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Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

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	C1.2.3.1	COMMUNITY LIAISON OFFICER Allow for a CLO to be appointed.	PC Sum	365000	1.00	365,000.00
6	C1.2.3.1	Allow for markup on item 5	%	365000		

TOTAL CARRIED TO SECTION 1 SUMMARY: PRELIMINARY AND GENERAL

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PART AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	AB.2, PS.AB.2.1	FIXED CHARGES Offices for Engineer and Staff as described in PS.AB.2.1	sum	1		
2	AB.2, PS.AB.8.2	Services Connection Fee (electrical / water / telephone)	PC Sum	10000	1.00	10,000.00
3	AB.3	Handling Cost and Profit with regard to item 2 above	%	10000		
4	AB.4, PS.AB.4	Contractor's Camp Site / Store Yard	sum	1		
5	AB.5	Notice Board	no.	1		
6	AB.7	Initial supply of all signs, barricades and delineators	sum	1		
7	PS.15	Survey coordination of existing valves, manholes, catchpits, and cable duct markers	sum	1		
8	PS.15	Additional Survey required by the Engineer during the course of the contract	PC Sum	50000	1.00	50,000.00
9		Overheads, charges and profit on item 8 above	%	50000		

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Part Continued **PART** AB GENERAL SPECIFICATIONS

Item	Clause	Description	Unit	Quantity	Rate	Amount
10	PS.1.3	Allow for Traffic Control Measures as ordered by the Engineer	PC Sum	50000	1.00	50,000.00
11		Overheads, charges and profit on item 10 above	%	50000		
12		Allow the following additional items which the tenderer required to be priced separately :-	sum	1		
		a)				
13		b)	sum	1		
14		c)	sum	1		
15	AB.7	Maintenance of Pedestrian and Traffic Facilities	sum	1		
16	AB.7	Maintenance of all signs, barricades and delineators	sum	1		
17	PS.AB.8.3	Allow for Progress Photographs including aerial pictures (e.g Mini Drone)	PC sum	10000	1.00	10,000.00
18		Handling Cost and Profit with regard to item 17 above.	%	10000		
19	AB.2	Attendance on and Maintenance of Office for Engineer and Staff	sum	1		
20	PS.15	Survey for, and Preparation of, 'As-Built' Drawings	sum	1		
21	AB.6 and PS.16	Cost of Samples and Contractor's Preliminary and Site Control Testing	sum	1		
22	PS.16	Deduction for re-tests requested when density of a layer is not to specification as determined by Acceptance Testing (- R1000/set)	set	0		
23	PS.1.3.7	Fixed Penalty for non-compliance with requirements of SANS 1921-2: 2004 and PS.2.3 of the project specifications with respect to Accommodation of Traffic. (- R2,000.00 per occurrence)	no.	0		
24	PS.1.3.7	Time Related Penalty for non-compliance with requirements of SANS 1921-2: 2004 and PS.2.3 of the project specifications with respect to Accommodation of Traffic. (-R500.00 per hour)	hr	0		
25	PS.11	Site security	sum	1		
26	C.3.1.5.1	Contractor's compliance with the CIDB B.U.I.L.D. Programme for indirect targeting for enterprise development through construction works contracts.	PC Sum	180000	1.00	180,000.00
27	C.3.1.5.1	Mark-up and profit on Item 26 above	%	180000		

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Part Continued **PART AB GENERAL SPECIFICATIONS**

Item	Clause	Description	Unit	Quantity	Rate	Amount
28	C.3.1.5.1	Contractor's compliance with the CIDB B.U.I.L.D. Programme for the standard for developing skills through infrastructure contracts.	sum	1		

TOTAL CARRIED TO SECTION I SUMMARY: PRELIMINARY AND GENERAL

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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		
4	AH.14.4 and PS.10.4	Application for Work Permit to DOEL (Once off Fee R450) per Regulation Gazette 11465 Volume 685 No 47109	PC Sum	450	1.00	450.00
5		Overhead Charges and Profit for Item 4 Above.	%	450		

