

FINAL SUMMARY			
BILL NO	DESCRIPTION	Page	AMOUNT
1	PRELIMINARY AND GENERAL		R -
2	BULK EARTHWORKS		R -
3	ROADWORKS		R -
4	CONCRETE ABUTMENTS		R -
5	GABIONS		R -
6	PILING		R -
7	BRIDGE		R -
8	CONTRACT PARTICIPATION GOAL		R -
9	<b>Sub Total A</b>		R -
10	Allow 10% Contingency Amount for the unforeseen and the sum provided is under the sole control of the client and upon approval by the Client Representative and deducted in whole or in part.	10%	R -
11	<b>Sub Total B</b>		R -
12	Value Added Tax 15%		R -
<b>Total including VAT Carried to Form of Tender</b>			R -

BILL NO. 1 - PRELIMINARIES AND GENERAL						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>BILL NO. 1 PRELIMINARIES</b>				
		NOTES Tenderers are referred to the General Conditions of Contract for Construction Works GCC (Third Edition, 2015), relevant parts of SANS 1921: Construction and Management Requirements for Works Contracts, Occupational Health & C3: Scope of Works documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary.				
		Changes made to the standard GCC document referred to above, are described in C1.2: Contract Data.				
	<b>PSA8.3</b>	<b>SCHEDULED FIXED-CHARGE AND VALUE RELATED ITEMS</b>				
1	<b>PSA8.3.1</b>	Contractual requirements	Sum	1		
2		Political Riot Insurance	Sum	1		
3	<b>PSA 8.3.1.1</b>	Occupational Health and Safety compliance fixed charge and value related costs - Contractor compliance with the OHS Act 85 of 1993, Construction Regulations (2014) & all other relevant Regulations, Client's Project Specific Health & Safety Specification	Sum	1		
4	<b>PSA 8.3.1.2</b>	Environmental Management Plan compliance fixed charge and value related cost	Sum	1		
	<b>PSA 8.3.1.3</b>	<b>Advance Payment Guarantee Fixed Charge and Value related costs for:</b>				
5		Bridge Deck	Sum	1		
6		Piling Works	Sum	1		
	<b>8.3.2</b>	<b>Establishment of Facilities on Site</b>				
	<b>PSA 8.3.2.1</b>	<b>Facilities for Engineer</b>				
7	a)	One furnished office as specified including: One Standard office table or desk, three chairs, acceptable lighting, a connection for electricity, Air-conditioning and a filing cabinet	Sum	1		
8	b)	One Contract Nameboard	Sum	1		
9	c)	Shaded carport	Sum	1		
10	d)	Survey equipment and assistants (2 No.)	Sum	1		
11	e)	DCP Testing equipment	Sum	1		
	<b>PSA 8.3.2.2</b>	<b>Facilities for Contractor</b>				
12	a)	Offices and storage sheds	Sum	1		
13	b)	Workshops	Sum	1		
14	c)	Laboratories	Sum	1		
15	d)	Living Accomodation	Sum	1		
16	e)	Ablution facilities	Sum	1		
17	f)	Tools and equipment	Sum	1		
18	g)	Water supplies, electric power and communications	Sum	1		
19	h)	Dealing with Water (see PSA5.5)	Sum	1		
20	i)	Access	Sum	1		
21	j)	Plant	Sum	1		
22	<b>8.3.3</b>	<b>Other Fixed Charge Obligations</b>	Sum	1		
23	<b>8.3.4</b>	<b>Removal of Site Establishment on completion</b>	Sum	1		
	<b>PSA8.4</b>	<b>SCHEDULED TIME RELATED ITEMS</b>				
24	<b>PSA8.4.1</b>	<b>Contractual Requirements</b>	Sum	1		
25	<b>PSA 8.4.1.1</b>	All Occupational Health and Safety compliance time related costs - Contractor compliance with the OHS Act 85 of 1993, Construction Regulations (2014) & all other relevant Regulations, Client's Project Specific Health & Safety Specification	Sum	1		
26	<b>PSA 8.4.1.2</b>	All Environmental Management Plan compliance time related costs	Sum	1		
	<b>PSA 8.4.1.3</b>	<b>Advance Payment Guarantee Time-related costs for:</b>				
27		Bridge Deck	Sum	1		
28		Piling Works	Sum	1		

