

1200 GENERAL REQUIREMENTS AND PROVISIONS

Section	Item Description	Unit	Est. Qty.	Rate	Amount
COTO	<u>SECTION 1200</u>				
12.00	<u>GENERAL REQUIREMENTS AND PROVISIONS</u>				
12.01	Name boards				
	(a) Contract name board as per drwg	No	1,0		
12.02	Relocating and/or protecting of existing services				
	(a) Payment for the relocation, replacing and/or protecting of existing services	Prov Sum	1,0	R 30 000,00	R 30 000,00
	(b) Handling costs and profit in respect of B12.02 (a)	%	R 30 000,00		
12.03	Community Liaison Office (CLO)				
	(a) Remuneration of the CLO	Prov Sum	1,0	R 50 000,00	R 50 000,00
12.04	Project Steering Committee (PSC):				
	Payment of expenses/disbursements to members of the PSC	Prov Sum	1,0	R 24 500,00	R 24 500,00
	(b) Handling costs and profit in respect of B12.03 & B12,04	%	R 74 500,00		
12.07	CETA Accredited training courses for maintenance/OHS	Prov Sum	1,0	R 80 000,00	R 80 000,00
	(a) Handling costs and profit in respect of item 12.07	%	R 80 000,00		
	<u>SECTION 1200</u>				
	<u>GENERAL REQUIREMENTS AND PROVISIONS</u>				
Total Carried Forward To Summary					

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	<u>SECTION 1300</u>				
13.00	<u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
13,01	Contractor's general obligations				
	(a) Fixed obligations	Sum	1,0		
	(b) Value-related obligations	Sum	1,0		
	(c) Time-related obligations	Month	10,0		
	<u>SECTION 1300</u>				
	<u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
Total Carried Forward To Summary					

Ziqungwini to nqabeni Access Road -New
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1500 ACCOMMODATION OF TRAFFIC

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	<u>SECTION 1500</u>				
15.00	<u>ACCOMMODATION OF TRAFFIC</u>				
15.01	Accommodating traffic	km	4		
15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	402,0		
	(b) Portable STOP and GO-RY signs	Nil	Nil		
	(c) Delineators(DTG50J) (800mm x 200mm)	Nil	Nil		
	(i) Single	Nil	Nil		
	(ii) Mountable back to back	Nil	Nil		
	(d) Traffic cones	Nil	Nil		
	<u>SECTION 1500</u>				
	<u>ACCOMMODATION OF TRAFFIC</u>				
Total Carried Forward To Summary					

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Ziqungwini to nqabeni Access Road -New
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1600 OVERHAUL

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto 16.00	<u>SECTION 1600</u> <u>OVERHAUL</u>				
16.01	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m ³ -km	24 300,00		
	<u>SECTION 1600</u> <u>OVERHAUL</u>				
Total Carried Forward To Summary					

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Ziqungwini to nqabeni Access Road -New
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1700 CLEARING AND GRUBBING

Section	Item Description	Unit	Est. Qty.	Rate	Amount R
Colto	<u>SECTION 1700</u>				
17.00	<u>CLEARING AND GRUBBING</u>				
17.01	Clearing and grubbing	ha	4,8		
17.02	Reclearing of surfaces (on the written instructions of the Engineer only)	ha	0,2		
	<u>SECTION 1700</u>				
	<u>CLEARING AND GRUBBING</u>				
Total Carried Forward To Summary					

Ziqungwini to nqabeni Access Road -New
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2100 DRAINS

Section	Item Description	Unit	Est. Qty.	Rate	Amount R
Colto	SECTION 2100				
21.00	DRAINS				
21.01	Excavation for open drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m up to 1.5m	m ³	658,0		
	(ii) Exceeding 1.5m and up to 3.0m	m ³	-		
	(b) Extra over subitem 21.01 (a) excavation in hard material,irrespective of depth.	m ³	57,0		
21.05	Banks and Dykes	m ³	684,0		
21.16	Backfilling existing eroded side drains	m ³	300,0		
B21.01	Clearing and shaping side and mitre drains by road grader	m	5 230,4		
B21,08	Pipes in subsoil drainage systems				
	Geocompositepre-manufactured drainage system(Kay-tech fro drain)with flownet core				
	(i)Flodrain A2(30m x 75 mm)	m	1200		
	(ii) Geopipe(6m x100mm)M100 meshcore HPDE drainage pipe	m	1200		
	SECTION 2100				
	DRAINS				
Total Carried Forward To Summary					

#REF!