TOTAL CARRIED TO SECTION I SUMMARY: PRELIMINARY AND GENERAL

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Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

BILL OF QUANTITIES

SECTION 2 SITE CLEARANCE

PART B SITE CLEARANCE

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.B.8.7	Removal of street/traffic signs and posts. Rate to include all haulage to the Municipal Complex in 166 KE Masinga Road.	no.	4		
2	B.8.7	Removal of bollards and and spoil at tip. Rate to include all haulage	no.	100		
3	B.8.10	Removal of unreinforced concrete	m3	15		
4	B.8.11	Removal of reinforced concrete	m3	10		
5	B.8.14	Removal of roadways to tip	m3	50		
6	B.8.15	Removal of sidewalks/median to tip	m3	250		
7	B.8.16	Removal of kerb and channel/haunch/fillet to tip	m3	510		
8	B.8.17	Scarify existing hardened areas Depth : 0 to 150 mm	m2	350		
9	PS.B.8.18	Removal of excess scarified material to spoil. Rate to include all haulage	m3	120		
10	B.8.19	Removal of disused pipes, 300 mm diameter and spoil at tip. Rate to include all haulage	m	30		
11	B.8.19	Removal of disused pipes, 450 mm diameter and spoil at tip. Rate to include all haulage (Provisional)	m	10		
12	B.8.19	Removal of disused pipes, 600 mm diameter and spoil at tip. Rate to include all haulage (Provisional)	m	10		
13	PS.B.8.20.1	Seal ends of pipes with grade 15/26 concrete	m3	15		
14	PS.B.8.20.2	Seal ends of pipes with 230 mm brickwork	m2	20		
15	B.8.21	Backfilling with suitable material imported from an off-site source.	m3	50		
16	B.8.22	Transport re-usable material to Municipal depot	t * km	1500		
17	B.8.9	Demolition of brick manholes and inlets including concrete covers and lids and spoil at tip : Depth - : 0.0 m but not Exceeding 1.5m	no.	20		
18	PS.B.8.24	Removal of concrete block/brick paving and transport to Municipal Depot.	m2	2500		
19	B.8.13	Removal of concrete blocks spoil at tip.	m3	400		
20	B.8.9	Removal of underground brickwork	m3	5		

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Part Continued PART B SITE CLEARANCE

Item	Clause	Description	Unit	Quantity	Rate	Amount
21	B.8.15	Removal of block/brick paving to tip	m3	320		
22	PS.B.8.25	Removal of heavy duty cast iron covers and frames and store on site for re-use	no.	30		
23	PS.23	Removal of all waste and debris from site to spoil at approved tip site.	t	1.5		

TOTAL CARRIED TO SECTION 2 SUMMARY: SITE CLEARANCE

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Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

SECTION 3 ROADWORKS

PART DA EARTHWORKS : BULK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.3	Excavate soft material to spoil. Rate to include haulage.	m3	910		
2	DA.8.3	Extra over item 1 above for the excavation of intermediate material to spoil. Rate to include haulage.	m3	200		
3	DA.8.3	Extra over item 1 above for excavation of hard material to spoil. Rate to include haulage.	m3	100		
4	DA.8.3	Excavate unsuitable material below embankments or formation and spoil at tip. Rate to include haulage. (Provisional)	m3	20		
5	DA.5	Import G7 material from contractor's off-site source inclusive of haulage and royalties	m3	950		
6	DA.8.5	Compact G7 material to 95% Mod. A.A.S.H.T.O.	m3	950		
7	DA.8.9	Formation	m2	2600		
8	PS.DA.8.11	Supply and place general grade geofabric	m2	300		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART DB EARTHWORKS FOR PIPE TRENCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.19 and PS.2.2	Prove existing services by hand excavation (provisional), where depth is: - - Over 0,0 m and not exceeding 1,5 m	m3	50		
2	DB.8.19 and PS.2.2	Prove existing services by hand excavation (provisional), where depth is: - - Over 1,5 m and not exceeding 2,0 m	m3	20		
3	DB.8.19 and PS.2.2	Prove existing services by hand excavation (provisional), where depth is: - - Over 2,0 m and not exceeding 2,5 m	m3	20		
4	DB.8.5	Excavate in all material for services to be laid by others where depth is:- - Over 0,0 m and not exceeding 1,5 m	m3	1000		
5	DB.8.6	Extra over, item 1 to 3, for hard material (Provisional)	m3	200		
6	DB.8.7	Extra over, item 1 to 3 for road hardening	m3	400		
7	DB.8.8	Excavation of unsuitable material from trench bottom and spoil at tip (Provisional)	m3	50		

