF TSHWANE**  
ROADS AND TRANSPORT DEPARTMENT

M. Nene Phiso  
Acting STRATEGIC EXECUTIVE DIRECTOR

M. L. V. Kgagame-Phe  
EXECUTIVE DIRECTOR

DATE: AUG 2018 SCALE: 1:1500 SHEET NO: 1

**GENERAL LAYOUT PLAN**

DESCRIPTION OF PROJECT  
MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1

CONTRACT NO.: RFD01-2016/2018-TIDC18 PROJECT NO.: 1063K

DRAWING APPROVED BY EXECUTIVE DIRECTOR: [Signature]

DATE: AUG 2018 SCALE: 1:1500 SHEET NO: 1

**BENCH MARK POINTS**  
LO 29, WGS84 DATUM

POINT	Y	X	LEVEL
BM1	74653.028	2839584.059	1229.611
BM2	74628.702	2839370.970	1227.415
BM3	74317.641	2839329.184	1227.977
BM4	74299.369	2839140.163	1225.965
BM5	74290.866	2839028.287	1225.153
BM6	74350.942	2838876.608	1223.979
BM7	74417.621	2838960.782	1222.933
BM8	74495.159	2838499.331	1221.016
BM12	73933.689	2839046.505	1226.747

**POINT TABLE**  
LO 29, WGS84 DATUM

POINT	Y	X	LEVEL
S1	74 128.444	2 839 451.020	1229.193
S2	73 884.535	2 839 458.268	1228.960
S3	74 119.362	2 839 380.555	1228.607
S4	73 863.209	2 839 388.487	1228.419
S5	74 156.068	2 839 351.731	1227.795
S6	73 835.070	2 839 351.731	1227.865
S7	74 185.444	2 839 313.863	1227.653
S8	73 953.040	2 839 288.441	1227.821
S9	74 197.287	2 839 244.021	1227.097
S10	73 838.281	2 839 221.303	1227.201
S11	74 207.974	2 839 175.198	1226.010
S12	73 968.588	2 839 158.084	1226.769
S13	74 218.113	2 839 117.485	1225.606
S14	74 001.410	2 839 079.540	1225.912

**POINT TABLE**  
LO 29, WGS84 DATUM

POINT	Y	X	LEVEL
S15	74 233.284	2 839 006.720	1224.730
S16	74 033.356	2 839 001.350	1225.286
S17	74 260.751	2 838 939.338	1224.136
S18	74 060.774	2 838 936.427	1224.741
S19	74 316.828	2 838 872.251	1223.602
S20	74 056.628	2 838 872.471	1224.525
S21	74 330.404	2 838 780.491	1223.008
S22	74 091.386	2 838 802.178	1223.696
S23	74 321.648	2 838 731.278	1223.656
S24	74 102.638	2 838 731.278	1223.263
S25	74 332.817	2 838 645.883	1221.730
S26	74 094.089	2 838 670.561	1222.825
S27	74 320.708	2 838 658.147	1221.167
S28	74 083.006	2 838 592.264	1222.334

