

174727_ROADSAND STORMWATER IN NEWTOWN

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
B12.05	<u>Training</u> (a) Accredited and approved training courses for selected local and other labourers including wages during training (b) Contractor's charge to allow for handling costs and profit in respect of sub item B12.05 (c)	Prov. Sum	1	30 000,00	30 000,00
		%			
B12.06	Contractor to allow in his rates to meet requirements regarding Environmental Specifications	Sum	1		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01	<u>The contractor's general obligations:</u>				
	(a) Fixed obligations	L. Sum	1		
	(b) Value-related obligations	L. Sum	1		
	(c) Time-related obligations	Month	5		
	<u>NOTE:</u>				
	<i>The combined total tendered for subitems (a), (b) & (c) shall not exceed 15% of the Tender Sum.</i>				
B13.02	Project Name Boards	No.	2		
B13.03	<u>Health and Safety</u>				
	(a) Fixed obligations for the preparation of risk assessments, safe work procedures, the project H&S file, the H&S plan and any other H & S matters tha the Contractor deems necessary	L. Sum	1		
	(b) Fixed obligations for completing and checking the Project H & S file and handing it over to the Client on completion of the Works	L. Sum	1		
	(c) Time related obligations for updating and amending the risk assessments, the safe work procedures, the project H & S file, the H&S plan and for full compliance with all H & S matters during the construction of the Works under the contract	Month	5		
TOTAL CARRIED FORWARD TO SUMMARY					

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NKANGALA DISTRICT MUNICIPALITY
PROJECT NUMBER: 174727
ROADS AND STORMWATER IN NEWTOWN

SECTION 1400
HOUSING, OFFICES AND LABORATORIES FOR
THE ENGINEER'S SITE PERSONNEL

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
B14.03	<u>(b) Prime-cost items and items paid for in a Lump Sum:</u>				
	(i) The provision of cellular telephones	No	1		
	(ii) Provisional sum for the costs of cellular calls and other charges	Prov Sum	1	10 000,00	10 000,00
	(iii) Handling costs and profit in respect of sub item B14.03(b)(ii) above	%			
B14.03	<u>(c) Items measured by area:</u>				
	(vii) Venetian blinds	m ²	4		
	(viii) Notice boards as specified	m ²	1		
B14.04	<u>Car ports:</u>				
	Car ports, as specified, at offices and laboratory buildings	No.	2		
B14.07	<u>Rented, hotel and other accommodation:</u>				
	(a) Provisional sum for providing rented housing, hotel or other accommodation as described in sub clause 1403(c)(ii)	Prov Sum	1	25 000,00	25 000,00
	(b) Handling costs & profit in respect of sub item B14.07(a)	%			
B14.08	<u>Services:</u>				
	The provision of water, electricity, low pressure gas, sewerage, septic tanks, sewage and rubbish removal, cleaning services, maintenance and repairs, all as specified in clause 1404, including the construction and maintenance of the access roads, footpaths, etc.				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	L Sum	1		
	(ii) Running costs	Month	5		
B14.10	Provision of photostat facilities	Month	5		
B14.11	Provision and erection of security fencing (including gate)	m	18		
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 1500
ACCOMMODATION OF TRAFFIC

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1500	ACCOMMODATION OF TRAFFIC				
B15.01	Accommodating traffic and maintaining temporary deviations	km	0,79		
B15.02	<u>Eartworks for temporary deviations:</u>				
	(a) Shaping of temporary deviations	km	0,79		
B15.03	<u>Temporary traffic control facilities</u>				
	(a) Flagmen	man-day	10		
	(b) Portable STOP and GO-RY signs	No.	2		
	(e) Road signs, R- and TR-series, 1 200 mm in diameter	No.	2		
	(f) Road signs, TW-series, 1 524 mm sides	No.	12		
	(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m²	4		
	(h) Delineators 800 mm x 200 mm sides:				
	(i) Single	No.	1		
	(ii) Mounted back to back	No.	1		
	(j) Traffic cones, 750 mm high	No.	2		
	(n) Provision of high visibility safety jackets & safety hats	No.	2		
B15.05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations	m³	19		
B15.06	Watering of temporary deviations	kL	108		
B15.07	<u>Blading by road grader of:</u>				
	(c) Existing gravel shoulders used as temporary deviations	km-pass	5		
B15.14	<u>Allow provisional sums for:</u>				
	(a) Repair of damaged temporary road signs and delineators	Prov Sum	1	10 000,00	10 000,00
	(b) Replacement of damaged temporary road signs and delineators	Prov Sum	1	10 000,00	10 000,00
TOTAL CARRIED FORWARD					