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Part Continued PART DB EARTHWORKS FOR PIPE TRENCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
8	PS.DB.8.24	Backfilling and compaction of service trenches	m3	800		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART EC CEMENT TREATED GRADED CRUSHED STONE

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EC.8.1	300 mm thick C3 cement treated subbase, (2 x 150 mm lifts)	m3	600		
2	EC.8(b)	Prime coat	m2	3900		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART ED ROAD ASPHALT

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	ED.8.3	Transverse joints	m	50		
2	ED.8.3	Longitudinal joints	m	400		
3	ED.8.3	Feathered transverse joints	m	60		
4	PS.ED.8.3	Saw Cut existing road edge	m	7000		
5	PS.ED.8.6	Planing / Milling of existing asphalt surface. (Rate to include all Haulage to the Municipal Asphalt Manufacturing Plant in Umhlatuzana Road, Sea View): Depth 0 - 40 mm	m3	150		
6	ED.8.1	40mm thick Wearing Course, Asphalt Sa - SV14 - Level IIA. Bitumen content % as per mix design entered at time of use.	t	550		
7	ED.8.2	80mm thick Base Course Asphalt Sa - SV14 - Level IIA. Bitumen content % as per mix design entered at time of use.	t	1100		
8	ED.8.4	Tack coat	m2	8000		
9	PS.ED.8.5	Patching of existing road surface	m2	350		
10	PS.ED.8.7	Crack sealing : supply of sealant	kg	100		
11	PS.ED.8.7	Crack sealing : Sealing of cracks	m	2000		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART EF KERBS AND HAUNCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EF.8.1	Type A barrier kerb and channel/fillet	m	3000		
2	EF.8.1	Extra over item 1 for curves of radius less than 25 m	m	450		

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Part Continued **PART** EF KERBS AND HAUNCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
3	EF.8.1	Extra over item 1 for curves of radius less than 2 m	m	60		
4	EF.8.1	Scoop kerb and channel/fillet (Type A) including transition kerb`	m	80		
5	PS.EF.8.4	Additional concrete to kerb foundation	m3	350		
6	PS.EF.8.5	Excavation for kerb and channel/ fillet in existing asphalt layers	m3	300		
7	EH.8.2	Graded Channel	m	250		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART EL DUMPROCK SUBGRADE IMPROVEMENT

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EL.8.	Dumprock subgrade improvement, 150 mm thick	m3	100		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART PG NON PRESSURE PIPELINES and PC CULVERTS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.11	110 mm diameter U.P.V.C. cable ducts	m	3840		
2	PG.8.11	160 mm diameter U.P.V.C. cable ducts	m	1920		
3	PG.8.11	Grade 20/26 concrete encasement to ducts	m3	336		
4	PS.PG.8.13	Sand/cement mix backfill to ducts	m3	100		
5	PG.8.11, PS.PG.8.11.3	Cable duct markers	no.	50		

TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS

R

PART TA ROAD SIGNS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	TA.8.7	Dismantling and storing road signs, area exceeding 2m2 but not exceeding 10m2	no.	10		
2	TA.8.3	Excavate to spoil for road sign supports	m3	15		
3	TA.8.4	Concrete grade 20/19 for road sign footings	m3	20		
4	TA.8.1	Supply and erect road sign boards, area not exceeding 2m2	m2	50		
5	TA.8.8	Re-erecting road signs stored on site, area not exceeding 2m2	no.	10		
6	TA.8.2	Supply and erect standard 76mm diameter hotted dipped galvanised road name sign supports. Rate to include haulage.	no.	50		

