

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ANCILLARY ROAD WORKS (ARW)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
1	ARW 1	<u>GUARD RAILS [SABS 1350]</u>				
	ARW 1.1	Supply and Deliver Armco Barriers or equal and approved (Includes end wings, spacer blocks and reflective plates)	m	1		
2	ARW2	<u>CLEARVIEW FENCING PANEL AND FIXTURES SHALL BE GALVANIZED</u>				
		Supply and deliver and Install				
		<u>Height = 1.8 metres</u>				
2.1	ARW2.1	Panel L = 2,4m W - 85mm Tapering to 45mm with Locking recess mechanism	m	1		
2.2	ARW2.2	<u>Height= 1.2 metres</u> metresPost L = 2,4m W = 85mm Tapering to 45mm with Locking recess mechanism.	m	1		
3	ARW 3	<u>GABION BOXES AND MATTRESSES (SANS APPROVED)</u>				
		Supply and deliver and install				
3.1	ARW 3.1	<u>Gabion Mattresses (Standard RSH size = 60 x 80 m Galvanized)</u> <u>Thickness = 2,2 mm</u>				
3.1.1	ARW 3.1.1	3m x 2mx 0,23m	Each	1		
3.1.2	ARW 3.1.2	4m x 2m x 0,23m	Each	1		
3.1.3	ARW 3.1.3	4m x 2m x 0,23m	Each	1		
3.2	ARW 3.2	<u>Gabion Boxes (Standard Mesh size 60 x 80mm</u> <u>Galvanized Thickness = 2,2 mm)</u>				
3.2.1	ARW 3.2.1	2m x 1m x 1m	Each	1		
3.2.2	ARW 3.2.2	1.5m x 1m x 1m	Each	1		
3.2.3	ARW 3.2.3	2m x 1m x 0.5m	Each	1		
TOTAL CARRIED FOWARD						

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		CRUSHED STONE, DUST,SAND PRODUCTS (CSP)			MUNICIPAL RATES	
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (RANDS)	TOTAL (RANDS)
TOTAL BROUGHT FOWARD						
4	CSP 1	<u>CRUSHED STONE</u>				
4.1	CSP 1.1	Crusher Run (TRH 14)	tonne	1		
4.2	CSP 1.2	<u>Crusher Dust (SABS 197)</u>				
		Crusher Dust (SABS 197 TPA Grit (medium)	tonne	1		
		Crusher dust fine Sand 2.75mm	tonne	1		
4.3	CSP 1.3	<u>Concrete Stone (SANS 1083)</u>				
		5mm	tonne	1		
		6,7mm	tonne	1		
		7,1mm	tonne	1		
		10mm	tonne	1		
		14mm	tonne	1		
		20mm	tonne	1		
		28mm	tonne	1		
		37,5mm	tonne	1		
		50mm	tonne	1		
		75mm	tonne	1		
4.4	CSP 1.4	Gabions stones 100mm-300mm for Gabion Works	tonne	1		
4.5	CSP 1.5	<u>SAND</u>				
		(a) Building sand	tonne	1		
		(b) Plastering sand	tonne	1		
		(c) Filling	tonne	1		
		(d) Topsoil	tonne	1		
TOTAL CARRIED FORWARD						

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		SEGMENTED PAVING AND BRICKS (PAV)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
5	PAV1.1	Supply and deliver the following paving and bricks				
5.1	PAV 1.1.1	Bevels				
5.1.1		Grey	No.	1		
5.2	PAV 1.1.2	Grey B.C. Normal				
5.2.1		60 mm	No.	1		
5.2.2		80 mm	No.	1		
5.3	PAV 1.1.3	Cement bricks				
5.3.1		200 x 100 x 70 mmMinimum strength = 10MPa Palettes)	Per 1000	1		
SECTION		PREMIXED CONCRETE (PMC)				
6	PMC1	PREMIXED CONCRETE AS FOLLOWS:				
6.1	PMC 1.1	Supply and deliver the following classes of premixed concrete:				
		(a) Class 25/19	m ³	1		
		TOTAL CARRIED FOWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		BITUMINOUS PRODUCTS (AP)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
15		Supply and deliver the bituminous products:				
15.1	AP1	Continuously Graded medium asphalt (Hot Mix)Base Rate.....	tonne	1		
15.2	AP2	Continuously Graded medium asphalt (Cold Mix)Base Rate.....	25kg	1		