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ROADS AND STORMWATER IN NEWTOWN

SECTION 1500

ACCOMMODATION OF TRAFFIC

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
B15.16	<u>Provision of traffic safety equipment for the Engineer</u>				
	(a) Amber rotating beacon	No	1		
	(b) Magnetic "Construction Vehicle" sticker for vehicles with 100mm lettering	No	1		
	(c) Safety Jackets	No	2		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1700	CLEARING AND GRUBBING				
B17.01	<u>Clearing and grubbing of:</u>				
	(a) Normal areas:				
	(i) Within the road reserve	ha	0,7		
	(ii) In borrow pits	ha	0,3		
	(iii) Existing fill embankments with slopes > 1:4	ha	0,1		
17,02	<u>Removal and grubbing of large trees and tree stumps:</u>				
	(a) Girth exceeding 1 m up to and including 2 m	No.	0,5		
	(a) Girth exceeding 2 m up to and including 3 m	No.	-		Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 1800
DAY WORK AND HIRE OF CONSTRUCTION
EQUIPMENT

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1800	DAY WORK AND HIRE OF CONSTRUCTION EQUIPMENT				
B18.01	<u>Labourers:</u>				
	(i) Unskilled	hour	18		
	(ii) Semi-skilled	hour	9		
	(iii) Skilled	hour	5		
B18.02	Foreman	hour	5		
B18.03	<u>Tipper trucks</u>				
	(i) 3 - 5 ton	hour	5		
	(ii) 5, 1 - 10 ton	hour	5		
B18.04	Loader (0,5m³)	hour	5		
B18.05	Grader (CAT 140G or similar)	hour	5		
B18.06	LDV	hour	5		
B18.07	<u>Compaction Rollers</u>				
	(i) Vibrator roller	hour	5		
	(ii) Tamping roller	hour	5		
	(iii) Grid roller	hour	5		
B18.08	<u>Hand Controlled Compactors</u>				
	(i) Pedestrian roller (Bomag BW90)	hour	1		
	(ii) Vibratory plate	hour	1		
	(iii) Rammers	hour	1		
B18.09	Water truck (min 10 000litre)	hour	18		
B18.10	Dozer (D7 or similar)	hour	1		
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 2100**DRAINS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2100	DRAINS				
21,03	Excavation for subsoil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m and up to 1,5 m	m ³	20		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	20		
	(b) Extra over subitem 21.03(a) for excavation in hard material irrespective of depth	m ³	12		
21,04	Impermeable backfilling to subsoil drainage systems	m ³	28		
21,06	Natural permeable material in subsoil drainage systems (crushed stone):				
	Crushed stone obtained from commercial Source				
	(2) Coarse grade 19 mm	m ³	12		
21,08	Pipes in subsoil drainage systems:				
	(c) High density type polyethylene pressure pypes and fitting complete with couplings				
	(1) 110 mm diameter Perforated pipe	m	100		
	(2) Kaytech Grade A2 Geotextile (or similar approved)	m ²	10		
21,12	Concrete outlet structures, manhole boxes junction boxes and cleanign eyes for subsoil drainage systems:				
	(a) Outlet structures	No	1		
	(b) Junction boxes	No	1		
	(d) Cleaning eyes	No	1		
21,13	Concrete caps for subsoil drain pipes	No	1		
21.15	Overhaul for material hauled in excess of 1,0 km km free-haul (normal overhaul)	m ³ -km	41		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2200	PREFABRICATED CULVERTS				
22.01	<u>Excavation</u>				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	783		
	(ii) Exceeding 1,5 m and up to 3,0m	m ³	2094		
	(iii) Exceeding 3.0m and up to 4,5m	m ³	34		
	(b) Extra over sub-item 22.01(a) for excavation in hard material, irrespective of depth	m ³	582		
	(c) Extra over sub item B22.01(a) for excavation by hand using hand tool	m ³	116		
22.02	<u>Backfilling</u>				
	(a) Using the excavated material	m ³	1090		
