

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>SECTION NO. 1</u>				
<u>BILL NO. 1</u>				
<u>PRELIMINARIES</u>				
<u>BUILDING AGREEMENT AND PRELIMINARIES</u>				
The JBCC Principal Building Agreement (March 2014 Edition 6.1) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described				
The errata listed under the Table of Contents on page 3 of the JBCC Principal Building Agreement are deemed to be included in the agreement.				
The JBCC Principal Building Agreement contract data form an integral part of this agreement				
The Preliminaries revision 1 (February 2016) published by the Association of South African Quantity Surveyors for use with the JBCC Principal Building Agreement Edition 6.1 shall be deemed to be incorporated in these bills of quantities , amended as hereinafter described				
The contractor is deemed to have referred to the above mentioned documents for the full intent and meaning of each clause				
The clauses in the above mentioned documents are hereinafter referred to by clause number and heading only				
Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable"				
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<u>Pricing of Preliminaries</u> Should the contractor select Option A in terms of sub-clause 26.9.4 in the Contract Data for the purpose of adjustment of these Preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value-related (V) and Time-related (T) Tenderers are advised any item left unpriced shall be deemed to have been included or allowed for elsewhere in the prices. Fixed (F) - A fixed amount, which shall not be varied Value-related (V) - An amount which shall be varied in proportion to the contract value Time-related (T) - An amount which shall be varied in proportion to the construction period <u>PREAMBLES FOR TRADES</u> <u>User note</u> The Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the Model Preambles The contractor's prices for all items throughout these bills of quantities shall take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles and/or specifications				
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	Brought Forward <u>STRUCTURE OF THIS PRELIMINARIES BILL</u> Section A : A recital of the headings of the individual clauses of the aforementioned JBCC Principal Building Agreement Section B : A recital of the headings of the individual clauses of the aforementioned Preliminaries document Section C : Any special clauses to meet the particular circumstances of the project <u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u> <u>Interpretation (A1-A7)</u> 1 Clause 1.0 - Definitions and interpretation Definition of agreement The definition of agreement is replaced with the following definition : "AGREEMENT: The JBCC Principal Building Agreement, the completed JBCC PBA contract data, the contract drawings, the priced documents and any other documents reduced to writing and signed by the parties" Pricing of bills of quantities The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement. Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities Carried Forward Section No. 1 Bill No. 1 Preliminaries			R	
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Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained Prices for all construction equipment, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary Abbreviated descriptions The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice Legal status of contractor If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then: 1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement 2. These persons shall notify the employer of their leader who has authority to bind the contractor and each of these persons 3. The contractor shall not alter its composition or legal status without the prior written consent of the employer F:..... V:..... T:.....					
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2	Clause 2.0 - Law, regulations and notices <u>User note</u> <i>Insert the following where a health and safety specification is <u>not</u> yet available</i> Health and safety F:..... V:..... T:..... Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 Edition 19. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [2.1, 2.7.2 & 2.7.3] The contractor shall: 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 3. Co-operate with the health and safety consultant in all respects 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 5. Conform to the conditions contained in the employer's health and safety specification			
3	Clause 3.0 - Offer and acceptance F:..... V:..... T:.....	Item		
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4	Clause 4.0 - Assignment and cession F:..... V:..... T:.....		Item		
5	Clause 5.0 - Contract documents Value Added Tax Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT) Priced document as specification Clause 5.3 is deemed to be deleted The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any Electronic issue of drawings All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [5.5] Precedence Clause 5.6 is deemed to be deleted. The provisions of this Bill No. 1 (Preliminaries) shall take precedence over any other documents which constitute this agreement [5.6] F:..... V:..... T:.....		Item		
6	Clause 6.0 - Employer's agents Delegated authority The authority of the principal agent to issue contract instructions and perform duties for specific aspects of the works is delegated to agents as follows [6.2]				
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7	Clause 7.0 - Design responsibility F:..... V:..... T:.....		Item		
	<u>Insurance and security (A8-A11)</u>				
8	Clause 8.0 - Works risk F:..... V:..... T:.....		Item		
9	Clause 9.0 - Indemnities F:..... V:..... T:.....		Item		
10	Clause 10.0 - Insurances F:..... V:..... T:..... The Contractor is to ensure that he is properly and adequately insured in respect of all risk, public liability, workmen and materials on site.		Item		
11	Clause 11.0 - Security Extension of waiver of lien The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10] F:..... V:..... T:.....		Item		
	<u>Execution (A12 - A17)</u>				
12	Clause 12.0 - Duties of the parties Provisions of clauses 12.1.2 to 12.1.6 and 12.2.18				
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Brought Forward Refer to the contract data, the Preliminaries document and "Section B : Preliminaries" of this Bill No. 1 with reference to the provisions of clauses 12.1.2 to 12.1.6 and 12.2.18 of the JBCC Principal Building Agreement Office accommodation The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18] Notice board The contractor shall erect in a position by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as by the principal agent listing the names and logos of the employer, the contractor, and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18] Access to water, sewer, stormwater and electricity connections The employer is not in a position to identify access to water, sewer, stormwater and/or electricity connections to the site as may be suitable for the execution of the works. The contractor is to allow what he considers to be required and is to qualify his tender in detail in this regard, failing which it shall be taken that the contractor has allowed what will be required for the execution of the works. In such case no claims for additional cost or loss shall be entertained [12.1.5] Statutory and other notices The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay all deposits or fees in this regard [12.1.6]			R	
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	It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto F:..... V:..... T:.....				
13	Clause 13.0 - Setting out The contractor shall be responsible for the verification and protection of the location of all existing services. In the event that existing services are damaged by the contractor or sub-contractors then the damaged services shall be reinstated to the approval of the relevant authorities, all at the expense of the contractor F:..... V:..... T:.....	Item			
14	Clause 14.0 - Nominated subcontractors General attendance by the contractor upon n/s subcontractors shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as required by such subcontractor for the execution of the relevant subcontract works F:..... V:..... T:.....	Item			
15	Clause 15.0 - Selected subcontractors Refer to provisions on general attendance in previous clause 14.0 which shall apply equally to this clause F:..... V:..... T:.....	Item			
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16	Clause 16.0 - Direct contractors Attendance on direct contractors In respect of direct contractors the contractor shall: 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 2. Allow the use of personnel welfare facilities, where provided 3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation 4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1] F:..... V:..... T:.....	Item	
17	Clause 17.0 - Contract instructions Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor F:..... V:..... T:..... <u>Completion (A18 - A24)</u>	Item	
18	Clause 18.0 - Interim completion F:..... V:..... T:.....	Item	
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19	Clause 19.0 - Practical completion F:..... V:..... T:.....		Item		
20	Clause 20.0 - Sectional completion F:..... V:..... T:.....		Item		
21	Clause 21.0 - Defects liability period and final completion F:..... V:..... T:.....		Item		
22	Clause 22.0 - Latent defects liability period F:..... V:..... T:.....		Item		
23	Clause 23.0 - Revision of date for practical completion Substitution of materials and goods The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8, 23.1 & 2] F:..... V:..... T:.....		Item		
24	Clause 24.0 - Penalty for late or non-completion F:..... V:..... T:.....		Item		
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	<u>Payment (A25 - A27)</u>			
25	Clause 25.0 - Payment Materials and goods prematurely on site Materials and goods brought onto the site prematurely shall not be authorised for payment [25.3.2] Materials and goods stored off site Materials and goods stored off site shall be authorised for payment subject to a guarantee for advance payment being provided to the employer [25.3.2] Materials must be stored safely and protected against loss or damage Materials must be covered by insurance Fluctuations in costs All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [25.3.4] Prices submitted Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing F:..... V:..... T:.....			
26	Clause 26.0 - Adjustment of the contract value and final account	Item		
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	Tenant installations/users requirements delayed There is a possibility that certain works related to tenant installations/users requirements may have to be delayed and may consequently not be executed prior to practical completion The employer reserves the right to omit such work without compensation to the contractor for loss of profit or any other loss which the contractor may suffer as a result of such omission Should the contractor be instructed to do so he shall execute this work under the conditions pertaining to this agreement on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the contractor and the principal agent and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of practical completion of the works. Cost of claims All costs incurred by the contractor in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6,7] from making a determination on costs The contractor shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6] F:..... V:..... T:.....			
27	Clause 27.0 - Recovery of expense and/or loss F:..... V:..... T:.....	Item		
		Item		
28	<u>Suspension and termination (A28 - A29)</u> Clause 28.0 - Suspension by the contractor			
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	F:..... V:..... T:.....	Item	
29	Clause 29.0 - Termination F:..... V:..... T:.....	Item	
	<u>Dispute resolution (A30)</u>		
30	Clause 30.0 - Dispute resolution F:..... V:..... T:.....	Item	
31	Contract data Payment of preliminaries Where Option B is applicable and the initial construction period is extended the monthly charge shall be recalculated on the same basis as was initially applied but taking into account the revised construction period and the amounts already paid to the contractor [CD26.0] Adjustment of preliminaries Where the adjustment of preliminaries is in terms of Option A, the construction period and the initial construction period shall be calculated in working days [CD 26.0]		
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	Where the adjustment of preliminaries is in terms of Option A, the breakdown of charges into three categories and, where applicable, the appointment of preliminaries amounts per section, shall be provided by the contractor in schedule form indicating which items in this Preliminaries Bill are priced and whether they are fixed, Value - related or Time - related or a combination of categories. Alternatively, the contractor may provide the breakdown described above by marking each amount in this Preliminaries Bill with a "F", "V", "T" to indicate Fixed, Value - Related or Time - related respectively. Should the contractor fail to provide the sectional apportionment within the period stipulated, the categorised amounts shall be prorated to the value of each section [CD 26.0] Where the adjustment of preliminaries is required in terms of Option B, the detailed breakdown of preliminaries amounts and, where applicable, the apportionment of preliminaries amounts per section, shall be provided by the contractor in an schedule form which separates, as a minimum, the administrative and supervisory staff, the use of construction equipment in terms of the programme, establishment and disestablishment charges, Insurances and Guarantees, site office costs and the like. Should the contractor fail to provide such information within the period stipulated, Option A shall apply [CD 26.0]				
32	<u>Changes made to JBCC documentation</u> It is specifically agreed that the note below calling for amendments to the standard JBCC Agreement to be listed in the space provided in the contract data or recorded in "the single referenced Annexure" shall not apply. Where standard clauses or alternatives are not entirely applicable to this agreement, modifications, corrections or supplements as will apply are given under each relevant clauses heading in this Preliminaries Bill and such amendments, modifications, corrections or supplements shall take precedence notwithstanding the note below and notwithstanding the provisions of clause 5.6 of the JBCC Principal Building Agreement. F:..... V:..... T:..... <u>SECTION B: PRELIMINARIES</u>				
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	<u>Interpretation (B1)</u>				
33	Clause 1.1 - Definitions F:..... V:..... T:.....	Item			
34	Clause 1.2 - Interpretation F:..... V:..... T:.....	Item			
	<u>Documents (B2)</u>				
35	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item			
36	Clause 2.2 - Provisional bills of quantities				
37	Clause 2.3 - Availability of construction information				
	Budgetary allowances and provisional sums The budgetary allowances and/or provisional sums allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of subcontractors during the construction period F:..... V:..... T:.....	Item			
38	Clause 2.4 - Ordering of materials and goods F:..... V:..... T:.....	Item			
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	<u>Previous work and adjoining properties (B3)</u>				
39	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item			
40	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item			
41	Clause 3.3 - Inspection of adjoining properties A photographic record must be handed over to the Principal Agent prior to commencing work on site F:..... V:..... T:.....	Item			
	<u>The site (B4)</u>				
42	Clause 4.1 - Defined works area F:..... V:..... T:.....	Item			
43	Clause 4.2 - Handover of site in stages F:..... V:..... T:.....	Item			
44	Clause 4.3 - Enclosure of the works F:..... V:..... T:.....	Item			
45	Clause 4.4 - Geotechnical investigation F:..... V:..... T:.....	Item			
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46	Clause 4.5 - Encroachments F:..... V:..... T:.....	Item	
47	Clause 4.6 - Existing premises occupied F:..... V:..... T:.....	Item	
48	Clause 4.7 - Services - known F:..... V:..... T:.....	Item	
49	Clause 4.8 - Protection of trees and/or relevant natural features F:..... V:..... T:.....	Item	
<u>Management of contract (B5)</u>			
50	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item	
51	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item	
52	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item	
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	<u>Samples, shop drawings and manufacturer's instructions (B6)</u>		
53	<u>Samples, shop drawings and manufacturer's instructions (B6)</u> Clause 6.1 - Samples of materials Clause 6.1 is hereby amended by the addition of the following: The principal agent may reject any material or colours not corresponding with the samples. The samples shall be kept on site until completion of the works. Should any materials or items specified prove to be either unavailable, in poor supply or likely to cause delay to the works, the contractor shall notify the principal agent in sufficient time for suitable alternatives to be considered. Any claims for delays resulting from the contractor not conforming with the terms of this clause will not be entertained or allowed. F:..... V:..... T:.....	Item	
54	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item	
55	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item	
56	Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item	
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<u>Deposits and fees (B7)</u>			
57	Clause 7.1 - Deposits and fees F:..... V:..... T:.....	Item	
<u>Temporary services (B8)</u>			
58	Clause 8.1 - Water F:..... V:..... T:.....	Item	
59	Clause 8.2 - Electricity F:..... V:..... T:.....	Item	
60	Clause 8.3 - Ablution and welfare facilities F:..... V:..... T:.....	Item	
61	Clause 8.4 - Communication facilities F:..... V:..... T:.....	Item	
<u>Prime cost amounts (B9)</u>			
62	Clause 9.1 - Responsibility for prime cost amounts		
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	<u>Attendance on subcontractors (B10)</u>			
63	Clause 10.1 - General attendance General Attendance on N/S Subcontracts The following sub clauses are added: 10.1.1 Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor. 10.1.2 The provision of water and lighting and of single phase electric power to a position within 50 metres of the place where the subcontract work is to be carried out but excluding water, fuel and power for commissioning of any installation. 10.1.3 The provision of an area for the subcontractor to establish temporary office accommodation and workshop and for the storage of plant and materials. 10.1.4. The use of erected scaffolding belonging to the contractor, in common with others having the like right, as necessary to complete the works. 10.1.5. The use, at reasonable times by arrangement of the contractor's erected hoisting equipment. F:..... V:..... T:.....			
		Item		
64	Clause 10.2 - Special attendance F:..... V:..... T:..... <u>General (B11)</u>			
65	Clause 11.1 - Protection of the works F:..... V:..... T:.....			
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71	Clause 11.7 - Works cleaning and clearing The contractor shall ensure that the roads, pavements, etc leading to and around the site are kept free from obstruction, debris, etc at all times. In no way shall the work on the site be the cause of any inconvenience or hindrance to traffic or pedestrians. The contractor shall be responsible to ensure that all vehicles leaving the site do not deposit earth, mud, debris, etc either by spillage or via the wheels on any roads. The contractor shall have no claim against the employer in the event that the contractor is held accountable by any local authority or police for any action such as overloading vehicles, causing damage to roads while carting goods and materials onto or away from the site, restrictions on masses or dimensions of loads, holding up traffic, etc. F:..... V:..... T:.....				
			Item		
72	Clause 11.8 - Vermin F:..... V:..... T:.....				
			Item		
73	Clause 11.9 - Overhand work F:..... V:..... T:.....				
			Item		
74	Clause 11.10 - Tenant installations by direct contractors F:..... V:..... T:.....				
			Item		
75	Clause 11.11 - Advertising F:..... V:..... T:.....				
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	<u>Preliminaries schedule (B12)</u>				
76	Information for completion of the preliminaries schedule Information necessary for elections and completion of those clauses contained in the preliminaries schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract 12.1 - Provisional bills of quantities [2.2] The quantities are provisional Yes 12.2 - Availability of construction information [2.3] Construction documentation is complete Yes 12.3 - Previous work - dimensional accuracy [3.1] The contractor is required to check the site for dimensional accuracy of the previous works, report thereon in detail possession of the site. Failure by the contractor to comply with the above shall deem the previous works to be correct, and this shall be the basis for adjustment to contract value. 12.4 - Previous work - defects [3.2] not applicable 12.5 - Inspection of adjoining properties [3.3] Specific Requirements: The contractor shall make a photographic record of all adjoining/ existing properties, buildings, walls, boundary fences, roads, pavements, kerbs, etc that could be affected by the works and deliver same recorded on a CD to the principal agent . 12.6 - Defined works area [4.1]				
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12.7 - Handover of site in stages [4.2]				
12.8 - Enclosure of the works [4.3]				
12.9 - Geotechnical investigation [4.4]				
12.10 - Existing premises occupied [4.6]				
12.11 - Services - known [4.7]				
12.12 - Protection of trees and/or relevant natural features [4.8]				
12.13 - Water [8.1]				
Option A (by contractor)				
Option B (by employer - free of charge)				
Option C (by employer - metered)				
12.14 - Electricity [8.2]				
Option A (by contractor)				
Option B (by employer - free of charge)				
Option C (by employer - metered)				
12.15 - Ablution and welfare facilities [8.3]				
Option A (by contractor)				
Option B (by employer)				
12.16 - Communication facilities [8.4]				
Specific Requirements: Contractor's account				
12.17 - Protection of the works [11.1]				
Specific Requirements: The Contractor shall be liable for all damages to adjoining properties and existing roads and pavement and must make good all damages to same at his own expense all to the satisfaction of the Principal Agent.				
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Brought Forward		R
12.18 - Protection/isolation of existing/sectionally occupied works [11.2] Protection/isolation is required Yes 12.19 - Disturbance [11.5] Specific Requirements: Minimising disturbanceAll work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Whilst the employer shall not impose restrictions upon the contractor's working hours, the contractor shall take all measures available to him in order to minimise noisy operations during business hours. Such measures will include, inter alia, the use of silent compressors and strict control of workmen. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever. 12.20 - Environmental disturbance [11.6] Controlling all forms of pollution The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due <i>inter alia</i> to noise, artificial light, wind-blown sand, dust, deposits of mud, etc The contractor is to ensure that all roads which border the site and is used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works F:..... V:..... T:.....	Item	
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries		