15.3	AP 3	Anionic Stable mix 60 (200lt)	Drum	1		
15.4	AP 4	Tack coat (200lt)	Drum	1		
15.5	AP 5	Colseal or equivalent (200lt)	Drum	1		
15.6	AP 6	Colprime or equivalent (200lt)	Drum	1		
15.7	AP7	Colrub or equivalent (200lt)	Drum	1		
15.8	AP8	Jet pave Emulsion (200lt)	Drum	1		
15.9	AP9	Road broom patch product Standard size: 13,2 mm aggregate 750mm x 1000 mm	Per Sheet	1		
15.10	AP10	TREATMENT OF AN EXISTING SURFACE Slurry seal:(a) Tack coat using 30% bitumen emulsion (60/70pen 240-260l/m3	litre	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL							
BILL OF QUANTITIES							
SECTION		BITUMINOUS PRODUCTS (AP)					
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES		
					RATE (RANDS)	TOTAL (RANDS)	
TOTAL BROUGHT FORWARD							
15.11	AP11	TREATMENT OF AN EXISTING SURFACE Slurry seal: (b) Slurry applied by hand	m ²	1			
15.12	AP12	TREATMENT OF AN EXISTING SURFACE Slurry seal: (c) Slurry applied by spreader box Repairing edge breaks in surfacing	m ³	1			
15.13	AP13	CRACK SEAL Applying bituminous binder for sealing cracks (d) Hot bitumen binder	tonne	1			
15.14	4400	<u>SINGLE SEALS</u> Single seals using bidder variations:		1			
15.15.1	44.01	(c) 13.2mm bitumen rubber	m ²	1			
		(d) 9.5mm bitumen rubber	m ²	1			
15.15	4400	<u>SINGLE SEALS</u> Single seals using:Aggregate variations:					
15.15.2	44.03	(c) 9.5mm bitumen aggregates	m ²	1			
	44.04	(d) 13.2mm bitumen aggregates	m ²	1			
15.16	45/B42.21	Rumble strips constructed with continuously graded medium asphalt and penetration grade bitumen	tonne	1			
15.17	39,01	Sawing asphalt or cemented pavement layers for patching (a)Sawing asphalt to an average depth(i) Not exceeding 50mm	m ²	1			
TOTAL CARRIED FORWARD							

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		PRECAST CONCRETE PRODUCTS (PCP)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
7	PCP1	PRECAST CONCRETE PIPES AND RECTENGULAR CULVERTS Supply and deliver the following precast culverts				
7.1	PCP1.1	<u>Class 50 D CONCRETE PIPES</u> 450mm diameter 600mm diameter 900mm diameter	No. No. No.	1 1 1		
7.2	PCP1.2	<u>Class 100 D CONCRETE PIPES</u> 450mm diameter 600mm diameter 900mm diameter	No. No. No.	1 1 1		
8	PCP1.3	<u>PORTAL SECTION</u> a) 600x 450x1220 mm Class 200 (SANS 986) b) 600 x 600x1220 mm Class 200 (SANS 986) c) 750 x600x1220 mm Class 175 S (SANS 986) d) 750X750 x 1220mm Class 175 S (SANS 986) e) 900X450x1220 mm Class 175 S (SANS 986) f) 900X600x1220 mm Class 175 S (SANS 986) g) 900 x 900x1220 mm Class 175 S (SANS 986) h)1200x1200x1200 mm Class 150 S (SANS 986) f)1800x1200x1200 mm Class 75 S (SANS 986) i) 1800x1800x1200 mm Class 75 S (SANS 986)	No. No. No. No. No. No. No. No. No. No.	1 1 1 1 1 1 1 1 1 1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		PRECAST CONCRETE PRODUCTS (PCP)			MUNICIPAL RATES	
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (RANDS)	TOTAL (RANDS)
TOTAL BROUGHT FORWARD						
9	PCP 2	KERBS				
9.1	PCP2.1	E 1 (1m)	Each	1		
9.2	PCP2.2	E 1 (330mm)	Each	1		
9.3	PCP2.3	MK10 (1m)	Each	1		
9.4	PCP2.4	MK10 (330mm)	Each	1		
9.5	PCP2.5	BK 1 (1m)	Each	1		
9.6	PCP2.6	BK 1 (330mm)	Each	1		
9.7	PCP2.8	C 1 (330mm)	Each	1		
