

Item No	Quantity	Rate	Amount
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>NOTES</u>			
i)	The General Conditions of Contract under section six of the Public Procurement Act, 2015 shall be the form approved and recommended by the Ministry of Finance, Namibia Institute of Architects, the Institute of Namibian Quantity Surveyors and the Construction Industry Federation of Namibia.		
ii)	The Model Preliminaries as recommended and published by the Institute of Namibian Quantity Surveyors, 2016 edition shall be deemed to be incorporated herein.		
iii)	Bidders are referred to the above mentioned 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.		
iv)	Where standard clauses or alternatives are not applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading.		
v)	Where N/A appears opposite any clause, such clause as detailed in the standard documents referred to is NOT APPLICABLE to this contract.		
vi)	Where the designation "Architect" is mentioned in the Model Preliminaries document, and in the items detailed below, it shall be deemed to refer to the "Project Manager".		
<u>SECTION A : GENERAL CONDITIONS OF CONTRACT</u>			
Carried to Collection			N\$
SECTION 1 BILL NO 1 PRELIMINARIES ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

	<u>A. GENERAL</u>			
1	Clause 1: Definitions	Item		
2	Clause 2: Interpretation	Item		
3	Clause 3: Language and Law	Item		
4	Clause 4: Project Manager's Decisions	Item		
5	Clause 5: Delegation	Item		
6	Clause 6: Communications	Item		
7	Clause 7: Sub-contracting	Item		
8	Clause 8: Other Contractors	Item		
9	Clause 9: Personnel and Equipment	Item		
10	Clause 10: Employer's and Contractor's Risks	Item		
11	Clause 11: Employer's Risks	Item		
12	Clause 12: Contractor's Risks	Item		
13	Clause 13: Insurance	Item		
14	Clause 14: Site Data	Item		
15	Clause 15: Contractor to Construct the Works	Item		
16	Clause 16: The Works to be Completed by the Intended Completion Date	Item		
17	Clause 17: Approval by the Project Manager	Item		
18	Clause 18: Safety	Item		
19	Clause 19: Discoveries	Item		
20	Clause 20: Possession of the Site	Item		
21	Clause 21: Access to the Site	Item		
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22	Clause 22: Instructions	Item	
23	Clause 23: Appointment of the Adjudicator	Item	
24	Clause 24: Procedure for Disputes	Item	
	<u>B. TIME CONTROL</u>		
25	Clause 25: Program	Item	
26	Clause 26: Extension of Intended Completion Date	Item	
27	Clause 27: Acceleration	Item	
28	Clause 28: Delays Ordered by the Project Manager	Item	
29	Clause 29: Management Meetings	Item	
30	Clause 30: Early Warning	Item	
	<u>C. QUALITY CONTROL</u>		
31	Clause 31: Identifying Defects	Item	
32	Clause 32: Tests	Item	
33	Clause 33: Correction of Defects	Item	
34	Clause 34: Uncorrected Defects	Item	
	<u>D. COST CONTROL</u>		
35	Clause 35: Contract Price	Item	
36	Clause 36: Changes in the Contract Price	Item	
37	Clause 37: Variations	Item	
38	Clause 38: Cash Flow Forecasts	Item	
39	Clause 39: Payment Certificates	Item	
40	Clause 40: Payments	Item	
41	Clause 41: Compensation Events	Item	
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42	Clause 42: Tax	Item	
43	Clause 43: Currencies	Item	
44	Clause 44: Price Adjustment	Item	
45	Clause 45: Retention	Item	
46	Clause 46: Liquidated Damages	Item	
47	Clause 47: Bonus	Item	
48	Clause 48: Advance Payment	Item	
49	Clause 49: Securities	Item	
50	Clause 50: Day works	Item	
51	Clause 51: Cost of Repairs	Item	
52	Clause 52: Labour Clause	Item	
	<u>E. FINISHING THE CONTRACT</u>		
53	Clause 53: Completion	Item	
54	Clause 54: Taking Over	Item	
55	Clause 55: Final Account	Item	
56	Clause 56: Operating and Maintenance Manuals	Item	
57	Clause 57: Termination	Item	
58	Clause 58: Fraud and Corruption	Item	
59	Clause 59: Payment Upon Termination	Item	
60	Clause 60: Property	Item	
61	Clause 61: Release of Performance	Item	
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SPECIFIC PRELIMINARIES

62 Samples of materials

The Contractor shall furnish at his own cost such samples of materials and specimens of colours as may be called for by the Project Manager for his approval.

Item

63 Samples of workmanship and mock-ups

*The contractor shall furnish such samples of workmanship as may be called for by the Project Manager for his approval.
Where an assembly of various elements of the buildings is required, which is not incorporated in the works, this shall be arranged by the contractor. Any cost involved shall be borne by the employer.*

Item

64 Ordering of materials

Should the Bills of Quantities be used for ordering materials, this shall be entirely at the contractor's risk.

Item

65 Enclosure of works

The Contractor shall provide, erect, alter as necessary, maintain and remove and make good at completion suitable hoardings complete with gantries, fans, safety screens, barriers, access gates, covered gangways, steel sections at crane lifts, splayed corners, returned ends, etc. all as necessary for the enclosure of the works and the protection of the general public and others.

The Contractor shall pay and recover all deposits and pay all fees and charges in connection with the hoarding and the use of the pavements throughout the whole course of the contract, all in accordance with any Act of Parliament, regulation or by-law of any local authority.

Item

66 Pavement crossings and parking meters

The Contractor shall pay and recover all deposits and pay all fees and charges in connections with and/or obtain permission for the suspension of parking facilities and for pavement or street encroachment and or crossings and the removal and eventual reinstatement of any local authority's parking meters

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PRELIMINARIES

ORANJEMUND BUSINESS PARK - PHASE 3

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BILLS OF QUANTITIES

67	<p>Special scaffolding</p> <p><i>No special scaffolding is measured as these Bills of Quantities are based on the sixth edition of the Standard System for Measuring Building Work.</i></p> <p><i>The Contractor shall provide, maintain and remove on completion special scaffolding for areas exceeding 5m above floor level, for use of all trades, as defined under the "Description of the Works".</i></p>			
		Item		
68	<p>Contractor's offices and sheds</p> <p><i>The Contractor shall provide and maintain temporary sheds and offices for the proper storage of materials and for the use of the workmen and shall remove such temporary sheds and offices on completion.</i></p>			
		Item		
69	<p>Offices</p> <p><i>The contractor shall provide, maintain and remove on completion office accommodation for meetings held on site. The office shall be provided with tables and chairs sufficient for the maximum number of persons attending meetings and shall be kept clean.</i></p>			
		Item		
70	<p>Main notice board</p> <p><i>The Contractor shall provide, erect where directed, maintain and remove on completion the main noticeboard complying with the requirements of the Institute of Namibian Architects, with the title of the project and the names of the employer, the architect, the quantity surveyor, the consulting engineers and the contractor sign written thereon.</i></p>			
		Item		
71	<p>Water</p> <p><i>The Contractor shall provide all water for the works, including all necessary temporary plumbing, removing same and making good on completion.</i></p>			
		Item		
72	<p>Electricity and lighting</p> <p><i>The Contractor shall provide all necessary electricity and artificial lighting for the works, including all necessary temporary installation work, removing same and making good on completion.</i></p>			
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BILLS OF QUANTITIES