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward				R	
<u>SUPPLEMENTARY DOCUMENTATION</u>					
AS BUILT DRAWINGS					
77	The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineers drawings and are to be submitted to the principal agent and the structural engineer for their records. F:..... V:..... T:.....		Item		
<u>WARRANTIES FOR MATERIALS AND WORKMANSHIP</u>					
78	Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his ruling shall be final and binding. F:..... V:..... T:.....		Item		
Carried Forward				R	
Section No. 1 Bill No. 1 Preliminaries					

Brought Forward				R
SECTION C: SPECIFIC PRELIMINARIES				
ENCLOSURE OF WORKS.				
The contractor shall erect whatever other site enclosure, hoardings, access gates, etc he deems necessary to maintain the security of the works, his temporary offices, stores, etc and to protect the general public from accessing dangerous construction areas, and he shall maintain such enclosure during the course of the works and remove same prior to practical completion.				
F:..... V:..... T:.....		Item		
79	DEFINED WORKS AREA			
The area of the works to be occupied by the contractor, any restriction to the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site.				
F:..... V:..... T:.....		Item		
80	LABOUR RECORD			
At the end of each week the contractor shall provide the Principal Agent with written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all sub-contractors on the works each day				
F:..... V:..... T:.....		Item		
Carried Forward				R
Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
81	EMPLOYMENT OF ILLEGAL WORKERS No illegal (migrant) workers may be employed or allowed on the site by any contractor or subcontractor. Precautions to prevent illegal workers being employed shall include but not be limited to the following: 1. Records of all workers shall be maintained by all contractors and subcontractors, and shall be submitted to the contractor's site agent on a daily basis. 2. Advise all persons entering the site by means of notices or posters that illegal workers will not be employed on the site, and that any illegal workers found on site will be reported to the authorities. 3. Advise all persons entering the site by means of notices or posters that anyone who fails to provide full and proper means of identification when requested to do so by a supervisor will not be allowed to remain on the site. F:..... V:..... T:.....				
			Item		
82	OVERTIME Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer F:..... V:..... T:.....				
			Item		
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
83	CO-OPERATION OF THE CONTRACTOR FOR COST MANAGEMENT It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the contract value does not exceed the budget F:..... V:..... T:.....				
		Item			
84	PRICES FOR VARIATIONS Where prices or quotations for variations are submitted by the contractor during the currency of the contract, it shall be clearly understood that these are for the purpose of consideration only and that there is not to be any assumption of their acceptance. F:..... V:..... T:.....				
		Item			
85	SCAFFOLDING Tenderer to allow for scaffolding in accordance with the scope, including the provision of scaffolding for sub contractors as necessary to complete the works F:..... V:..... T:.....				
		Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward				R
86	CHANGES TO THE SCOPE OF WORKS The client reserves the right to extend the scope of works by not more than 20 percent (%) of the tendered quantities without repricing. F:..... V:..... T:.....	Item		
87	SITE INSTRUCTIONS Contract instructions issued on site are to be recorded in triplicate in an instruction book which is to be maintained on site by the contractor. Copies to be sent to Principal Agent and Quantity Surveyor weekly. No verbal Contract Instructions will be considered for remuneration. F: V: T:	Item		
Carried Forward				R
Section No. 1 Bill No. 1 Preliminaries				

	Brought Forward			R	
88	WARRANTIES FOR MATERIAL AND WORKMANSHIP Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor F: V: T:				
		Item			
89	COOPERATION OF THE CONTRACTOR FOR COST MANAGEMENT It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors F: V: T:				
		Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R	
90	TESTING OF WINDOWS FOR WATERTIGHTNESS Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other equally approved means F:..... V:..... T:.....		Item		
91	CONFIDENTIALITY The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works. No information regarding this project shall be published or disclosed without the prior written consent of the employer F:..... V:..... T:.....		Item		
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
92	GROUND AND ACCESS TO WORKS On completion of operations, the contractor shall restore the ground surface, wherever it may have been disturbed, to its original condition by filling ruts with material similar to the material within the rut and levelling the ground and, where necessary, plant grass and shrubs as may be required. Reinstatement operations to be done at the Contractor's expense. F:..... V:..... T:.....				
		Item			
93	ESCALATION/ CONTRACT PRICE ADJUSTMENTS PROVISION This contract and the rates contained will be Fixed and not subject to Escalation / Contract Price Adjustment F:..... V:..... T:.....				
		Item			
94	CONTRACT DRAWINGS Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent F:..... V:..... T:.....				
		Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

	Brought Forward			R
95	TRADE NAMES Wherever a trade name for any product has been described in the bills of quantities / lump sum document, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for F:..... V:..... T:.....		Item	
96	IMPORTED MATERIALS AND EQUIPMENT Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment to be completed by tenderer) Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable) F:..... V:..... T:.....		Item	
	Carried Forward			R
	Section No. 1 Bill No. 1 Preliminaries			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
97	ACCESS TO SITE LOCATIONS The site is located at Kuyasa Train Station and the tenderer must allow in his pricing for access and other considerations specific to these environments F:..... V:..... T:.....	Item	
98	SECURITY / BACKGROUND CHECKS OF PERSONNEL The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, undertake criminal background checks In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works F:..... V:..... T:.....	Item	
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

[illegible]

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
100	HIV/AIDS AWARENESS It is required of the contractor to thoroughly study the HIV/AIDS Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (Section A)" or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment				
		Item			
101	AWARENESS CHAMPION Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....				
		Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
102	AWARENESS WORKSHOPS Selection and appointment of a competent Service Provider by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....				
		Item			
103	POSTERS, BOOKLETS, VIDEOS, ETC Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....				
		Item			
104	ACCESS TO CONDOMS Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....				
		Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