9.8	PCP2.9	CK 5 (1m)	Each	1		
9.9	PCP2.10	CK 5 (330mm)	Each	1		
9.10	PCP2.11	Inlet Kerb 1m unit	Each	1		
9.11	PCP2.12	Inlet Kerb 2m unit	Each	1		
10	PCP 3	CATCH PIT COVERS				
		Supply and deliver the following catchpit covers				
10.1	P3.1	Catch pit cover 1750 x 1200 x 100	No.	1		
10.2	P3.2	Catch pit cover 910 x 610 x 80	No.	1		
10.3	P3.3	POLYMER CONCRETE COMBINATION:				
		a) Single Cover 1000x625x115 mm (SANS 1882)	No.	1		
		b) Double Cover 1000x525x250 mm (SANS 1882)	No.	1		
		c) Tripple Cover 1200x524x250 mm (SANS 1882)	No.	1		
		Safety Barriers				
		Top = 150 mm				
		New Jersey Barrier 3000				
11	PCP 5	W (Bottom) = 600mm	No.	1		
		H = 800 mm				
		L = 3000 mm				
		CONNECTING PLATES AND TWO M24 BOLTS INCLUDED				
12	PCP 6	CEMENT				
12.1	PCP 6.1	Ordinary cement 50kg 32.5 N on pallets	Each	1		
13	PCP 7	SLABS				
13.1	PCP7.1	Paving Slabs:				
		(a) 450 x 450 x 50mm	Each	1		
		(b) 500 x 500 x 50mm	Each	1		
13.2	PCP7.2	Heavy Duty Cover Slabs-Reinforced Slab				
		(a) 600 x 600 x 75mm	Each	1		
		(b) 1000 x 1000 x 75mm	Each	1		
TOTAL CARRIED FORWARD						

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		PRECAST CONCRETE PRODUCTS (PCP)			MUNICIPAL RATES	
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (RANDS)	TOTAL (RANDS)
14	PCP 8	MANHOLES				
14.1	PCP 8.1	MANHOLES-1250 X 1000(WITH STEPS)	Each	1		
14.2	PCP 8.2	MANHOLES-1250 X 500(WITH STEPS)	Each	1		
14.3	PCP 8.3	H/D COVER SLAB(1250 X 560)W/O INSERT	Each	1		
14.4	PCP 8.4	REDUCER SLABS(1250 X 750)	Each	1		
14.5	PCP 8.5	FRAMES(W/O INSERT)	Each	1		
14.6	PCP 8.6	SPACERS	Each	1		
14.7	PCP 8.7	H/D COVER SLAB (1500 X 560) WITHOUT INSERT	Each	1		
14.8	PCP 8.8	H/D LID(560)	Each	1		
TOTAL CARRIED FORWARD						

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		FANCING (FE)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
16	FE1	WELDED MESH FENCING				
16.1	FE1.1	Fencing:				
16.1.1	FE1.1.1	1.2 m high Galvanized welded mesh fence including wooden posts stays	m	1		
16.1.2	FE1.1.2	1.2 m high Galvanized welded mesh fence excluding wooden posts stays	m	1		
16.1.3	FE1.1.3	1.8 m high Galvanized welded mesh fence including wooden posts stays	m	1		
16.1.4	FE1.1.4	1.8 m high Galvanized welded mesh fence excluding wooden posts stays	m	1		
16.1.5	FE1.1.5	2.4 m high Galvanized welded mesh fence including wooden posts stays	m	1		
16.1.6	FE1.1.6	2.4 m high Galvanized welded mesh fence excluding wooden posts stays	m	1		
16.1.7	FE1.1.7	1.8 m high Galvanized welded mesh fence including galvanized posts and stays	m	1		
16.1.8	FE1.1.8	1.8 m high Galvanized welded mesh fence excluding galvanized posts and stays	m	1		
16.1.9	FE1.1.9	2.4 m high Galvanized welded mesh fence including galvanized posts and stays	m	1		
16.1.10	FE1.1.10	2.4 m high Galvanized welded mesh fence excluding galvanized posts and stays	m	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		FANCING (FE)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
16.2	FE1.2	Gates				
16.2.1	FE1.2.1	Pipe Diameter 27 mm Pedestrian Gate 900 mm (w) x 1200 mm	item	1		
16.2.2	FE1.2.2	Pipe Diameter 27 mm Pedestrian Gate 900 x 1800	item	1		
16.2.3	FE1.2.3	Pipe Diameter 32 mm Pedestrian Gate 900 x 1800+ 450mm (h)	item	1		