73	<p>Telephones</p> <p><i>The Contractor shall provide, maintain and remove on completion a PT telephone on site for use by all persons engaged upon the works and shall be entitled to recover the cost of outgoing calls from those making them.</i></p>	Item	
74	<p>Toilets</p> <p><i>The Contractor shall provide, maintain in a thoroughly clean and tidy condition proper toilets for the use of the workmen and remove same on completion.</i></p>	Item	
75	<p>Payment of preliminaries</p> <p><i>The amount to be included in each monthly certificate in respect of preliminaries costs shall be calculated from the priced items within the preliminaries section of the bills of quantities.</i></p> <p><i>The Contractor and project manager shall agree a division of the priced preliminaries items into:</i></p> <p><i>1) an initial or establishment charge, payment of which shall be made to the contractor on proof that the relevant expenditures have been made;</i></p> <p><i>2) a monthly charge, and</i></p> <p><i>3) a final or dis-establishment charge</i></p> <p><i>Should the contractor and project manager be unable to agree such division then the project manager shall make a fair and reasonable division.</i></p> <p><i>In arriving at such division cognisance shall be taken of such factors as:</i></p> <p><i>1) Premiums for policies of insurance and performance guarantees being renewable annually,</i></p> <p><i>2) Plant, scaffolding and the like remaining the property of the contractor or the hiring company and the capital cost thereof not being treated as part of the initial charge.</i></p> <p><i>In the event of an extension of time for the completion of the works the monthly charge be recalculated on the same basis as originally but taking into account the revised contract period and the amounts already paid to the contractor.</i></p>	Item	
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<p>SECTION 1 BILL NO 1 PRELIMINARIES ORANJEMUND BUSINESSSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

BILLS OF QUANTITIES

76	<p>Protection</p> <p><i>The Contractor shall provide for the protection of all work for which a certificate of practical completion has not been issued and which is liable to be damaged from any cause. The contractor shall be responsible for any damage which may occur and shall make good at his own expense.</i></p>	Item	
77	<p>Protection of existing and/or partially occupied works</p> <p><i>The Contractor shall provide all reasonable measures necessary to protect the existing and/or partially occupied works to ensure that they are not damaged and he shall remove such protection on completion.</i></p>	Item	
78	<p>Site security</p> <p><i>The Contractor shall provide all watching and lighting necessary for general site security.</i></p>	Item	
79	<p>Notice before covering work</p> <p><i>The Contractor shall give adequate notice to the project manager whenever any work or materials which are subjected to the project manager's inspection or remeasurement are to be covered in or concealed in any way. In default of such notice being received such work or materials shall be uncovered and later made good at the contractor's expense.</i></p>	Item	
80	<p>Disturbance</p> <p><i>The Contractor shall execute the whole of the works with a minimum of disturbance to the adjoining premises, any parts of the works already handed over and the occupants of those premises and/or parts.</i></p>	Item	
81	<p>Clearing and cleaning</p> <p><i>The Contractor shall regularly clean and clear away all rubbish and excess materials as the works proceed and, on completion, leave the works in a clean and satisfactory state for immediate use and occupation.</i></p>	Item	
Carried to Collection			N\$
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BILLS OF QUANTITIES

82	<p>Vermin</p> <p><i>The Contractor shall take all necessary precautions to keep the works and site free from vermin during construction and shall leave the works vermin free on completion.</i></p>	Item	
83	<p>Workmen's Compensation Insurance</p> <p><i>The Contractor and domestic sub-contractors shall insure workmen in terms of the Employee Compensation Act 5 of 1995 and shall deposit immediately with the Project Manager written confirmation of evidence of registration under the Workmen's Compensation Act when signing the Contract.</i></p> <p><i>Persons not falling under the above mentioned Act must be insured under individual Personal Accident Insurance policies to the satisfaction of the Project Manager.</i></p>	Item	
84	<p>Open Fires</p> <p><i>No open fires will be permitted except in such places as are approved by the Principal Agent. Any workmen or labourers lighting fires in unauthorised places are to be immediately dismissed.</i></p>	Item	
85	<p>Blasting</p> <p><i>The Contractor shall take all responsibility during blasting operations, should any be necessary, and must observe all conditions set forth in Government and Local Authority Regulations. The use of explosives is left to the discretion of the Contractor who must indemnify the Employer against any claims for damages to persons or property on or near the site from any cause whatsoever arising out of the use of explosives. The Contractor will be held solely responsible for and must immediately make good, at his own expense, any damage that may occur through the use of explosives.</i></p>	Item	
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BILLS OF QUANTITIES

86	<p>As built drawings</p> <p><i>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the architect and the structural engineer for their records.</i></p> <p><i>The Contractor shall furnish the Project Manager with a set of marked drawings indicating the positions of all plumbing and drainage pipe work as actually built.</i></p>	Item		
87	<p>Protection of trees</p> <p><i>Only those trees as are indicated by the Project Manager shall be removed. All other trees are to be protected during the building operations and no workmen may damage these trees in any way. The Contractor is to note that some trees may occur within the area of building operations. Before removing such trees, the Contractor is to obtain specific instructions from the Project Manager as whether such trees may be removed or not.</i></p>	Item		
Carried to Collection			N\$	
<p>SECTION 1 BILL NO 1 PRELIMINARIES ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>				

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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p>The responsibility is on the Contractor to satisfy himself as to the nature of the ground conditions, height of water table, etc. and to allow accordingly in his prices.</p> <p>The Geotechnical Assessment Report applicable to this project may be viewed at the offices of the Principal Agent / Engineer during normal office hours.</p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles created and situated on the building site.</p> <p>The quantities of excavation, filling, carting away, etc. measured are the nett volumes and the Contractor is to make allowances in his prices for the bulking of material.</p> <p><u>Classification of excavated material</u></p> <p>“Hard rock” shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives.</p> <p>“Soft rock” shall mean hard material the removal of which warrants the use of pneumatic tools and includes hard shale, ferrocite, compact oukclip and material of similar hardness.</p> <p>“Earth” shall mean all ground other than that classified as “hard rock” or “soft rock” and shall include made-up ground and any loose stones or pieces of concrete not exceeding 0.03 m3 in volume.</p>			
	Carried to Collection		N\$	
	<p>SECTION 2 BILL NO 1 EARTHWORKS (PROVISIONAL) ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

EXCAVATIONS, ETC.

Excavation in earth not exceeding 2m deep for :

1	Trenches	m3	49
2	Holes	m3	42

Extra over trench and hole excavations in earth for excavation in :

3	Soft rock	m3	16
4	Hard rock	m3	9

Extra over all excavations for carting away :

5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	59
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Risk of collapse of excavations to :

6	Sides of trench and hole excavations not exceeding 1.5m deep	m2	244
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Keeping excavations free of water :

7	Keeping excavations free of all water		Item
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FILLING, ETC.

Earth filling obtained from the excavations compacted to 98% Mod AASHTO density in layers not exceeding 150mm thick :

8	Backfilling to trenches, holes, etc.	m3	32
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Earth filling with G6 material supplied by the contractor compacted to 98% Mod AASHTO density in layers not exceeding 150mm thick :

9	Under floors, steps, pavings, etc.	m3	18
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EARTHWORKS (PROVISIONAL)
ORANJEMUND BUSINESSSS PARK - PHASE 3
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	<u>1.5MPa (at 7 days) Soilcrete comprising of 2% ordinary cement and 98% approved imported material mixed with water to obtain a 80mm to 100mm slump and compacted with mechanical vibration :</u>			
10	Backfilling to trenches, holes, etc. with soilcrete comprising cement and selected materials supplied by contractor	m3	15	
	<u>Coarse river sand filling supplied by the contractor :</u>			
11	25mm Thick layer of approved clean earth filling laid over poisoned areas under floors	m2	97	
	<u>Compaction of surfaces :</u>			
12	Compaction of ground surface under strip footings and bases to 98% Mod AASHTO density	m2	74	
13	Compaction of ground surface under floors, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO density	m2	97	
	<u>SOIL POISONING</u>			
	<u>"Premise 200 SC" or other approved soil insecticide:</u>			
14	To bottoms and sides of trenches, etc.	m2	318	
15	Under floors, pavings, etc. including forming and poisoning shallow furrows against foundation walls, etc. filling in furrows and ramming	m2	97	
	Carried to Collection			N\$
SECTION 2 BILL NO 1 EARTHWORKS (PROVISIONAL) ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA				