	Brought Forward	R	
105	MONITORING Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....	Item	
106	UTILISE LOCAL RESOURCES Utilise local resources F:..... V:..... T:.....	Item	
107	PROVIDE EXPERIENTIAL WORK OPPORTUNITIES TOWARDS A TECHNICAL QUALIFICATION FOR DESIGNATED PERSONS Provide experiential work opportunities towards a technical qualification for designated persons F:..... V:..... T:.....	Item	
	Carried Forward	R	
Section No. 1 Bill No. 1 Preliminaries			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
108	PROVIDE EXPERIENTIAL WORK OPPORTUNITIES AND TRAINING TOWARDS TRADE COMPETENCIES FOR DESIGNATED PERSONS Provide experiential work opportunities and training towards trade competencies for designated persons F:..... V:..... T:.....				
		Item			
109	COMMUNITY ENGAGEMENT OBLIGATION The contractor shall ensure labour and community harmony on the project site and in the surrounding community. The Contractor shall participate in all community engagement activities where appropriate to promote the successful early completion of the project. The CLO and the Contractors most senior site manager are required to participate in the regular scheduled PSC meetings. The terms of reference for the PSC will be established prior to electing community / stakeholder participants. F:..... V:..... T:.....				
		Item			
110	OCCUPATIONAL HEALTH AND SAFETY The contractor shall comply with all the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and safety Act, 1993 (Act No 85 of 1993) It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the Bills of Quantities / lump sum document The contractor must take note that compliance with the				
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
	Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance.				
	The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment				
	Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained				
	Provide the amount for the cost of employing a full time Health & Safety Officer for the duration of the project				
	F:..... V:..... T:.....				
		Item			
111	Profit	Item			
112	Attendance	Item			
113	SAFETY EQUIPMENT				
	Personal protective equipment, clothing, fencing, signage, and other safety equipment.				
	F:..... V:..... T:.....	Item			
114	Profit	Item			
	Carried Forward			R	
	Section No. 1 Bill No. 1 Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
115	Attendance	Item		
116	COMMUNITY LIAISON OFFICER (CLO)			
	The contractor shall allow for and pay any and all costs necessary for the engagement of the services of a Community Liaison Officer (CLO) for the full duration of this contract. A CLO will be identified by the local structures of the ward areas and appointed following fair and transparent interviewing process, to be conducted in the presence of local structures and the contractor representative, in order to assist the Contractor in the procurement of any local labour, etc. required for this project. The contractor is to liaise with the CLO and afford him any assistance needed in ensuring sound working relations with the local community. Key Responsibilities of the CLO are envisaged to include and not necessary be limited to: 1. Assisting local leadership in conducting skills and resources audit which facilitates sourcing labour from within the ward or targeted areas for employment, as required by the contractor. 2. Assisting in sourcing labour only domestic sub-contractors and the procurement of materials from local resources, as required by the contractor. 3. Assisting the contractor by identifying areas of potential conflict and of threats to the project or to stakeholders in the project and recommend appropriate action to the contractor. 4. Assisting contractor and stakeholders in the project in the resolution of any conflict which may arise. 5. Establishing and ensuring that sufficient and open communication channels between the contractor and the work force are maintained. 6. Establish and ensuring that efficient and open communication channels between the contractor and the community are maintained. 7. Identifying and reporting to the contractor regarding issues where communication between stakeholder is necessary, recommend courses of action and facilitate			
	Carried Forward			R
	Section No. 1 Bill No. 1 Preliminaries			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
	such communications				
	8. Assisting the Contractor and the work force in the establishment of grievance procedures and necessary recommendation to the contractor regarding the grievances and solution thereto.				
	9. Attending to site meetings and project implementation meetings as required by the Contractor and prepare periodic reports as may be required by the Contractor from time to time.				
	10. Attending to such other duties which are consistent with the functions of a CLO, as may be required by the Contractor from time to time.				
	Tenderers are to price twice the rate of unskilled local labour rate against this item for any and all costs arising out of compliance with the foregoing and in the event of a Tenderer failing to price against this item or making inadequate financial provision against this item for compliance as aforesaid, then no claim for costs or additional cost incurred will be entertained by the Principal Agent.				
	F:..... V:..... T:.....	Item			
117	SUB-CONTRACTING				
	A tenderer to sub-contract a minimum 30% of the contract value to EME's and QSE's to have black ownership of 51% and above. The sub-contractor must reside within the municipal ward.				
	F:..... V:..... T:.....	Item			
	<u>SUMMARY OF CATEGORIES</u>				
	Category : Fixed R.....				
	Category : Value R.....				
	Category : Time R.....				
	Carried to Final Summary			R	
	Section No. 1				
	Bill No. 1				
	Preliminaries				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 2</u>				
	<u>BILL NO. 1</u>				
	<u>ALTERATIONS</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>REMOVAL OF EXISTING WORK</u>				
	<u>Temporary roof protection, etc. including removal:</u>				
	Contractors will be held responsible for all damages, however caused, to ceilings, finishes, etc. inside rooms where the existing roof coverings have been removed and he must make good all damages at his own expense to the approval of the Principal Agent				
1	Cover and maintain existing roofs in a perfectly watertight condition during alterations by means of heavy tarpaulins properly secured and maintained in position to the approval of the Principal Agent and make good all work damaged or distributed after completion.	m2	1 489		
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
2	Carefully take out and removed damaged metal roof sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	1 489		
3	Carefully take out and removed damaged metal cladding sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	106		
	Carried Forward			R	
	Section No. 2 Bill No. 1 Alterations				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
4	Carefully take out and removed damaged metal eaves closure sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	33		
5	Carefully take out and removed damaged metal barge flashing	m	38		
6	Isoboard insulation from in between structural steel roof trusses and purlins, including preparing purlins to receive new (new elsewhere measured)	m2	814		
7	Acoustic tile suspended ceilings, including cornices, suspension grid, hangers, etc.	m2	253		
8	Disconnect and remove electrical cables including light fittings, etc.	m2	1 067		
	<u>Carefully take out and remove gutters and downpipes etc.</u>				
9	Existing metal box gutter	m	97		
10	Existing 110mm uPVC downpipes including outlet, bends & shoe	m	81		
	<u>Take out and remove doors, windows etc from brickwork to remain including making good cement plaster on both sides</u>				
11	Timber single door from steel frame to remain, door size 813 x 2032mm high overall	No	12		
12	Timber single door and steel frame 813 x 2032mm high overall	No	3		
13	Single aluminium door and frame 900 x 2100mm high overall	No	6		
14	Roller shutter door size 3200 x 2400mm high	No	2		
15	Roller shutter door size 3200 x 2900mm high	No	4		
	Carried Forward			R	
	Section No. 2 Bill No. 1 Alterations				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc</u>			
16	Tiles to floors, including 30mm screeds	m2	222	
17	300mm High tiles skirting to walls	m	99	
18	Tiles to walls	m2	108	
	<u>Take out and remove piping, sanitary fittings, etc., including disconnecting piping from fittings and make good floor and wall finishes</u>			
19	Vitreous china wash hand basin, including short lengths of piping, etc	No	6	
20	Vitreous china WC pan with cistern, including short lengths of piping, etc	No	6	
21	Vitreous china urinal, including short lengths of piping, etc	No	2	
22	Stainless steel sink and drainer on timber cupboard approximate size 1200 x 600 x 900mm high and including short lengths of piping, etc.	No	2	
23	10 Litre Hydroboil including short lengths of piping, etc.	No	2	
	<u>Taking out/off and removing glass and mirrors</u>			
24	Mirror 600 x 600mm high from wall	No	4	
	<u>Taking out and removing ironmongery</u>			
25	Towel rail not exceeding 2000mm long from wall	No	2	
26	Toilet paper holder from wall	No	6	
27	Soap dispenser	No	2	
	<u>Taking out and removing sundry joinery work, fittings, etc</u>			
28	Timber kitchen floor cupboard 1800 x 600 x 900mm high including work top	No	1	
	Carried Forward			R
	Section No. 2			
	Bill No. 1			
	Alterations			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
29	Timber kitchen floor cupboard 2400 x 600 x 900mm high including work top	No	1	
30	Timber floor cupboard 2750 x 600 x 900mm high including work top	No	4	
31	Timber floor cupboard 3550 x 600 x 900mm high including work top	No	1	
<u>REMOVAL OF EXISTING GLAZING</u>				
<u>Take out and remove glass and mirrors:</u>				
32	Glass from aluminium window including cleaning out rebates and preparing for new glass (elsewhere measured)	m2	5	
33	Glass from aluminium shopfront including cleaning out rebates and preparing for new glass (elsewhere measured)	m2	26	
<u>PREPARATORY WORK TO EXISTING PLASTER SURFACES</u>				
<u>Making good cement plaster</u>				
34	Chase out existing damaged plaster from walls, apply "Sika Plasterstik" or other equally approved bonding agent to manufacturer's specifications and re-plaster walls with 1:4 cement mortar, including floating up smooth or textured plaster to match existing	m2	18	
<u>Concrete spalling</u>				
<u>Concrete spalling to existing concrete surfaces to included saw cut, break back 50mm to remove loose concrete aggregates and to expose steel, clean & wire brush steel, apply ABE Durarep ZR primer or similar approved to steel, apply Epidermix 344 or similar approved, apply ABE Durarep FR or similar approved 50mm thick, etc. all in accordance to engineer specifications</u>				
35	Existing concrete surfaces	m2	13	
Carried Forward				R
Section No. 2 Bill No. 1 Alterations				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward				R
<u>PREPARATORY WORK TO EXISTING SURFACES</u>				
36	Pressure clean down external facebrick walls and seal with an approved sealer	m2	568	
37	Pressure clean and thoroughly clean existing floor tiling surfaces with sugar soap, etc.	m2	887	
38	Making good to defects in concrete floors with "Sika" or other equally approved	m2	36	
<u>SERVICING OF EXISTING</u>				
39	Servicing of existing aluminium single door size 900 x 2100mm high	No	1	
40	Service existing aluminium windows	m2	30	
41	Service existing aluminium shop fronts	m2	308	
<u>OPENINGS THROUGH EXISTING WALLS ETC</u>				
<u>Altering openings</u>				
42	Altering opening in one brick wall where 600 x 1200mm high bulletproof window removed to form opening for new bulletproof window and frame 600 x 1370mm high overall by breaking out brickwork on both sides and bottom, including making good cement plaster on one side and into reveals and face brickwork on other side and into reveals and with 20 MPa concrete threshold with steel trowelled finish (new bulletproof glass and frame and making good paintwork elsewhere)	No	1	
<u>SUNDRIES</u>				
43	Carefully dismantle, remove and cart away damaged lifts including, disconnection cables, hoisting, etc.	No	1	
<u>BUDGETARY ALLOWANCES</u>				
Carried Forward				R
Section No. 2 Bill No. 1 Alterations				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Brought Forward		R	
<u>Works for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required</u>			
44	Allow an amount of R 150,000.000 for rectification works to existing concrete lift shaft, amount to be utilized at the discretion of the Principal Agent.	Item	150 000,00
Carried Forward to Summary of Section No. 2		R	
Section No. 2			
Bill No. 1			
Alterations			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 2</u>				
	<u>ROOF COVERING</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>SHEETING</u>				
	Safintra or other similar approved 0,50mm thick SAFLOK 700 Colorplus AZ150 interlocking roof sheeting fixed to timber internal purlins at 2000mm, and ridge/eaves purlins at 1700mm centres using SAFLOK 700 clips which must be screw fixed to timber purlins with Fixtiteor Safintra approved wafer head self-tapping screws. The sheeting will be a double interlocking concealed fix SAFLOK 700 profile as manufactured by Safintra Roofing, roll formed in continuous lengths from certified G550 steel or aluminium 3004 H14. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41mm. Two stiffening ribs are incorporated in each pan.				
	<u>MATERIAL AND FINISH FOR SAFLOK ROOF SHEETING</u>				
	ZincAL AZ150 coated steel G550 with a ColorPLUS colour coated finish to one side, colour (sample of colour to be approved on site) with a Cool Grey backing coat.				
	<u>FIXING SAFLOK</u>				
	The Saflok sheets shall be fixed to every purlin by means of patented SAFLOK 700 clips having spurs which will securely hold the sheets in position and lock-				
	Carried Forward				
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Brought Forward in the sidelap and both centre ribs. The SAFLOK 700 clips shall be manufactured from Galvanized steel and shall be fixed with the appropriate self-drilling/tapping screws to timber or steel purlins (selection from installation manual) OR with ZAP no. 10x45mm Waferhead screws type 17 to timber purlins. <u>SAFLOK FLASHINGS</u> Flashings specifications shall be to the Safintra standards and fixed to the sheeting with S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Transverse flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from Global Roofing Solutions. <u>SAFETY</u> The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity. <u>INSTALLATION</u> Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, should be replaced. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces. <u>HANDLING AND STORAGE</u> The contractor shall ensure that all materials used on site for roofing/cladding, be transported, handled and Carried Forward Section No. 2 Bill No. 2 Roof Coverings			R	
			R	

Brought Forward stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction. <u>INSPECTION PRIOR TO INSTALLATION</u> Before commencing installation, the contractor shall verify that the following items have been checked and accepted: a. The entire structure or the portion thereof to be sheeted has been correctly aligned, levelled and grouted. b. Purlins and girths are at the correct spacing and are within the specified tolerances. c. The corners of the roof are square and the wall framework is perpendicular or as specified. d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework. e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square. f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or, so dealt with that direct contact with the sheeting is avoided. g. The contact faces between the purlins or the girths and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding. <u>PROTRUSION THROUGH SHEETED SURFACES</u> Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the Carried Forward Section No. 2 Bill No. 2 Roof Coverings			R	
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sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations. <u>GUARANTEE</u> The manufacturer shall comply with ISO 9001:2008 Quality Management System. SAFLOK 700 sheeting shall be laid in strict accordance with the manufacturer's specifications by a approved Safintra contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions. CLEANING OF ROOF, ETC. All debris, swarf, etc arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners, sealants, mandrels from pop rivets, off-cuts of sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc. <u>PROFILED METAL SHEETING AND ACCESSORIES</u> <u>0.50mm "Saflok 700 Colourplus" aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturer's recommendations</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	1 489
2	Side cladding	m2	106
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	Brought Forward			R
3	Eaves closure	m2	33	
4	Extra over roof sheeting for cranking	m2	922	
	<u>Sundries</u>			
5	Barge flashing 660mm girth	m	158	
6	Fascia flashing 550mm girth	m	123	
7	Corner flashing 550mm girth	m	7	
8	Bottom flashing 550mm girth (Bottom of cladding)	m	82	
9	Head wall flashing 550mm girth	m	73	
10	Counter flashing	m	73	
	<u>ROOF INSULATION</u>			
	<u>"Sisalation FR 430" heavy industrial grade aluminium foil based insulation</u>			
11	Insulation laid taut over purlins at 1200mm centres and fixed concurrent with roof covering, with stapled longitudinal flap joints including galvanised steel straining wires not exceeding 300mm centres and fixing at top and bottom edges to purlins with and including hoop iron straps.	m2	1 628	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
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	Roof Coverings			

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Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 3</u>				
	<u>CARPENTRY AND JOINERY</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>MERANTI DOORS</u>				
	<u>Solid meranti door framed and ledged</u>				
1	44mm Door size 813 x 2032mm high hung to steel frames	No	1		
	<u>FLUSH DOORS</u>				
	<u>Solid core flush doors with Sapele veneer covering on both sides and hard wood edging strips on vertical sides.</u>				
2	44mm Door size 813 x 2032mm high hung to steel frames	No	2		
	<u>Semi-solid core flush doors with Sapele veneer covering on both sides and hard wood edging strips on vertical sides.</u>				
3	44mm Door size 813 x 2032mm high hung to steel frames	No	14		
4	Extra over door 813 x 2032mm high overall for cutting and forming opening approximately 400 x 400mm high.	No	4		
	<u>FIRE DOORS</u>				
	<u>"Bitcon" or other equally approved 2hr rated fire door hung to steel frames including hinges, locks, etc.</u>				
5	Single door 813 x 2032mm high	No	1		
	Carried Forward			R	
	Section No. 2 Bill No. 3 Carpentry and Joinery				

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward					R
<u>Existing Protection Services Staff Office (Pasue Area)</u>					
8	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises one (1) door and one (1) open shelf. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	1		
9	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 900mm high. Unit comprises cut out for single / double bow sink drop in (sink supplied by others), base, three (3) doors and one (1) drawer. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	1		
<u>Existing Staff Room</u>					
10	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 2115mm long x 600mm wide x 800mm high. Unit comprises two (2) door and one (1) open shelf. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	1		
Carried Forward					R
Section No. 2 Bill No. 3 Carpentry and Joinery					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward					R
11	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 2215mm long x 600mm wide x 900mm high. Unit comprises cut out for single / double bow sink drop in (sink supplied by others), base, three (3) doors and one (1) drawer. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	1		
Existing Ticket Offices					
12	Floor unit made of work top formed of 32mm "Rustenberg" granite work top with bull nose. Work top to be fixed on to wall bracket as per supplier recommendation. Overall size of unit 2750mm long x 600mm wide. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2		
13	Floor unit made of work top formed of 32mm "Rustenberg" granite work top with bull nose. Work top to be fixed on to wall bracket as per supplier recommendation. Overall size of unit 3550mm long x 600mm wide. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	1		
14	Extra over work top for circular cutting (Radius 420) including bull nose edge	No	2		
15	Extra over work top for coring 64mm diameter including	No	2		
16	Floor unit made white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor, wall and underside of worktop as per supplier recommendation. Overall size of unit 550mm long x 600mm wide x 900mm high. Unit comprises base, one (1) door and one (1) drawer. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2		
Carried Forward					R
Section No. 2 Bill No. 3 Carpentry and Joinery					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward				R
<u>Kitchen</u>				
17	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises four (2) doors and one (1) open shelf. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2	
18	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 2215mm long x 600mm wide x 900mm high. Unit comprises cut out for single / double bow sink drop in (sink supplied by others), base, three (3) doors and one (1) drawer. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2	
<u>Office</u>				
19	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises one (1) door and one (1) open shelf. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2	
Carried Forward				R
Section No. 2 Bill No. 3 Carpentry and Joinery				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R	
20	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 900mm high. Unit comprises cut out for single / double bow sink drop in (sink supplied by others), base, three (3) doors and one (1) drawer. Tenderer are required to refer to architect drawings for full details and specification prior to pricing.	No	2		
Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 3 Carpentry and Joinery					R