BILL NO. 1 - PRELIMINARIES AND GENERAL						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	8.4.2	<u>Operation and Maintenance of Facilities on Site, for Duration of Construction</u>				
	8.4.2.1	<u>Facilities for Engineer</u>				
29	a)	One furnished office as specified including: One Standard office table or desk, three chairs, acceptable lighting, a connection for electricity, Air-conditioning and a filing cabinet	Sum	1		
30	b)	One Contract Nameboard	Sum	1		
31	c)	Shaded carport	Sum	1		
32	d)	Survey equipment and assistants (2 No.)	Sum	1		
33	e)	DCP Testing equipment				
	PSA 8.4.2.2	<u>Facilities for Contractor</u>				
34	a)	Offices and storage sheds	Sum	1		
35	b)	Workshops	Sum	1		
36	c)	Laboratories	Sum	1		
37	d)	Living Accomodation	Sum	1		
38	e)	Ablution facilities	Sum	1		
39	f)	Tools and equipment	Sum	1		
40	g)	Water supplies, electric power and communications	Sum	1		
41	h)	Dealing with Water (see PSA5.5)	Sum	1		
42	i)	Access	Sum	1		
43	j)	Plant	Sum	1		
44	k)	Provision of 24-hour security to the site camp	Sum	1		
45	l)	Provision of monthly labour return	Sum	1		
46	8.4.3	<u>Supervision for Duration of Construction</u>	Sum	1		
47	8.4.4	<u>Company and Head Office Overhead Cost for the duration of the Contract</u>	Sum	1		
48	PSA 8.4.5	<u>Other Time-Related Obligations</u>	Sum	1		
	PSA8.5	<u>SUMS STATED PROVISIONAL BY ENGINEER</u>				
49	(a)	Drilling & determining compressive strength of 100 mm diameter concrete cores	Sum	1	10 000	R10 000.00
50	(b)	Overheads charges and profit on item 49 (a) above	%	10 000		
51	(a)	Remuneration of CLO for 2 persons. CLO rate is R5 500,00 pm	Sum	1	121 000	R121 000.00
52	(b)	Overheads charges and profit on item 51 (a) above	%	121 000		
53	(a)	Reimbursement of PSC members (3 persons) for the attendance of site meetings to the value of R400.00 each member	Sum	1	26 400	R26 400.00
54	(b)	Overheads charges and profit on item 53 (a) above	%	26 400		
	8.7	<u>DAYWORK (Provisional)</u>				
		<u>NOTE:</u>				
		(i) All rates to be Gross (Mark up, profits under overheads, etc. and all requirements listed in item 8.7 included)				
		(ii) The Tenderer must state the capacity of the Plant that his rate is based on:				
		(iii) Dayworks will apply in quantities. Sub clause 6.5 of the General Conditions of Contract Limiting increases in quantities and/or any Sub items will not apply in day works				
		(iv) Standing time will be taken as 2/3 of the Rate				
	8.7.1	<u>Labour</u>				
55	(a)	Site Foreman	Hr			Rate Only
56	(b)	Trade Foreman	Hr			Rate Only
57	(c)	Supervisor	Hr			Rate Only
58	(d)	Artisan	Hr			Rate Only
59	(e)	Operator	Hr			Rate Only
60	(f)	Gang Boss	Hr			Rate Only
61	(g)	Leading Hand	Hr			Rate Only
62	(h)	Survey Assistant	Hr			Rate Only
63	(i)	Labourer	Hr			Rate Only
	8.7.2	<u>Plant</u>				
64	(a)	Track Excavator minimum 20 tons. State make ..... and model .....	Hr			Rate Only
65	(b)	Track Excavator minimum 40 tons. State make ..... and model .....	Hr			Rate Only

