

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>SECTION NO. 1</u>				
	SANS 1200A/AB / 8.3	<u>PRELIMINARY & GENERAL</u>				
		<u>Fixed preliminary items</u>				
		Fixed preliminary items will be valued and paid the total value				
		<u>Time related preliminary items</u>				
		Time related preliminary items will be paid on the price of work done to date per the Project activities directly related to materials, escalation over the contract value excluding preliminaries costs				
	8.3.1	<u>FIXED PRELIMINARY ITEMS</u>				
		<u>Contractual Requirements</u>				
1		Contractual requirements, sureties, insurances, etc.	Sum	1		
	8.3.2	<u>Establishment of Facilities on Site</u>				
2		Offices for engineer, staff	Sum	1		
3		Name boards	Sum	1		
	8.3.2.2	<u>Facilities for Contractor</u>				
4	a)	Offices and storage sheds	Sum	1		
5	b)	Workshops	Sum	1		
6	c)	Ablution and latrine facilities	Sum	1		
7	d)	Tools and equipment	Sum	1		
8	e)	Water supplies, electric power and communications	Sum	1		
9	f)	Dealing with water	Sum	1		
10	g)	Access	Sum	1		
11	h)	Equipment	Sum	1		
	8.3.3	<u>Other fixed charge obligations</u>				
12		Health and safety	Sum	1		
13		Environmental	Sum	1		
14		As-built surveys	Sum	1		
15		Security	Sum	1		
16	8.3.4	Removal of site establishment	Sum	1		
17	8.8.2	Dealing with traffic	Sum	1		
	SANS 1200A/AB /	<u>TIME RELATED ITEMS</u>				
		<u>Time related preliminary obligations may relate to fixed preliminary items and items not listed</u>				
18	8.4.1	Time related obligations	Sum	1		
Carried to summary:						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>SECTION NO. 2</u>				
		<u>DEMOLITIONS</u>				
		<u>DEMOLITIONS BETWEEN BERTH 1 - 2</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
1		Removal of submerged obstruction less than 200kg	No.	2		
2		Removal of submerged obstruction more than 200kg and less than 600kg	No.	1		
3		Removal of submerged obstruction more than 600kg and less than 1000kg	No.	1		
4		Removal of submerged obstruction more than 1000kg and less than 5000kg	No.	1		
5		Removal of submerged obstruction more than 5000kg	No.	3		
		<u>DEMOLITIONS BETWEEN BERTH 2 - 3</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
6		Removal of submerged obstruction less than 200kg	No.	2		
		<u>DEMOLITIONS BETWEEN BERTH 3 - 4</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
7		Removal of submerged obstruction less than 200kg	No.	3		
8		Removal of submerged obstruction more than 600kg and less than 1000kg	No.	2		
9		Removal of submerged obstruction more than 5000kg	No.	2		
		<u>DEMOLITIONS BETWEEN BERTH 6 - 7</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
10		Removal of submerged obstruction more than 5000kg	No.	2		
		<u>Break up existing cement/concrete rat proofing</u>				
11	B2.2.2	Break up existing 50mm cement/concrete rat proofing (partially within the tidal range)	m ²	300		
Carried Forward:						