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**ORANJEMUND BUSINESSS PARK - PHASE 3
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p><u>CONCRETE</u></p> <p><u>NOTES :</u></p> <p>Prices for concrete cast against excavated surfaces shall include for casting against all types of material in the excavations and shall include for additional concrete required in filling to irregularities.</p> <p>Prices for all concrete shall include for forming shaped tops and for striking off and curing of top surfaces of concrete.</p> <p>Prices for concrete in surface beds cast in panels shall include for all formwork, fillets, etc. required in forming the panels.</p> <p><u>TESTS</u></p> <p><u>Test Cubes :</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Principal Agent.</p>			
1	<p>Allow for the manufacture of a set of three (3) concrete strength test cubes as described, size 150mm x 150mm x 150mm, transporting to and handing over to an approved testing authority and paying all costs and charges related thereto (Provisional)</p>	Sets	4	
	Carried to Collection			N\$
	<p>SECTION 2 BILL NO 2 CONCRETE, FORMWORK AND REINFORCEMENT ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>15MPa/19mm concrete in :</u>				
2	Surface blinding under strip footings, column bases, etc.	m3	2	
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>25MPa/19mm concrete in :</u>				
3	Strip footings	m3	12	
<u>Concrete class 30MPa/19mm in :</u>				
4	Surface beds cast in panels on waterproofing	m3	10	
5	Bases	m3	10	
6	Columns in foundations (Provisional)	m3	1	
7	Columns	m3	6	
8	Extra over for thickening out 100mm thick concrete surface bed to form toe size 450mm wide extreme x 250mm deep overall with two edges splayed, including all necessary excavation and dressing of ant treatment and waterproofing membrane around same as required	m	33	
<u>REINFORCED CONCRETE CAST AGAINST FORMWORK</u>				
<u>30MPa/19mm concrete in :</u>				
9	Slabs including beams and inverted beams	m3	4	
<u>CONCRETE SUNDRIES</u>				
<u>Finishing off top surfaces of concrete smooth with a power float :</u>				
10	Surface beds, slabs, etc to falls	m2	5	
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FORMWORK

NOTES:

Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.

Formwork to soffits of solid slabs, etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.

Formwork to sides of items described as "in ground" means formwork from top of bearing level to top of surface bed.

Where a height above bearing level is stated, the bearing level is taken to be the surface bed or slab level as the case may be.

Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks".

Irrespective of overall height of columns, walls, etc. all items described as in foundations have been categorised to the top of surface bed level.

Unless otherwise described prices for all formwork in superstructure shall include for propping to a height not exceeding 3,5m above bearing level.

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<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>		
<u>Rough formwork to sides of :</u>		
11	300mm Diameter columns 700mm high in foundations (Provisional)	No 11
12	Edges, risers, ends and reveals not exceeding 300mm high	m 26
13	Edges, risers, ends and reveals exceeding 300mm high	m 48
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>		
<u>Smooth formwork to sides of :</u>		
14	300mm Diameter columns 5 730mm high	No 2
15	300mm Diameter columns 7 380mm high	No 9
<u>Smooth formwork to soffits of :</u>		
16	Vanity slabs, cupboard slabs, cover slabs, etc., propped up not exceeding 1,5m high above bearing level	m2 5
<u>MOVEMENT JOINTS, ETC.</u>		
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and/or brickwork surfaces including necessary formwork :</u>		
17	12mm Joints not exceeding 300mm high	m 24
<u>Saw cut joints :</u>		
18	3mm x 50mm Saw-cut joints in top of concrete with the top 10mm increased to 6mm wide in top of concrete	m 46
<u>Vertical joggle construction joints through concrete including thick bond breaker on concrete faces :</u>		
19	Surface beds not exceeding 300mm thick	m 55
<u>REINFORCEMENT</u>		
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Mild and high tensile steel reinforcement in concrete :

20	Various diameter bars (Provisional)	kg	3 064
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Fabric reinforcement :

21	Type Ref 245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	97
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22	Type Ref 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	54
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ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p>Prices for brickwork shall include for setting up and building windows and door frames into position in brick walls, wedging, pinning, building solid against frames, etc., bedding of roof coverings, wall plates, base plates, etc., forming ventilation flues through walls for air bricks, etc., building ends of rafters, purlins, joists, bars, pipes, bolts, etc. into or through brickwork including wrapping in polyethylene sheeting as necessary.</p> <p>Prices for brickwork are to include for all raking or splay cutting and waste, forming of squint quoins or birdsmouth angles and the forming of straight joints at expansion or construction joints in walls and at windows, doors or plain openings, etc.</p> <p>Where sizes in descriptions are given in brick units "one brick" shall represent the length and "half brick" the width of a brick.</p> <p><u>BRICK TESTS</u></p> <p><u>NOTES:</u></p> <p>The costs of testing bricks shall include the cost of providing the necessary bricks for the purpose of testing, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Architect.</p>			
1	<p>Allow for the test of twelve (12) brick samples randomly selected from each stack delivered on site, transporting to and handing over to an approved testing authority and paying all costs and charges related thereto (Provisional)</p>	Sets	5	
	Carried to Collection			N\$
	<p>SECTION 2 BILL NO 3 MASONRY ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

<u>BRICKWORK</u>				
<u>FOUNDATIONS (PROVISIONAL)</u>				
<u>Brickwork of cement bricks (14MPa nominal compressive strength) in class I mortar :</u>				
2	One brick walls	m2	50	
<u>SUPERSTRUCTURE</u>				
<u>Brickwork of cement bricks (7MPa nominal compressive strength) in class II mortar :</u>				
3	Half brick walls	m2	100	
4	One brick walls	m2	112	
<u>BRICKWORK SUNDRIES</u>				
<u>2.5mm Brickwork reinforcement :</u>				
5	75mm Wide reinforcement built in horizontally	m	391	
6	150mm Wide reinforcement built in horizontally in foundation (Provisional)	m	585	
7	150mm Wide reinforcement built in horizontally	m	441	
<u>Pre-cast concrete lintels including any necessary temporary support :</u>				
8	110mm x 75mm Lintels in lengths not exceeding 3m	m	49	
<u>FACE BRICKWORK</u>				
<u>"Namclay" or other approved clay face bricks, pointed with recessed horizontal and vertical joints :</u>				
9	Extra over brickwork for face brickwork	m2	54	
<u>Brick-on-edge header course copings, sills, etc., of "Namclay" or other approved clay face bricks, pointed with recessed joints on all exposed faces :</u>				
10	150mm Wide sills set sloping and slightly projecting	m	8	
Carried to Collection				
SECTION 2				
BILL NO 3				
MASONRY				
ORANJEMUND BUSINESS PARK - PHASE 3				
ON ERF 901, ORANJEMUND, NAMIBIA				
				N\$