BILL NO. 1 - PRELIMINARIES AND GENERAL						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
66	(c)	Backhoe TLB type min. 60kW. State make ..... and model .....	Hr			Rate Only
67	(d)	Bulldozer (CAT D7 or similar approved - approx. 145 Kw)	Hr			Rate Only
68	(e)	Grader (CAT 140H or similar approved)	Hr			Rate Only
69	(f)	Rubber tyred front-end loader mi. 90kW. State make ..... and model .....	Hr			Rate Only
70	(g)	Pedestrian type vibrating roller (Bomag BW65H or similar approved). State make ..... and model .....	Hr			Rate Only
71	(h)	Compacting vibrating roller - Single Drum Smooth - Self Propelled - min. 12 tons. State make ..... and model .....	Hr			Rate Only
72	(i)	Compacting vibrating roller - Single Drum Padded or Grid - Self Propelled - min. 12 tons. State make ..... and model .....	Hr			Rate Only
73	(j)	Compactor (PAN)	Hr			Rate Only
74	(k)	Water cart (9000 litre)	Hr			Rate Only
75	(l)	Water cart (5000 litre)	Hr			Rate Only
76	(m)	Tip-up truck (10 m³)	Hr			Rate Only
77	(n)	Tip-up truck (6 m³)	Hr			Rate Only
78	(o)	Compressor: min 250 cfm complete with hand tools and attachments. State make ..... and model .....	Hr			Rate Only
79	(p)	Bakkie (1 ton)	Hr			Rate Only
80	(q)	Cement	Bag			Rate Only
81	(r)	Building Sand	m³			Rate Only
82	(s)	Crushed Stone (19mm)	m³			Rate Only
83	(t)	Bricks (ROK's)	1,000			Rate Only
	<b>PSA8.8</b>	<b>TEMPORARY WORK</b>				
84	<b>PSA8.8.1</b>	<b>Main Access road to Works (construct and Maintain)</b>	Sum	1		
85	<b>8.8.2</b>	<b>Accommodation of Traffic</b>	Sum	1		
	<b>8.8.4</b>	<b>Existing Services</b>				
86		c)Excavate by hand in soft material to locate existing services	m³	150		
	<b>8.8.5</b>	<b>Cost of survey in terms of Land Survey Act</b>				
87	(a)	Locate, record and protect erf boundaries and survey pegs	Sum	1		
88	(b)	Replace pegs recorded as missing at commencement of Contract	Sum	1		
89	<b>8.8.6</b>	<b>Special Water Control in Terms of Project Specification</b>	Sum	1		
	<b>PSA8.8.7</b>	<b>Fencing</b>				
90		Supply, Installation and removal of temporary fencing. Fencing will be 1.8m high Bonnox Wire Fencing (galvanized) including all supports, equipment, labour, material and excavation required	m	300		
	<b>PSA8.8.8</b>	<b>Access to Western Embankment of River</b>				
91		Provision for the supply, installation and maintenance of all provisions required for the safe access across the river to the Western Embankment for all staff, labour, site visitors, plant, equipment and material for the duration of the contract.	Sum	1		
	<b>PSA8.8.9</b>	<b>Dewatering</b>				
92	PSA8.8.9.1	The contractor is referred to the geotechnical report for this project attached as addendum C4.2 highlighting the high water table on both embankments of the river. The Contractor must make provision for de-watering of all open excavations as necessary for construction to safely proceed until all backfilling of open trenches have been completed. The contractor must comply with all statutory regulations, including the environmental- & health and safety specifications during construction, operation and dismantling.	Sum	1		
93	PSA8.8.9.2	The contractor to provide temporary drainage works, temporary pumps and other equipment as may be necessary for the protection, draining and dewatering of the works; at stream and river crossings provide stream and river diversions to safeguard the works against floods of an acceptable return period. The contractor must comply with all statutory regulations, including the environmental- & health and safety specifications during construction, operation and dismantling.	Sum	1		

BILL NO. 1 - PRELIMINARIES AND GENERAL						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>PSA8.8.10</b>	<b>Temporary Launch Platform or structure for bridge deck</b>				
94		Temporary launch platform / structure to be designed, constructed, maintained and removed as per PSA 8.8.11. The contractor must comply with all statutory regulations, including the environmental- & health and safety specifications during construction, operation and removal/dismantling.	Sum	1		
95	<b>PSA8.9</b>	Dealing with Water	Sum	1		
<b>Total Preliminaries (Carried to Final Summary)</b>						