Brought Forward:						
		<u>DEMOLITIONS BETWEEN BERTH 7 - 8</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
12		Removal of submerged obstruction less than 200kg	No.	1		
13		Removal of submerged obstruction more than 600kg and less than 1000kg	No.	1		
14		Removal of submerged obstruction more than 1000kg and less than 5000kg	No.	3		
		<u>Break up existing cement/concrete rat proofing</u>				
15	B2.2.2	Break up existing 50mm cement/concrete rat proofing (partially within the tidal range)	m ²	1 100		
		<u>DEMOLITIONS BETWEEN BERTH 8 - BUNKER</u>				
	B2.2.1	<u>Excavate for, demolish and remove obstructions off site</u>				
16		Removal of submerged obstruction less than 200kg	No.	2		
17		Removal of submerged obstruction more than 600kg and less than 1000kg	No.	2		
		<u>Break up existing cement/concrete rat proofing</u>				
18	B2.2.2	Break up existing 50mm cement/concrete rat proofing (partially within the tidal range)	m ²	1 000		
Carried to summary:						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>SECTION NO. 3</u>				
	SANS 1200A/AB/Pricing Assumps:	<u>COASTAL STRUCTURES</u>				
		<u>SLOPE STABILISATION AT MOLE (Chainage 0+560 to 0+665)</u>				
	E3.1	<u>Site Clearance</u>				
1	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	2 050		
	E3.5	<u>Excavation</u>				
2	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
3	E3.2.1	Supply and construct Armour 1 slope with rock of grading 900mm	t	9 050		
4	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	2 827		
	E3.3	<u>Supply and construction of toe</u>				
5	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	5158.4		
	E3.3	<u>Blinding Layer / Void filler</u>				
6	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm	t	1 600		
	E3.4	<u>Geotextile</u>				
7	E3.4.1	Supply and Install Grade A10 Bidum	m ²	3 535		
		<u>SLOPE STABILISATION BETWEEN BERTH 1-2 (Chainage 0+740 to 0+821)</u>				
	E3.1	<u>Site Clearance</u>				
8	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	3 900		
	E3.5	<u>Excavation</u>				
9	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
10	E3.2.1	Supply and construct Armour 2 slope with rock of grading 800mm	t	3 040		
11	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	2 400		
12	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	0		
Carried Forward:						

Brought Forward:						
	E3.3	<u>Supply and construction of toe</u>				
13	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	1760		
	E3.4	<u>Blinding Layer / Void filler</u>				
14	E3.4.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm	t	5 280		
	E3.4	<u>Geotextile</u>				
15	E3.4.1	Supply and Install Grade A10 Bidum Bidum	m ²	2 400		
		<u>SLOPE STABILISATION AT BERTH 1</u> <u>(Chainage 0+665 to 0+740)</u>				
	E3.1	<u>Site Clearance</u>				
16	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	1 200		
	E3.5	<u>Excavation</u>				
17	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
18	E3.2.1	Supply and construct Armour 2 slope with rock of grading 800mm	t	2 880		
19	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	1 120		
	E3.3	<u>Supply and construction of toe</u>				
20	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	1628.8		
	E3.3	<u>Blinding Layer</u>				
21	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	640		
	E3.4	<u>Geotextile</u>				
22	E3.4.1	Supply and Install Grade A10 Bidum Bidum	m ²	1 400		
		<u>SLOPE STABILISATION BETWEEN BERTH 2-3</u> <u>(Chainage 0+903 to 1+074)</u>				
	E3.1	<u>Site Clearance</u>				
23	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	5 100		
	E3.5	<u>Excavation</u>				
24	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	1 300		
	E3.2	<u>Supply and construction of revetment</u>				
25	E3.2.1	Supply and construct Armour 2 slope with rock of grading 800mm	t	5 440		
Carried Forward:						