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BILL NO 3

MASONRY

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SECTION 2

BILL NO 3

MASONRY

**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>NOTES:</u>			
	Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.			
	<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron "Gundle Brikgrip DPC" or other approved embossed damp proof course :</u>			
1	Laid horizontally on or under walls, etc. including turning up against jambs, etc. and all laps	m2	22	
	<u>One layer of 250 micron "Gundle USB Green" or other approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape" or other approved :</u>			
2	Under floors, laid on sandbed (elsewhere measured) including dressing up against walls, etc.	m2	97	
	<u>SEALING STRIPS, JOINT SEALANTS, ETC</u>			
	<u>"Adcoseal 488" or other approved joint sealer sealing compound including backing cord, bond breaker, primer, etc. :</u>			
3	12mm x 10mm In vertical expansion joint including raking out expansion joint filler as necessary	m	24	
4	3mm x 50mm In saw cut joints	m	46	
5	6mm x 10mm In construction joints	m	55	
	Carried Forward to Summary of Section No. 2			N\$
	SECTION 2 BILL NO 4 WATERPROOFING ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>NOTES:</u>			
	Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.			
	Flashings to be sealed with silicone along walls.			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0.8mm Thick aluminium "Corrugated" (EZCLAD 9017) or other approved profile roof sheeting in single lengths fixed to timber purlins (purlins elsewhere measured) and 0.8mm thick aluminium "Corrugated" (EZCLAD 9017) or other approved sheet steel accessories in strict accordance with manufacturer's specifications :</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	149	
2	Moulded narrow and broad rib polyethylene filler blocks	m	34	
3	Side cladding	m2	16	
	<u>ROOF INSULATION</u>			
	<u>"Sisalation® FR 405 fire retardant grade" or other approved light industrial glass fibre reinforced aluminium foil bonded insulation :</u>			
4	Insulation laid taut over purlins and fixed concurrent with roof covering with minimum 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	128	
	Carried Forward to Summary of Section No. 2			N\$
	SECTION 2 BILL NO 5 ROOF COVERINGS, ETC. ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to All Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p><u>PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION, ETC.</u></p> <p><u>NOTES:</u></p> <p><u>ROOFS ETC</u></p> <p>Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p><u>"SA Pine" or other approved untreated softwood timber grade 6 :</u></p>			
1	<p>Roof construction with a 35 degree pitch consisting of timber trusses at maximum 900mm centres including all rafters, hips, valleys, wall plates purlins, struts, braces, clips, etc. designed and installed by specialist (measured on flat)</p>	m2	347	
	<p><u>"SA Pine" or other approved treated softwood timber class 4 :</u></p>			
2	<p>Mono pitched truss size 7 000mm wide and 1 046mm high overall at 1 000mm centres with 470mm eaves overhang on both sides comprising of rafters, king posts and diagonal struts formed of 152mm x 50mm truss members including dpc, movement joints to ends , built into brickwork (As per Engineers Drawing Number OR-SC-01)</p>	No	3	
	Carried to Collection			N\$
	<p>SECTION 2 BILL NO 6 CARPENTRY AND JOINERY ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

BILLS OF QUANTITIES

3	Mono pitched truss size 6 872mm wide and 1 038mm high overall at 1 000mm centres with 470mm eaves overhang on both sides comprising of rafters, king posts and diagonal struts formed of 152mm x 50mm truss members including dpc, movement joints to ends , built into brickwork (As per Engineers Drawing Number OR-SC-01)	No	4	
4	Mono pitched truss size 6 370mm wide and 983mm high overall at 1 000mm centres with 1 365mm eaves overhang on both sides comprising of rafters, king posts and diagonal struts formed of 152mm x 50mm truss members including dpc, movement joints to ends , built into brickwork (As per Engineers Drawing Number OR-SC-01)	No	5	
5	50mm x 114mm Wall plate fixed to trusses and brickwork	m	32	
6	50mm x 76mm Purlins fixed to roof trusses	m	170	
7	50mm x 50mm Longitudinal bracing fixed to trusses	m	33	
<u>EAVES, VERGES, ETC.</u>				
<u>"Everite Nutec" or other approved medium density fibre-cement fascias and barge boards in single lengths including metal fixing and jointing strips, lugs, etc. :</u>				
8	9mm x 300mm Fascia boards including galvanised steel H-profile jointing strips fixed to timber trusses	m	17	
9	9mm x 300mm Barge boards including galvanised steel H-profile jointing strips fixed to timber trusses	m	16	
Carried to Collection				N\$
SECTION 2 BILL NO 6 CARPENTRY AND JOINERY ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA				

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BILL NO 6

CARPENTRY AND JOINERY

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SECTION 2

BILL NO 6

CARPENTRY AND JOINERY

**ORANJEMUND BUSINESS PARK - PHASE 3
 ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 7</u>			
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
	<u>NOTES:</u>			
	Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this bill and must be read in conjunction herewith.			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.			
	<u>SUSPENDED CEILINGS</u>			
	<u>"Gyproc Rhinoboard" or other approved 9.5mm thick gypsum plasterboard taped with "Rhinotape" or other approved over joints and finished with "Rhinolite" or other approved gypsum skim plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer :</u>			
1	Ceilings suspended not exceeding 1m below timber purlins at 600mm centres	m2	94	
	<u>"Donnceil" or other approved cornices, perimeter trims, etc., to suspended ceilings :</u>			
2	"SM25" or other approved pre-painted shadowline perimeter trim plugged to walls	m	93	
	Carried Forward to Summary of Section No. 2			N\$
	SECTION 2			
	BILL NO 7			
	CEILINGS, PARTITIONS AND ACCESS FLOORING			
	ORANJEMUND BUSINESSS PARK - PHASE 3			
	ON ERF 901, ORANJEMUND, NAMIBIA			

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 8</u></p>			
<p><u>METALWORK</u></p>			
<p><u>NOTES:</u></p>			
<p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill of Quantities and must be read in conjunction herewith.</p>			
<p>Prices for metalwork are to include for all cutting, fitting, grinding, welding, brazing, soldering, drilling, bolting, riveting and forming mitred and welded intersections of metal components as well as for setting up and fixing in position or building into brickwork or casting into concrete complete.</p>			
<p>Descriptions on drawings of bolts, expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p>			
<p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p>			
<p>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described.</p>			
<p>The Tenderer is to allow in his price for fixing of balustrades complete in position as indicated on Architect's drawings.</p>			
<p>The Tenderer is to allow in his price for priming and spray painting of all balustrades, handrails, etc with an approved automative spray paint prior to installation.</p>			
<p>Carried to Collection</p>			
<p>SECTION 2 BILL NO 8 METALWORK ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			<p>N\$</p>

STEEL GATES, SCREENS, ETC.

Purpose made burglar screens :

1 Burglar screen to fit window size 1 600mm x 600mm high overall etc.

No

5

ALUMINIUM WINDOWS, DOORS, ETC.

NOTES:

Unless otherwise specified, anodising to aluminium must be a minimum of 25 micron covering thickness and must comply with requirements of SABS - Specifications 999.

Construction shall comply with the minimum performance requirements contained in the relevant "Selection Guides" as published by the Association for Architectural Aluminium Manufacturer's of South Africa (AAAMSA).

All sizes for windows and doors are overall sizes as indicated on the Architect's drawings. All sizes must first be checked and verified on site before commencing with the manufacture of any windows.

Action of windows, ironmongery of doors, etc. must be as specified on the drawings.

Glazing to windows and doors must be as specified on the drawings and fixed in frames in waterproofing mastic gaskets with glazing beads, or other approved method.

Prices for aluminium windows and doors must, amongst others, allow for manufacturing, protection during transporting, off loading, storing, setting up, building in, pointing between frame and plaster with an approved silicone compound, cleaning up on completion and commissioning to the complete satisfaction of the Principal Agent and/or Architect.

Ironmongery to windows and doors are to be included with the pricing of the windows and doors.

Window and door types referred to below relate to the Architect's drawing numbers included with these Bills of Quantities and must be consulted when pricing.