16.2.4	FE1.2.4	Pipe Diameter 38 mm Pedestrian Gate 900 x 2400+ 450	item	1		
16.2.5	FE1.2.5	Pipe Diameter 38 mm Double Leaf Gates 3000 x 2400	item	1		
16.2.6	FE1.2.6	Pipe Diameter 38 mm Double Leaf Gates 3000 x 2400 + 450	item	1		
16.2.7	FE1.2.7	1.7 m High 3 m Wide Sliding Gate	item	1		
16.2.8	FE1.2.8	2 m High 3 m Wide Sliding Gate	item	1		
16.2.9	FE1.2.9	2.4 m High 3 m Wide Sliding Gate	item	1		
16.2.10	FE1.2.10	1.7 m High 4 m Wide Sliding Gate	item	1		
16.2.11	FE1.2.11	2 m High 4 m Wide Sliding Gate	item	1		
16.2.12	FE1.2.12	2.4 m High 4 m Wide Sliding Gate	item	1		
16.2.13	FE1.2.13	1.7 m High 5 m Wide Sliding Gate	item	1		
16.2.14	FE1.2.14	2 m High 5 m Wide Sliding Gate	item	1		
16.2.15	FE1.2.15	2.4 m High 5 m Wide Sliding Gate	item	1		
16.2.16	FE1.2.16	1.7 m High 6 m Wide Sliding Gate	item	1		
16.2.17	FE1.2.17	2 m High 6 m Wide Sliding Gate	item	1		
15.2.18	FE1.2.18	2.4 m High 6 m Wide Sliding Gate	item	1		
16.3	FE1.3	Topping options on fences and gates				
16.3.1	FE1.3.1	Supply and erect 500 mm Razor flat wrap on top of fence or gates including brackets/extended arms and wire strand to secure flat wrap to fence	m	1		
16.3.2	FE1.3.2	Supply and erect 500 mm Razor flat wrap on top of fence or brackets/extended arms gates excluding	m	1		
16.3.3	FE1.3.3	Supply and erect 500 mm Barbed tape concertina (BTC) razor wire on top of fence or gates including brackets/extended arms and wire strand to secure barbed tape to fence	m	1		
16.3.4	FE1.3.4	Supply and erect 500 mm Barbed tape concertina (BTC) razor wire on top of fence or gates excluding brackets/extended arms	m	1		
16.3.5	FE1.3.5	Supply and erect 1 strand barb wire on top of fence	m	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		FANCING (FE)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
17	FE2	BARB WIRE AND SMOOTH WIRE FENCING				
17.1	FE2.1	Fancing:				
17.1.1	FE2.1.1	1.2 m high Barb wire fence including wooden posts and stays	m	1		
17.1.2	FE2.1.2	1.2 m high Barb wire fence excluding wooden posts and stays	m	1		
17.1.3	FE2.1.3	1.2 m high Smooth wire fence including wooden posts and stays	m	1		
17.1.4	FE2.1.4	1.2 m high Smooth wire fence excluding wooden posts and stays	m	1		
17.1.5	FE2.1.5	1.2 m high Barb and Smooth wire combination fence including wooden posts and stays	m	1		
17.1.6	FE2.1.6	1.2 m high Barb and Smooth wire combination fence excluding wooden posts and stays	m	1		
17.1.7	FE2.1.7	1.8 m high Barb wire fence including wooden posts and stays	m	1		
17.1.8	FE2.1.8	1.8 m high Barb wire fence excluding wooden posts and stays	m	1		
17.1.9	FE2.1.9	1.8 m high Barb and Smooth wire combination fence including wooden posts and stays	m	1		
17.1.10	FE2.1.10	1.8 m high Barb and Smooth wire combination fence excluding wooden posts and stays	m	1		
17.1.11	FE2.1.11	2.4 m high Barb wire fence including wooden posts and stays	m	1		
17.1.12	FE2.1.12	2.4 m high Barb wire fence excluding wooden posts and stays	m	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		FANCING (FE)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
18	FE3	DIAMOND MESH FENCING				
18.1	FE3.1	Fencing				