BILL NO. 2 - BULK EARTHWORKS						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200C: SITE CLEARANCE						
		<u>Clear and grub</u>				
1	8.2.1	Clear and grub	ha	0.2		R -
2	PSC8.2.3	Remove all trees and tree stumps regardless of girth	No.	5		R -
3	PSC 8.2.10	Remove topsoil to nominal depth of 150 mm to stockpile and maintain for later use and rehabilitation	m³	400		R -
4	PSC8.2.11	Taking down and repositioning and re-erect of existing fences	m	230		R -
SABS 1200D: BULK EARTHWORKS						
	PSD 8.3.2	<u>Bulk Excavation</u>				
	PSD 8.3.2.1	Excavate in all materials and use for embankment or backfill including processing, shaping and compaction to 90% MOD AASHTO				
5		To reach suitable roadbed founding material to approach and access roads	m³	200		R -
6		To drainage ditch	m³	20		R -
	PSD 8.3.2.2	Extra-over items 5 and 6 for				
7	a)	Hard Rock (Provisional)	m³	0		Rate Only
8	b)	Boulder excavation Class A (Provisional)	m³	90		R -
9	c)	Boulder excavation Class B (Provisional)	m³	90		R -
	PSD 8.3.2.2	Excavate in all materials and stockpile				
10		To reach suitable roadbed founding material to approach and access roads	m³	300		R -
11		To drainage ditch	m³	20		R -
	PSD 8.3.2.2	Extra-over items 10 and 11 for				
12	a)	Hard Rock (Provisional)	m³	0		Rate Only
13	b)	Boulder excavation Class A (Provisional)	m³	150		R -
14	c)	Boulder excavation Class B (Provisional)	m³	100		R -
	PSD 8.3.2.1	Excavate in all materials and dispose of as ordered				
15		To reach suitable roadbed founding material to approach and access roads	m³	200		R -
16		To drainage ditch	m³	20		R -
	PSD 8.3.2.2	Extra-over items 15 and 16 for				
17	a)	Hard Rock (Provisional)	m³	0		Rate Only
18	b)	Boulder excavation Class A (Provisional)	m³	100		R -
19	c)	Boulder excavation Class B (Provisional)	m³	50		R -
	8.3.4	Extra-over items 5 to 9 for importing of materials:				
20	8.3.4 a)	Extra-over for importation of materials from: commercial sources including processing, shaping and compaction to 90% MOD AASHTO	m³			Rate Only
21	8.3.4 a)	Extra-over for importation of materials from borrow pits including processing, shaping and compaction to 90% MOD AASHTO	m³	200		
22	8.3.4 b)	Opening up and closing down of designated borrow pit	Sum	1		
23	8.3.4 c)	Dealing with overburden (Provisional)	m³	100		
24	8.3.9	Extra-over for Backfill or for fill material to top of pile caps and foundations, including processing, shaping and compaction to 90% MOD AASHTO	m³	200		R -
Total Bulk Earthworks (Carried to Final Summary)						R -

BILL NO. 3 - ROADWORKS						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200DM: EARTHWORKS (ROADS, SUBGRADE)						
	PSDM 8.3.7	<u>Stockpile to fill, use for embankment or backfill including processing, shaping and compaction to 90% MOD AASHTO</u>				
1	a)	Soft excavation	m³	200	R	-
	PSDM 8.3.7	<u>Dispose of stockpiled material as ordered</u>				
2	a)	Soft excavation	m³	100	R	-
	PSDM 8.3.4b)	<u>Rock fill (hard, durable, and inert material preferably shall consist of rock fill material varying in size between 150mm and the maximum size of 500mm including processing, shaping and compaction to the applicable specification from commercial sources</u>				
3		To underside of link mattresses at East Abutment	m³	1800	R	-
4		To underside of link mattresses at West Abutment	m³	200	R	-
	PSDM 8.3.4b)	<u>Rock fill (hard, durable, and inert material preferably shall consist of rock fill material varying in size between 150mm and the maximum size of 500mm including processing, shaping and compaction to the applicable specification from designated borrow pits</u>				
5		To underside of link mattresses at East Abutment	m³			Rate Only
6		To underside of link mattresses at West Abutment	m³			Rate Only
7	1200D 8.3.4 b)	Opening up and closing down of designated borrow pit	Sum			Rate Only
8	8.3.4 c)	Dealing with overburden	m³			Rate Only
		<b>Bridge approach</b>				
9		Cart surplus excavated material to spoil	m³	110	R	-
	PSDM8.3.3	Tatement of road-bed				
10	a)	Road bed preperation and compaction of material to 93% Mod AASHTO Density	m³	110	R	-
11	b) i)	In-place treatment of roadbed in hard rock materil by ripping (Provisional)	m³	10	R	-
12		150mm Sabunga wearing course from from designated borrow pit or comercial source compacted to 95% Mod AASHTO density	m³	110	R	-
SABS 1200ME: SUBBASE						
	PSME8.3.3	<u>Construct the subbase course / shoulders / gravel wearing course with material from commercial sources or designated borrow areas</u>				
13		150mm Subbase G5 material compacted to 95% Mod AASHTO Density	m³	60	R	-
14		150mm Gravel Wearing Course (CBR minimum 45%, PI>6 and not more than (3xGM)+10, max. stone size 40mm) compacted to 95% Mod AASHTO maximum density	m³	10	R	-
		<b>Testing (Additional tests as required by the Engineer)</b>			R	-
15		Modified AASHTO Density tests by registered laboratory	No.	10	R	-
SABS 1200MM: ANCILLARY ROADWORKS						
	8.2.1	<b>SANS 1350 hot dipped Galvanized Guardrails on Standard timber posts 1800mm long x 150-175mm diameter.</b>				
16		to Eastern approach road	m	110	R	-
17		to Western approach road	m	40	R	-
	8.2.2	<b>End Units</b>				
18		Fishtail Terminal end wings	No	8	R	-
Total Roadworks (Carried to Final Summary)					R	-