Ziqungwini to nqabeni Access Road -New
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2200 PREFABRICATED CULVERTS

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	SECTION 2200				
22.00	PREFABRICATED CULVERTS				
22.01	Excavation:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m up to 1.5m	m ³	450,0		
	(ii) Exceeding 1.5m and up to 3.0m	m ³	149,0		
	(b) Extra over subitem 22.01 (a) excavation in hard material,irrespective of depth.	m ³	79,6		
22.02	Backfilling:				
	(a) Using the excavated material	m ³	749,3		
	(b) Using imported selected material	m ³	153,2		
	(c) Extra over subitems 22.02 (a) and (b) for soil cement backfilling				
	(i) with 4% cement	m ³	Rate		
22.03	Concrete pipe culverts:				
	(a) On class C bedding:				
	(ii) 900mm diameter Class 100D	m	45,0		
	(iii) 1200 mm x 450 mm : Clas 100S(Portal culverts)	m	15,0		
22.07	Cast in-situ concrete and formwork				
	(a) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork, but including class U2 surface finish:				
	(i)25Mpa concrete	m ³	30		
	In floor slabs for portal or rectangular culverts, including formwork, joints and class U2 surface finish				
	Class 25/19 concrete	m ³	5		
	(c) Formwork for concrete under item 22.07 (a) Vertical Formwork for F1 surface finish 22.07(c) above (type of finish indicated):	m ²	20		
	Class F1 surface finish	m ²	70		
	Class F2 surface finish	m ²	70		
22.10	Steel reinforcement:				
	Welded steel fabric (Ref. 617)	kg	300		
22.17	Manholes, Catchpits, precast inlet and outlet structures				
	(a) Headwalls and Inlet Structures as per drwg				
	(ii) Construction of headwalls and Inlet Structures complete on	No	5,0		
	SECTION 2200				
	PREFABRICATED CULVERTS				
Total Carried Forward To Summary					

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3300 MASS EARTHWORKS

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	<u>SECTION 3300</u>				
33.00	<u>MASS EARTHWORKS</u>				
33.01	Cut and borrow to fill, including free-haul up to 0.5km				
	(a) Gravel material in compacted layer thickness of 150 mm and less:				
	(i) Compacted to 90% of modified AASHTO density	m ³	3 050,0		
	(c) Rockfill material	m ³	900,0		
33.03	Extra over item 33.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m ³	100,0		
	(b) Hard excavation	m ³	204,0		
	(c) Boulder excavation class A	m ³	1 200,0		
	(d) Boulder excavation class B	m ³	1 800,0		
33.04	Cut to spoil, including free-haul up to 1,0 km. Material obtained from:				
	(a) Soft excavation	m ³	450,0		
	(b) Intermediate excavation	m ³	252,0		
	(c) Hard excavation	m ³	254,0		
	(d) Boulder excavation class A	m ³	1 200,0		
	(e) Boulder excavation class B	m ³	1 800,0		
33.05	Removal of unsuitable material (including free-haul of 1.0 km):				
	(a) In layer thicknesses of 200 mm and less:				
	(i) Stable material	m ³	1 680,0		
	(ii) Unstable material	m ³	600,0		
33.06	Roadbed preparation and the compaction of material:				
	(a) Compaction to 93% of modified AASHTO density	m ³	1 125,0		
	Overhaul on material hauled in excess of 1,0 km for base material (ordinary overhaul)	m ³ -km	17 600,00		
	<u>SECTION 3300</u>				
	<u>MASS EARTHWORKS</u>				
Total Carried Forward To Summary					

3400 PAVEMENT LAYERS OF GRAVEL MATERIAL

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	SECTION 3400				
34.00	PAVEMENT LAYERS OF GRAVEL MATERIAL				
34.01	Pavement layers constructed from gravel obtained from borrow pits within a free haul distance of 1km:				
	(a) Gravel Subbase layer compacted to:				
	(i) 93% modified AASHTO density (150mm)	m ³	900,0		
	(b) Gravel base / wearing coarse layer compacted to:				
	(i) 95% modified AASHTO density (150mm)	m ³	2 700,0		
	SECTION 3400				
	PAVEMENT LAYERS OF GRAVEL MATERIAL				
Total Carried Forward To Summary					

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 Ziqungwini to nqabeni Access Road -New
 Section C2.2 Bill of Quantities

5200 GABIONS

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	<u>SECTION 5200</u>				
52.00	<u>GABIONS</u>				
52.01	Foundation trench excavation and backfilling:				
	(a) In all other classes of material	m ³	210,0		
52.02	Surface preparation for bedding of gabions	m ²	353,3		
52.03	Gabions				
	(a) Galvanized Gabion Boxes				
	(i) 1m X 1m X 1m	m ³	112,0		
	(c) Galvanized Reno-mattress with size: 60 X 80 mesh				
	(i) 6m X 1m X 0.5m	m ³	32,5		
	(i) 6m X 1m X 0.3m	m ³	13,0		
52.04	Filter fabric - Grade 3 (Kaymat U24 or similar)	m ²	422,4		
B52.03	Extra over item 52.03 (c) for cutting mattresses to suit	m	43,3		
	<u>SECTION 5200</u>				
	<u>GABIONS</u>				
Total Carried Forward To Summary					