18.1.1	FE3.1.1	1.2 m high Galvanized Diamond Mesh fence including wooden posts and stays	m	1		
18.1.2	FE3.1.2	1.2 m high Galvanized Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.3	FE3.1.3	1.8 m high Galvanized Diamond Mesh fence including wooden posts and stays	m	1		
18.1.4	FE3.1.4	1.8 m high Galvanized Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.5	FE3.1.5	2.4 m high Galvanized Diamond Mesh fence including wooden posts and stays	m	1		
18.1.6	FE3.1.6	2.4 m high Galvanized Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.7	FE3.1.7	3 m high Galvanized Diamond mesh fence including wooden posts and stays	m	1		
18.1.8	FE3.1.8	3 m high Galvanized Diamond mesh fence excluding wooden posts and stays	m	1		
18.1.9	FE3.1.9	1.2 m high PVC Coated Diamond Mesh fence including wooden posts and stays	m	1		
18.1.10	FE3.1.10	1.2 m high PVC Coated Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.11	FE3.1.11	1.8 m high PVC Coated Diamond Mesh fence including wooden posts and stays	m	1		
18.1.12	FE3.1.12	1.8 m high PVC Coated Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.13	FE3.1.13	2.4 m high PVC Coated Diamond Mesh fence including wooden posts and stays	m	1		
18.1.14	FE3.1.14	2.4 m high PVC Coated Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.15	FE3.1.15	3 m high PVC Coated Diamond Mesh fence including wooden posts and stays	m	1		
18.1.16	FE3.1.16	3 m high PVC Coated Diamond Mesh fence excluding wooden posts and stays	m	1		
18.1.17	FE3.1.17	1.8 m high Galvanized Diamond Mesh fence including galvanized posts and stays	m	1		
18.1.18	FE3.1.18	1.8 m high Galvanized Diamond Mesh fence excluding galvanized posts and stays	m	1		
18.1.19	FE3.1.19	2.4 m high Galvanized Diamond Mesh fence including galvanized posts and stays	m	1		
18.1.20	FE3.1.20	2.4 m high Galvanized Diamond Mesh fence excluding galvanized posts and stays	m	1		
18.1.21	FE3.1.21	3 m high Galvanized Diamond mesh fence including galvanized posts and stays	m	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		FANCING (FE)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
18.1.22	FE3.1.22	3 m high Galvanized Diamond mesh fence excluding galvanized posts and stays	m	1		
18.1.23	FE3.1.23	1.8 m high PVC Coated Diamond Mesh fence including galvanized posts and stays	m	1		
18.1.24	FE3.1.24	2.4 m high PVC Coated Diamond Mesh fence including galvanized posts and stays	m	1		
18.1.25	FE3.1.25	2.4 m high PVC Coated Diamond Mesh fence excluding galvanized posts and stays	m	1		
18.1.26	FE3.1.26	3 m high PVC Coated Diamond Mesh fence including galvanized posts and stays	m	1		
18.1.27	FE3.1.27	3 m high PVC Coated Diamond Mesh fence excluding galvanized posts and stays	m	1		
19	FE4	WELDED RAZOR MESH FENCING				
19.1	FE4.1	Fencing:				
19.1.1	FE4.1.1	2.4 m high Standard Welded Razor Mesh including wooden posts and stays	m	1		
19.1.2	FE4.1.2	2.4 m high Standard Welded Razor Mesh excluding wooden posts and stays	m	1		
19.1.3	FE4.1.3	2.4 m high High Density Welded Razor Mesh including wooden posts and stays	m	1		
19.1.4	FE4.1.4	2.4 m high High Density Welded Razor Mesh excluding wooden posts and stays	m	1		