Brought Forward:						
26	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	6 240		
27	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	4 640		
28	E3.2.2	Supply and construct Filter rock type 2 slope with rock of grading 120mm aggregate	t	1440		
29	E3.2.3	Take from stockpile and place filter rock	t	2080		
	E3.3	<u>Supply and construction of toe</u>				
30	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	1867.2		
	E3.3	<u>Blinding Layer /Voider Filler</u>				
31	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	5 280		
	E3.4	<u>Geotextile</u>				
32	E3.4.1	Supply and Install Grade A10 Bidum	m ²	5 900		
	E3.6	<u>Tie-in to existing infrastructure</u>				
33	E3.6.1	Stormwater outlets	No.	2		
		<u>SLOPE STABILISATION AT BERTH 3 (Chainage 1+074 to 1+170)</u>				
	E3.1	<u>Site Clearance</u>				
34	E3.1.1	Clear the site and remove debris to an approved on-	m ²	2 200		
	E3.5	<u>Excavation</u>				
35	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	2 200		
	E3.2	<u>Supply and construction of revetment</u>				
36	E3.2.1	Supply and construct Armour 2 slope with rock of grading 800mm	t	4 000		
37	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	1 600		
38	E3.2.3	Take from stockpile and place filter rock	t	3 520		
	E3.3	<u>Blinding Layer</u>				
39	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	960		
	E3.4	<u>Geotextile</u>				
40	E3.4.1	Supply and Install Grade A10 Bidum	m ²	2 100		
	E3.6	<u>Tie-in to existing infrastructure</u>				
41	E3.6.1	Stormwater outlets	No.	1		
Carried Forward:						

Brought Forward:						
		<u>SLOPE STABILISATION AT BERTH 3-4</u> <u>(Chainage 1+170 to 1+260)</u>				
	E3.1	<u>Site Clearance</u>				
42	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	3 000		
	E3.5	<u>Excavation</u>				
43	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
44	E3.2.1	Supply and construct Armour 2 slope with rock of grading 800mm	t	2 720		
45	E3.2.1	Supply and construct Armour 3 slope with rock of	t	3 040		
46	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	2 400		
47	E3.2.3	Take from stockpile and place filter rock	t	6 880		
	E3.3	<u>Blinding Layer</u>				
48	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	2 880		
	E3.4	<u>Geotextile</u>				
49	E3.4.1	Supply and Install Grade A10 Bidum	m ²	3 100		
		<u>SLOPE STABILISATION BETWEEN BERTH 6-7</u> <u>(Chainage 1+948 to 1+990)</u>				
	E3.1	<u>Site Clearance</u>				
50	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	900		
	E3.5	<u>Excavation</u>				
51	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
52	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	1 920		
53	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	960		
54	E3.2.2	Supply and construct Filter rock type 2 slope with rock of grading 120mm aggregate	t	480		
	E3.3	<u>Supply and construction of toe</u>				
55	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	912		
	E3.3	<u>Blinding Layer</u>				
56	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	8 160		
Carried Forward:						

Brought Forward:						
	E3.4	<u>Geotextile</u>				
57	E3.4.1	Supply and Install Grade A10 Bidum	m ²	1 100		
	E3.6	<u>Tie-in to existing infrastructure</u>				
58	E3.6.1	Stormwater outlets	No.	2		
		<u>SLOPE STABILISATION AT BERTH 7 (Chainage 1+990 to 2+058)</u>				
	E3.1	<u>Site Clearance</u>				
59	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	1 200		
	E3.5	<u>Excavation</u>				
60	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	1 000		
	E3.2	<u>Supply and construction of revetment</u>				
61	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	1 760		
62	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	960		
	E3.3	<u>Supply and construction of toe</u>				
63	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	1476.8		
	E3.3	<u>Blinding Layer</u>				
64	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	800		
	E3.4	<u>Geotextile</u>				
65	E3.4.1	Supply and Install Grade A10 Bidum	m ²	1 300		
	E3.6	<u>Tie-in to existing infrastructure</u>				
66	E3.6.1	Stormwater outlets	No.	2		
		<u>SLOPE STABILISATION BETWEEN BERTH 7-8 (2+058 to 2+233)</u>				
	E3.1	<u>Site Clearance</u>				
67	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	5 600		
	E3.5	<u>Excavation</u>				
68	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 300		
	E3.2	<u>Supply and construction of revetment</u>				
68	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	9 760		
69	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	4 480		
Carried Forward:						