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 4</u>				
	<u>CEILINGS</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUSPENDED CEILINGS</u>				
	<u>'OWAcoustic(R)' or other equally approved constellation Premium biologically absorbable mineral wool ceiling tiles, NRC - 0.70 & CAC 33db, fire rating REI 180 (EN13501 - 2) size 1200 x 600 x 15mm with Square-edge and white painted finish, laid on fire rated OWAcconstruct(R) system S3 exposed demountable T24 suspension system, comprising galvanised main tees and cross tees with main tees suspended by means of galvanised hangers at centres not exceeding 1200mm and all installed to manufacturer's specification.</u>				
1	Ceilings suspended not exceeding 1m below structural steel roof trusses	m2	226		
2	Extra over for 1200 x 600mm Opening in ceiling for light fittings	No	22		
3	Extra over for 1200 x 600mm Opening in ceiling for light fittings	No	23		
4	Extra over for 40mm Diameter opening in ceiling panels for light fittings	No	20		
5	Extra over for 100mm diameter opening in ceiling panels for extraction	No	15		
	Carried Forward			R	
	Section No. 2 Bill No. 4 Ceilings				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward			R
	<u>'OWA' or other equally approved 12.5mm Vinyl Faced Gypsum Ceiling Panels, face-covered with white embossed vinyl, size 1200 x 600mm, laid on fire rated Cliq system S3 exposed demountable suspension system including galvanised main tees, cross tees, etc., all suspended with galvanised hangers at centres not exceeding 1200mm and all installed to manufacturer's instructions.</u>		
6	Ceilings suspended not exceeding 1m below structural steel roof trusses	m2	27
7	Extra over for 1200 x 600mm Opening in ceiling for light fittings	No	5
8	Extra over for 40mm Diameter opening in ceiling panels for light fittings	No	4
9	Extra over for 100mm diameter opening in ceiling panels for extraction	No	6
	<u>Shadowline, cornices, etc to ceilings</u>		
10	'OWAconstruct' or other equally approved pre-painted shadowline W-trim plugged at 200mm centres and all installed in accordance to the manufacturer's specification	m	390
	<u>INSULATION</u>		
	<u>'Isoboard' or other equally approved roof insulation high density 32-36kg/m³ rigid extruded polystyrene 100% closed cell insulation boards 30mm thick x 600mm wide with brown paper and polyethylene laminate slip sheet factory applied to upper surface, with tongue & groove joints fixed concurrent with roof covering over steel purlins at maximum 1200mm centres with 5mm gap between boards butt-joined over purlins.</u>		
11	Isoboard insulation	m2	814
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 4			
Ceilings			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 5</u>				
	<u>IRONMONGERY</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>LOCKSETS, ETC</u>				
	<u>Manufactured by "Dormakaba" or other equally approved</u>				
1	Cylinder Deadlock. Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. (D037D SS)	No	2		
2	Cylinder Sash Lock. Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. Centres 61mm. (D036S SS)	No	23		
3	Bathroom Deadlock. Case dimensions (mm) 102H x 78D. Forend dimensions (mm) 155H x 22W. Backset 57mm. (D032D SS)	No	3		
4	Helping hand indicator bolt for paraplegic wc (Code: 37651 AS)	No	2		
5	Bathroom WC indicator (Red and white) and turnknob (Code: DWC-005)	No	3		
6	43mm five pin Euro-profile Single Cylinder Grand Master Keyed (DSC104301 GMK)	No	2		
7	66mm five pin Euro-profile Double Cylinder Grand Master Keyed (DDC106601 GMK)	No	16		
8	66mm five pin Euro-profile knob cylinder master keyed (Code: DKC106601 MK - 66mm)	No	5		
9	66mm Euro-profile bathroom / privacy cylinder (Code: DBC006601)	No	2		
	Carried Forward			R	
	Section No. 2 Bill No. 5 Ironmongery				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward					R
<u>HANDLES</u>					
<u>Manufactured by "Dormakaba" or other equally approved</u>					
10	DPH301C Pull handle BT fixed on a 75 x 170 x 1.2mm thick Grade 430 stainless steel plate with no cylinder cutout. Stainless steel plate to have 4 countersunk holes for screw fixing. (Code: DHP-430-BL-SF 75 x 170)	No	3		
11	75 x 170 x 1.2mm thick Grade 430 stainless steel plate to have 4 countersunk holes for screw fixing. (Code: DPP-430-BL-SF-75x170)	No	3		
12	DPH301C Pull handle BT fixed on a 150 x 300 x 1.2mm thick grade 430 stainless steel plate with no cylinder cutout. Stainless steel plate to have 6 countersunk holes for screw fixing. (Code: DHP-430-BL-SF 150 x 300)	No	2		
13	150 x 300 x 1.2mm thick Grade 430 stainless steel plate with cylinder cutout right. Stainless steel plate to have 6 countersunk holes fir screw fixing. (Code: DPP-430-CR-SF150 x 300)	No	1		
14	150 x 300 x 1.2mm thick Grade 430 stainless steel plate with cylinder cutout right. Stainless steel plate to have 6 countersunk holes fir screw fixing. (Code: DPP-430-CL-SF150 x 300)	No	1		
15	325 x 25mm Straight Tubular Pull Handle Flange Fixing (DPH301B)	No	4		
16	Lever handle on 170 x 170mm plate with cylinder cutout (Code: TH120 BP Cyl S.S)	No	23		
<u>PUSH PLATES AND KICK PLATES</u>					
<u>Manufactured by "Dormakaba" or other equally approved</u>					
17	300 x (width of door) x 1.2mm thick Grade 430 stainless steel kick plate. Stainless Steel Kick Plate to have 12 countersunk holes for screw fixing. (List price calculated on 813mm wide door) (DKP-430-SF 300)	No	54		
<u>LETTERS, NAMEPLATES, ETC</u>					
Carried Forward					R
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	Brought Forward			R
	<u>Manufactured by "Dormakaba" or other equally approved</u>			
18	150 x 150mm MALE sign (Code: DSS-130 M)	No	1	
19	150 x 150mm FEMALE sign (Code: DSS-131 F)	No	1	
20	150 x 150mm PARAPLEGIC sign	No	2	
21	150 x 150mm TEA CUP sign (DSS-135 TC)	No	2	
22	150 x 150mm ELECTRICAL sign (Code: DSS-136 EL)	No	1	
	<u>STATUTORY SIGNAGE</u>			
	<u>Statutory signage to be SABS approved and photo luminescent, external signage to be UV rated</u>			
	<u>Red and white single sided signage screwed fixed on to walls as per manufacturer's details</u>			
23	190 x 190mm Arrow sign	No	20	
24	190 x 190mm Fire extinguisher sign	No	4	
25	190 x 190mm Fire hose reel sign	No	2	
26	190 x 190mm Fire hydrant sign	No	2	
27	190 x 190mm Twin booster sign	No	1	
28	300 x 200mm Fire exit keep clear sign	No	1	
	<u>Green and white single sided signage screwed fixed on to walls as per manufacturer's details</u>			
29	190 x 190mm Arrow sign	No	2	
30	190 x 190mm Running man sign	No	2	
	<u>Red and white double sided signage suspended 1m below suspended ceilings / soffit of slabs by chains as per manufacturer's details</u>			
31	Combination of 4 No. of 190 x 190mm signage. Signage include arrow, fire hose reel, fire extinguisher and fire hydrant	No	1	
	Carried Forward			R
	Section No. 2 Bill No. 5 Ironmongery			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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	Brought Forward			R	
32	Combination of 3 No. of 190 x 190mm signage. Signage include arrow, fire hose reel and fire extinguisher <u>Green and white double sided signage suspended 1m below suspended ceilings / soffit of slabs by chains as per manufacturer's details</u>	No	1		
33	Combination of 3 No. of 190 x 190mm signage. Signage include running man, arrow and wheel chair <u>Green, red and white double sided signage suspended 1m below suspended ceilings / soffit of slabs by chains as per manufacturer's details</u>	No	1		
34	Combination of 5 No. of 190 x 190mm signage. Signage include running man & arrow (green) and fire hose reel, fire extinguisher & arrow (red) <u>NON-STATUTORY SIGNAGE (PRASA SPECIFICATION)</u> <u>Projecting: Iconography</u>	No	1		
35	Double sided signage, non-illuminated overall size 500 x 500mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type C2.1, page 4 of 12 of Prasa Specification, for full details.	No	8		
36	Double sided signage, non-illuminated overall size 600 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type C2.2, page 4 of 12 of Prasa Specification, for full details. <u>Internal Signage: Digitally printed</u>	No	4		
37	Wall mounted signage, overall size 300 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type J1.2, page 11 of 12 of Prasa Specification, for full details.	No	8		
38	Door and wall mounted signage, overall size 300 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type J2.1, page 11 of 12 of Prasa Specification, for full details. <u>DOOR CLOSURE</u>	No	5		
	Carried Forward			R	
	Section No. 2 Bill No. 5 Ironmongery				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
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Brought Forward					R
<u>Manufactured by "Dormakaba" or other equally approved</u>					
39	NON HOLD OPEN Cam action slide channel door closer. Max door width 950mm. Closing Force EN 3. Hydraulic speed control. Pull-side door leaf fixing (Standard), Push-side transom fixing. Door closer compliant with EN 1154. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240. Certified manufacturer to ISO 9001 (TS91B - SL)	No	2		
40	EN 2-4 Parallel Arm DELAYED ACTION Door Closer. Push Side Fixing (Parallel Arm Bracket Included) EN2 750-850, EN3 850-950, EN4 950-1100 (TS73V PA DC - PAB - SL)	No	2		
<u>BATHROOM FITTINGS</u>					
41	"Franke Rodan RODX672" or other equally approved 0,8mm thick satin finished stainless steel double toilet roll holder with spindle system (Code: 359987), size 144 x 138 x 301mm high for 2 rolls maximum 120mm diameter with cylinder lock with standard Franke Key, plugged and screwed to the wall with stainless steel screws.	No	6		
42	"Bathroom Butler Series 4600" or other equally approved paper holder type II in polished grade 304 stainless steel finish (Code: 4602POLS), overall size 180 x 97 x 100mm, plugged and screwed to wall with stainless steel screws.	No	4		
43	"Bathroom Butler Series 4600" or other equally approved single rail in polished grade 304 stainless steel finish (code: 4678POLS), overall size 1125 x 105 x 50mm, plugged and screwed to wall with stainless steel screws.	No	2		
44	"XLerator 2.5Kw" or other equally approved 270W x 240H x 200Dmm Automatic Electric Stainless Steel Hand Dryer - CLX2500 or other equally approved satin finish stainless steel casing	No	4		
Carried Forward					R
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REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

	Brought Forward	R
"Chilli-B" or other equally approved:		
45 Soap dispenser (code: P-SDM-650) bolted to walls including all necessary fittings	No	4
<u>PARAPLEGIC FITTINGS</u>		
<u>Manufactured by "Dormakaba" or other equally approved</u>		
46 300x300x300mm Side Grab Rail (DGR-SS-152)	No	2
47 800x206mm Cistern Back Rail (DGR-SS-150)	No	2
<u>BLINDS</u>		
<u>"Windowvert" or other equally approved</u>		
48 Vertical slatted blinds 100mm wide to fit opening 750 x 1000mm high opening	No	4
49 Vertical slatted blinds 100mm wide to fit opening 1630 x 1000mm high opening	No	1
50 Vertical slatted blinds 100mm wide to fit opening 2050 x 1000mm high opening	No	1
51 Vertical slatted blinds 100mm wide to fit opening 2620 x 1000mm high opening	No	1
<u>SUNDRIES</u>		
<u>Manufactured by "Dormakaba" or other equally approved</u>		
52 Floor Mounted Door Stop (DDS-SS-017)	No	25
53 Hat and Coat Hook with rubber buffer (DHC-SS-031B)	No	4
Carried Forward to Summary of Section No. 2		R
Section No. 2 Bill No. 5 Ironmongery		

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>BILL NO. 6</u>				
<u>METALWORK</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>				
<u>1.2mm Double rebated frames suitable for one brick wall</u>				
1	No	1		
<u>ALUMINIUM WINDOWS, DOORS ETC</u>				
<u>"Crealco" or other equally approved aluminium windows, shopfronts and doors complete with subframes, ironmongery, glass, sealing, etc. and fixing to brickwork or concrete complete with 'KoastGuard" or other equally approved Qualicoat class 2 powder coating, Interpon D2525, Jet Black code QN205P all in accordance with suppliers instruction</u>				
2	m2	21		
3	No	4		
<u>EXPANDING SECURITY GATES</u>				
<u>'Trellidor' or other equally approved composite epoxy powder coated galvanised mild steel expanding security gate complete with floor rail, soffit guide and lock</u>				
4	No	4		
<u>BULLET PROOF PAY WINDOWS</u>				
Carried Forward				R
Section No. 2 Bill No. 6 Metalwork				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R
	<u>"Mutual Safes" or other equally approved Level G3 bullet resistant glazed & natural anodised aluminium transaction window with 30mm deep stainless steel dish tray and speech transfer posts (interior applications only), overall size to details, glazed in 53mm thick clear glass with 32mm post formed granite counter top.</u>			
5	Bullet proof pay window size 610 x 1370mm high	No	1	
	<u>ANODISED ALUMINIUM LOUVRE UNITS</u> <u>'Trox' or other equally approved natural anodised louvre units screwed into wooden door</u>			
6	Type AGS-T size 400mm wide x 400mm high	No	4	
	<u>MOTORISED ROLLER SHUTTER DOORS</u> <u>"Roll-Up Serranda" or other equally approved perforated galvanised; SABS 1461, & epoxy coated M/S perforated roller shutter for openings up to 3m x 4m high. Electrically operated with 220-volt HL600 motor with manual override, with 75 x 1.0mm thick galv. end locked slats complete with nylon end-locks, 120mm extra-wide tamper proof M/S guides, powder coated ancillary components including door curtain, 4.5mm thick end plates, guide rails, closed shaft, extruded aluminium T-bar with Astragal Rubber weather seal, & single span (no join) galv. cover box. Operated with High Security key switch. Fixed to brick, concrete or structural steel jambs and structural steel beam over. Contractor to provide cavity of 160mm x 120mm for recessing guides.</u>			
7	Automated roller shutter door approximate size 1600 x 2400mm high	No	2	
8	Automated roller shutter door approximate size 3200 x 2400mm high	No	2	
9	Automated roller shutter door approximate size 3200 x 2900mm high	No	4	
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 6 Metalwork			R