BILL NO. 4 - CONCRETE ABUTMENTS						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200D: EARTHWORKS						
	PSD8.3.3	Restricted excavation in earth and deposit excavated material on site for use as filling, backfilling or carting away (elsewhere)				
1		To underside of pile caps including working around piles	m <sup>3</sup>	328	R	-
	8.3.7	Extra over restricted excavation for				
2		Soft excavation	m <sup>3</sup>	120	R	-
3		Hard excavation	m <sup>3</sup>	25	R	-
4		Boulder excavation Class B	m <sup>3</sup>	60	R	-
	8.3.5	Working space excavation for a width as necessary and backfill on completion with in-situ material from stockpiles on site				
5		Working space for formwork to sides of pile caps (Excavation not exceeding 3m deep)	m <sup>2</sup>	135	R	-
		Risk of collapse of excavations				
6		Sides of pile cap excavations exceeding 1,5m deep	m <sup>2</sup>	265	R	-
7	8.3.7	Include a Provisional Sum of R 200 000.00 (Two Hundred Thousand Rand) nett for Additional Lateral Support around pile cap excavations as directed by the Engineer (provisional)	Sum	1	R	200 000.00
		Filling				
8		Granular earth filling arising from the excavations compacted in multiple layers not exceeding 150mm thick to 93% Mod AASHTO density in backfilling to foundation excavations	m <sup>3</sup>	197	R	-
		Carting away				
9		Excavate into stockpile and cart surplus excavated material off site to an approved Municipal Landfill site irrespective of any freehaul distance	m <sup>3</sup>	251	R	-
SABS 1200G: CONCRETE (STRUCTURAL)						
		FORMWORK				
	8.2.1	Rough				
10		To sides of blinding	m <sup>2</sup>	10	R	-
11		To sides of pile caps	m <sup>2</sup>	75	R	-
	8.2.1	Smooth				
12		To sides of bridge abutments not exceeding 8m high	m <sup>2</sup>	103	R	-
13		To edge of abutment support	m <sup>2</sup>	5	R	-
14		To 45° underside of corbel to abutment not exceeding 300mm wide	m	7	R	-
15		To Semi circular end of concrete abutment 750mm diameter x 7840mm high (rectangular sides elsewhere measured)	No	4	R	-
		Boxing in to smooth formwork				
16		To form horizontal rebate size 100mm wide x 150mm deep at top edge of abutment support	m	7	R	-
	8.3	REINFORCEMENT				
	8.3.1	Steel Bars				
17		Mild steel bars of varying diameter	t	2	R	-
18		High tensile bars of varying diameter	t	30	R	-
19		R24 x 750mm long L-shaped dowel cast into abutment with one end projecting 200mm	No	22	R	-
		CONCRETE				
	8.4.2	Blinding				
20		Blinding layer under pile caps	m <sup>3</sup>	15	R	-
	8.4.3	Strength concrete 35/19				
21		Pile caps	m <sup>3</sup>	108	R	-
22		Bridge abutments	m <sup>3</sup>	107	R	-
	8.4.4	Unformed surface finishes				
23		Broom finish to top of abutment	m <sup>2</sup>	3	R	-
		JOINTS				
24		10mm Bitumen impregnated softboard not exceeding 300m wide between concrete surfaces	m	6	R	-



BILL NO. 4 - CONCRETE ABUTMENTS						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SUNDRIES</b>				
25		Set of three concrete strength cubes each size 150 x 150 x 150mm, send to an independent laboratory for test crushing including all	No	20		R -
26		Take delivery and cast in exact position set of eight anchor bolts in to of abutment support	No	4		R -
27		20mm Thick Non-shrink grout between concrete and steel baseplate	m <sup>2</sup>	1		R -
		<b>METALWORK</b>				
28		80x80x8 angles hot dipped galvAnized cast into edges of concrete abutments with 200 long x 30mm wide x 5mm thick fishtale lugs at 300mm c/c	m	21		R -
29		Extra on last for mitred and welded corner	No	8		R -
<b>Total Concrete Abutments (Carried to Final Summary)</b>						