19.1.5	FE4.1.5	2.4 m high Standard Welded Razor Mesh including galvanized posts and stays	m	1		
19.1.6	FE4.1.6	2.4 m high Standard Welded Razor Mesh excluding galvanized posts and stays	m	1		
19.1.7	FE4.1.7	2.4 m high High Density Welded Razor Mesh including galvanized posts and stays	m	1		
19.1.8	FE4.1.8	2.4 m high High Density Welded Razor Mesh excluding galvanized posts and stays	m	1		
20	FE5	VIBRACRETE FENCING				
20.1	FE5.1	Fencing:				
20.1.1	FE51.1	1.2 m high Vibracrete fence including poles	m	1		
20.1.2	FE51.2	1.2 m high Vibracrete fence excluding poles (use existing poles)	m	1		
20.1.3	FE51.3	1.8 m high Vibracrete fence including poles	m	1		
20.1.4	FE51.4	1.8 m high Vibracrete fence excluding poles (use existing poles)	m	1		
20.1.5	FE51.5	2.4 m high Vibracrete fence including poles	m	1		
20.1.6	FE51.6	2.4 m high Vibracrete fence excluding poles (use existing poles)	m	1		
20.1.7	FE51.7	Supply only Vibracrete Slabs (1440mm (L) x 300mm (D) x 40mm (T))	item	1		
20.1.8	FE51.8	Supply Only Vibracrete Poles/Pillar (2400mm)	item	1		
20.1.9	FE51.9	Supply Only Vibracrete Poles/Pillar (3000mm)	item	1		
20.1.10	FE51.10	Supply Only Vibracrete Corner Poles/Pillar (2400mm)	item	1		
20.1.11	FE51.11	Supply Only Vibracrete Corner Poles/Pillar (3000mm)	item	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		SUBSOIL DRAINAGE (SD)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
21.1	SBD1	110x6m Corrugated Slot Pipe & Coup	m	1		
21.2	SBD2	160x6 PVC Corrugated pipe & Coup	Each	1		
21.3	SBD3	1m x150 (A2) BIDIM Cloth	m2	1		
21.4	SBD4	10mx1.3m BIDIM Cloth flash pack	Each	1		
21.5	SBD5	Drainage Junction- 90 Degrees 160mm	Each	1		
21.6	SBD6	Drainage Junction- 90 Degrees 110mm	Each	1		
21.7	SBD7	Drainage bend 90 degrees_110mm	Each	1		
21.8	SBD8	Drainage bend 90 degrees_160mm	Each	1		
21.9	SBD9	Y Junction -160mm	Each	1		
21.10	SBD10	Y Juntion -110mm	Each	1		
21.11	SBD11	T junction- 160mm	Each	1		
21.12	SBD12	T Junction- 110mm	Each	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		REINFORCEMENT (RFB)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
22.1	RFB1	Mild steel bars				
		(i) R8	t	1		
		(ii) R12	t	1		
		(iii) R16	t	1		
		(iv) R20	t	1		
22.2	RFB2	High Yield steel bars				
		(i) R8	t	1		
		(ii) R12	t	1		
		(iii) R16	t	1		
		(iv) R20	t	1		
22.3	RFB3	Welded steel mesh	kg	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
23	RTS 1	R-SERIES: CONTROL SIGNS				
23.1	RTS 1.1	R1: Stop Sign 600mm 900mm 1200mm	No. No. No.	1 1 1		
23.2	RTS1.2	R1.2: Stop/Yeild 900mm 1200mm	No. No.	1 1		
23.3	RTS1.3	R1.3 & R1.4: 3 way Stop Sign & 4-way stop sign 249mm 373mm 497mm	No. No. No.	1 1 1		
23.4	RTS 1.4	R1.5A & B: 4-Way Stop Sign 600mm 900mm 1200mm	No. No. No.	1 1 1		
23.5	RTS 1.5	R2: Yield Sign 900mm 1200mm 1500mm	No. No. No.	1 1 1		
24.6	RTS 1.6	R2.1: Yeild to pedestrain sign 225x300mm 338x450mm 450x600mm 563x750mm	No. No. No. No.	1 1 1 1		
24.7	RTS 1.7	R2.2: Yeild at centre 900mm 1200mm	No. No.	1 1		
24.8	RTS 1.8	R3: No Entry 600mm 900mm 1200mm	No. No. No.	1 1 1		
24.9	RTS 1.9	R4.1, R4.2, R4.3: One Way Road and Keep right sign 600x450mm 900x675mm 1200x900mm	No. No. No.	1 1 1		