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 8</u> <u>TILING</u> <u>PREAMBLES</u> The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item <u>SUPPLEMENTARY PREAMBLES</u> <u>Fixing</u> Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc. shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc. shall be deemed to include 1:3 plaster bedding. Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for tiling key-coat. Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the Tal Professional range of products as recommended by the manufacturer. <u>WALL TILING</u> <u>200 x 200 x 6mm Matt white "Samca MWC4" or other equally approved glazed ceramic tiles fixed with an adhesive to plastered walls (plaster elsewhere measured) and flush pointed with waterproofing jointing compound to match tile colour</u>				
1	On splash backs	m2	3		
	Carried Forward Section No. 2 Bill No. 8 Tiling			R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R	
	<u>'Union Tiles' or other equally approved 300 x 600mm full bodied porcelain tiles (Code: SE20 A 600AH) with 3mm grouting fixed with 'Tal Goldstar 6' and Tal Bond" tile adhesive to plastered walls (plaster elsewhere measured) and flush pointed with "Tal Wall or Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>				
2	On walls (Black)	m2	21		
3	On narrow widths	m2	1		
	<u>'Union Tiles' or other equally approved 300 x 600mm full bodied porcelain tiles (Code: SE SPA 6100 3x6 AH) with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to plastered walls (plaster elsewhere measured) and flush pointed with "Tal Wall or Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>				
4	On walls (Ivory)	m2	84		
5	On narrow widths	m2	4		
	<u>FLOOR TILING (Internal)</u>				
	<u>'Union Tiles' or other equally approved 600 x 600mm R10 slip rated full bodied porcelain floor (Code: SEZZ6879N) tiles with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>				
6	On floors (Light grey)	m2	40		
7	300mm High skirting	m	56		
	<u>'Union Tiles' or other equally approved 600 x 600mm R10 slip rated full bodied porcelain floor (Code: SEZZ6876N) tiles with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>				
8	On floors (Dark grey)	m2	10		
	Carried Forward			R	
	Section No. 2				
	Bill No. 8				
	Tiling				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R
9	300mm High skirting	m	14	
	<u>FLOOR TILING (External)</u>			
	<u>'Union Tiles' or other equally approved 300 x 300mm terrazzo non-slip floor tiles (Code: ADMB34LAV SL300) with 5mm grouting fixed with ""Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>			
10	On floors (Charcoal grey)	m2	187	
11	300mm High skirting	m	45	
	<u>SUNDRIES</u>			
	<u>"Genesis" or other equally approved edge trims:</u>			
12	27 x 10 x 10mm aluminium square edge trim (Code: TDF 104.81)	m	130	
13	21 x 10mm aluminium straight edge trim (Code: ESA 100.80)	m	12	
	<u>"Genesis" or other equally approved movement joints:</u>			
14	Aluminium standard intermediate joints (Code: MMA100.35)	m	28	
15	Aluminium heavy duty movement joint (Code: GFAM5027.35)	m	14	
	<u>Polysulphide soft joint or equally approved at 3.0m intervals both ways as per supplier instructions</u>			
16	5 x 10mm Joints in floor tiles	m	861	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	Bill No. 8			
	Tiling			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 9</u>				
	<u>PLUMBING AND DRAINAGE</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>RAINWATER DISPOSAL</u>				
	<u>0.8mm Seamless aluminium proprietary gutter and rainwater pipe system with baked enamel finish</u>				
1	Purpose made 200 x 150mm Square eaves gutters fixed to rafter	m	59		
2	Extra over gutter for outlet	No	12		
	<u>0.8mm Fluted aluminium down pipes with baked enamel finish</u>				
3	120 x 90mm Rainwater pipe	m	41		
4	Extra on rainwater pipe for bend	No	24		
5	Extra on rainwater pipe for shoe	No	12		
	<u>SANITARY FITTINGS</u>				
	<u>WC</u>				
6	"Vaal Sanitaryware" or other equally approved vitreous china Parktown 90 degree outlet top inlet or back inlet flushvalve (code: 431600) and double flap plastic seat	No	4		
7	"Grohe" or other equally approved 25mm diameter chrome flush valve for wc (code: 37609) for concealed installation with push button actuator, 1.2 - 5.0 bar flow pressure, flow rate adjustment, including 25mm supply pipe, stop valve, flush pipe and 300mm extension pipe to wc.	No	4		
	Carried Forward			R	
	Section No. 2 Bill No. 9 Plumbing and Drainage				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>Wash Hand Basin</u>					
8	"Vaal Sanitaryware" or other equally approved Iceberg Vitreous china drop-in vanity basin colour White (Code: 7034), size 420 x 420mm fitted into opening in granite vanity top (vanity top elsewhere measured) and sealed with silicone sealant where basin rim meets vanity top.	No	4		
9	"Idral" or other equally approved water save self-closing push button pillar tap, non-hold cold water supply only, chrome finish, (code: 08212) with flow time of 6 - 9 secs.	No	4		
10	GH angle valve bau 15x15mm	No	4		
11	303-32 Basin waste	No	4		
12	ISM Gio bottle trap CP 32mm	No	4		
<u>Kitchen Sink - Single Bowl</u>					
13	"Franke" or other equally approved Projectline Model PLN611 stainless steel single end bowl inset sink (Code: 821047), overall size 800 x 460mm wide with one 340 x 370 x 150mm deep bowl, fitted onto cupboard (cupboard elsewhere measured) including clear silicon, 38mm waste fitting and PVC trap (trap elsewhere measured).	No	2		
14	"Cobra Watertech Noka" or other equally approved 15mm chrome plated deck mounted sink mixer with overarm swivel outlet and adjustable flanges (code: NA-970), manufactured in accordance with SANS 226:2004 Type 1 (BS 5412).	No	2		
15	GH angle valve bau 15x10mm	No	4		
16	32 x 40mm Butyl rubber "P" or "S" trap jointed to waste outlet fitting and uPVC pipe including clamps	No	2		
Carried Forward					R
Section No. 2 Bill No. 9 Plumbing and Drainage					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>Urinals</u>					
17	"Vaal Sanitaryware" or other equally approved 565 x 275 x 310mm sweetpea white vitreous china wall mounted back inlet urinal (code: 705127) including 38mm chromium plated domical grating (code: 8787z0) and chromium plated back inlet spreader (code: 7054z2), flush valve, flush pipe and fittings (by others), fixed on and including two hanger brackets (code: 8127z0).	No	2		
18	"Walcro" or other equally approved 15mm Ø BSP built-in sleeve, DZR brass urinal flush valve (code: 155UW) with internal flow control, strainer and no-hold feature for single bowl urinal.	No	2		
<u>WC (Paraplegic)</u>					
19	"Whyte House" or other equally approved paraplegic WC (code: 025134) with back inlet flush valve & double flap plastic seat.	No	2		
20	"Grohe" or other equally approved 25mm diameter chrome flush valve for wc (code: 37609) for concealed installation with push button actuator, 1.2 - 5.0 bar flow pressure, flow rate adjustment, including 25mm supply pipe, stop valve, flush pipe and 300mm extension pipe to wc.	No	2		
<u>Wash Hand Basin (Paraplegic)</u>					
21	"Vaal Sanitaryware" or other equally approved hibiscus vitreous china lavatory basin colour white (code: 7023), size 510 x 405mm with one tap hole including integrated overflow and chain stay hole bolted to wall with two x 10mm bolts (code: 8448Z0) and including universal half pedestal with hanger springs (code: 715221) and sealed with silicone sealant where basin meets wall.	No	2		
22	"Cobra" or other equally approved medical elbow action pillar tap with high waist, chrome finish, manufactured in accordance with SANS 226 Type 2.	No	2		
Carried Forward					R
Section No. 2 Bill No. 9 Plumbing and Drainage					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
23	GH angle valve 15x10mm	No	2	
24	303-32 Basin waste	No	2	
25	ISM Gio bottle trap CP 32mm	No	2	
	<u>TAPS, VALVES, ETC.</u>			
	Taps, valves, etc. jointed to copper pipes are to include brass connectors, adaptors etc. Installation and fixings to be as per manufacturers specifications and SANS 1808-9 compliant.			
26	15mm Ball-O- stop valves	No	4	
27	22mm Ball-O- stop valves	No	4	
28	28mm Ball-O- stop valves	No	1	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes cast into concrete slabs, fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications</u>			
29	50mm Pipes	m	33	
30	110mm Pipes	m	30	
	<u>Extra over uPVC pipes for:</u>			
31	50mm Bend	No	32	
32	50mm Access bend	No	5	
33	50mm Junction	No	4	
34	50mm Access junction	No	2	
35	50mm Coupling	No	7	
36	110mm Bend	No	12	
37	110mm Access bend	No	9	
38	110mm Access junction	No	3	
	Carried Forward			R
	Section No. 2			
	Bill No. 9			
	Plumbing and Drainage			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
39	110mm Double access junction	No	3	
40	110 x 50mm Access junction	No	3	
41	110mm Pan connector	No	6	
42	110mm Two way vent valve	No	3	
43	110mm Coupling	No	3	
<u>DOMESTIC WATER SUPPLIES</u>				
<u>Geberit Mepla or other equally approved pipes fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications:</u>				
All piping embedded into concrete or chased into walls to be twice wrapped in strong approved building paper.				
Rates for surface mounted copper pipe shall be deemed to include all fixtures and fittings for pipes fixed to walls, in chases, and in ceilings.				
44	16mm Pipes	m	30	
45	20mm Pipes	m	59	
46	26mm Pipes	m	6	
<u>Extra over Mepla pipes for fittings:</u>				
47	16mm Bend	No	22	
48	20mm Bend	No	21	
49	20 x 16mm Bend	No	4	
50	26mm Bend	No	1	
51	20mm Tees	No	11	
52	20 x 16mm Tees	No	6	
53	26mm Tees	No	1	
54	26 x 20mm Reducer	No	2	
Carried Forward				R
Section No. 2 Bill No. 9 Plumbing and Drainage				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward				R
<u>Extra over Mepla pipes for brass compression fittings:</u>				
55	15mm Flexible service pipe 300mm girth	No	10	
56	15mm Wallplate elbow	No	10	
57	22mm Wallplate elbow	No	8	
58	28mm coupling	No	1	
<u>PIPE INSULATION</u>				
<u>Thermaflex snap on sectional pipe insulation, neatly cut around pipe as required</u>				
59	Insulation to 15mm diameter piping and couplings including working around fittings	m	4	
<u>ELECTRIC WATER HEATERS</u>				
<u>Water heaters and accessories:</u>				
60	10 Litre "Hydroboil" or other equally approved over sink electric water heater	No	2	
<u>TESTING</u>				
61	Allow for testing the whole of the Stormwater drainage, Sewer drainage, Plumbing, Water and Fire supplies and all fittings to the satisfaction of the Architect, Engineer and Local Authorities. All defective work is to be taken out and replaced at the contractor's expense and the whole re-tested until acceptable		Item	
<u>AS-BUILT DRAWINGS</u>				
62	Provide a full set of as-built drawings on completion of the installation		Item	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 9				
Plumbing and Drainage				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	BILL NO. 10				
	GLAZING				
	PREAMBLES				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	GLAZING TO ALUMINIUM FRAME				
	<u>6.38mm Shutter proof glass seal with weather sealant joint to as per manufacturer's specifications.</u>				
1	Panes exceeding 0,5m2 and not exceeding 2m2	m2	5		
2	Panes exceeding 2m2 and not exceeding 4m2	m2	26		
	MIRRORS				
	<u>Mirrors shall be silver float glass with polished edges all round and holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>				
3	6mm Mirror size 600 x 750mm, four times holed and fixed to plastered wall	No	6		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 10 Glazing				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 11</u>				
	<u>PAINTWORK</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>PREPARATORY WORK TO EXISTING WORK</u>				
	<u>Previously painted plastered surfaces</u>				
	Surfaces shall be thoroughly water pressure cleaned and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished to match existing surfaces.				
	<u>PAINTWORK, ETC TO PREVIOUSLY PAINTED SURFACES</u>				
	<u>ON EXTERNAL FLOATED PLASTER SURFACES</u>				
	<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved alkali resistant primer and two coats "Micatex" emulsion paint for exterior use</u>				
1	On walls	m2	126		
	<u>ON INTERNAL FLOATED PLASTER SURFACES</u>				
	<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved Primer (PP700) and two coats "Velvagio" water based paint for interior use</u>				
2	On walls	m2	1 459		
3	On columns	m2	49		
	Carried Forward			R	
	Section No. 2 Bill No. 11 Paintwork				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
4	On beams	m2	63	
5	On narrow widths	m2	36	
<u>ON METAL SURFACES</u>				
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>				
6	On door frames	m2	24	
7	On balustrades	m2	135	
8	On clear vu balustrades	m2	58	
<u>Prepare, degrease and sand down existing surfaces and apply "Plascon" or other approved alkyd based zinc phosphate primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint, on steel</u>				
9	On structural steel members	m2	1 120	
<u>ON PLASTERBOARD SURFACES</u>				
<u>Prepare and sanddown existing surfaces and apply "Plascon" or other equally approved gypsum and plaster primer (PP700) and two coats professional super matt (PEM 900/TSA) for interior use</u>				
10	On ceilings	m2	79	
<u>PAINTWORK, ETC TO NEW SURFACES</u>				
<u>ON METAL SURFACES</u>				
<u>One coat calcium plumbate primer on:</u>				
11	Backs of galvanised steel door frames before fixing	m2	18	
Carried Forward				R
Section No. 2 Bill No. 11 Paintwork				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>"Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>			
12	On door frames	m2	18	
	<u>ON WOOD SURFACES</u>			
	<u>"Plascon" or other equally approved primer, one coat alkyd based universal undercoat and two coats professional gloss enamel paint</u>			
13	On Doors	m2	98	
	<u>ON EXISTING CONCRETE FLOOR SURFACES</u>			
	<u>Prepare floors including all necessary degreasing, patching, grinding and sanding, prime with 'Flowshield Primer' and apply 4-6mm thick self levelling 'Flowshield epoxy</u>			
14	On riser of staircase	m2	32	
15	Extra over epoxy for 'Flowcoat SF41' non-slip epoxy 0.25-0.35mm thick all in accordance with suppliers instructions	m2	32	
16	On treads and landing of staircase	m2	72	
17	Extra over epoxy for 'Flowcoat SF41' non-slip epoxy 0.25-0.35mm thick all in accordance with suppliers instructions	m2	72	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 11				
Paintwork				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Bill No	SECTION SUMMARY - Ticket Office & Security Office Building (A1)		Page No	Amount	
1	Alterations		50		
2	Roof Coverings		55		
3	Carpentry and Joinery		61		
4	Ceilings		63		
5	Ironmongery		69		
6	Metalwork		71		
7	Plastering		72		
8	Tiling		75		
9	Plumbing and Drainage		81		
10	Glazing		82		
11	Paintwork		85		
Section No. 2		Carried to Final Summary		R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 1</u>				
<u>ALTERATIONS</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>REMOVAL OF EXISTING WORK</u>				
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
1	m2	36		
Acoustic tile suspended ceilings, including cornices, suspension grid, hangers, etc.				
<u>Take out and remove doors, windows etc from brickwork to remain including making good cement plaster on both sides</u>				
2	No	5		
Timber single door and timber frame 813 x 2032mm high overall				
3	No	3		
Timber single door from steel frame to remain, door size 813 x 2032mm high overall				
4	No	1		
Timber single door from steel frame to remain, door size 600 x 2032mm high overall				
<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc</u>				
5	m2	36		
Tiles to floors, including 30mm screeds				
6	m2	166		
Tiles to walls				
Carried Forward				R
Section No. 3 Bill No. 1 Alterations				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>Take out and remove piping, sanitary fittings, etc., including disconnecting piping from fittings and make good floor and wall finishes</u>					
7	Vitreous china wash hand basin, including short lengths of piping, etc	No	7		
8	Vitreous china WC pan with cistern, including short lengths of piping, etc	No	6		
9	Vitreous china urinal, including short lengths of piping, etc	No	3		
<u>Taking out/off and removing glass and mirrors</u>					
10	Mirror 600 x 900mm high from wall	No	3		
<u>Taking out and removing ironmongery</u>					
11	Paraplegic grab rails	No	2		
<u>SERVICING OF EXISTING</u>					
12	Service existing aluminium windows	m2	3		
Carried Forward to Summary of Section No. 3					R
Section No. 3					
Bill No. 1					
Alterations					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 2</u>				
	<u>CARPENTRY AND JOINERY</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>FLUSH DOORS</u>				
	<u>Solid core flush doors with Sapele veneer covering on both sides and hard wood edging strips on vertical sides.</u>				
1	44mm Door size 813 x 2032mm high hung to steel frames	No	3		
2	44mm Door size 600 x 2032mm high hung to steel frames	No	1		
3	Extra over door 813 x 2032mm high overall for cutting and forming opening approximately 400 x 400mm high.	No	3		
4	Extra over door 600 x 2032mm high overall for cutting and forming opening approximately 400 x 400mm high.	No	1		
	<u>Semi-solid core flush doors with Sapele veneer covering on both sides and hard wood edging strips on vertical sides.</u>				
5	44mm Door size 813 x 2032mm high hung to timber frames	No	5		
	<u>FRAMED FRAMES ETC</u>				
	<u>Wrought meranti</u>				
6	44 x 110mm Rebated linings, plugged for door size 813 x 2032mm high.	No	5		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3				
	Bill No. 2				
	Carpentry and Joinery				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 3</u>				
	<u>CEILINGS</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUSPENDED CEILINGS</u>				
	<u>'OWA' or other equally approved 12.5mm Vinyl Faced Gypsum Ceiling Panels, face-covered with white embossed vinyl, size 1200 x 600mm, laid on fire rated Cliq system S3 exposed demountable suspension system including galvanised main tees, cross tees, etc., all suspended with galvanised hangers at centres not exceeding 1200mm and all installed to manufacturer's instructions.</u>				
1	Ceilings suspended not exceeding 1m below structural steel roof trusses	m2	36		
2	Extra over for 1200 x 600mm Opening in ceiling for light fittings	No	8		
3	Extra over for 40mm Diameter opening in ceiling panels for light fittings, fire detection, etc.	No	14		
4	Extra over for 100mm diameter opening in ceiling panels for extraction	No	6		
	<u>Shadowline, cornices, etc to ceilings</u>				
5	'OWAconstruct' or other equally approved pre-painted shadowline W-trim plugged at 200mm centres and all installed in accordance to the manufacturer's specification	m	70		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 3 Ceilings				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 4</u>				
	<u>IRONMONGERY</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>HINGES, ETC</u>				
	<u>Manufactured by "Union" or other equally approved</u>				
1	102 x 75 x 3mm Stainless steel two ball bearing butt hinge (Code: 8352-100SB)	No	15		
	<u>LOCKSETS, ETC</u>				
	<u>Manufactured by "Dormakaba" or other equally approved</u>				
2	Cylinder Deadlock. Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. (D037D SS)	No	2		
3	Cylinder Sash Lock. Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. Centres 61mm. (D036S SS)	No	1		
4	Bathroom Deadlock. Case dimensions (mm) 102H x 78D. Forend dimensions (mm) 155H x 22W. Backset 57mm. (D032D SS)	No	6		
5	Disabled WC indicator (Red & White) and turnknob for physically impaired (DWC-006)	No	6		
6	43mm five pin Euro-profile Single Cylinder Grand Master Keyed (DSC104301 GMK)	No	2		
7	66mm five pin Euro-profile Double Cylinder Grand Master Keyed (DDC106601 GMK)	No	1		
8	Round Cylinder escutcheon (DCE-002 S.S)	No	2		
	Carried Forward			R	
	Section No. 3 Bill No. 4 Ironmongery				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward			R
<u>HANDLES</u>			
<u>Manufactured by "Dormakaba" or other equally approved</u>			
9	300 x 30mm Straight Tubular Pull Handle BT (DPH210 BT)	No	2
10	325 x 25mm Straight Tubular Pull Handle Flange Fixing (DPH301B)	No	2
11	Lever handle on 170 x 170mm plate with cylinder cutout (Code: TH120 BP Cyl S.S)	No	1
<u>PUSH PLATES AND KICK PLATES</u>			
<u>Manufactured by "Dormakaba" or other equally approved</u>			
12	300 x (width of door) x 1.2mm thick Grade 430 stainless steel kick plate. Stainless Steel Kick Plate to have 12 countersunk holes for screw fixing. (List price calculated on 813mm wide door) (DKP-430-SF 300)	No	8
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Manufactured by "Dormakaba" or other equally approved</u>			
13	150 x 150mm MALE sign (Code: DSS-130 M)	No	1
14	150 x 150mm FEMALE sign (Code: DSS-131 F)	No	1
15	150 x 150mm PARAPLEGIC sign	No	1
<u>DOOR CLOSURE</u>			
<u>Manufactured by "Dormakaba" or other equally approved</u>			
16	NON HOLD OPEN Cam action slide channel door closer. Max door width 950mm. Closing Force EN 3. Hydraulic speed control. Pull-side door leaf fixing (Standard), Push-side transom fixing. Door closer compliant with EN 1154. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240. Certified manufacturer to ISO 9001 (TS91B - SL)	No	2
Carried Forward			R
Section No. 3 Bill No. 4 Ironmongery			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
17	EN 2-4 Parallel Arm DELAYED ACTION Door Closer. Push Side Fixing (Parallel Arm Bracket Included) EN2 750-850, EN3 850-950, EN4 950-1100 (TS73V PA DC - PAB - SL)	No	1	
	<u>BATHROOM FITTINGS</u>			
18	"Franke Rodan RODX672" or other equally approved 0,8mm thick satin finished stainless steel double toilet roll holder with spindle system (Code: 359987), size 144 x 138 x 301mm high for 2 rolls maximum 120mm diameter with cylinder lock with standard Franke Key, plugged and screwed to the wall with stainless steel screws.	No	6	
19	"Bathroom Butler Series 4600" or other equally approved paper holder type II in polished grade 304 stainless steel finish (Code: 4602POLS), overall size 180 x 97 x 100mm, plugged and screwed to wall with stainless steel screws.	No	3	
20	"XLerator 2.5Kw" or other equally approved 270W x 240H x 200Dmm Automatic Electric Stainless Steel Hand Dryer - CLX2500 or other equally approved satin finish stainless steel casing	No	3	
	<u>"Chilli-B" or other equally approved:</u>			
21	Soap dispenser (code: P-SDM-650) bolted to walls including all necessary fittings	No	5	
	<u>PARAPLEGIC FITTINGS</u>			
	<u>Manufactured by "Dormakaba" or other equally approved</u>			
22	300x300x300mm Side Grab Rail (DGR-SS-152)	No	1	
23	800x206mm Cistern Back Rail (DGR-SS-150)	No	1	
	<u>SUNDRIES</u>			
	<u>Manufactured by "Dormakaba" or other equally approved</u>			
24	Floor Mounted Door Stop (DDS-SS-017)	No	4	
	Carried Forward			R
	Section No. 3 Bill No. 4 Ironmongery			