Carried to Collection

N\$

SECTION 2

BILL NO 8

METALWORK

ORANJEMUND BUSINESS PARK - PHASE 3

ON ERF 901, ORANJEMUND, NAMIBIA

Purpose made powder coated (black) aluminium profiled windows, sliding doors and doors with and including frames, hinges, glazing, ironmongery, sealing watertight, etc. plugged to brickwork, concrete or steel frame :

2	Window size 600mm x 600mm high overall with 6.38mm solar view grey laminated safety glass, ironmongery, etc.	No	5	
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GALVANISED PRESSED STEEL GARAGE DOORS

"Xpanda" or other approved roller shutter door fixed to brickwork or concrete :

3	Manual push-up slatted roller shutter for 2 440mm x 2 100mm high opening including all necessary guides, locking device, bolts, etc. fixed in position	No	5	
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Carried to Collection

N\$

SECTION 2
 BILL NO 8
 METALWORK
ORANJEMUND BUSINESS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

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BILL NO 8

METALWORK

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BILL NO 8

METALWORK

**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 9</u></p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete.</p> <p>All steel work built into brickwork or concrete to be wrapped in two layers with DPC extending for a minimum of 150mm both sides of brickwork or concrete.</p> <p>All prices shall be deemed to include for preparing the necessary shop drawings, fabrication, application of primer coat, delivery to site, temporary storing and erection including the necessary plant, fuel, operators and other workmen required for the execution of the works as described.</p> <p>Structural steelwork shall be complete with all necessary cleats, brackets, gussets, packs, etc. including welding, holes, black bolts, nuts, washers, rivets, bolting and riveting, supplied and fabricated, delivered and erected on site complete.</p> <p><u>PURLINS, GIRTS, BRACING, ETC.</u></p> <p><u>Purlins and bracings bolted to steel :</u></p>			
1	150mm x 75mm x 10mm Thick angle section roof support	kg	227	
	Carried to Collection			N\$
	<p>SECTION 2 BILL NO 9 STRUCTURAL STEELWORK ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

The following in mild steel anchors plates, brackets, etc. :

2	Plate size 300mm diameter 400mm high and 8mm thick, cast in column	No	4
3	Plate size 300mm diameter 450mm high and 8mm thick, cast in column	No	4
4	Plate size 300mm diameter 650mm high and 8mm thick, cast in column with	No	7

Bolts to purlins, bearers, etc. :

5	M16 Bolts including nuts and washers	No	332
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Carried to Collection

N\$

SECTION 2
 BILL NO 9
 STRUCTURAL STEELWORK
ORANJEMUND BUSINESS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

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 BILL NO 9
 STRUCTURAL STEELWORK
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 BILL NO 9
 STRUCTURAL STEELWORK
**ORANJEMUND BUSINESS PARK - PHASE 3
 ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>NOTES:</u>			
	Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill of Quantities and must be read in conjunction herewith.			
	The Contractor must allow for the preparation of all concrete surfaces which are to receive plaster. Brick surfaces to receive plaster include small parts to adjacent flush concrete surfaces.			
	Prices for finishes are to include for all labours including fair, rounded and chamfered edges, trowel cuts, throats, V-joints, angles, channels and dressing into channels and outlets.			
	<u>INTERNAL PLASTER</u>			
	<u>1:3 Cement plaster wood floated for tiles, on brickwork :</u>			
1	On walls	m2	289	
2	On narrow widths	m2	6	
	<u>One coat cement plaster on concrete :</u>			
3	Beams	m2	16	
	<u>EXTERNAL PLASTER</u>			
	<u>1:5 Cement plaster wood floated on brickwork :</u>			
4	On walls	m2	81	
5	On narrow widths	m2	6	
	<u>One coat cement plaster on concrete :</u>			
6	Beams	m2	16	
	Carried to Collection			N\$
	SECTION 2 BILL NO 10 PLASTERING ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

7	Columns	m2	75	
	<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC.</u>			
	<u>"Schluter Quadec" or other approved aluminium tile edging, strips, stair nosings, expansion joint strips, etc. :</u>			
8	40mm x 3mm Flat section brass weather bar strips	m	12	
Carried to Collection				N\$
SECTION 2 BILL NO 10 PLASTERING ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA				

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BILL NO 10

PLASTERING

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SECTION 2

BILL NO 10

PLASTERING

**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 11</u></p> <p><u>TILING</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to All Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p><u>WALL TILING</u></p> <p><u>600mm x 600mm x 8mm Thick "Link Super White" or other approved first grade full body porcelain tiles fixed with "Tal Goldstar" or other approved tile adhesive on "Keycoat slurry" or other approved to plaster (plaster elsewhere measured) and including all cutting, jointing and flush pointing with and including "Tal Wall and Floor Dove Grey" or other approved tile grouting and thoroughly washed with sugar soap and polished with three successive coats of "Cobra" or other approved clear wax polish:</u></p>			
1	On walls in isolated panels, splashbacks, etc.	m2	5	
	<p><u>SUNDRIES</u></p> <p><u>"Schluter Quadec" or other approved aluminium tile edging, strips, stair nosings, expansion joint strips, etc. :</u></p>			
2	"Quadec" or other approved tiling edge bedded in cement mortar as per manufacturer's specifications	m	15	
	<p>Carried Forward to Summary of Section No. 2</p> <p>SECTION 2 BILL NO 11 TILING ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			N\$

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 12</u></p>			
<p><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></p>			
<p><u>NOTES:</u></p>			
<p>Attention is directed to the relevant sections of the Model Preambles to All Trades which forms a part of this Bill and must be read in conjunction herewith.</p>			
<p><u>Concrete pipes</u></p>			
<p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings.</p>			
<p><u>uPVC pipes and fittings</u></p>			
<p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.</p>			
<p>Soil, waste and vent pipes and fittings shall be solvent weld jointed.</p>			
<p><u>uPVC pressure pipes and fittings</u></p>			
<p>Pipes for water supply shall be of the class stated.</p>			
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.</p>			
<p>Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints.</p>			
<p>Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.</p>			
<p><u>Copper pipes</u></p>			
<p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" or other approved type.</p>			
<p>Carried to Collection</p>		<p>N\$</p>	
<p>SECTION 2 BILL NO 12 PLUMBING AND DRAINAGE (PROVISIONAL) ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.

Fixing of pipes

Prices for pipes will include all required brackets, chasing into brickwork, etc., as per specification.

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary.

Stainless steel basins, sinks, wash troughs, urinals, etc.

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc. shall be finished smooth with plaster.

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling. "Soft rock" and "hard rock" shall be as defined in "Earthworks".

Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following:

- SABS 1200
- L : Medium-pressure pipelines
- LD : Sewers
- LE : Stormwater drainage

Carried to Collection

N\$

SECTION 2
 BILL NO 12
 PLUMBING AND DRAINAGE (PROVISIONAL)
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200
 DB : Earthworks (Pipe trenches)
 Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200
 LB : Bedding (Pipes)
 Unless otherwise described bedding of rigid pipes shall be class B bedding.

RAINWATER DISPOSAL

"Heunis" or other approved 0.5mm galvanised Z275 sheet steel gutters and rainwater pipes :

1	110mm Wide x 125mm high roof gutters with beaded front edge	m	17
2	Extra over gutter for stopped end	No	6
3	Extra over gutter for outlet for 100mm diameter pipe	No	3
4	100mm x 75mm rainwater pipes	m	12
5	Extra over rainwater pipe for bend	No	3
6	Extra over rainwater pipe for shoe	No	3
7	Extra over rainwater pipe for swan-neck	No	3

SOIL DRAINAGE

uPVC soil pipes (class 9) and fittings laid in ground or filling of approved granular material to even falls, including all excavation, backfilling, ramming, etc. as described :

8	110mm Pipe laid in and including trenches not exceeding 1m deep	m	40
9	110mm Pipe vertically or ramped to cleaning eyes	m	46

Extra over uPVC pipes for fittings :

10	110mm Bend	No	10
11	110mm Junction	No	10

Carried to Collection

N\$

SECTION 2
 BILL NO 12
 PLUMBING AND DRAINAGE (PROVISIONAL)
ORANJEMUND BUSINESS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