5900 ANCILLARY ROADWORKS

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto 59.00	<u>SECTION 5900</u> <u>FINISHING THE ROAD AND ROAD RESERVE AND</u> <u>TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve : (a) Single carriageway road	km	2,9		
	<u>SECTION 5900</u> <u>FINISHING THE ROAD AND ROAD RESERVE AND</u> <u>TREATING OLD ROADS</u>				
Total Carried Forward To Summary					

6300 STEEL REINFORCING FOR STRUCTURES

Section	Item Description	Unit	Est. Qty.	Rate	Amount
Colto	<u>SECTION 5900</u>				
6300	STEEL REINFORCING FOR STRUCTURES				
6300	Steel reinforcement for: (a)Concrete Welded steel fabric mesh (ref 395)	kg	4 147,5		
	<u>SECTION 5900</u> <u>STEEL REINFORCING FOR STRUCTURES</u>				
Total Carried Forward To Summary					

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Section C2.2 Bill of Quantities

5900 ANCILLARY ROADWORKS

Section	Item Description	Unit	Qty	Rate	Amount
Colto	<u>SECTION 8100</u>				
81.00	<u>TESTING WORKMANSHIP AND MATERIALS</u>				
81.02	Other special test required by the Engineer	Prov Sum	1,0	R 30 000,00	R 30 000,00
	<u>SECTION 8100</u>				
	<u>TESTING WORKMANSHIP AND MATERIALS</u>				
Total Carried Forward To Summary					R 30 000,00

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 Ziqungwini to nqabeni Access Road -New
 Section C2.2 Bill of Quantities

9400 OCCUPATIONAL HEALTH AND SAFETY

Section	Item Description	Unit	Quantity	Rate	Amount
Colto 9400	SECTION 9400 OCCUPATIONAL HEALTH AND SAFETY				
94,01	Preparation of Contractor's site specific Health and Safety Plan	Lump sum	1		
94,02	Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations	Lump sum	1		
94,04	Review of OHS Plan for each assignment and other adjustments to ensure compliance for the assessment	Sum	1		
94,05	Provision of Personal Protective Equipment & Protective Clothing (PPE)				
	(a) Reflective vests	No	20		
	(b) Hard hats	No.	20		
	(c) Protective foot wear	No	20		
	(d) Earplugs	No	20		
	(e) Dust masks	No	20		
	(f) Gloves	No	20		
	(g) High visibility overalls to SARTSM Chapter 13 Level 3	No	20		
	(l) Hand sanitiser	Litres	5		
	(m) Cleaning detergents	Litres	5		
94,06	Provision of full time Construction Health & Safety Officer	Month	10		
94,07	Costs of medical certificates and Medical Surveillance				
	(a) Initial (baseline) medical examinations	No	20		
	(b) Periodic and exit examinations	No	20		
94,08	Induction Training	No	20		
94,10	Provision of First Aid Boxes	No	2		
94,11	Submission of the Health and Safety File	Lump sum	1		
94,12	Provision for Health and safety compliance as assigned by the Project Manager	Prov Sum	1	65 000,00	65 000,00
Total Carried Forward To Summary					

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Ziqungwini to ngabeni Access Road -New
Summary Section of Bill of Quantities

SUMMARY OF SECTIONS

SECTIONS	DESCRIPTIONS	AMOUNTS
1200	GENERAL REQUIREMENTS AND PROVISIONS	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1500	ACCOMMODATION OF TRAFFIC	
1600	OVERHAUL	
1700	CLEARING AND GRUBBING	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
3100	BORROW MATERIALS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
5100	PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION	
5200	GABIONS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
6200	FALSEWORK, FORMWORK TO CONCRETE FINISH	
6300	STEEL REINFORCING OF STRUCTURES	
6400	CONCRETE	
8100	TESTING WORKMANSHIP AND MATERIALS	
9400	OCCUPATIONAL HEALTH AND SAFETY	
	TOTAL OF SCHEDULE OF QUANTITIES	
	PROVISIONAL SUM FOR CONTINGENCIES (5% OF SUB-TOTAL A)	
	SUB-TOTAL B	
	VALUE ADDED TAX (15% OF SUB-TOTAL B)	
	TOTAL CARRIED FORWARD TO FORM OF OFFER AND ACCEPTANCE	