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R	
25	Hat and Coat Hook with rubber buffer (DHC-SS-031B)	No	5		
Carried Forward to Summary of Section No. 3				R	
Section No. 3					
Bill No. 4					
Ironmongery					

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	BILL NO. 5 METALWORK PREAMBLES The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item ANODISED ALUMINIUM LOUVRE UNITS 'Trox' or other equally approved natural anodised louvre units screwed into wooden door				
1	Type AGS-T size 400mm wide x 400mm high	No	3		
				R	
Carried Forward to Summary of Section No. 3					
Section No. 3 Bill No. 5 Metalwork					

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	BILL NO. 6 PLASTERING PREAMBLES The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item SCREEDS Screeds wood floated, on concrete				
1	30mm Thick on floors	m2	36		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 6 Plastering				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 7</u>				
	<u>TILING</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc. shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc. shall be deemed to include 1:3 plaster bedding.				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for tiling key-coat.				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the Tal Professional range of products as recommended by the manufacturer.				
	<u>WALL TILING</u>				
	<u>'Union Tiles' or other equally approved 300 x 600mm full bodied porcelain tiles (Code: SE20 A 600AH) with 3mm grouting fixed with 'Tal Goldstar 6' and Tal Bond" tile adhesive to plastered walls (plaster elsewhere measured) and flush pointed with "Tal Wall or Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>				
1	On walls	m2	83		
2	On narrow widths	m2	4		
	Carried Forward			R	
	Section No. 3 Bill No. 7 Tiling				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

	Brought Forward			R
	<u>'Union Tiles' or other equally approved 300 x 600mm full bodied porcelain tiles (Code: SE SPA 6100 3x6 AH) with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to plastered walls (plaster elsewhere measured) and flush pointed with "Tal Wall or Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>			
3	On walls	m2	83	
4	On narrow widths	m2	4	
	<u>FLOOR TILING</u>			
	<u>'Union Tiles' or other equally approved 600 x 600mm R10 slip rated full bodied porcelain floor (Code: SEZZ6879N) tiles with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>			
5	On floors	m2	29	
	<u>'Union Tiles' or other equally approved 600 x 600mm R10 slip rated full bodied porcelain floor (Code: SEZZ6876N) tiles with 3mm grouting fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>			
6	On floors	m2	7	
	<u>SUNDRIES</u>			
	<u>"Genesis" or other equally approved edge trims:</u>			
7	27 x 10 x 10mm aluminium square edge trim (Code: TDF 104.81)	m	89	
8	21 x 10mm aluminium straight edge trim (Code: ESA 100.80)	m	4	
	Carried Forward			R
	Section No. 3 Bill No. 7 Tiling			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 8</u>				
	<u>PLUMBING AND DRAINAGE</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SANITARY FITTINGS</u>				
	<u>WC</u>				
1	Whyte House vandal resistant WC pan or equal approved Security Pan, Code 021643	No	5		
2	WALCRO 155 UWS or equal approved 15mm Ø BSP built-in sleeve, DZR brass urinal flush valve with internal flow control, strainer and no-hold feature for single bowl urinal Code 155UWS	No	5		
	<u>Wash Hand Basin (Public Ablutions)</u>				
3	Whyte House wall mounted basin with wall mounted push on demand tap - Vandal resistant Code 030337	No	6		
4	Walcro Metering pillar tap 100R 15MM	No	6		
5	GH angle valve bau 15x15mm	No	6		
6	303-32 Basin waste	No	6		
7	ISM Gio bottle trap CP 32mm	No	6		
	<u>Urinals</u>				
8	Whyte House Vandal Resistant Urinal with automatic flush sensors or manual flush valve Code 029800	No	3		
9	"Walcro" or other equally approved 15mm Ø BSP built-in sleeve, DZR brass urinal flush valve (code: 155UW) with internal flow control, strainer and no-hold feature for single bowl urinal.	No	3		
	Carried Forward			R	
	Section No. 3 Bill No. 8 Plumbing and drainage				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>WC (Paraplegic)</u>			
10	Gypsy Standard Universal Vandal Resistant WC, 390mm (w) x 480mm (d) x 410mm (h) Code GYP/VA.R 1/06 with back inlet flush valve & double flap plastic seat.	No	1	
11	WALCRO 155 UWS or equal approved 15mm Ø BSP built-in sleeve, DZR brass urinal flush valve with internal flow control, strainer and no-hold feature for single bowl urinal Code 155UWS	No	1	
	<u>Wash Hand Basin (Paraplegic)</u>			
12	Whyte House wall mounted basin with wall mounted push on demand tap - Vandal resistant Code 030337	No	1	
13	Walcro Metering pillar tap 100R 15MM	No	1	
14	GH angle valve 15x10mm	No	1	
15	303-32 Basin waste	No	1	
16	ISM Gio bottle trap CP 32mm	No	1	
	<u>TAPS, VALVES, ETC.</u>			
	Taps, valves, etc. jointed to copper pipes are to include brass connectors, adaptors etc. Installation and fixings to be as per manufacturers specifications and SANS 1808-9 compliant.			
17	15mm Ball-O- stop valves	No	2	
18	22mm Ball-O- stop valves	No	4	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes cast into concrete slabs, fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications</u>			
19	50mm Pipes	m	28	
	Carried Forward			R
	Section No. 3 Bill No. 8 Plumbing and drainage			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
20	110mm Pipes	m	16	
	<u>Extra over uPVC pipes for:</u>			
21	50mm Bend	No	23	
22	50mm Access bend	No	3	
23	50mm Junction	No	7	
24	50mm Access junction	No	2	
25	50mm Coupling	No	3	
26	110mm Bend	No	6	
27	110mm Access bend	No	6	
28	110mm Access junction	No	7	
29	110 x 50mm Access junction	No	1	
30	110mm Pan connector	No	6	
31	110mm Two way vent valve	No	1	
32	110mm Coupling	No	2	
	<u>DOMESTIC WATER SUPPLIES</u>			
	<u>Geberit Mepla or other equally approved pipes fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications:</u>			
	All piping embedded into concrete or chased into walls to be twice wrapped in strong approved building paper.			
	Rates for surface mounted copper pipe shall be deemed to include all fixtures and fittings for pipes fixed to walls, in chases, and in ceilings.			
33	16mm Pipes	m	17	
34	20mm Pipes	m	48	
	Carried Forward			R
	Section No. 3 Bill No. 8 Plumbing and drainage			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>Extra over Mepla pipes for fittings:</u>			
35	16mm Bend	No	12	
36	20mm Bend	No	8	
37	20 x 16mm Bend	No	3	
38	20mm Tees	No	9	
39	20 x 16mm Tees	No	4	
	<u>Extra over Mepla pipes for brass compression fittings:</u>			
40	15mm Flexible service pipe 300mm girth	No	6	
41	15mm Wallplate elbow	No	6	
42	22mm Wallplate elbow	No	9	
	<u>TESTING</u>			
43	Allow for testing the whole of the Stormwater drainage, Sewer drainage, Plumbing, Water and Fire supplies and all fittings to the satisfaction of the Architect, Engineer and Local Authorities. All defective work is to be taken out and replaced at the contractor's expense and the whole re-tested until acceptable		Item	
	<u>AS-BUILT DRAWINGS</u>			
44	Provide a full set of as-built drawings on completion of the installation		Item	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3			
	Bill No. 8			
	Plumbing and drainage			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>BILL NO. 10</u>				
<u>PAINTWORK</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>PREPARATORY WORK TO EXISTING WORK</u>				
<u>Previously painted plastered surfaces</u>				
Surfaces shall be thoroughly water pressure cleaned and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished to match existing surfaces.				
<u>PAINTWORK, ETC TO PREVIOUSLY PAINTED SURFACES</u>				
<u>ON INTERNAL FLOATED PLASTER SURFACES</u>				
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved Primer (PP700) and two coats "Velvaglo" water based paint for interior use</u>				
1	On walls	m2	38	
2	On narrow widths	m2	2	
<u>ON METAL SURFACES</u>				
Carried Forward				R
Section No. 3 Bill No. 10 Paintwork				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>			
3	On door frames	m2	8
<u>PAINTWORK, ETC TO NEW SURFACES</u>			
<u>ON WOOD SURFACES</u>			
<u>"Plascon" or other equally approved primer, one coat alkyd based universal undercoat and two coats professional gloss enamel paint</u>			
4	On doors frames	m2	5
5	On doors	m2	34
Carried Forward to Summary of Section No. 3			R
Section No. 3 Bill No. 10 Paintwork			