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PART TA ROAD SIGNS

Item	Clause	Description	Unit	Quantity	Rate	Amount
TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS						R

PART TB ROAD MARKINGS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.TB.8.5	Remove existing lane, edge and painted island lines by sand blasting	m2	1200		
2	TB.8.1.1	RETRO-REFELCTIVE ROAD THERMO-PLASTIC ROAD MARKING MATERIAL Painted road lines 100mm wide (white), including setting out and premarking	km	12		
3	TB.8.1.1	Painted road lines 100mm wide (white), including setting out and premarking	km	8		
4	TB.8.1.1	Painted road lines 100mm wide (yellow), including setting out and premarking	km	1.2		
5	TB.8.1.1	Painted road lines 150mm wide (yellow), including setting out and premarking	km	0.25		
6	TB.8.1.1	Painted road lines 100mm wide (red), including setting out and premarking	km	0.15		
7	TB.8.1.1	Painted road lines 200mm wide (white), including setting out and premarking	km	1.4		
8	TB.8.1	Road Marking for lettering, symbols and traffic islands (white), including setting out lettering, symbols and traffic island markings.	m2	150		
9	TB.8.1	Road Marking for lettering, symbols and traffic islands (yellow), including setting out lettering, symbols and traffic island markings.	m2	55		
10	PS.TB.8.4	PVA ROAD PAINT - Painted road lines 100mm wide (white), including setting out and premarking. Painted road lines 100mm wide (white), including setting out and premarking for temporary road marking	km	4		
11	PS.TB.8.4	Painted road lines 100mm wide (yellow), including setting out and premarking for temporary road marking	km	0.6		
12	TB.8.3 and PS.TB.8.3	Roadstuds	no.	900		
TOTAL CARRIED TO SECTION 3 SUMMARY: ROADWORKS						R

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SECTION 4 SIDEWALKS AND MEDIANS

PART DA EARTHWORKS : BULK

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DA.8.3	Excavate soft material to spoil	m3	1600		
2	DA.8.3	Extra over item 1 above for the excavation of intermediate material to spoil	m3	160		
3	DA.8.3	Extra over item 1 above for excavation of hard material to spoil	m3	40		
4	DA.8.4	Import suitable fill material, (G7 quality) from contractor's off-site source inclusive of haulage and royalties	m3	600		
5	DA.8.5	Compact imported fill material to 95% Mod. A.A.S.H.T.O.	m3	600		
6	DA.8.5	Compact soft material from site to 93% Mod. A.A.S.H.T.O.	m3	20		
7	DA.8.9	Formation	m2	16000		

TOTAL CARRIED TO SECTION 4 SUMMARY: SIDEWALKS AND MEDIANS

R

PART EB GRADED CRUSHED STONE

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EB.8(1)	Graded crushed stone (G4 quality), 100 mm thick	m3	1600		

TOTAL CARRIED TO SECTION 4 SUMMARY: SIDEWALKS AND MEDIANS

R

PART EF KERBS AND HAUNCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	EF.8.1	Figer 12 mini kerb as edge restraints to paving including haunching.	m	300		
2	EF.8.1	Extra over item 1 above for curves of radius less than 2 m	m	50		

TOTAL CARRIED TO SECTION 4 SUMMARY: SIDEWALKS AND MEDIANS

R

PART EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.EG.8.10	Insitu concrete bullnose to median	no.	5		
2	EG.8.4	Clay Brick paved median for forming scoop	m2	10		
3	EG.8.4	220 x 108.5 x 50 Cederburg Modular (Or Similar Approved) Clay Brick paver in herringbone pattern sidewalk. (Drawing 49521)	m2	7250		

