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**BILL OF QUANTITIES****SECTION 1 Preliminary and General****PART AA PRELIMINARIES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	GCC 2015	GENERAL CONDITIONS OF CONTRACT (GCC 2015) READ IN CONJUNCTION WITH THE CONTRACT DATA  Fixed Charge obligations	sum	1		
2	GCC 2015	Time Related obligations	sum	1		
3	SANS 1921-1	SANS 1921-1 : GENERAL ENGINEERING AND CONSTRUCTION WORKS READ IN CONJUNCTION WITH THE ASSOCIATED SPECIFICATION DATA IN THE SCOPE OF WORKS  Fixed Charge Items	sum	1		
4	SANS 1921-1	Time Related Items	sum	1		
5	C.1.2.3.1	COMMUNITY LIAISON OFFICER  Allow for a CLO to be appointed.	PC Sum	171000	1.00	171,000.00
6	C.1.2.3.1	Allow for markup on item 5 above	%	171000		

**TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminary and General****R****PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
		<b><u>FIXED CHARGES</u></b>				
1	AB.3	Offices for Engineer and Staff	sum	1		
2	AB.2	Services Connection Fee (electrical and water) (Provisional)	sum	1		
3	AB.4	Contractor's Camp Site / Store Yard	sum	1		
4	AB.5	Notice Board	sum	1		
5	AB.7	Road Deviations	sum	1		
6	AB.7	Initial supply of all signs, barricades and delineators	sum	1		
7	AB.6 PS.15	Deduction for re-tests requested when item is not to specification as determined by Acceptance Testing (-R1000/test)	-R1000/set	0		
8	PS.14.1	Setting out of works	sum	1		
9		Allow for the following Additional Items which the tenderer requires to be priced separately :-  a)	sum	1		

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**
**Part Continued PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
10		c)	sum	1		
11		b)	sum	1		
<b><u>TIME RELATED CHARGES</u></b>						
12	AB.2	Attendance on and Maintenance of Office for Engineer and Staff	sum	1		
13	AB.6 PS.15	Cost of Samples and Contractor's Preliminary and Site Control Testing	sum	1		
14	AB.7	Maintenance of all signs, barricades and delineators	sum	1		
15	PS.14	Survey for, and Preparation of, 'As-Built' Drawings and Data	sum	1		
16	PS.11	Provision of security on site to guard against any disruption of the works throughout the duration of the contract	sum	1		
17	C.1.2.3.6	Site De-establishment (Provisional)	sum	1		
18	C.1.2.3.6	Site Re-establishment (Provisional)	sum	1		

**TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminary and General**
**R**
**PART AH OCCUPATIONAL HEALTH and SAFETY**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AH.14.1	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
2	AH.14.2	Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
3	AH.14.3	Submission of the Health and Safety File	sum	1		

**TOTAL CARRIED TO SECTION 1 SUMMARY: Preliminary and General**
**R**

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**
**SECTION 2      Site Clearance**
**PART B        SITE CLEARANCE**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	B.8.2	General clearance and grubbing within site boundary	m2	8000		
2	B.8.14	Removal of existing asphalt paved areas	m3	400		
3	B.8.11	Removal of existing concrete paved areas	m3	200		
4	B.8.15	Removal of brick paved structures above ground	m3	10		
5	PS.B.8.23	Remove existing building structures above ground	no.	2		
6	B.8.5	Removal of existing wire mesh fence including concrete posts (1.8m - 2.4m)	m	280		
7	B.8.5	Removal of existing concrete palisde fence (1.8m - 2.4m)	m	80		
8	B.8.11	Remove existing precast staircase including handrails	m3	10		
9	B.8.4 PS.B.8.4	Removal of existing trees up to 1.5m girth	no.	8		
10	B.8.4 PS.B.8.4	Remove of existing trees over 1.5m girth	no.	4		
11	PS.B.8.24	Removal of Effluent in soakpit by pumping using a Honey Sucker (Provisional)	m3	10		
12	B.8.12 PS.B.8.12	Demolish and remove existing underground soakpit (Provisional)	m3	15		

**TOTAL CARRIED TO SECTION 2 SUMMARY: Site Clearance**
**R**

## The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)

**SECTION 3 Testing Platform and Parking Area****PART C CONCRETE WORK**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	C.8.1 PS.C.8.1	200mm Plain JCP incl. all anchors, formwork & finishing (40Mpa)	m3	900		
2	C.8.2	Reinforcing wire mesh Ref.395 (for non-rectangular panels only)	t	2.5		
3	PS.C.8.4	Transverse joints (max 4.5m spacing) incl bitumen based joint sealant	m	880		
4	PS.C.8.5	Longitudinal joints incl bitumen based joint sealant	m	860		
5	PS.C.8.6	Saw cut to all joints	m	1800		

TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area

R

**PART DA EARTHWORKS : BULK**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.2	Excavate topsoil and spoil at tip	m3	100		
2	DA.8.3	Excavate in all material and place directly into fill	m3	400		
3	DA.8.3	Excavate in all material to spoil	m3	1800		
4	DA.8.5	150mm LSSG (insitu) Rip and re-compact @ 93% MOD AASHTO (min G10)	m3	600		
5	DA.8.4	Supply 250mm USSG G7 quality fill from commercial sources	m3	1400		
6	DA.8.5	Compaction of G7 from commercial sources to 93% MOD AASHTO	m3	1400		
7	DA.8.9	Formation: constructed to correct falls as per Drawing No.: 49297	m2	4000		

TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area

R

**PART DB EARTHWORKS FOR PIPE TRENCHES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.19	Proving existing services (Provisional)	m3	10		

TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area

R

**PART EC CEMENT TREATED GRADED CRUSHED STONE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EC.8.1 PS.EC.8.1	150 mm C1 Cemented Subbase (G2 stabilised. UCS @ 6MPa)	m3	620		

TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area

R

## The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)

**PART EF KERBS AND HAUNCHES**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	EF.8.1	Type D barrier kerb and channel / fillet as per drawing 38577	m	400		
2	EF.8.1	Extra over item1 for curves of radius less than 5m	m	20		

**TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area****R****PART TB ROAD MARKINGS**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	TB.8.1.1	Painted road lines 150mm wide (white), including setting out and premarking	km	0.5		
2	TB.8.1.2	Painted traffic islands 150mm wide (yellow), including setting out and premarking	m2	350		

**TOTAL CARRIED TO SECTION 3 SUMMARY: Testing Platform and Parking Area****R**

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**


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**SECTION 4      Subgrade Improvement**
**PART      EB      GRADED CRUSHED STONE**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	EB.8.1	G4 quality material choke to dumprock	m3	200		

**TOTAL CARRIED TO SECTION 4 SUMMARY: Subgrade Improvement**
**R**
**PART      EL      DUMPROCK SUBGRADE IMPROVEMENT**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	EL.8	Dumprock subgrade improvement, 500 mm thick	m3	600		

**TOTAL CARRIED TO SECTION 4 SUMMARY: Subgrade Improvement**
**R**
**PART      F      PROTECTION WORKS**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	PS.F.8.10	Grade 7 geofabric or similar approved	m2	1000		

**TOTAL CARRIED TO SECTION 4 SUMMARY: Subgrade Improvement**
**R**

## The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)

**SECTION 5 Sidewalks and Paving****PART EB GRADED CRUSHED STONE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EB.8.1	150mm G4 Quality material compacted to 98% Mod AASHTO	m3	30		

TOTAL CARRIED TO SECTION 5 SUMMARY: Sidewalks and Paving

R

**PART EF KERBS AND HAUNCHES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EF.8.1	Mini kerb and haunch (edge restraint to clay brick pavers)	m	80		
2	EF.8.1	Extra over item1 for curves of radius less than 5m	m2	10		

TOTAL CARRIED TO SECTION 5 SUMMARY: Sidewalks and Paving

R

**PART EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EG.8.4	Supply and lay 220x108x40mm clay brick pavers. (Burgundy 45 deg herringbone bond)	m2	200		
2	EG.8.4	Supply and lay 8:1 sand cement mix 50mm thick	m2	200		
3	EG.8.4	Weedkiller prior and after laying pavers	m2	200		
4	EG.8.6	Pedestrian scoop incl transition kerbs as per Drawing No.38579	no.	4		
5	PS.EG.8.7	Precast concrete step as per Drawing No.38581	no.	15		
6	PS.EG.8.8	Precast concrete posts as per drawing No.38581	no.	10		
7	PS.EG.8.9	Handrails as per drawing No.38581	m	20		

TOTAL CARRIED TO SECTION 5 SUMMARY: Sidewalks and Paving

R

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**
**SECTION 6      Fencing**
**PART      C      CONCRETE WORK**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	C.8.1	Grade 25/19 Concrete to fence post foundations	m3	20		

**TOTAL CARRIED TO SECTION 6 SUMMARY: Fencing**
**R**
**PART      DD      EARTHWORKS FOR STRUCTURES**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	DD.8.2	Excavate in all material for fence post foundations	m3	20		

**TOTAL CARRIED TO SECTION 6 SUMMARY: Fencing**
**R**
**PART      F      PROTECTION WORKS**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	PS.F.8.8	Installation of medium security Clear View fencing (2.4m High)	m	350		
2	PS.F.8.9.2	Supply & install vehicular gate (10m long x 2.4m high) to match new fence including industrial gate motor	no.	2		
3	PS.F.8.9.1	Supply & install pedestrian gate to match new fence	no.	2		