	(b) Using imported selected material	m ³	763		
	(c) Extra over sub-items 22.02(a) and (b) for soil cement backfilling with 5% cement	m ³	38		
22.03	<u>Concrete pipe culverts:</u>				
	(b) On class B bedding				
	(i) 600mm dia. Type 50D	m	805		
	(ii) 750mm dia. Type 50D	m	67		
	(iii) 900mm dia. Type 50D	m	62		
	(iii) 1050mm dia. Type 50D	m	25		
	(C) On class B bedding				
	(i) 600mm dia. Type 100D	m	70		
	(ii) 750mm dia. Type 100D	m	9		
22.07	<u>Cast in situ concrete and formwork</u>				
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchors blocks, excluding formwork but including class U2 surface finish (Class 25/19 concrete)	m ³	27		
	(d) Formwork of concrete under sub-item 22.07(c) above				
	(i) Type F1 finish	m ²	171		
22.10	<u>Steel reinforcement</u>				
	(c) Welded steel fabric (Ref 1.93)	kg	1155		
TOTAL CARRIED FORWARD					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
B22.17	Manholes, catchpits, precast inlet and outlet structures complete:				
	(f) Kerb Inlets (as per detail drawings)				
	(i) Depth range of 0.0m to 1.0m	No	1		
	(ii) Depth range of 1.0m to 2.0m	No	13		
	(iii) Depth range of 2.0m to 3.0m	No	1		
	(g) Junction Box (as per detail drawings)				
	(i) Depth range of 1.0m to 2.0m	No	5		
	(ii) Depth range of 2.0m to 3.0m	No	4		
	(i) Stormwater outlets (as per detail drawings)				
	(i) Depth range of 0.0m to 1.0m	No	2		
B22.29	Removing existing pipe culvert and cart away to approved dumping site, all haul included	m	5		
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 2300
CONCRETE KERBING, CONCRETE CHANNELING,
CHUTES AND DOWN PIPES, AND CONCRETE LININGS
FOR OPEN DRAINS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2300	<u>CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWN PIPES, AND CONCRETE LININGS FOR OPEN DRAINS</u>				
23.01	<u>Concrete kerbing:</u>				
	(a) Prefabricated mountable kerb, SABS 927 fig 8c, as shown on the detailed drawings	m	1514		
	(b) 250 mm x 150 mm cast in situ class 30/19 concrete edge beam, as shown on the detailed drawings	m	-		Rate Only
	(c) 300 mm x 150 mm cast in situ class 25/19 concrete edge beam, as shown on the detailed drawings LE-068-2011/08	m	-		Rate Only
23.02	<u>Concrete kerbing-channelling combination:</u>				
	(a) Prefabricated battered kerb, SABS 927 fig 8c, with 250 x 100 mm cast in situ class 30/19 concrete channel, as shown on the detailed drawings	m	-		Rate Only
	(b) Cast in situ class 25/19 Type A concrete side drain as shown on the detailed drawings	m	-		Rate Only
23.04	(a) Concrete causeways using 30/19 concrete as per typical drawing	m ³	-		Rate Only
	(b) Concrete property access slabs using 30/19 concrete as per typical drawing	m ³	-		Rate Only
	(c) Concrete drift using 30/19 concrete as per typical drawing	m ³	-		Rate Only
23.05	<u>Inlet, outlet, transition and similar structures (typical designs):</u>				
	(b) Transition, mountable kerb, SABS 927 fig 8c to stormwater drain or edge beam, class 25/19 concrete, complete with joints as shown on the detailed drawings	No.	-		Rate Only
23.07	<u>Trimming of excavations for concrete-lined open drains:</u>				
	(a) In soft material	m ²	-		Rate Only
	(b) In hard material	m ²	-		Rate Only
23.08	<u>Concrete lining for open drains:</u>				
	(a) Cast in situ class 30/19 concrete lining in drains across road as shown on the detailed drawings	m ³	-		Rate Only
	(b) Class U2 surface finish to cast in situ concrete in across road as shown on the detailed drawings	m ²	-		Rate Only
TOTAL CARRIED FORWARD					