BILL NO. 5 - GABIONS						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200D: EARTHWORKS						
	PSD8.3.3	<u>Restricted Excavation</u>				
	PSD8.3.3 a)	Restricted excavation in all materials and spoiling to an approved Landfill site irrespective of any freehaul distance				
1		To underside of Gabions and Link Mattressess	m <sup>3</sup>	330	R	-
	8.3.5	Working space excavation for a width as necessary and backfill on completion with in-situ material from stockpiles on site				
2		Working space around gabions (Excavations not exceeding 3m deep)	m <sup>2</sup>	310	R	-
SABS 1200DM: EARTHWORKS ROADS						
	PSD8.3.3	<u>Treatment of road-bed</u>				
	a)	Road-bed preparation and compaction of material to				
3		minimum of 93% of modified AASHTO maximum density for Gabions/Reno Matrasses(where required by Engineer)	m <sup>3</sup>	200	R	-
SABS 1200DK GABIONS AND PITCHING						
		<u>GABIONS EASTERN EMBANKMENT</u>				
4	PSDK8.2.1	Surface Preparation for gabions	m <sup>3</sup>	200	R	-
	8.2.2	<u>Mesh Type 60 double twisted hexagonal galvanized mesh. Steel wire used to manufacture the mesh, lacing, bracing and selvage shall be heavily Galfan coated to class A according to EN 10244-2 Table 2 and the wire shall further be PVC coated to a nominal thickness of 0.5 mm</u>				
5		Gabions 1x1x2m to sides of concrete abutment	m <sup>3</sup>	200	R	-
6		Gabions 1x1x2m to sides of concrete access road	m <sup>3</sup>	1500	R	-
7	8.2.3	Extra over items 5 to 6 for packing selected stone for exposed face	m <sup>2</sup>	560		
		<u>Mattressess</u>				
	8.2.2	<u>Mesh Type 60 double twisted hexagonal galvanized mesh. Steel wire used to manufacture the mesh, lacing, bracing and selvage shall be heavily Galfan coated to class A according to EN 10244-2 Table 2 and the wire shall further be PVC coated to a nominal thickness of 0.5 mm</u>				
8		Bed mattress 2x1x0.3m	m <sup>3</sup>	100	R	-
	8.2.4	<u>Geotextile (or geomembrane)</u>				
9		Filter fabric Bidim A6 or similar approved: Supply geotextile, cutting, waste, placing, joining, overlapping and fastening geotextile in position to external face of baskets	m <sup>2</sup>	1200	R	-
10		Filter fabric Bidim A4 or similar approved: Supply geotextile, cutting, waste, placing, joining, overlapping and fastening geotextile in position to underside of mattressess	m <sup>2</sup>	1700	R	-
		<u>GABIONS WESTERN EMBANKMENT</u>				
11	PSDK8.2.1	Surface Preparation for gabions	m <sup>3</sup>	200	R	-
	8.2.2	<u>Mesh Type 60 double twisted hexagonal galvanized mesh. Steel wire used to manufacture the mesh, lacing, bracing and selvage shall be heavily Galfan coated to class A according to EN 10244-2 Table 2 and the wire shall further be PVC coated to a nominal thickness of 0.5 mm</u>				
12		Gabions 1x1x2m to sides of concrete abutment	m <sup>3</sup>	200	R	-
13		Gabions 1x1x2m to sides of concrete access road	m <sup>3</sup>	600	R	-
14	8.2.3	Extra over items 12 to 13 for packing selected stone for exposed face	m <sup>2</sup>	340		
		<u>Mattressess</u>				
	8.2.2	<u>Mesh Type 60 double twisted hexagonal galvanized mesh. Steel wire used to manufacture the mesh, lacing, bracing and selvage shall be heavily Galfan coated to class A according to EN 10244-2 Table 2 and the wire shall further be PVC coated to a nominal thickness of 0.5 mm</u>				
15		Bed mattress 2x1x0.3m	m <sup>3</sup>	50	R	-
	8.2.4	<u>Geotextile (or geomembrane)</u>				

16		Filter fabric Bidim A6 or similar approved: Supply geotextile, cutting, waste, placing, joining, overlapping and fastening geotextile in position to external face of baskets	m <sup>2</sup>	400		R	-
17		Filter fabric Bidim A4 or similar approved: Supply geotextile, cutting, waste, placing, joining, overlapping and fastening geotextile in position to underside of mattresses	m <sup>2</sup>	1350		R	-