**TOTAL CARRIED TO SECTION 6 SUMMARY: Fencing**
**R**

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**
**SECTION 7 Subsoil Drainage**
**PART DB EARTHWORKS FOR PIPE TRENCHES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.5	Excavate to stockpile in all material for subsoil drainage pipe (0.0m to 1.5m)	m3	150		
2	DB.8.5	Excavate to spoil in all material for subsoil drainage pipe (0.0m to 1.5m)	m3	110		
3	DB.8.5	Backfill material from stockpile for subsoil drainage pipe	m3	150		
4	DB.8.2	Provision of clean coarse sand for subsoil from commercial source	m3	50		

**TOTAL CARRIED TO SECTION 7 SUMMARY: Subsoil Drainage**
**R**
**PART PG NON PRESSURE PIPELINES and PC CULVERTS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.1	Supply and place 110mm dia perforated subsoil pipes	m	110		
2	PG.8.12	Drainage grade geofabric blanket as surround to subsoil drainage	m2	550		
3	PS.PG.8.14	Supply and place 19mm stone	m3	70		

**TOTAL CARRIED TO SECTION 7 SUMMARY: Subsoil Drainage**
**R**
**PART PH MANHOLES and APPURTENANT DRAINAGE WORKS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.PH.9	Construct Subsoil outlet headwall at discharge point as per Standard Drawing No. 38576	no.	1		

**TOTAL CARRIED TO SECTION 7 SUMMARY: Subsoil Drainage**
**R**

**The Construction of Illovo Dangerous Goods Heavy Vehicle Inspection Facility (Ward 109)**
**SECTION 8 Stormwater Drainage**
**PART DB EARTHWORKS FOR PIPE TRENCHES**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	DB.8.5	Excavate to stockpile in all material for 375mm dia. Pipe (0.0m to 1.5m)	m3	35		
2	DB.8.5	Excavate to spoil in all material for 375mm dia. Pipe (0.0m to 1.5m). Rate to include all haulage	m3	45		
3	DB.8.9	Provision of clean coarse sand for pipe bedding cradle	m3	20		
4	DB.8.10	Placing and compacting of selected fill material above pipe	m3	25		
5	DB.8.10	Placing and compacting of backfill material from stockpile	m3	35		

**TOTAL CARRIED TO SECTION 8 SUMMARY: Stormwater Drainage**
**R**
**PART PG NON PRESSURE PIPELINES and PC CULVERTS**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	PG.8.2	375 mm diameter concrete Class 100D	m	50		

**TOTAL CARRIED TO SECTION 8 SUMMARY: Stormwater Drainage**
**R**
**PART PH MANHOLES and APPURTENANT DRAINAGE WORKS**

<b>Item</b>	<b>Clause</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	PH.8.3	Standard inlet type S2 catchpit. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	3		
2	PS.PH.9	Construct standard outlet headwall for 375mm dia. Pipe as per Standard Drawing no. 38576	no.	1		

**TOTAL CARRIED TO SECTION 8 SUMMARY: Stormwater Drainage**
**R**

**SUMMARY OF BILL OF QUANTITIES**

**Section**

1	Preliminary and General		R	_____
	AA PRELIMINARIES	R		_____
	AB GENERAL SPECIFICATIONS	R		_____
	AH OCCUPATIONAL HEALTH and SAFETY	R		_____
2	Site Clearance		R	_____
	B SITE CLEARANCE	R		_____
3	Testing Platform and Parking Area		R	_____
	C CONCRETE WORK	R		_____
	DA EARTHWORKS : BULK	R		_____
	DB EARTHWORKS FOR PIPE TRENCHES	R		_____
	EC CEMENT TREATED GRADED CRUSHED STONE	R		_____
	EF KERBS AND HAUNCHES	R		_____
	TB ROAD MARKINGS	R		_____
4	Subgrade Improvement		R	_____
	EB GRADED CRUSHED STONE	R		_____
	EL DUMPROCK SUBGRADE IMPROVEMENT	R		_____
	F PROTECTION WORKS	R		_____
5	Sidewalks and Paving		R	_____
	EB GRADED CRUSHED STONE	R		_____
	EF KERBS AND HAUNCHES	R		_____
	EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS	R		_____
6	Fencing		R	_____
	C CONCRETE WORK	R		_____
	DD EARTHWORKS FOR STRUCTURES	R		_____
	F PROTECTION WORKS	R		_____
7	Subsoil Drainage		R	_____
	DB EARTHWORKS FOR PIPE TRENCHES	R		_____
	PG NON PRESSURE PIPELINES and PC CULVERTS	R		_____
	PH MANHOLES and APPURTENANT DRAINAGE WORKS	R		_____
8	Stormwater Drainage		R	_____
	DB EARTHWORKS FOR PIPE TRENCHES	R		_____
	PG NON PRESSURE PIPELINES and PC CULVERTS	R		_____
	PH MANHOLES and APPURTENANT DRAINAGE WORKS	R		_____

SUB TOTAL R \_\_\_\_\_

ADD VAT (15%) - (only if a registered VAT Vendor) R \_\_\_\_\_

TOTAL CARRIED TO FORM OF TENDER R \_\_\_\_\_