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SECTION 2300
CONCRETE KERBING, CONCRETE CHANNELING,
CHUTES AND DOWN PIPES, AND CONCRETE LININGS
FOR OPEN DRAINS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
23.09	<u>Formwork to cast in situ concrete lining for open drains (class F2 surface finish):</u>				
	(b) To sides with formwork on both internal and external faces (each face measured)	m ²	-		Rate Only
	(c) To ends of slabs	m ²	-		Rate Only
23.10	<u>Sealed joints in concrete linings of open drains</u>				
	(i) 125 by 10 mm "Flexcell" or Similar	m			Rate Only
23.12	<u>Steel reinforcement:</u>				
	(a) Mild steel bars	t	-		Rate Only
	(b) (i) High-tensile steel bars Y16	t			Rate Only
	(ii) High-tensile steel bars Y20	t	-		Rate Only
	(c) Mesh Ref 617	kg	-		Rate Only
23.13	Polyethylene Sheeting (0.15mm thick), for concrete lined open drains	m ²	-		Rate Only
23.14	Cutting bituminous surfacing and pavement layers for concrete kerbing, channelling or concrete-lined drains	m	-		Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3100	BORROW MATERIALS				
31.01	Excess overburden				
	(a) Depth up to and including 0.5m	m ³	1604		
31.03	<u>Finishing-off borrow areas in:</u>				
	(a) Hard material	ha	0,09		
	(b) Soft material	ha	0,09		
B31.04	<u>Compensation to landowners</u>				
	(a) Prime cost sum for compensation to land owners	Prov Sum	1	20 000,00	20 000,00
	(b) Handling cost and profit in respect of sub-item B31.04(a) above	%			
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3300	MASS EARTHWORKS				
33.01	<u>Cut and borrow to fill, including free-haul up to 0,5km:</u> (a) Material in compacted layer thicknesses of 150mm and less: (i) Compacted to 93% of mod. AASHTO density	m ³	1 321		
33.03	<u>Extra over item 33.01 for excavating and breaking down material in:</u> (a) Intermediate excavation (b) Hard excavation (c) Boulder excavation class A (d) Boulder excavation class B	m ³ m ³ m ³ m ³	264 16 11 8		
33.04	<u>Cut to spoil, including free-haul up to 0,5 km.</u> Material obtained from: (a) Soft excavation (b) Intermediate excavation (c) Hard excavation (d) Boulder excavation class A (e) Boulder excavation class B	m ³ m ³ m ³ m ³ m ³	1 740 348 522 23 23		
33.06	<u>Variations in the number of roller passes</u> <u>(applicable to subsubitems 33.01(a)(iii) and 33.01 (b)(iii)</u> <u>and item 33.11):</u> (a) Vibratory rollers	m ² -pass	-		Rate Only
33.09	Material bladed to windrow	m ³	823		
33.10	<u>Roadbed preparation and the compaction of material:</u> (b) Compaction to 93% of mod. AASHTO density	m ³	850		
TOTAL CARRIED FORWARD					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD					
33.11	<u>Three-roller-passes compaction:</u>				
	(a) Grid roller	m ²	850		
33.12	<u>In situ treatment of roadbed:</u>				
	(a) In situ treatment by ripping (Only by Instruction of the Engineer)	m ³	823		
33.13	<u>Finishing-off cut and fill slopes, medians and interchange areas:</u>				
	(a) Cut slopes	m ²	181		
	(b) Fill slopes	m ²	1 391		
33/32.06	Stockpiling of material	m ³	685		
33/1600	OVERHAUL				
33/16.02	Overhaul of material in excess of 1,0km (ordinary overhaul)	m ³ -km	3312		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL				
34.01	<u>Pavement layers constructed from gravel taken from cut or borrow including free-haul up to 1,0km:</u>				
	(d) Gravel subbase (chemically stabilized material) (C3 quality material) compacted to:				
	(i) 95% of Modified AASHTO density (150mm thickness)	m ³	823		
	(f) Base Course (Blended Mixture 40% Slag + 60% in-Situ) compacted to:				
	(i) 98% of modified AASHTO density (150mm thickness)	m ³	781		
	(g) Gravel shoulder compacted to:				
	(i) 90% of Modified AASHTO density (150mm thickness)	m ³	227		
34.02	<u>Extra over item 34.01 for excavation of material in:</u>				
	(a) Intermediate excavation	m ³	183		
	(b) Hard excavation	m ³	92		
	Import and place material from commercial Sources				
	a) 150mm to 200mm Rock fill	m ³	47		
	Slag Material	m ³	642		
TOTAL CARRIED FORWARD					