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

SECTION SUMMARY - Concourse Ablutions (A2)		Page No	Amount	
Bill No				
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Carried to Final Summary			R	
Section No. 3				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u>				
<u>BILL NO. 1</u>				
<u>ALTERATIONS</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>REMOVAL OF EXISTING WORK</u>				
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
1				
Carefully take out vandalised metal roof sheeting in patches including screws, sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	137		
2				
Carefully take out and remove damaged steel purlins	m	85		
<u>Carefully take out and remove gutters and downpipes etc.</u>				
3				
Existing metal box gutter	m	21		
4				
Existing 110mm metal downpipes including outlet, bends & shoe	m	6		
<u>Taking out/off and removing sundry metalwork</u>				
5				
Remove existing 50mm diameter steel post and base plate bolted (four number of bolts) to concrete surfaces, base size 120 x 120mm, prepare and seal surfaces with epoxy grout to receive new (new elsewhere measured)	No	40		
Carried Forward to Summary of Section No. 4			R	
Section No. 4				
Bill No. 1				
Alterations				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 2</u>				
	<u>ROOF COVERING</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>SHEETING</u>				
	Safintra or other similar approved 0,50mm thick SAFLOK 700 Colorplus AZ150 interlocking roof sheeting fixed to timber internal purlins at 2000mm, and ridge/eaves purlins at 1700mm centres using SAFLOK 700 clips which must be screw fixed to timber purlins with Fixtiteor Safintra approved wafer head self-tapping screws. The sheeting will be a double interlocking concealed fix SAFLOK 700 profile as manufactured by Safintra Roofing, roll formed in continuous lengths from certified G550 steel or aluminium 3004 H14. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41mm. Two stiffening ribs are incorporated in each pan.				
	<u>MATERIAL AND FINISH FOR SAFLOK ROOF SHEETING</u>				
	ZincAL AZ150 coated steel G550 with a ColorPLUS colour coated finish to one side, colour (sample of colour to be approved on site) with a Cool Grey backing coat.				
	<u>FIXING SAFLOK</u>				
	The Saflok sheets shall be fixed to every purlin by means of patented SAFLOK 700 clips having spurs which will securely hold the sheets in position and lock-				
	Carried Forward				
	Section No. 4 Bill No. 2 Roof Covering			R	

Brought Forward in the sidelap and both centre ribs. The SAFLOK 700 clips shall be manufactured from Galvanized steel and shall be fixed with the appropriate self-drilling/tapping screws to timber or steel purlins (selection from installation manual) OR with ZAP no. 10x45mm Waferhead screws type 17 to timber purlins. <u>SAFLOK FLASHINGS</u> Flashings specifications shall be to the Safintra standards and fixed to the sheeting with S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Transverse flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from Global Roofing Solutions. <u>SAFETY</u> The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity. <u>INSTALLATION</u> Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, should be replaced. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces. <u>HANDLING AND STORAGE</u> The contractor shall ensure that all materials used on site for roofing/cladding, be transported, handled and Carried Forward Section No. 4 Bill No. 2 Roof Covering			R	
			R	

Brought Forward stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction. <u>INSPECTION PRIOR TO INSTALLATION</u> Before commencing installation, the contractor shall verify that the following items have been checked and accepted: a. The entire structure or the portion thereof to be sheeted has been correctly aligned, levelled and grouted. b. Purlins and girths are at the correct spacing and are within the specified tolerances. c. The corners of the roof are square and the wall framework is perpendicular or as specified. d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework. e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square. f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or, so dealt with that direct contact with the sheeting is avoided. g. The contact faces between the purlins or the girths and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding. <u>PROTRUSION THROUGH SHEETED SURFACES</u> Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the Carried Forward Section No. 4 Bill No. 2 Roof Covering			R	
			R	

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
	sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations. <u>GUARANTEE</u> The manufacturer shall comply with ISO 9001:2008 Quality Management System. SAFLOK 700 sheeting shall be laid in strict accordance with the manufacturer's specifications by a approved Safintra contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions. CLEANING OF ROOF, ETC. All debris, swarf, etc arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners, sealants, mandrels from pop rivets, off-cuts of sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc. <u>PROFILED METAL SHEETING AND ACCESSORIES</u> <u>0.50mm "Saflok 700 Colourplus" aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturer's recommendations</u>				
1	Roof covering with pitch not exceeding 25 degrees	m2	137		
	Carried Forward			R	
	Section No. 4 Bill No. 2 Roof Covering				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>BILL NO. 3</u>				
<u>STRUCTURAL STEELWORK</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>SUPPLEMENTARY PREAMBLES</u>				
Descriptions of bolts shall be deemed to include nuts and washers. Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include dending, threading, nuts and washers and embedding in concrete. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete. Structural steelwork shall comply with the requirements of SABS 1200H and the relevant project specifications.				
Carried Forward				R
Section No. 4 Bill No. 3 Structural Steelwork				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward	R
<u>Corrosion Protection</u> All steelwork a) Abrasive blast to Sa 2.5 b) Galvanize to SABS 763 (Heavy Duty) c) Clean with Galvanized iron cleaner, treat galvanizing in such a way so that paint may be applied over it d) Apply 1 coat galvanizing primer - Interguard 269 or equally e) Apply 2No. Coats recoatable polyurethane - Interthane 900 or equal . Colour to Architect's specification. All hot rolled steelwork shall be grade 350W, all hollow tube steelwork shall be grade 300W and all cold formed steelwork shall be SANS 10162 Part 1 with a minimum yeild stress of 200Mpa and a minimum tensile stress of 365Mpa unless noted otherwise. All fixing bolts for structural steelwork shall be M20 grade 8.8 unless otherwise noted, and is deemed included. Only chemical anchor bolts are to be measured as a measurable item. All welds shall be 6mm continuous fillet welds unless noted otherwise. When steelwork connects to structures, the steelwork contractor shall check all site dimensions and levels before fabrication and erection. No flame cutting or site welding shall be carried out without the written approval of the engineer. Shop drawings shall be submitted in duplicate to the engineer for approval before commencing any fabrication. <u>Traceability of steel</u> All steel to be marked with manufacturer's test certificate number to ensure full traceability and to facilitate re-use of the steel members.	
Carried Forward	R
Section No. 4 Bill No. 3 Structural Steelwork	

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward		R
<u>Marking steelwork</u> Completed components shall be marked with a durable and distinguishing erection mark, section size, steel grade and manufacturer's test certificate number in such a way as not to damage the component. Marking shall be in a discrete location. Hardstamping may be used unless noted otherwise.		
<u>Testing of welds</u> 10% of all fillet welds and 100% of butt welds to be subjected to non destructive testing. Fabricate, supply, deliver and erect including shop and site painting as described.		
<u>HOT DIPPED GALVANISED PURLINS</u>		
1	150 x 75 x 20 x 3.5mm Cold rolled lipped channels	2,51
<u>SUNDRY STEELWORK</u>		
<u>Sundry Steelwork</u>		
2	Cleats, plates, gussets, connectors, etc	0,13
Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 3 Structural Steelwork		R

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 4</u>				
	<u>METALWORK</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>GALVANISED STEEL BENCHES</u>				
	<u>Galvanised and polyurethane painted platform bench, colour mid grey, set into concrete bed including saw cutting existing premix / concrete surfaces, excavations, concrete base, cart away excavated materials, etc. all in accordance to Prasa Specifications (Code: M04)</u>				
1	Back-to-back sides bench 1800mm long with straight leg	No	4		
	<u>BUDGETARY ALLOWANCES</u>				
	<u>Works for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required</u>				
2	Allow an amount of R 108,000.00 for reinforced glass with metal frames (waiting area viewing panels) amount to be utilized at the discretion of the Principal Agent.		Item		108 000,00
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4				
	Bill No. 4				
	Metalworks				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	BILL NO. 5				
	<u>PLUMBING AND DRAINAGE</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>RAINWATER DISPOSAL</u>				
	<u>1.6mm Gauge aluminium gutter box</u>				
1	250 x 200mm High purpose made box gutter	m	21		
2	Extra over gutter box for stop end	No	2		
3	Extra over gutter box for 110mm outlet	No	2		
	<u>"Marley" or other equally approved uPVC downpipes</u>				
4	110mm Diameter rainwater pipe	m	6		
5	Extra over 110mm rainwater pipe for bend	No	4		
6	Extra over 110mm rainwater pipe for shoe	No	2		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 5 Plumbing and Drainage				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 6</u> <u>PAINTWORK</u> <u>PREAMBLES</u> The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item <u>PAINTWORK, ETC TO PREVIOUSLY PAINTED SURFACES</u> <u>ON METAL SURFACES</u> <u>Remove all grease and oil by washing with a water emulsifiable solvent degreaser and rinsing with potable water, dry abrasive blast to rear white metal in accordance with Sa 2.5 of the International Standard ISO 850-1 to obtain a surface profile of 25 - 75 microns and apply one coat Interguard 269 galvanizing primer and two coats Interthane 990 recoatable polyurethane</u>				
1	On structural steel members	m2	173		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 6 Paintworks			R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Bill No	SECTION SUMMARY - Waiting Area (B)		Page No	Amount	
1	Alterations		108		
2	Roof Covering		113		
3	Structural Steelwork		116		
4	Metalworks		117		
5	Plumbing and Drainage		118		
6	Paintworks		119		
Section No. 4		Carried to Final Summary		R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 5</u>				
	<u>BILL NO. 1</u>				
	<u>ALTERATIONS</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>REMOVAL OF EXISTING WORK</u>				
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
1	Carefully take out metal roof sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	137		
	<u>Carefully take out and remove gutters and downpipes etc.</u>				
2	Existing metal box gutter	m	21		
3	Existing 110mm metal downpipes including outlet, bends & shoe	m	6		
	<u>Taking out/off and removing sundry metalwork</u>				
4	Remove existing steel bench overall size 1830 x 500mm and comprises of 50mm diameter frames, 2 x 50mm diameter steel post and base plate bolted (four number of bolts) to concrete surfaces, base size 120 x 120mm, prepare and seal surfaces with epoxy grout to receive new (new elsewhere measured)	No	20		
	<u>REMOVAL OF EXISTING GLAZING</u>				
	Carried Forward			R	
	Section No. 5 Bill No. 1 Alterations				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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Item No	Unit	Quantity	Rate	Amount
<u>BILL NO. 2</u>				
<u>ROOF COVERING</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>SHEETING</u>				
Safintra or other similar approved 0,50mm thick SAFLOK 700 Colorplus AZ150 interlocking roof sheeting fixed to timber internal purlins at 2000mm, and ridge/eaves purlins at 1700mm centres using SAFLOK 700 clips which must be screw fixed to timber purlins with Fxiteor Safintra approved wafer head self-tapping screws. The sheeting will be a double interlocking concealed fix SAFLOK 700 profile as manufactured by Safintra Roofing, roll formed in continuous lengths from certified G550 steel or aluminium 3004 H14. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41mm. Two stiffening ribs are incorporated in each pan.				
<u>MATERIAL AND FINISH FOR SAFLOK ROOF SHEETING</u>				
ZincAL AZ150 coated steel G550 with a ColorPLUS colour coated finish to one side, colour (sample of colour to be approved on site) with a Cool Grey backing coat.				
<u>FIXING SAFLOK</u>				
The Saflok sheets shall be fixed to every purlin by means of patented SAFLOK 700 clips having spurs which will securely hold the sheets in position and lock-				
Carried Forward			R	
Section No. 5 Bill No. 2 Roof Covering				

Brought Forward in the sidelap and both centre ribs. The SAFLOK 700 clips shall be manufactured from Galvanized steel and shall be fixed with the appropriate self-drilling/tapping screws to timber or steel purlins (selection from installation manual) OR with ZAP no. 10x45mm Waferhead screws type 17 to timber purlins. <u>SAFLOK FLASHINGS</u> Flashings specifications shall be to the Safintra standards and fixed to the sheeting with S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Transverse flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from Global Roofing Solutions. <u>SAFETY</u> The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity. <u>INSTALLATION</u> Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, should be replaced. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces. <u>HANDLING AND STORAGE</u> The contractor shall ensure that all materials used on site for roofing/cladding, be transported, handled and Carried Forward Section No. 5 Bill No. 2 Roof Covering			R	
			R	

Brought Forward	R	
stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction. <u>INSPECTION PRIOR TO INSTALLATION</u> Before commencing installation, the contractor shall verify that the following items have been checked and accepted: a. The entire structure or the portion thereof to be sheeted has been correctly aligned, levelled and grouted. b. Purlins and girths are at the correct spacing and are within the specified tolerances. c. The corners of the roof are square and the wall framework is perpendicular or as specified. d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework. e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square. f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or, so dealt with that direct contact with the sheeting is avoided. g. The contact faces between the purlins or the girths and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding. <u>PROTRUSION THROUGH SHEETED SURFACES</u> Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the		
Carried Forward Section No. 5 Bill No. 2 Roof Covering		R