24.10	RTS 1.10	R5: Pedestrain Priority Sign 900mm 1200mm	No. No.	1 1		
25	RTS 2	<u>R-SERIES-PROHIBITION SIGNS</u>				
25.1	RTS 2.1	R201: Speed Limit Sign 600mm 900mm	No. No.	1 1		
		TOTAL CARRIED FORWARD				

SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
25.2	RTS 2.2	R202: Mass Limit Sign				
		600mm	No.	1		
25.3	RTS 2.3	R208: Unauthorized vehicle prohobited				
		600mm	No.	1		
25.4	RTS 2.4	R209/210: Left/Right ahead Turn Prohibited				
		600mm	No.	1		
25.5	RTS 2.5	R211/212: Left/Right Turn Prohibited				
		600mm	No.	1		
25.6	RTS 2.6	R214:Overtaking Prohibited				
		600mm	No.	1		
25.7	RTS 2.7	R215: Overtaking by Good Vehicles Prohibited				
		600mm	No.	1		
25.8	RTS 2.8	R216: Parking Prohibited				
		600mm	No.	1		
25.9	RTS 2.9	R217: Stopping Prohibited				
		600mm	No.	1		
25.10	RTS 2.10	R218: Pedestrain probibited				
		600mm	No.	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
26	RTS3	R-SERIES: RESEEVATION SIGNS				
26.1	RTS 3.1	R301-P: Bus Parking Reservation				
		340x450mm	No.	1		
		675x900mm	No.	1		
26.2	RTS3.2	R305-P: Parking Reservation				
		340x450mm	No.	1		
		675x900mm	No.	1		
26.3	RTS3.3	R325: Bus Stop Reservation				
		340x450mm	No.	1		
		675x900mm	No.	1		
26.4	RTS3.4	R322: Police Vehicle Reservation				
		340x450mm	No.	1		
		675x900mm	No.	1		
27	RTS4	W-SERIES- ROAD LAYOUT SIGNS				
27.1	RTS 4.1	W201: Traffic Circle				
		900mm	No.	1		
		120mm	No.	1		
27.2	RTS 4.2	W202: Gentle Curve Right				
		900mm	No.	1		
		120mm	No.	1		
27.3	RTS 4.3	W203: Gentle Curve Left				
		900mm	No.	1		
		120mm	No.	1		
27.4	RTS 4.4	W204: Sharp Curve Right				
		900mm	No.	1		
		120mm	No.	1		
27.5	RTS 4.5	W205: Sharp Curve Left				
		900mm	No.	1		
		120mm	No.	1		
27.6	RTS 4.6	W206: Hairpin Bend Right				
		900mm	No.	1		
		120mm	No.	1		
27.7	RTS 4.7	W207: Hairpin Bend Left				
		900mm	No.	1		
		120mm	No.	1		
27.8	RTS 4.8	W208: Winding road Sign Right Left				
		900mm	No.	1		
		120mm	No.	1		
27.9	RTS 4.9	W209: Winding road sign Left Right				
		900mm	No.	1		
		120mm	No.	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
27.10	RTS 4.10	W210: Combined Curve Right Left 900mm 120mm	No. No.	1 1		
27.11	RTS 4.11	W211: Combined Curve Left Right 900mm 120mm	No. No.	1 1		
27.12	RTS 4.12	W212: Two-Way Traffic 900mm 120mm	No. No.	1 1		
27.13	RTS 4.13	W213: Two-way Crossroad 900mm 120mm	No. No.	1 1		
27.14	RTS 4.14	W214: Right Lane Ends 900mm 120mm	No. No.	1 1		
27.15	RTS 4.15	W215: Left Lane Ends 900mm 120mm	No. No.	1 1		
27.16	RTS 4.16	W216: Concealed Driveway Right 900mm 120mm	No. No.	1 1		
27.17	RTS 4.17	W217: Concealed Driveway Left 900mm 120mm	No. No.	1 1		
27.18	RTS 4.18	W218: Concealed Driveway Both Sides 900mm 120mm	No. No.	1 1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
28	RTS5	W-SERIES: SYMBOLIC				
28.1	RTS5.1	W308: Pedestrian Crossing Sign 900mm 1200mm	No. No.	1 1		
28.2	RTS5.2	W309: Children Sign 900mm 1200mm	No. No.	1 1		
28.3	RTS5.3	W310: Domestic Animals Cattle 900mm 1200mm	No. No.	1 1		
28.4	RTS5.4	W325: Gravel Road Begins 900mm 1200mm	No. No.	1 1		
28.5	RTS5.5	W332: Speed Humps 900mm 1200mm	No. No.	1 1		
28.6	RTS5.6	W366: Road Works 900mm 1200mm	No. No.	1 1		