	8.2.2	<b><u>APPROACH ROAD</u></b>				
		<b><u>Mattressess</u></b>				
		<b><u>Mesh Type 60 double twisted hexagonal galvanized mesh</u></b>				
18		Bed mattress 2x1x0.3m	m <sup>3</sup>	140	R	-
		<b><u>Scour Bags</u></b>				
19		Duffle top, closed bottom bulk bag, with a 2000kg capacity filled with material from excavations or borrow pits	No	100	R	-
20		Duffle top, closed bottom bulk bag, with a 1000kg capacity filled with material from excavations or borrow pits	No	150	R	-
<b>Total Gabions (Carried to Final Summary)</b>						

SECTION 5: PILING						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200D: BULK EARTWORKS						
	8.3.2	Bulk Excavation cut to fill				
	8.3.2 a)	Excavate in all materials to embankment and fill adjacent areas in cut to fill operation and dispose surplus material as ordered				
1		To form temporary platform for piling equipment on Western bank	m³	240		R -
SABS 1200F: PILING						
		DESIGN, SUPPLY AND INSTALLATION OF ODEX PILES RATES INCLUDED BELOW TO INCLUDE FOR FULL DESIGN AND SUPPLY OF EACH PILE, RATES ARE TO INCLUDE ALL REQUIREMENTS LISTED IN THE DOCUMENTS PROVIDED BELOW. Geotechnical Report - Dikidikini Bridge 31.1.2023 Rev1 PSF PILING WORKS rev2 A_GA30-01_T03 - Pile Layout and Details All measurement items below are in accordance with SABS 1200F				
		Notes:				
		The piling contractor must take note of the condition of the main access road to the site and that access to the site is only possible from the East of the river. All prices in this Bill must include for moving equipment and materials across the river for those portions of work on the Western embankment and back on completion, by a means determined by the piling contractor. The piling contractor must visit the site beforehand to acquaint himself with the conditions and restrictions on site as no claims due to want of knowledge will be entertained				
2	8.2.1	Establishment on Site of for permanently cased, rotary bored, reinforced concrete ODEX piles socketed into the underlying bedrock, for both the Western and Eastern embankments  (The sum shall include for the cost of carrying out operations the cost of which does not vary with the actual amount of piling done, and of general leveling of the piling site and the establishment on site and subsequent removal of all special plant and equipment for piling.)	Sum	1		R -  R -
						R -
3	8.2.2	Move Equipment to and set up at each Pile Position  (The quantity measured will be equal to the number of piles plus the number of heaved piles redriven on instruction by the engineer. The rate shall cover the cost of moving and setting up equipment)	No.	60		R -  R -
						R -
4	8.2.4	Auger or Bore holes for Piles of ..... mm Diameter (as defined by pile designer contractor to insert diameter) Through material in the following successive depth ranges for material as detailed in the Geotechnical report				R -
		(The limits for the successive depth ranges will be measured from the working level (see 5.1.6) to the agreed founding level. The depth measured will be that of the accepted hole. The contractor to allow for disposal of augered material at suitable dump site. )				R -
4.1		0 to 8m - silty sandy gravel with cobbles and BOULDERS	m	480		R -
4.2		8 to 10m - moderately to highly weathered, very fine grained, intensely laminated, very highly to highly fractured, soft to medium hard rock, SHALE	m	120		R -
4.3		10 to 14m - very fine grained, intensely laminated, very highly to highly fractured, soft to medium hard rock, SHALE.	m	240		R -
						R -

SECTION 5: PILING						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	8.2.15	Install Permanent steel Pile Casings in augered holes as directed for Piles of diameter ..... mm (as defined by pile designer - contractor to insert diameter). Thickness of casing of..... mm (as defined by piling contractor - contractor to insert casing thickness.  (The length measured will be that of the permanent casing used The rate shall cover the cost of supply and installation)	m	840		R - R -
						R -
6	8.2.16	Steel Reinforcement in Cast-in-situ piles				R -
6.1		Mild steel bars	t	2		R -
6.2		High Tensile Steel Bars	t	24		R -
						R -
7	8.2.17	Concrete for cast-in-situ Piles, Underreams, Bulbous Bases and Sockets 30 Mpa maximum water cement ratio of 0.55  (The volume measured will be that of concrete placed in cast-in-situ piles, underreams, bulbous bases, and sockets. The volume will be computed from the nominal pile diameter and length of pile from the founding level (extremity of pile or bottom of socket, as applicable) to 80mm into the pile cap plus the additional quantity of concrete in the underream or bulbous base, as applicable. The rate shall cover the cost of supplying all materials and plant, mixing, transporting, placing, compacting, curing, and repairs to defective concrete)	m3	200		R - R -
						R -
8	8.2.18	Extra-over 8.2.17 for concrete cast under water (The rate shall cover the cost of all additional work and extra cement required to place the concrete under water )	m3	200		R - R -
						R -
9	8.2.20	Strip cut pile heads (The rate shall cover the cost of stripping/cutting a pile head )	No.	60		R - R -
						R -
10	8.2.21	Establishment on Site for the Load Testing of Piles  (The sum shall cover the cost of establishment on site and subsequent removal of all special plant and equipment required for carrying out load testing of piles, the cost of which does not vary with the actual number of load tests to be done)	Sum	1		R - R -
						R -
11	8.2.22	<u>Load test on piles</u>  (Only load test actually performed on written instructions from the engineer, for each specified test load will be measured. Test piles, but not anchor piles, will be measured as specified above for permanent piles. the rate shall cover the cost of moving and setting up the pile testing assembly, provision of kentledge or the installation of of anchor piles and anchors, where necessary, performing the load tests, processing and submission of results and removal of assembly. )				R -
11.1		Compression	no.	2		R -
11.2		Tension	no.	1		R -
						R -
						R -
Total Piling (Carried to Summary)						R -