12	110mm Long radius bend	No	10
13	110mm Rodding eye	No	3
14	110mm Overflow gulley head	No	4
<u>Sundries :</u>			
15	100mm Cast iron 45 degree "ABC" or other approved rodding eye fitted to end of 110mm uPVC sewer pipe and cast into and including 25MPa unreinforced concrete block size 500mm x 500mm x 150mm thick	No	3
<u>Testing :</u>			
16	Allow for testing the whole of the soil drainage installation and for replacing and/or rectifying defective work as directed by the Engineer and re-testing until found to be perfect		Item
<u>SANITARY FITTINGS</u>			
<u>"Franke" or other approved :</u>			
17	"Code 320811" or other approved wall mounted single wash trough complete with waste and bottle trap	No	5
<u>WASTE UNIONS, ETC.</u>			
<u>"Cobra Watertech" or other approved :</u>			
18	38mm or other approved PVC basin waste union	No	5
<u>TRAPS, ETC.</u>			
<u>"Franke" or other approved :</u>			
19	"Spazio Code FRA/105-01-000SPAZ01" or other approved sink trap set	No	5
<u>TAPS, VALVES, ETC.</u>			
<u>"Grohe" or other approved :</u>			
20	"Code 32858" or other approved single lever basin mixer	No	5

Carried to Collection

N\$

SECTION 2
BILL NO 12
PLUMBING AND DRAINAGE (PROVISIONAL)
ORANJEMUND BUSINESS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

	<u>"Cobra" or other approved :</u>			
21	15mm Angle valve with flexible hose connector 350mm x 15mm bent as required complete with nut and wall flange	No	5	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC soil, waste and ventilation pipes (SABS 967) :</u>			
22	50mm Pipe	m	15	
	<u>Extra over uPVC pipes for fittings :</u>			
23	50mm Bend	No	10	
24	50mm Junction	No	5	
25	50mm Access bend	No	10	
26	50mm Diameter "Marley WAV 50" or other approved vent valve	No	7	
	<u>Testing :</u>			
27	Allow for testing the whole of the sanitary plumbing installation and for replacing and/or rectifying defective work as directed by the Engineer and re-testing until found to be perfect			Item
	<u>WATER SUPPLIES</u>			
	<u>Class 10 HDPE type IV pipes :</u>			
28	25mm Pipe laid in and including trenches	m	20	
29	63mm Pipe laid in and including trenches	m	10	
	<u>Extra over HDPE class 10 pipes for the following compression fittings :</u>			
30	25mm Fittings	No	5	
31	25mm Kent-elster water meter	No	5	
32	63mm Fittings	No	5	
	Carried to Collection			N\$
	SECTION 2 BILL NO 12 PLUMBING AND DRAINAGE (PROVISIONAL) ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

<u>Class 0 copper pipes with capillary couplings :</u>			
33	15mm Pipe	m	15
34	22mm Pipe	m	15
<u>Extra over Class 0 copper pipes for capillary fittings:</u>			
35	15mm Fittings	No	15
36	22mm Fittings	No	15
<u>Testing :</u>			
37	Allow for testing the whole internal and external water supply installation and for replacing and/or rectifying defective work as directed by the Engineer and re-testing until found to be perfect		Item
<u>FIRE APPLIANCES, ETC.</u>			
<u>"Chubb" or other approved :</u>			
38	9Kg Approved rechargeable dry chemical powder (DPE) fire extinguisher complete with initial charge fixed to and including a 25mm x 250mm x 600mm red enamel painted wrought hardwood backing board with suitable brackets, etc.	No	5
Carried to Collection			N\$
SECTION 2			
BILL NO 12			
PLUMBING AND DRAINAGE (PROVISIONAL)			
ORANJEMUND BUSINESS PARK - PHASE 3			
ON ERF 901, ORANJEMUND, NAMIBIA			

SECTION 2
 BILL NO 12
 PLUMBING AND DRAINAGE (PROVISIONAL)
COLLECTION

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N\$

SECTION 2
 BILL NO 12
 PLUMBING AND DRAINAGE (PROVISIONAL)
**ORANJEMUND BUSINESSSS PARK - PHASE 3
 ON ERF 901, ORANJEMUND, NAMIBIA**

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 13</u></p>			
<p><u>PAINTWORK</u></p>			
<p><u>NOTES:</u></p>			
<p>Attention is directed to the relevant sections of the Model Preambles to Trades which forms a part of this Bill of Quantities and must be read in conjunction herewith.</p>			
<p>Where a specific manufacturer's paint products are described in these Bills of Quantities the Contractor is advised that he should price the specific product as specified and that he may only change from the designated product to another product after written consent has been obtained from the Architect, after the closing of tenders. Where applicable the cost of such substitution with another product shall be adjusted by the Quantity Surveyor in the Final Account for this project.</p>			
<p>The Contractor shall apply all paints in strict accordance with the manufacturer's instructions and after consultation with the manufacturer's authorised representative. Painting shall be done by brush, roller or spraying as recommended by the paint manufacturer (and at the discretion of the Contractor) to produce a finish to the approval of the Architect.</p>			
<p>No paint shall be applied during cold weather.</p>			
<p>All materials for paintwork shall be brought onto the site in unopened containers and no adulteration will be allowed.</p>			
<p>The area of paint measured is the nett area of the final painted surfaces and excludes for paint finishes behind joinery fittings, pinning boards, etc. Prices are to include for cutting to line around such items or for painting behind such items if preferred.</p>			
<p>Prices for paintwork are to include for all necessary precautions for the protection of finished work including masking or covering all finished paintwork as well as all finished joinery, tiling, floor coverings, etc. during painting. Any damage to such finished work shall be</p>			
<p>Carried to Collection</p>			
<p>SECTION 2 BILL NO 13 PAINTWORK ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			<p>N\$</p>

removed, repaired or replace at the Contractor's own expense.

The Contractor shall provide all necessary dust sheets, covers, etc. required during painting. All door handles, locks and other ironmongery, pelmets, electrical switch and socket covers, etc. are to be removed before commencing the painting and are to be refitted after completion of the painting. All paint spots, stains, etc. are to be cleaned off all floors, walls, glass, doors, frames, fittings, etc. after completion of the painting.

Prices for painting are to include for painting a one square metre sample panel of all finishing coats and for repeating if required. Only after the written approval by the Architect of the sample panels may the finishing coats be applied.

Cellulose fillers such as "Aurora" and "Polyfilla" will not be accepted. Plaster, concrete, fibre cement or timber surfaces are to be filled with "Polycell Mendall 90" or other approved or "Pera Universal Repairing Compound" or other approved mixed with 30% marble dust in strict accordance with the manufacturer's specifications.

Prices for painting on ceilings are to include for painting with a stippled effect roller.

PAINTWORK, ETC. TO NEW WORK

ON INTERNAL FLOATED PLASTER SURFACES

Prepare and apply one coat "Neo Acrylic Wall Primer" or other approved acrylic plaster primer, stop with "Neo Repair Paste" or other approved and apply one coat "Neo Bonding Liquid" or other approved and apply two coats "Neo Multi Dur PVA" or other approved paint on :

1	Walls	m2	290		
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Carried to Collection

N\$

SECTION 2
 BILL NO 13
 PAINTWORK
**ORANJEMUND BUSINESSS PARK - PHASE 3
 ON ERF 901, ORANJEMUND, NAMIBIA**

ON EXTERNAL FLOATED PLASTER SURFACES

Prepare and apply one coat "Neo Acrylic Wall Primer" or other approved acrylic plaster primer, stop with "Neo Repair Paste" or other approved and apply one coat "Neo Bonding Liquid" or other approved and apply two coats "Neo Multi Dur PVA" or other approved paint on :

2	Walls	m2	87
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ON FAIR FACED BRICKWORK

Prepare and apply two coats "Nova 1 Novabrik" or other approved brick sealer on :

3	External walls	m2	54
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ON SMOOTH CONCRETE SURFACES

Prepare and apply one coat "Plascon Merit Plaster Primer (UC56)" or other approved plaster primer and apply two coats "Plascon Polvin Super Acrylic Paint (EPL/TAP range)" or other approved paint on :