28.7	RTS5.7	W336: Roadworks 900mm 1200mm	No. No.	1 1		
28.8	RTS5.8	W350: Drift Sign 900mm 1200mm	No. No.	1 1		
29	RTS6	W-SERIES: HAZARD MARKERS				
29.1	RTS 6.1	W401: Danger Plate 150x600mm	No.	1		
29.2	RTS 6.2	W402: Danger Plate 150x600mm	No.	1		
29.3	RTS 6.3	W405:Sharp Curve Chevron Right 450X450mm	No.	1		
		TOTAL CARRIED FORWARD				

ROADS AND STORMWATER MATERIAL						
BILL OF QUANTITIES						
SECTION		ROAD TRAFFIC SIGNS (RTS)				
NO	ITEM	DESCRIPTION	UNIT	QUANTITY	MUNICIPAL RATES	
					RATE (RANDS)	TOTAL (RANDS)
		TOTAL BROUGHT FORWARD				
29.4	RTS 6.4	W406:Sharp Curve Chevron Left 1350x450mm	No.	1		
29.5	RTS 6.5	W407:Sharp Curve Chevron Triple Right 1350x450mm	No.	1		
29.6	RTS 6.6	W408: Sharp Curve Tripple Tripple Left 1350x450mm	No.	1		
29.7	RTS 6.7	W409: T-Juntion Chevron 2700x450mm	No.	1		
29.8	RTS 6.8	W410: Dead End or Road Closed Chevron 2700x450mm	No.	1		
29.9	RTS 6.9	W411: Boom Barricade 2700x450mm	No.	1		
29.10	RTS 6.10	W413: Gore Plate 150x600mm	No.	1		
29.11	RTS 6.11	W413: Gore Chevron 900X450mm	No.	1		
29.12	RTS 6.12	W413: Overhead Danger Plate 1350x450mm	No.	1		
30	RTS7	Galvanize 71-85 mm pole	No.	1		
30.1	RTS8	P1118 Two clamp piece	No.	1		
30.2	RTS9	Bolt M8x 40mm steel nuts	No.	1		
30.3	RTS10	Bolt M10 x 50mm steel nut	No.	1		
30.4	RTS11	Traffic cones (450mm)	No.	1		
30.5	RTS12	Standard Temporary signs Stands	No.	1		
		TOTAL CARRIED FORWARD				
SECTION		ROAD MARKINGS (RM)				
		TOTAL BROUGHT FORWARD				
31.1	RM1	Road Markings (20 Litres)Retro-refeective road marking paint White paint	No.	1		
31.2	RM2	Road Markings (20 Litres)Retro-refeective road marking paint Yellow paint	No.	1		
		TOTAL CARRIED FORWARD				

SECTION		TOOLS AND EQUIPMENTS (TAE)				
		TOTAL BROUGHT FORWARD				
32	TAE1	Asphalt and Concrete cutting saw concrete cutting blades (350mm)	No.	1		
32.1	TAE2	Pick	No.	1		
32.2	TAE3	Wheel barrow	No.	1		
32.3	TAE4	Spade shovel	No.	1		
32.4	TAE5	Rake shovel Shovel	No.	1		
32.5	TAE6	Leather hand gloves	No.	1		
32.6	TAE7	Leather hand gloves	No.	1		
32.7	TAE8	Dust masks	No.	1		
32.8	TAE9	Metal handle stick road push broom	No.	1		
32.9	TAE10	Roller paint brush (100mm) Bristle paint brush (100mm)	No.	1		
32.10	TAE11	8 step Alluminium A frame ladder	No.	1		
32.11	TAE12	Barrier tape red/white (70x500000mm)	No.	1		
32.12	TAE13	Portable drilling machine (Min Continuous rating input 800W)	No.	1		
32.13	TAE14	Portable water pump (4" Diameter, Min Capacity 96m3/hr)	No.	1		
32.14	TAE15	Spirit level	No.	1		
32.15	TAE16	Shutters	No.	1		
32.16	TAE17	Pen (R16 steel)	No.	1		
32.17	TAE18	Fishlane	No.	1		
32.18	TAE19	Building Trowel	No.	1		
SECTION		EXTRAS E				
	E1	Material and Equipments not covered in the bill of quantity but needed for supply and delivery of roads and stormwater. The supplier will be required to produce 3 quotations for material needed and 30% of the sum will be added as the profit. Only SANS approved material to be used. (Amount is only for evaluation purpose only)	Prov Sum	1	350 000.00	350 000.00
	E1.1	% for profit, transactional costs and handling fees for item	%	30		105 000.00
TOTAL FOR SCHEDULE OF QUANTITIES						
Add 15%						
TOTAL						