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SECTION 3400

PAVEMENT LAYERS OF GRAVEL MATERIAL

BROUGHT FORWARD					
34/1600	OVERHAUL				
34/16.02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m ³ -km	1 831		
34/32.04	Removal of oversize pavement material	m ³	-		Rate Only
34/32.05	Additional normal grid rolling	m ³	-		Rate Only
34/3500	STABILIZATION				
34/B35.01	Chemical stabilization extra over unstabilized compacted layers:				
	(i) Base layer 150mm	m ³	-		Rate Only
	(ii) Sub-base layer 150mm	m ³	823		
	(iii) Slag Material 300mm	m ³	642		
34/35.02	Chemical stabilizing agent				
	(a) Ordinary portland cement (CEM II A-L 32,5N)	t	28		
34/35.04	Provision and application of water for curing	kL	631		
34/35.05	Curing by covering with the subsequent layer	m ²	-		Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 4100

PRIME COAT

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4100	PRIME COAT				
41,01	Asphalt surfacing 25mm thick using B8 road grade bitumen (80/100 penetration grade bitumen)				
	(a) MC30 prime (@ 0,8 l/m ²)	litre	5202		
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 4200

ASPHALT BASE AND SURFACING

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4200	ASPHALT BASE AND SURFACING				
42.02	Asphalt surfacing using 60/70 penetration grade bitumen:				
	(a) Continuously graded, medium grade	m ²	4387		
42.04	Tack coat of 30% stable-grade emulsion	litre	5202		
42.05	Speed humps complete with layer works and paving surface	No	4		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5200	GABIONS				
52.01	<u>Foundation trench excavation and backfilling:</u>				
	(b) In all other classes of material	m ³			Rate Only
52.02	Surface preparation for bedding the gabions	m ²			Rate Only
52.03	<u>Gabions:</u>				
	(c) Galvanized gabion mattresses, 2m x 2m x 0.23m deep with 80mm x 100mm mesh and diaphragms at 1,0m centres and 2,5mm dia mesh wire	m ³			Rate Only
52.04	Filter fabric, Kaymat U24 or approved equivalent	m ²			Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					Rate Only

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SECTION 5100
PITCHING, STONEWORK AND PROTECTION
AGAINST EROSION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
51,01	Stone pitching:				
	(b) Grouted stone pitching	m ²	-		Rate Only
51,02	(a) Grouted stone lining for open drains				
	(1) 1.5 m grouted stone side drain 150mm thick	m	-		Rate Only
51,03	Grouted stone pitching for a V-drain outlets (Downchute) as per typical drawing)	No.	-		Rate Only
51,05	Concrete edge beams				
	(a) Class 25/19	m ³	-		Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					0,00

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SECTION 5600

ROAD SIGNS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5600	ROAD SIGNS				
56,01	Road sign boards sign faces with painted or coloured background. Symbols, lettering and borders in engineering-grade retro-reflective material, where the sign board is constructed from: (c) Sheet steel (chromadek 1,6 mm thick) (2) Area exceeding 2 m ² up to 10 m ² (d) Sheet steel (chromadek 1,6 mm thick) (1) Octagonal (b) 610 mm (2) Triangular (a) 914 mm (3) Round (a) 610 mm	m ²	1,22		
56,02	Extra over item 56.01 for using (a) Background of retro-reflective material of - (1) Engineering grade (b) Lettering, symbols and borders or retro-reflective material of (1) High intensity grade	m	16		
56,03	Road sign supports: (Overhead road sign structures excluded) (b) Steel tubing	t	1,50		
56,05	Excavatin and backfilling for road sign supports (not applicable to kilometer posts)	m ³	1,35		
56,06	Extra over item 56.05 for cement treated soil backfill	m ³	1,35		
56.10	Class 15/19 concrete backfill in excavations for road sign footings	m ³	7		
TOTAL CARRIED FORWARD					