4	Columns	m2	75
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5	Beams	m2	32
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ON SMOOTH CONCRETE SURFACES

Prepare and apply two coats "Nova 2 Slasto n Stone Sealer" or other approved UV resistant solvent-based sealer on :

6	Floors	m2	97
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7	Counter slab	m2	5
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ON PLASTERBOARD SURFACES

Prepare and apply one coat acrylic plaster primer, stop with "Neo Repair Paste" or other approved and apply two coats "Neo Aurora Acrylic PVA" or other approved paint on :

8	Ceilings and cornices, including priming metal cover strips and nailheads	m2	94
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Carried to Collection

N\$

SECTION 2
BILL NO 13
PAINTWORK

**ORANJEMUND BUSINESS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

ON FIBRE-CEMENT BOARD SURFACES

Prepare and apply one coat "Neo Acrylic Wall Primer" or other approved acrylic plaster primer, stop with "Neo Repair Paste" or other approved and apply one coat "Neo Bonding Liquid" or other approved and apply two coats "Neo Multi Dur PVA" or other approved paint on :

9	Fascias and barge boards, including priming metal jointing strips	m2	15
10	Cladding	m2	16

ON METAL SURFACES

Remove all rust mill scale grease and oil with "Neo metal conditioner" or other approved metal cleaner, rinse with clean water and apply one coat "Neo corroguard anti-corrosive" or other approved primer and two coats "Neo dur acrylic emulsion" or other approved paint on :

11	Gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	23
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Carried to Collection

N\$

SECTION 2
 BILL NO 13
 PAINTWORK
ORANJEMUND BUSINESSSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

SECTION 2

BILL NO 13

PAINTWORK

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N\$

SECTION 2

BILL NO 13

PAINTWORK

**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

Bill No	<u>SECTION SUMMARY - BUILDING WORKS</u>	Page No	Amount
1	EARTHWORKS (PROVISIONAL)	15	
2	CONCRETE, FORMWORK AND REINFORCEMENT	21	
3	MASONRY	24	
4	WATERPROOFING	25	
5	ROOF COVERINGS, ETC.	26	
6	CARPENTRY AND JOINERY	29	
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	30	
8	METALWORK	34	
9	STRUCTURAL STEELWORK	37	
10	PLASTERING	40	
11	TILING	41	
12	PLUMBING AND DRAINAGE (PROVISIONAL)	48	
13	PAINTWORK	53	
	Carried to Final Summary		N\$
	SECTION 2		
	ORANJEMUND BUSINESSS PARK - PHASE 3		
	ON ERF 901, ORANJEMUND, NAMIBIA		

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>ROADWORKS, PARKING AND PAVING</u></p> <p><u>NOTES:</u></p> <p>Attention is directed to the relevant sections of the Model Preambles to All Trades which forms a part of this Bill and must be read in conjunction herewith.</p> <p>The Contractor is referred to the previous Sections for the full descriptions of labour and material which apply equally to the items in this Section unless otherwise described.</p> <p><u>Clearing and grubbing :</u></p> <p>Parking areas shall be cleared and grubbed to a line 2m outside the parking area unless existing structures or fences make this impossible.</p> <p>Where the above widths cannot be cleared due to existing structures, clearing is to be done as wide as possible within the above limits.</p> <p>After setting out but before any clearing is done, the Engineer will decide which trees, if any, are to be left undamaged in the strip outside the paved areas. Trees with trunks larger than 150mm diameter x 1 000mm above ground level will be paid for separately.</p> <p>The area shall be ripped to a depth of at least 150mm below original ground level in at least two directions. There shall be an angle of at least 45 degrees and at most 135 degrees between the two ripping passes.</p> <p>All vegetable matter including roots with a diameter larger than 30mm shall be removed and hand labour will consequently be required.</p> <p><u>Disposal of Material :</u></p> <p>All trees, bushes, shrubs, roots and other vegetable matter removed during the clearing and grubbing operations, shall be carted away to a dumping site agreed to by the Local Authority. No vegetable matter may be burned.</p>			
	Carried to Collection		N\$	
	<p>SECTION 3 BILL NO 1 ROADWORKS, PARKING AND PAVING ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA</p>			

No additional payment shall be made for loading, transport and off loading of material resulting from clearing.

Preparing and compacting the roadbed :

Roadbed preparation shall be carried out underneath all roads and parking areas between toe lines of road and parking area embankments or in cut areas to a maximum width of 2m outside the edge of a surfaced street or parking area and 5m on either side of the centreline of gravel surfaced streets.

In cut areas roadbed preparation shall only be done after any excess material has been removed in order to accommodate the selected sub grade material and wearing course or sub base and paving.

The roadbed shall be compacted by using a combination of compaction equipment which shall include a vibrating roller and a pneumatic roller.

Roadbed preparation shall be carried out after grubbing has been completed. The Contractor shall water the roadbed thoroughly and allow the water to penetrate the loose material. Thereafter the material shall be thoroughly mixed to ensure a uniform distribution of moisture. Prior to commencing with compaction, the roadbed shall be shaped to allow proper and unimpeded contact of the roller with the roadbed throughout.

Compaction shall be to 100% Mod AASHTO density for non-plastic sand and 93% for other material to a depth of at least 150mm.

Kerbs :

Standard pre-cast concrete barrier kerbs size 900mm long x 250mm high x 90mm wide on the top edge tapering to 125mm wide at the bottom with a compressive strength of at least 35MPa are to be used where barrier kerbs or mountable kerbs are specified. Where mountable kerbs are specified, the kerb shall be laid flat or at an incline as shown on the drawings.

Precast kerbs shall be laid on and including a 15MPa mass concrete bedding with a 15MPa backing in at least two positions spaced equidistant behind each kerb.

Concrete edging :

Carried to Collection

N\$

SECTION 3
 BILL NO 1
 ROADWORKS, PARKING AND PAVING
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

Concrete edging used as side restraints for interlocking brick paving where no barrier kerbs are specified, may be either pre-cast barrier kerbs laid with the top surface flush to the adjacent paving block surface or may be a cast-in-situ 25MPa concrete edge strip size 300mm wide x 300mm deep as indicated on drawings.

Edging will be used in a transverse direction to a street centreline to act as restraint where interlocking brick paving is stopped.

Road marking :

Parking bays shall be marked with white unbroken lines, each 5m long x 100mm wide.

FILLING, ETC.

Earth filling with G5 material supplied by the contractor compacted to 98% Mod AASHTO density in layers not exceeding 150mm thick :

1	Under floors, steps, pavings, etc.	m3	43
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Compaction of surfaces :

2	Compaction of ground surface under floors, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO density	m2	71
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SOIL POISONING

"Premise 200 SC" or other approved soil insecticide :

3	Under floors, pavings, etc. including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming	m2	71
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Carried to Collection

N\$

SECTION 3
 BILL NO 1
 ROADWORKS, PARKING AND PAVING
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

PAVING

"Smart stone Huguenot" or other approved 60mm thick 25MPa precast concrete block paving size 150mm x 150mm of various colours laid to falls on and including 20mm thick clean sand bed to an approved pattern to falls and cambers including brushing with sand/cement mixture and compacting as described :

4	Paving to apron etc. to falls	m2	71	
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"Wibeku" or other approved precast concrete kerbs and channels finished smooth on exposed surfaces:

5	Precast concrete barrier kerb 125mm x 250mm high with one battered face and rounded edge bedded on and including 20MPa concrete base and jointed and pointed in 3:1 cement mortar, including any necessary excavation, formwork, filling, etc.	m	39	
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Carried to Collection

