

**INDEX TO BILL OF QUANTITIES****SECTION 1     PRELIMINARIES AND GENERAL**

PART	AA	PRELIMINARIES
PART	AB	GENERAL SPECIFICATIONS
PART	AH	OCCUPATIONAL HEALTH and SAFETY
PART	S	REINSTATEMENT

**SECTION 2     CONSTRUCTION WORK**

PART	B	SITE CLEARANCE
PART	DA	EARTHWORKS : BULK
PART	DB	EARTHWORKS FOR PIPE TRENCHES
PART	DC	EARTHWORKS FOR CONCRETE LINED CANALS
PART	EL	DUMPROCK SUBGRADE IMPROVEMENT
PART	F	PROTECTION WORKS
PART	PG	NON PRESSURE PIPELINES and PC CULVERTS
PART	PH	MANHOLES and APPURTENANT DRAINAGE WORKS

**SECTION 3     REINSTATEMENT**

PART	S	REINSTATEMENT
------	---	---------------

**BILL OF QUANTITIES****SECTION 1 PRELIMINARIES 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	sum	1		
		Fixed Charge obligations				
2	GCC 2015	Time Related obligations	sum	1		
3	C.1.2.3.1	COMMUNITY LIAISON OFFICER	PC Sum	85000	1.00	85,000.00
		Allow for a CLO to be appointed.				
4	C.1.2.3.1	% Mark-up for item 3 above	%	85000		
5	C.1.2.3.1	LOCAL LABOUR	sum	1		
		Allow for the weekly submission of proof of employment of local labour				

**TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARIES AND GENERAL****R****PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AB.4	FIXED CHARGES	sum	1		
		Offices for Engineer and Staff				
2	AB.4	Contractor's Camp Site / Store Yard	sum	1		
3	PS.AB.5	Notice Board	sum	1		
4	AB.7	Initial supply of all signs, barricades and delineators	sum	1		
5	PS.15	Allow for the following Additional Items which the tenderer requires to be priced separately :-	sum	1		
		a)				
6	AB.6	Cost of Samples and Contractor's Preliminary and Site Control Testing	PR Sum	1	1.00	1.00
7	AB.7	Maintenance of all signs, barricades and delineators	sum	1		
8	PS.AB.6	Deduction for re-test requested when density and cube is not as per specification as determined by accepted test.	sum	1		
9	PS.16	Temporary stream/river diversion and removal of stream diversion. (Rates to include maintenance of the stream diversion)	sum	1		
10	C.1.2.3.7	Excepted Risks: Establishment	sum	1		

## Saratoga Beach Park, Umhlanga, Ward 36: Coastline rehabilitation

Part Continued **PART** AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
11	C.1.2.3.7	Excepted Risks: De-establishment	sum	1		
12	PS.11	Site security	PC Sum	75000	1.00	75,000.00
13	PS.13	Setting out	sum	1		
14	PS.14	Survey for, and Preparation of, 'As-Built' Drawings	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARIES AND GENERAL

R

**PART** AH OCCUPATIONAL HEALTH and SAFETY

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AH.14.1/ PS.10	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
2	AH.14.2/ PS.10	Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	sum	1		
3	AH.14.3/ PS.10	Submission of the Health and Safety File	sum	1		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARIES AND GENERAL

R

## Saratoga Beach Park, Umhlanga, Ward 36: Coastline rehabilitation

**SECTION 2 CONSTRUCTION WORK****PART B SITE CLEARANCE**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	B.8.2	General clearance and grubbing within working area.	m2	500		
2	B.8.2	General clearance and grubbing in contractor's camp site	m2	200		
3	B.8.2	General clearance and grubbing in temporary stockpile area	m2	200		
4	B.8.10/ PS.F.8.10	Removal of existing damaged gabions and spoil at an approved tip. Rate to include haulage.	m3	30		
5	PS.B.9	Demolition of the existing manholes/inlets and spoil at tip. Rate to include all haulage and royalties.	no.	3		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R****PART DA EARTHWORKS : BULK**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.2	Excavate in all unsuitable material to spoil at tip.	m3	400		
2	PS.DA.8.11	Disposal of unsuitable material off site to an approved DSW management site. Rate to include all royalties and haulage. Excluding weighbridge costs.	m3	100		
3	PS.DA.8.11	Disposal of unsuitable material off site to an approved hazardous waste management site. Rate to include all royalties and haulage. Excluding weighbridge costs.	m3	350		
4	PS.DA.8.12	Weighbridge costs at an approved waste management site.	PC Sum	110000	1.00	110,000.00
5	PS.DA.8.12	% Mark-up for item 4 above.	%	110000		
6	DA.8.9	Formation.	m2	280		
7	DA.8.6	Trimming of embankments	m2	180		
8	DA.8.4/ PS.DA.8.11	Excavate clean course beach sand from the swash zone (wet beach sand) as approved by the Engineer representative. Rate inclusive of haulage and royalties.	m3	1350		
9	DA.8.5	Compact clean course beach sand from the swash zone in layers using water.	m3	1350		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R**