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Part Continued PART EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS

Item	Clause	Description	Unit	Quantity	Rate	Amount
4	EG.8.4	220 x 220 x 50 Burgandy Doppio (Or Similar Approved) Clay Brick paver in stack bond pattern sidewalk and centre median. (Drawing 49521)	m2	4300		
5	EG.8.4	220 x 108.5 x 50 Burgundy Modular (Or Similar Approved) Clay Brick header course pattern in paved sidewalk and centre median. (Drawing 49521)	m2	7500		
6	EG.8.4	108.5 x 108.5 x 50 Onyx Cobble (Or Similar Approved) Clay Brick strip along trees in paved sidewalk and centre median. (Drawing 49521)	m	650		
7	EG.8.4	200 x 100 x 80 Exposed Aggregate Concrete Finish, Kalahari Colour, Interlocking Paver (Or similar Approved) in herringbone pattern (Drawing 49521)	m2	1350		
8	EG.8.4	Square Planter Boxes as per detail. (Drawing 49521)	no.	120		
9	EG.8.4	Elliptical Planter Boxes as per detail. (Drawing 49521)	m	1000		

TOTAL CARRIED TO SECTION 4 SUMMARY: SIDEWALKS AND MEDIANS

R

PART F PROTECTION WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PS.EH.8.3	280 Diameter and 325 Base Diameter x 900 mm high (157 KG) Captain Bollard exposed aggregate concrete bollards (Grey Colour) @ 1500 mm centers.	no.	350		
2	PS.EH.8.3	500 mm diameter exposed aggregate concrete bollard with smooth finish top surface.	no.	10		

TOTAL CARRIED TO SECTION 4 SUMMARY: SIDEWALKS AND MEDIANS

R

Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

SECTION 5 ROAD DRAINAGE

PART DB EARTHWORKS FOR PIPE TRENCHES

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	DB.8.5	Excavate and backfill in all material for 375 mm diameter pipe where depth is :- - Over 0,0 m and not exceeding 1,5 m	m	100		
2	DB.8.5	Excavate and backfill in all material for 375 mm diameter pipe where depth is :- - Over 1,5 m and not exceeding 2,0 m	m	60		
3	DB.8.6	Extra over, item 1 to 2, for hard material (Provisional)	m ³	16		
4	DB.8.7	Extra over, item 1 to 2, for road hardening	m ³	100		
5	DB.8.14	Extra over, item 1 to 2, for cement stabilised backfill	m ³	60		
6	DB.8.8	Excavation of unsuitable material from trench bottom and spoil at tip	m ³	25		
7	DB.8.9	Provision of selected granular material for Class B pipe bedding from a commercial or off- site source	m ³	50		
8	DB.8.9	Provision of clean coarse sand for pipe bedding from commercial or off-site source	m ³	50		
9	DB.8.9	Provision of 19 mm stone material for pipe bedding from commercial or off-site source (Provisional)	m ³	30		
10	PS.DB.8.25	Provision of drainage grade geofabric - Grade A2	m ²	500		
11	DB.8.10	Placing and compacting of Class B bedding for 375 mm diameter pipe.	m	50		
12	DB.8.12	Encasing of pipes in concrete grade 20/26 (Provisional)	m ³	25		
13	DB.8.15	Disposal of Unsuitable Material or Surplus Material caused by the Importation of Suitable Backfill or Bedding Materials (Provisional)	m ³	50		
14	DB.8.20	Trench shoring to remain in excavation	m ²	50		
15	DB.8.5	Excavate and backfill in all material for 110 mm diameter pipe where depth is :- - Over 0,0 m and not exceeding 1,5 m	m	100		

TOTAL CARRIED TO SECTION 5 SUMMARY: ROAD DRAINAGE

R

PART PG NON PRESSURE PIPELINES and PC CULVERTS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PG.8.2	375 mm diameter concrete Class 100D	m	160		

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Part Continued **PART** PG NON PRESSURE PIPELINES and PC CULVERTS