N\$

SECTION 3
BILL NO 1
ROADWORKS, PARKING AND PAVING
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

SECTION 3
BILL NO 1
ROADWORKS, PARKING AND PAVING
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SECTION 3
BILL NO 1
ROADWORKS, PARKING AND PAVING
**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 2</u>			
	<u>BOUNDARY FENCING</u>			
	<u>NOTES:</u>			
	Prices for all metal posts, standards, struts, stays, framing, etc. shall include for two coats aluminium paint including touching up paint work after installation.			
	Prices for fixing all metal posts, standards, struts, stays, framing, etc. shall include fixing members with 12mm diameter bolts, nuts and washers where applicable.			
	Prices for forming concrete footings, edge, blocks, etc shall include for all the necessary excavations, concrete, formwork, etc as may be required.			
	<u>TRENCH EXCAVATIONS, FILLING, ETC.</u>			
	<u>Excavation in earth not exceeding 2m deep for :</u>			
1	Trenches	m3	62	
	<u>Extra over trench and hole excavations in earth for excavation in :</u>			
2	Soft rock	m3	3	
3	Hard rock	m3	3	
	<u>Extra over all excavations for carting away :</u>			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	18	
	<u>FILLING, COMPACTION, ETC.</u>			
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick :</u>			
5	Backfilling to trenches, holes, etc.	m3	43	
	Carried to Collection			N\$
	SECTION 3 BILL NO 2 BOUNDARY WALL AND FENCING ORANJEMUND BUSINESSSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

	<u>Risk of collapse of excavations to :</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	164	
	<u>Compaction of surfaces :</u>			
7	Compaction of ground surface under strip footings and bases to 100% Mod AASHTO density	m2	62	
	<u>SOIL POISONING</u>			
	<u>Soil insecticide :</u>			
8	To bottoms and sides of trenches, etc.	m2	226	
	<u>UNREINFORCED CONCRETE</u>			
	<u>Concrete class 25MPa/19mm cast against excavated surfaces in :</u>			
9	Strip footings	m3	18	
	<u>BRICKWORK</u>			
	<u>FOUNDATIONS (PROVISIONAL)</u>			
	<u>Brickwork of cement bricks (14MPa nominal compressive strength) in class I mortar :</u>			
10	One brick walls	m2	57	
	<u>SUPERSTRUCTURE</u>			
	<u>Brickwork of cement bricks (7MPa nominal compressive strength) in class II mortar :</u>			
11	One brick walls	m2	116	
	<u>BRICKWORK SUNDRIES</u>			
	<u>2.5mm Brickwork reinforcement :</u>			
12	150mm Wide reinforcement built in horizontally in foundation (Provisional)	m	675	
13	150mm Wide reinforcement built in horizontally	m	456	
	Carried to Collection			N\$
	SECTION 3			
	BILL NO 2			
	BOUNDARY WALL AND FENCING			
	ORANJEMUND BUSINESS PARK - PHASE 3			
	ON ERF 901, ORANJEMUND, NAMIBIA			

DAMPPROOFING OF WALLS AND FLOORS

One layer of 375 micron "Gundle Brikgrip DPC" or other approved embossed damp proof course :

14	Laid horizontally on or under walls, etc. including turning up against jambs, etc. and all laps	m2	36
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FENCING, ETC.

"Clearvu Invisible Wall" or other approved high density mesh panel fencing fixed to brick walls with "Tech" or other approved screws with clamps, etc. all in strict accordance with the manufacturers instructions :

15	1 500mm High fixed to brick walls and including columns	m	31
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WELDED SCREENS, GATES, ETC.

Purpose made mild steel security gates :

16	Gate type G02 size 1 200mm x 1 700mm high overall including frames, brakcets, infill panels, locks, handles, etc. (As per Architects Drawing Number 658-W-900)	No	1
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17	Gate type G04 size 3 000mm x 1 735mm high overall including frames, brakcets, infill panels, locks, handles, etc.(As per Architects Drawing Number 658-W-900)	No	1
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18	Gate type G03 size 2 475mm x 1 735mm high overall including frames, brakcets, infill panels, locks, handles, etc.(As per Architects Drawing Number 658-W-900)	No	1
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Carried to Collection

N\$

SECTION 3
BILL NO 2
BOUNDARY WALL AND FENCING
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

PLASTERING

EXTERNAL PLASTER

1:5 Cement plaster wood floated on brickwork :

19	On walls	m2	674
20	On narrow widths	m2	41

PAINTWORK

ON EXTERNAL FLOATED PLASTER SURFACES

Prepare and apply one coat "Neo Acrylic Wall Primer" or other approved acrylic plaster primer, stop with "Neo Repair Paste" or other approved and apply one coat "Neo Bonding Liquid" or other approved and apply two coats "Neo Multi Dur PVA" or other approved paint on :

21	Walls	m2	715
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ON METAL

Prepare surfaces and clean with "Plascon Aquasolv" or other approved cleaner, wire brush and apply one coat "Plascon Universal" or other approved and apply two coats "Super Universal High Gloss Enamel" or other approved paint on :

22	On gates, grilles, burglar screens, louvres, balustrades, etc. (both sides measured over the full flat area)	m2	56
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Carried to Collection

N\$

SECTION 3
BILL NO 2
BOUNDARY WALL AND FENCING
ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA

SECTION 3

BILL NO 2

BOUNDARY WALL AND FENCING

COLLECTION

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SECTION 3

BILL NO 2

BOUNDARY WALL AND FENCING

**ORANJEMUND BUSINESSS PARK - PHASE 3
ON ERF 901, ORANJEMUND, NAMIBIA**

SECTION SUMMARY - EXTERNAL WORKS

Bill No		Page No	Amount
1	ROADWORKS, PARKING AND PAVING	59	
2	BOUNDARY WALL AND FENCING	64	
Carried to Final Summary			N\$
SECTION 3 ORANJEMUND BUSINESSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

Item No	Quantity	Rate	Amount
<u>BILL NO 1</u>			
<u>PROVISIONAL AMOUNTS</u>			
<u>NOTES:</u>			
<p>Attention is directed to the relevant sections of the Model Preambles to All Trades which forms a part of this Bill and must be read in conjunction herewith. Before any work covered by means of Provisional Amounts is commenced the cost of work shall have been agreed to between the Contractor and Architect and/or Quantity Surveyor and/or Engineer. The cost of tests will only be paid to the contractor if tests are instructed in writing by the Engineer and those tests are approved in writing by the Engineer. The contractor is responsible to allow for random tests to ensure that he has reached the required results as specified by the Engineer. The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Principal Agent. The costs of testing bricks shall include the cost of providing the necessary bricks for the purpose of testing, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Architect.</p>			
<u>Electrical Installation :</u>			
1	Allow the provisional amount of N\$ 110,000.00 (One Hundred and Ten Thousand Namibia Dollars Nett) for Electrical Installation executed complete	Item	110 000.00
<u>SIGNAGE :</u>			
2	Allow the provisional amount of N\$ 25,000.00 (Twenty Five Thousand Namibia Dollars Nett) for signage to be deducted in part or whole if not required	Item	25 000.00
Carried to Final Summary			N\$
SECTION 4 BILL NO 1 PROVISIONAL AMOUNTS ORANJEMUND BUSINESS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			

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<u>FINAL SUMMARY</u>				
1	PRELIMINARIES	11		
2	BUILDING WORKS	54		
3	EXTERNAL WORKS	65		
4	PROVISIONAL ALLOWANCES	66		
	SUB TOTAL		N\$	
	<u>CONTINGENCIES</u>			
	Allow the Contingent Sum of N\$ 150,000.00 (One Hundred Fifty Thousand Namibia Dollars Nett) for contingencies to be used as directed by the Principal Agent and to be deducted in whole or in part if not required	Item		150 000.00
	NET CONSTRUCTION COST		N\$	
	Value Added Tax (VAT) at 15%		N\$	
	Carried to Form of Tender		N\$	
	ORANJEMUND BUSINESSSS PARK - PHASE 3 ON ERF 901, ORANJEMUND, NAMIBIA			