BILL NO. 7 - BRIDGE						
ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>DESIGN , SUPPLY AND ERECTION OF BRIDGE OVER NEWLY CONSTRUCTED CONCRETE ABUTMENTS</b>				
		<b>Notes:</b>				
		The contractor is referred to the following documentation attached as an addendum to this document in pricing this section: - Bridge Performance Specification - 8547AP-STR-SPEC02-T03 - Addendum Drawings A GA30-04_T01 A GA30-05_T01				
		<u>Mabey or equal approved Modular Compact 200 single span bridge as per the attached Bridge Performance Specification Annexure N 8547AP-STR-SPEC02-T03</u>				
1		Design, fabrication and supply per 8547AP-STR-SPEC02-T03 for 1 Number bridge structure	Sum	1	R -	R -
2		Delivery to site	Sum	1	R -	R -
3		Erection Complete	Sum	1	R -	R -
		<u>Temporary works and requirements as set out in Clause 5 of the Bridge Performance Specification</u>				
4		Temporary Works and Structures	Sum	1	R -	R -
5		Temporary Works designer	Sum	1	R -	R -
		<u>Forward Cover for Foreign Exchange fluctuations</u>				
6		Rates and prices are fixed for the duration of the Contract and not subject to adjustment. The Contractor must therefor make allowance for forward cover for expected exchange rate fluctuations between the Rand and currency of the country of origin on the cost of all imported material and include this in his price. This forward cover shall be from the date of submission of tender up to the end of the tender validity period (90 days) in terms of Clause C2.16 of the Tender Data including the time period from date of award (which could be on day 90 after tender submission) to the arrival of the material in South Africa	Sum	1		R -
<b>Total Bridge (Carried to Final Summary)</b>						R -

**BILL NO. 8: CONTRACT PARTICIPATION GOALS**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>Note to tenderers:</b> As CPGs may not provide any bidder a competitive advantage. Provisional amounts and fixed percentages for profit and attendance have been provided. Only the provisional amount will be adjusted once the awarded tender amount and/or the beneficiaries have been appointed, and the final values have been ascertained.				
<b>1</b>	<b><u>MINIMUM TARGETED ENTERPRISE DEVELOPMENT</u></b>				
1.1	A provisional amount has been allowed for in the execution of this project as described in C3.1 Project Specifications. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises including monitoring and monthly reporting.	PS	1		<b>R 785 000.00</b>
1.2	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%	1	5%	
1.3	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%	1	5%	
<b>2</b>	<b><u>MINIMUM TARGETED SKILLS DEVELOPMENT GOALS</u></b>				
2.1	A provisional amount has been allowed for the Minimum Targeted Development CPG in the execution of this project as described in C3.1 Project Specifications				
	<ul style="list-style-type: none"> <li>• stipends payable to the beneficiaries</li> <li>• appointment of training coordinator</li> <li>• appointment of mentor (where applicable)</li> <li>• appointment of training service providers</li> <li>• other additional costs as per table 3 of the Standard</li> <li>• monitoring and monthly reporting</li> </ul>	PS	1		<b>R 812 000.00</b>
2.2	Allowance for profit all inclusive of associated costs to the contractor for implementation.	%	1	5%	
2.3	Allowance for attendance all inclusive of associated costs to the contractor for implementation.	%	1	5%	
<b>Total Roadworks (Carried to Summary)</b>					