Item	Clause	Description	Unit	Quantity	Rate	Amount
2	PG.8.13	Grade 20/26 concrete for encasement of ducts under carriageways.	m ³	10		
3	PG.8.12	110 mm diameter pitch fibre sub-soil pipes	m	100		
4	PG.8.12.3	110 mm diameter pitch fibre stub at manholes	no.	10		

TOTAL CARRIED TO SECTION 5 SUMMARY: ROAD DRAINAGE

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PART PH MANHOLES and APPURTENANT DRAINAGE WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
1	PH.8.2	Manhole type A with heavy duty polymer cover and frame. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	9		
2	PH.8.2	Manhole type A with heavy duty polymer cover and frame. Depth :- - Over 1,5 m and not exceeding 2,0 m	no.	5		
3	PH.8.2	Manhole type A with heavy duty polymer cover and frame. Depth :- - Over 2,0 m and not exceeding 2,5 m	no.	1		
4	PH.8.3	Manhole type A with inlet type cover S2 with heavy duty polymer cover and frame. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	5		
5	PH.8.3	Manhole type A with inlet type cover S2 with heavy duty polymer cover and frame. Depth :- - Over 1,5 m and not exceeding 2,0 m	no.	6		
6	PH.8.3	Manhole type A with inlet type cover V2 with heavy duty polymer cover and frame. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	8		
7	PH.8.3	Manhole type A with inlet type cover VD3 with heavy duty polymer cover and frame. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	4		
8	PS.PH.8.2	Construct Type A manhole with heavy duty polymer cover and frame over an existing 375 mm diameter pipe. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	2		
9	PS.PH.8.2	Construct Type A manhole with heavy duty polymer cover and frame over an existing 375 mm diameter pipe. Depth :- - Over 1,5 m and not exceeding 2,0 m	no.	2		
10	PS.PH.8.2	Construct Type S2 inlet with heavy duty polymer cover and frame over an existing 375 mm diameter pipe. Depth :- - Over 0,0 m and not exceeding 1,5 m	no.	20		

Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

Part Continued PART PH MANHOLES and APPURTENANT DRAINAGE WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
11	PS.PH.8.2	Construct Type S2 inlet with heavy duty polymer cover and frame over an existing 375 mm diameter pipe. Depth :- - Over 1,5 m and not exceeding 2,0 m	no.	5		
12	PH.8.7	Raise/lower existing stormwater manhole with heavy duty polymer cover and frame in paved area by :- - 0 to 250 mm	no.	5		
13	PH.8.7	Raise/lower existing sewer manhole with heavy duty polymer cover and frame in paved area by :- - 0 to 250 mm	no.	5		
14	PH.8.7	Raise/lower existing stormwater manhole with cast iron cover and frame in roadway by :- - 0 to 250 mm	no.	22		
15	PH.8.7	Raise/lower existing sewer manhole with cast iron cover and frame in roadway by :- - 0 to 250 mm	no.	16		
16	PH.8.7	Raise/lower existing cast iron valve cover in paved area by :- - 0 to 250 mm	no.	5		
17	PH.8.7	Raise/lower existing cast iron valve cover in roadway by :- - 20 to 250 mm	no.	49		
18	PS.PH.8.12	Converting a type S2 inlet to a manhole with heavy duty polymer cover and frame	no.	4		
19	PS.PH.8.13	Converting a type S2 inlet to a V2 inlet with a heavy duty polymer cover and frame	no.	4		
20	PS.PH.8.13	Converting a type D3 inlet to a VD3 inlet with heavy duty polymer cover and frame	no.	2		
21	PS.PH.8.11	Break into existing brick manhole/inlet wall for [200 - 400] mm diameter pipe and make good	no.	8		
22	PH.8.7	Raise/lower Telkom/Services Manhole with concrete cover in paved area by :- - 0 to 250 mm	no.	2		
23	PH.8.7	Raise/lower Telkom/Services Precast Polymer Manhole in paved area :- - 0 to 250 mm	no.	3		
24	PH.8.7	Raise/lower Telkom/Services Manhole with cast iron frame and cover in roadway :- - 0 to 250 mm	no.	2		
25	PS.PH.8.17	Standard 2,75 Telkom Manholes (Provisional)	no.	2		
26	PS.PH.8.15	Heavy duty polymer concrete Slab for Blind Manholes (Provisional)	no.	3		
27	PH.8.5.6	Heavy duty cast iron manhole cover and frame on roadway (Stored on site).	no.	15		

Inner City Corridors of Excellence:Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade,(Ward 28).