Brought Forward:						
70	E3.2.2	Supply and construct Filter rock type 2 slope with rock of grading 120mm	t	2560		
	E3.3	<u>Supply and construction of toe</u>				
71	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	3976		
	E3.3	<u>Blinding Layer</u>				
72	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm	t	7 520		
	E3.6	<u>Tie-in to existing infrastructure</u>				
73	E3.6.1	Stormwater outlets	No.	5		
	E3.4	<u>Geotextile</u>				
74	E3.4.1	Supply and Install Grade A10 Bidum	m ²	5 600		
		<u>SLOPE STABILISATION AT BERTH 8</u> <u>(Chainage 2+233 to 2+324)</u>				
	E3.1	<u>Site Clearance</u>				
75	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	2 100		
	E3.5	<u>Excavation</u>				
76	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	1 300		
	E3.2	<u>Supply and construction of revetment</u>				
77	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	3 040		
78	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	1 760		
	E3.3	<u>Supply and construction of toe</u>				
79	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	1 976		
	E3.4	<u>Geotextile</u>				
80	E3.4.1	Supply and Install Grade A10 Bidum	m ²	2 200		
	E3.6	<u>Tie-in to existing infrastructure</u>				
81	E3.6.1	Stormwater outlets	No.	2		
		<u>SLOPE STABILISATION BETWEEN BERTH 8- BUNKER (Chainage 2+324 to 2+ 487)</u> <u>8 - BUNKER (Chainage 2+324 to 2+487)</u>				
	E3.1	<u>Site Clearance</u>				
82	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	6 000		
	E3.5	<u>Excavation</u>				
83	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	5 300		
CARRIED FORWARD:						

		BROUGHT FORWARD:				
	E3.2	<u>Supply and construction of revetment</u>				
84	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	10 400		
85	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	4 480		
86	E3.2.2	Supply and construct Filter rock type 2 slope with rock of grading 120mm aggregate	t	2720		
	E3.3	<u>Supply and construction of toe</u>				
87	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	3432		
	E3.3	<u>Blinding Layer</u>				
88	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	5 440		
	E3.4	<u>Geotextile</u>				
89	E3.4.1	Supply and Install Grade A10 Bidum	m ²	5 800		
	E3.6	<u>Tie-in to existing infrastructure</u>				
90	E3.6.1	Stormwater outlets	No.	3		
		<u>SLOPE STABILISATION AT BUNKER</u> <u>(Chainage 2+487 to 2+645)</u>				
	E3.1	<u>Site Clearance</u>				
91	E3.1.1	Clear the site and remove debris to an approved on-land dumpsite	m ²	3 600		
92	E3.5.1	Excavate and Stockpile existing material to be reused in revetment construction	m ³	4 200		
	E3.2	<u>Supply and construction of revetment</u>				
93	E3.2.1	Supply and construct Armour 3 slope with rock of grading 600mm	t	3 840		
94	E3.2.2	Supply and construct Filter rock type 1 slope with rock of grading 300mm	t	1 760		
	E3.3	<u>Supply and construction of toe</u>				
95	E3.3.1	Supply and construct Armour 2 toe with rock of grading 800mm	t	3432		
	E3.3	<u>Blinding Layer</u>				
96	E3.3.1	Supply and construct Blinding Layer with Filter rock type 3 of grading 53mm aggregate	t	1 600		
	E3.4	<u>Geotextile</u>				
97	E3.4.1	Supply and Install Grade A10 Bidum	m ²	2 200		
	E3.6	<u>Tie-in to existing infrastructure (details as per the typical sections on the drawings)</u>				
98	E3.6.1	Stormwater outlets	No.	7		
Carried to summary:						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>SECTION NO. 4</u>				
		<u>PROVISIONAL SUMS</u>				
		<u>BUDGETORY ALLOWANCES</u>				
		Budgetory allowances are to be priced at bill rates or rates to be agreed to, in terms of the contract				
1		Provide the sum of R300 000,00 for Hazcon Studies	Sum	1	300 000	300 000.00
2		Provide the sum of R 500 000 for diving requirements	Sum	1	500 000	500 000.00
Carried to summary						800 000.00