BROUGHT FORWARD					
B56.11	<u>Danger plates at culverts/structures/speedhumps</u> (a) Type A at stormwater culverts (size indicated), including 110 diameter supports (W401) (i) 150 mm x 600 mm	number	22		
TOTAL CARRIED FORWARD TO SUMMARY					

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SECTION 5700
ROAD MARKINGS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5700	ROAD MARKINGS				
57,02	Retro-reflective road-marking paint:				
	(a) White lines (broken or unbroken):				
	(ii) 150 mm wide	km	0,79		
	(b) Yellow lines (broken or unbroken):				
	(ii) 150 mm wide	km	0,4		
	(d) White lettering and symbols	m ²	58		
	(e) Yellow lettering and symbols	m ²	11,6		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m ²	2,3		
57,04	<u>Variations in rate of application:</u>				
	(a) White paint	litre			Rate Only
	(b) Yellow paint	litre			Rate Only
	(d) Retro-reflective beads	kg			Rate Only
57,06	Setting out and premarking the lines (excluding traffic-island markings, lettering and symbols)	km	0,79		
57,07	Re-establishing the painting unit at the end of maintenance period	L. Sum	1		
B57.11	Referencing of road markings	km	1		
57/ 56.01	Provisional amount for the provision and erection of road signs complete	Prov Sum	1	50 000,00	50 000,00
TOTAL CARRIED FORWARD TO SUMMARY					

NKANGALA DISTRICT MUNICIPALITY
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SECTION 5900
FINISHING THE ROAD AND ROAD RESERVE
AND TREATING OLD ROADS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5900	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	<u>Finishing the road and road reserve:</u>				
	(b) Single carriageway road	m	794		
59.02	Treatment of old roads and temporary deviations	m	18		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8100	TESTING MATERIALS AND WORKMANSHIP				
81,02	Other special tests requested by the engineer:				
	(a) Cost of testing	PC Sum	1	75 000,00	75 000,00
	(b) Handling cost and profit in respect of Sub-item B81.02(a) above	%			
TOTAL CARRIED FORWARD TO SUMMARY					

NKANGALA DISTRICT MUNICIPALITY
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SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT
1200	GENERAL REQUIREMENTS AND PROVISIONS	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
1800	DAY WORK AND HIRE OF CONSTRUCTION EQUIPMENT	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWN PIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3100	BORROW MATERIALS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
4100	PRIME COAT	
4200	ASPHALT BASE AND SURFACING	
5100	PITCHING, STONework AND PROTECTION AGAINST EROSION	
5200	GABIONS	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
8100	TESTING MATERIALS AND WORKMANSHIP	
TOTAL OF SCHEDULE OF QUANTITIES (SUB TOTAL A)		

**NKANGALA DISTRICT MUNICIPALITY
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ROADS AND STORMWATER IN NEWTOWN**

CALCULATION OF TENDER SUM

DESCRIPTION	TOTAL
SCHEDULE A ROADWORKS	
TOTAL OF SCHEDULE OF QUANTITIES	
<u>CONTINGENCIES</u> The sum provided here is under the sole control of the Employer and may be deducted in whole or in part. The tenderer shall add 10% of the total of schedule of quantities for contingencies.	
RISE AND FALL ON SPECIAL MATERIALS The tenderer shall allow an amount of 5% of the total of schedule of quantities	
SUBTOTAL	
<u>VALUE ADDED TAX (VAT)</u> The tenderer shall add 15% of the subtotal for VAT	
TENDER SUM CARRIED TO FORM OF TENDER	