Part Continued PART PH MANHOLES and APPURTENANT DRAINAGE WORKS

Item	Clause	Description	Unit	Quantity	Rate	Amount
28	PH.8.5.6	Heavy duty polymer concrete manhole cover and frame on roadway.	no.	5		

TOTAL CARRIED TO SECTION 5 SUMMARY: ROAD DRAINAGE

R

BILL OF QUANTITIES SECTION SUMMARY

SECTION 1 PRELIMINARY AND GENERAL

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

BILL OF QUANTITIES SECTION SUMMARY

SECTION 2 SITE CLEARANCE

PART B	SITE CLEARANCE	
TOTAL CARRIED TO FINAL SUMMARY		

BILL OF QUANTITIES SECTION SUMMARY**SECTION 3 ROADWORKS**

PART	DA	EARTHWORKS : BULK	
PART	DB	EARTHWORKS FOR PIPE TRENCHES	
PART	EC	CEMENT TREATED GRADED CRUSHED STONE	
PART	ED	ROAD ASPHALT	
PART	EF	KERBS AND HAUNCHES	
PART	EL	DUMPROCK SUBGRADE IMPROVEMENT	
PART	PG	NON PRESSURE PIPELINES and PC CULVERTS	
PART	TA	ROAD SIGNS	
PART	TB	ROAD MARKINGS	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY**SECTION 4 **SIDEWALKS AND MEDIANS****

PART	DA	EARTHWORKS : BULK	
PART	EB	GRADED CRUSHED STONE	
PART	EF	KERBS AND HAUNCHES	
PART	EG	SIDEWALKS, FOOTPATHS and MEDIAN AREAS	
PART	F	PROTECTION WORKS	
TOTAL CARRIED TO FINAL SUMMARY			

BILL OF QUANTITIES SECTION SUMMARY**SECTION 5 ROAD DRAINAGE**

PART	DB	EARTHWORKS FOR PIPE TRENCHES	
PART	PG	NON PRESSURE PIPELINES and PC CULVERTS	
PART	PH	MANHOLES and APPURTENANT DRAINAGE WORKS	
TOTAL CARRIED TO FINAL SUMMARY			

Inner City Corridors of Excellence: Corridor 2, Upgrade of Dr Pixley Ka Seme Street From Samora Machel Street to O.R. Tambo Parade, (Ward 28).

SUMMARY OF BILL OF QUANTITIES

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	ROADWORKS		R _____
	DA EARTHWORKS : BULK	R _____	
	DB EARTHWORKS FOR PIPE TRENCHES	R _____	
	EC CEMENT TREATED GRADED CRUSHED STONE	R _____	
	ED ROAD ASPHALT	R _____	
	EF KERBS AND HAUNCHES	R _____	
	EL DUMPROCK SUBGRADE IMPROVEMENT	R _____	
	PG NON PRESSURE PIPELINES and PC CULVERTS	R _____	
	TA ROAD SIGNS	R _____	
	TB ROAD MARKINGS	R _____	
4	SIDEWALKS AND MEDIANS		R _____
	DA EARTHWORKS : BULK	R _____	
	EB GRADED CRUSHED STONE	R _____	
	EF KERBS AND HAUNCHES	R _____	
	EG SIDEWALKS, FOOTPATHS and MEDIAN AREAS	R _____	
	F PROTECTION WORKS	R _____	
5	ROAD 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 _____