## Saratoga Beach Park, Umhlanga, Ward 36: Coastline rehabilitation

**PART DB EARTHWORKS FOR PIPE TRENCHES**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.4	Excavate topsoil to stockpile for re-use. Depth 100 mm	m2	280		
2	DB.8.5	Excavate and backfill in all material for 600 mm diameter pipe where depth is :- - Over 0,0 m and not exceeding 1,5 m	m	200		
3	DB.8.5	Excavate and backfill in all material for 600 mm diameter pipe where depth is :- - Over 1,5 m and not exceeding 2,0 m	m	50		
4	DB.8.9	Provision of clean coarse sand for pipe bedding from commercial or off-site source	m3	70		
5	DB.8.10	Placing and compacting of Class C pipe bedding.	m	200		
6	DB.8.20	Trench shoring to remain in excavation	m2	350		
7	PS.DA.8.11	Disposal of unsuitable or surplus material including material displaced by pipe from trench excavation	m3	70		
8	DB.8.9	Provision of 19 mm stone material for pipe bedding from commercial or off-site source	m3	35		
9	DB.8.19	Prove existing services by hand excavation (provisional), where depth is: - - Over 0,0 m and not exceeding 1,5 m	m3	10		
10	PS.F.8.9	Provision of drainage grade geofabric	m2	210		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R****PART DC EARTHWORKS FOR CONCRETE LINED CANALS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.2	Excavate in all unsuitable material under the existing concrete culvert and spoil at tip.	m3	50		
2	DA.8.2	Excavate in all suitable material and store on site for re-use (Rates to include all stockpile handling, plant and machinery).	m3	1560		
3	PS.DD.8.6	Lateral support.	sum	1		
4	DC.8.4	Overhaul	m3km	100		
5	DC.8.3	Backfilling and compaction using material from the swash zone (wet beach sand).	m3	1350		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R**

**Saratoga Beach Park, Umhlanga, Ward 36: Coastline rehabilitation****PART EL DUMPROCK SUBGRADE IMPROVEMENT**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EL.8	Dumprock subgrade improvement, 300 mm thick	m3	100		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R****PART F PROTECTION WORKS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.F.8.9/ PS.F.5 /PS.F.3.7/ PS.F.6/ PS.F.3	Supply, deliver and install geotextile sandbags of minimum size 2.3 m x 1.8 m x 0.5 m as per specification in clause PS.F.3.7	no.	980		
2	PS.F.8.9	Supply and place grade A5 geofabric	m2	1420		
3	F.8.3	Dune Rehabilitation	PC Sum	450000	1.00	450,000.00
4	F.8.1	Imported topsoil	m3	300		
5	F.8.3	Grass sodding	m2	500		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R****PART PG NON PRESSURE PIPELINES and PC CULVERTS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.2	Supply and install 600 mm diameter solid wall (HDPE 4kN/m2) stormwater pipe. Pipe to be welded on site: Rate to include pipe welding.	m	200		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R****PART PH MANHOLES and APPURTENANT DRAINAGE WORKS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PH.8.2	Manhole type A with heavy duty concrete cover. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	2		
2	PH.8.2	Manhole type A with inlet type cover S2. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	1		
3	PH.8.2	Manhole type A with inlet type cover D3. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	1		
4	PS.PH.8.10	Construct manhole over existing culvert	no.	1		

**TOTAL CARRIED TO SECTION 2 SUMMARY: CONSTRUCTION WORK****R**

**SECTION 3 REINSTATEMENT**

**PART S REINSTATEMENT**

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	S.8.1	Reinstatement of ground surface	m2	500		
2	S.8.1	Reinstatement of ground surface on temporary stockpile site	m2	200		
3	S.8.1	Reinstatement of ground surface on site camp.	m2	200		

TOTAL CARRIED TO SECTION 3 SUMMARY: REINSTATEMENT **R**

**BILL OF QUANTITIES SECTION SUMMARY**

**SECTION 1    PRELIMINARIES AND GENERAL**

PART	AA	PRELIMINARIES	
PART	AB	GENERAL SPECIFICATIONS	
PART	AH	OCCUPATIONAL HEALTH and SAFETY	
PART	S	REINSTATEMENT	
TOTAL CARRIED TO FINAL SUMMARY			



**BILL OF QUANTITIES SECTION SUMMARY****SECTION 2    CONSTRUCTION WORK**

PART	B	SITE CLEARANCE	
PART	DA	EARTHWORKS : BULK	
PART	DB	EARTHWORKS FOR PIPE TRENCHES	
PART	DC	EARTHWORKS FOR CONCRETE LINED CANALS	
PART	EL	DUMPROCK SUBGRADE IMPROVEMENT	
PART	F	PROTECTION WORKS	
PART	PG	NON PRESSURE PIPELINES and PC CULVERTS	
PART	PH	MANHOLES and APPURTENANT DRAINAGE WORKS	
TOTAL CARRIED TO FINAL SUMMARY			

**BILL OF QUANTITIES SECTION SUMMARY**

**SECTION 3    REINSTATEMENT**

PART   S	REINSTATEMENT	
TOTAL CARRIED TO FINAL SUMMARY		

SUMMARY OF BILL OF QUANTITIES

Section

1	PRELIMINARIES AND GENERAL		R	
AA	PRELIMINARIES	R		
AB	GENERAL SPECIFICATIONS	R		
AH	OCCUPATIONAL HEALTH and SAFETY	R		
S	REINSTATEMENT	R		
2	CONSTRUCTION WORK		R	
B	SITE CLEARANCE	R		
DA	EARTHWORKS : BULK	R		
DB	EARTHWORKS FOR PIPE TRENCHES	R		
DC	EARTHWORKS FOR CONCRETE LINED CANALS	R		
EL	DUMPROCK SUBGRADE IMPROVEMENT	R		
F	PROTECTION WORKS	R		
PG	NON PRESSURE PIPELINES and PC CULVERTS	R		
PH	MANHOLES and APPURTENANT DRAINAGE WORKS	R		
3	REINSTATEMENT		R	
S	REINSTATEMENT	R		
SUB TOTAL			R	
ADD VAT (15%) - (only if a registered VAT Vendor)			R	
TOTAL CARRIED TO FORM OF TENDER			R	