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations. <u>GUARANTEE</u> The manufacturer shall comply with ISO 9001:2008 Quality Management System. SAFLOK 700 sheeting shall be laid in strict accordance with the manufacturer's specifications by a approved Safintra contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions. CLEANING OF ROOF, ETC. All debris, swarf, etc arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners, sealants, mandrels from pop rivets, off-cuts of sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc. <u>PROFILED METAL SHEETING AND ACCESSORIES</u> <u>0.50mm "Saflok 700 Colourplus" aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturer's recommendations</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	137	
	Carried Forward			R
	Section No. 5 Bill No. 2 Roof Covering			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 3</u>				
	<u>METALWORK</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>GALVANISED STEEL BENCHES</u>				
	<u>Galvanised and polyurethane painted platform bench, colour mid grey, set into concrete bed including saw cutting existing premix / concrete surfaces, excavations, concrete base, cart away excavated materials, etc. all in accordance to Prasa Specifications (Code: M04)</u>				
1	Back-to-back sides bench 1800mm long with straight leg	No	4		
	<u>BUDGETARY ALLOWANCES</u>				
	<u>Works for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required</u>				
2	Allow an amount of R 108,000.00 for reinforced glass with metal frames (waiting area viewing panels) amount to be utilized at the discretion of the Principal Agent.		Item		108 000,00
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5				
	Bill No. 3				
	Metalworks				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

SECTION SUMMARY - Waiting Area (C)		Page No	Amount	
Bill No				
1	Alterations	122		
2	Roof Covering	127		
3	Metalworks	128		
4	Plumbing and Drainage	129		
5	Glazing	130		
6	Paintworks	131		
Carried to Final Summary			R	
Section No. 5				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 6</u>				
	<u>BILL NO. 1</u>				
	<u>EXTERNAL WORKS (ALL TRADES)</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>PEDESTRIAN ACCESS RAMP</u>				
	<u>Alterations</u>				
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
1	Carefully take out metal roof sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	396		
2	Carefully take out and remove damaged steel purlins	m	75		
	<u>Carefully take out and remove gutters and downpipes etc.</u>				
3	Existing metal box gutter	m	49		
4	Existing 110mm metal downpipes including outlet, bends & shoe	m	31		
	<u>Saw cut, breaking up and removing brick pavers including concrete surfaces to receive new (new elsewhere measured)</u>				
5	Treads and landing of staircase	m2	16		
	<u>Preparatory work to existing surfaces</u>				
6	Pressure clean surfaces of concrete surfaces	m2	466		
	<u>Concrete spalling</u>				
	Carried Forward			R	
	Section No. 6				
	Bill No. 1				
	External Works				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
<u>Concrete spalling to existing concrete surfaces to included saw cut, break back 50mm to remove loose concrete aggregates and to expose steel, clean & wire brush steel, apply ABE Durarep ZR primer or similar approved to steel, apply Epidermix 344 or similar approved, apply ABE Durarep FR or other equally approved 50mm thick, etc. all in accordance to engineer specifications</u>			
7	Existing concrete surfaces	m2	10
<u>Raking out existing expansion joints and prepare to receive new (new elsewhere measured)</u>			
8	Expansion joints in floors, approximate size 40 x 40mm	m	60
<u>Waterproofing</u> <u>"Sika" or other equally approved two-part grey polysulphide sealing compound including backing cord, bond breaker , primer, etc</u>			
9	40 x 40mm In horizontal expansion joints including raking out expansion joint filler as necessary	m	60
<u>Roof covering</u> <u>0.50mm "Saflok 700 Colourplus" aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturer`s recommendations</u>			
10	Roof covering with pitch not exceeding 25 degrees	m2	396
<u>Sundries</u>			
11	Gutter flashings 300mm girth	m	49
12	Barge flashing 660mm girth	m	69
13	Fascia flashing 660mm girth	m	49
<u>Structural Steelwork</u>			
Carried Forward			R
Section No. 6 Bill No. 1 External Works			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
	<u>Hot dipped galvanised steel purlins</u>		
14	150 x 75 x 20 x 3.5mm Cold rolled lipped channels	t	0,38
	<u>Sundry steelwork</u>		
15	Cleats, plates, gussets, connectors, etc	t	0,02
	<u>Rainwater disposal</u>		
	<u>1.6mm Gauge aluminium gutter box</u>		
16	250 x 200mm High purpose made box gutter	m	49
17	Extra over gutter box for stop end	m	6
18	Extra over gutter box for 110mm outlet	m	6
	<u>"Marley" or other equally approved uPVC downpipes</u>		
19	110mm Diameter rainwater pipe	m	30
20	Extra over 110mm rainwater pipe for bend	No	12
21	Extra over 110mm rainwater pipe for shoe	No	6
	<u>Paving</u>		
22	50mm 'Corobrik' or other equally approved Burgundy clay paving embedded in concrete mortar on existing concrete surfaces	m2	16
	<u>Paintworks</u>		
	<u>Remove all grease and oil by washing with a water emulsifiable solvent degreaser and rinsing with potable water, dry abrasive blast to rear white metal in accordance with Sa 2.5 of the International Standard ISO 850-1 to obtain a surface profile of 25 - 75 microns and apply one coat Interguard 269 galvanizing primer and two coats Interthane 990 recoatable polyurethane</u>		
23	On structural steel members	m2	495
Carried Forward			R
Section No. 6 Bill No. 1 External Works			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
	<u>"Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>		
24	On balustrades	m2	253
<u>MAIN STATION SIGNAGE</u> <u>Non-Statutory Signage (Prasa Specification)</u> <u>Pylons: Naming</u>			
25	Double sided signage, illuminated and non-illuminated overall size 500 x 3000mm high signage, fixed on steel post approximate 6000mm high including 1000mm cast into concrete base.Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type D1.2, page 5 of 12 of Prasa Specification, for full details.	No	1
Carried to Final Summary			R
Section No. 6 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 7</u>				
	<u>BILL NO. 1</u>				
	<u>EXTERNAL WORKS (ALL TRADES)</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>PEDESTRIAN ACCESS RAMP</u>				
	<u>Alterations</u>				
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>				
1	Carefully take out metal roof sheeting covering including sisalation, and preparing existing steel purlins to receive new sheeting (new sheeting elsewhere measured)	m2	396		
2	Carefully take out and remove damaged steel purlins	m	75		
	<u>Carefully take out and remove gutters and downpipes etc.</u>				
3	Existing metal box gutter	m	49		
4	Existing 110mm metal downpipes including outlet, bends & shoe	m	31		
	<u>Saw cut, breaking up and removing brick pavers including concrete surfaces to receive new (new elsewhere measured)</u>				
5	Treads and landing of staircase	m2	16		
	<u>Preparatory work to existing surfaces</u>				
6	Pressure clean surfaces of concrete surfaces	m2	466		
	<u>Concrete spalling</u>				
	Carried Forward			R	
	Section No. 7 Bill No. 1 External Works				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Brought Forward			R
<u>Concrete spalling to existing concrete surfaces to included saw cut, break back 50mm to remove loose concrete aggregates and to expose steel, clean & wire brush steel, apply ABE Durarep ZR primer or similar approved to steel, apply Epidermix 344 or similar approved, apply ABE Durarep FR or similar approved 50mm thick, etc. all in accordance to engineer specifications</u>			
7	Existing concrete surfaces	m2	10
<u>Raking out existing expansion joints and prepare to receive new (new elsewhere measured)</u>			
8	Expansion joints in floors, approximate size 40 x 40mm	m	60
<u>Waterproofing</u>			
<u>"Sika" or other equally approved two-part grey polysulphide sealing compound including backing cord, bond breaker , primer, etc</u>			
9	40 x 40mm In horizontal expansion joints including raking out expansion joint filler as necessary	m	60
<u>Roof covering</u>			
<u>0.50mm "Saflok 700 Colourplus" aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturer`s recommendations</u>			
10	Roof covering with pitch not exceeding 25 degrees	m2	396
<u>Sundries</u>			
11	Gutter flashings 300mm girth	m	49
12	Barge flashing 660mm girth	m	69
13	Fascia flashing 660mm girth	m	49
<u>Structural Steelwork</u>			
Carried Forward			R
Section No. 7 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>Hot dipped galvanised steel purlins</u>			
14	150 x 75 x 20 x 3.5mm Cold rolled lipped channels	t	0,38	
	<u>Sundry steelwork</u>			
15	Cleats, plates, gussets, connectors, etc	t	0,02	
	<u>Rainwater disposal</u>			
	<u>1.6mm Gauge aluminium gutter box</u>			
16	250 x 200mm High purpose made box gutter	m	49	
17	Extra over gutter box for stop end	m	6	
18	Extra over gutter box for 110mm outlet	m	6	
	<u>"Marley" or other approved uPVC downpipes</u>			
19	110mm Diameter rainwater pipe	m	30	
20	Extra over 110mm rainwater pipe for bend	No	12	
21	Extra over 110mm rainwater pipe for shoe	No	6	
	<u>Paving</u>			
22	50mm Corobrik or other equally approved Burgundy clay paving embedded in concrete mortar on existing concrete surfaces	m2	16	
	<u>Painworks</u>			
	<u>Remove all grease and oil by washing with a water emulsifiable solvent degreaser and rinsing with potable water, dry abrasive blast to rear white metal in accordance with Sa 2.5 of the International Standard ISO 850-1 to obtain a surface profile of 25 - 75 microns and apply one coat Interguard 269 galvanizing primer and two coats Interthane 990 recoatable polyurethane</u>			
23	On structural steel members	m2	495	
	Carried Forward			R
	Section No. 7			
	Bill No. 1			
	External Works			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
	<u>"Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>		
24	On balustrades	m2	253
<u>MAIN STATION SIGNAGE</u> <u>Non-Statutory Signage (Prasa Specification)</u> <u>Pylons: Naming</u>			
25	Double sided signage, illuminated and non-illuminated overall size 500 x 3000mm high signage, fixed on steel post approximate 6000mm high including 1000mm cast into concrete base.Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type D1.2, page 5 of 12 of Prasa Specification, for full details.	No	1
Carried to Final Summary			R
Section No. 7 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 8</u>				
	<u>BILL NO. 1</u>				
	<u>EXTERNAL WORKS (ALL TRADES)</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SITE CLEARANCE</u>				
1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m2	3 000		
	<u>PROVING OF EXISTING SERVICES</u>				
	No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services, which may be damaged thereby.				
	Any damage shall be reported immediately to the Principal Agent, or to the personnel in charge at the nearest station.				
	Any previously uncharted underground services encountered by the Contractor during the course of his activities shall be reported immediately to the Principal Agent who shall ensure necessary inclusion in the "as built" drawings.				
	Carried Forward			R	
	Section No. 8 Bill No. 1 External Works				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward			R
Any claims relating to standing time costs resulting from proving of services shall be for the Contractors account. The services are stated below but are limited to and is to be identified by the Engineer when encountered on site. The contractor is to make reasonable allowance for possible delays and standing time in his rates for tasks relating to works undertaken in the various trades with and including in the Preliminaries & General. The Contractor is to familiarize himself/herself with the possible services prior to pricing the bills of quantities. The contractor is to take into account the following services but not limited to: 1. Electrical lines 2. Stormwater lines 3. Sewer lines 4. Domestic or potable water supply lines 5. Fire water supply lines <u>Restrictive excavations for proving of services</u> <u>Restrictive excavations in earth not exceeding 2m deep</u>			
2	Trenches	m3	360
<u>Extra over restrictive excavations in earth for excavation in</u>			
3	Intermediate rock	m3	36
<u>Risk of collapse of excavations</u>			
4	Sides of trench and hole excavation not exceeding 1,5m deep	m2	720
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod. AASHTO density</u>			
5	Backfilling to trenches	m3	360
<u>Re-routing</u>			
6	Relocating and re-routing of existing services	m	360
Carried Forward			R
Section No. 8 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>STORMWATER DRAINAGE</u>					
7	Pressure clean or jetting existing stormwater line	m	300		
<u>Covers, etc.</u>					
8	450 x 450mm Heavy duty cast iron stormwater grating and frame and welded to existing frames	No	3		
9	450 x 600mm Heavy duty cast iron stormwater grating and frame, welded to existing frames	No	5		
<u>SEWER DRAINAGE</u>					
10	Pressure clean or jetting existing sewer line	m	300		
<u>Covers, frames, etc.</u>					
11	1130mm Diameter heavy duty precast concrete cover and frame, fitted over existing manholes	No	5		
<u>SPECIALIST SERVICES</u>					
<u>Precast concrete circular manholes (covers elsewhere measured) formed of manhole rings (SABS 1294) including excavation, risk of collapse, working space, backfilling with selected material from the excavations, cart away surplus material, shoring, hoisting in position, step irons, benching and haunching</u>					
12	Precast concrete manhole rings (SABS 1294) size internally 1000mm diameter not exceeding 1m deep including excavation, risk of collapse, working space, hoisting in position, backfilling with selected excavated material, cart away surplus material, shoring, step irons, benching and haunching	No	5		
<u>Covers, Frames, etc.</u>					
13	550mm Diameter heavy duty precast manhole cover and frame	No	5		
14	610mm Diameter 2A polymer manhole cover and frame to SABS specification SANS 1882/2003, fitted over existing manholes	No	12		
Carried Forward					R
Section No. 8 Bill No. 1 External Works					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
15	610mm Diameter 4A polymer manhole cover and frame to SABS specification SANS 1882/2003, fitted over existing manholes	No	11		
16	1130mm Diameter heavy duty precast concrete cover and frame, fitted over existing manholes	No	9		
<u>FENCING AND GATES</u>					
<u>Alterations</u>					
<u>Taking out/off and removing sundry metalwork</u>					
17	Existing damaged 1800mm high steel clear vu fencing including steel posts and grubbing up concrete base	m	600		
<u>Metalwork</u>					
<u>'Clearvu' or other equally approved galvanised steel security fencing:</u>					
18	Marine fusion bonded galvanized mesh panels with widths not exceeding 3297mm wide and height of 2100mm high bolted to 2400mm high tapered locking posts embedded in 20Mpa/19mm concrete.	m	640		
<u>Extra over 'Clearvu' or other equally approved fence for:</u>					
19	Marine fusion bonded galvanized 'Shark tooth spike' fitted to fencing panels (Fencing panels elsewhere measured)	m	640		
<u>PLATFORM AREAS</u>					
<u>Alterations</u>					
<u>Saw cut, breaking up and removing brick pavers including reducing ground by 150mm deep</u>					
20	Platforms	m2	552		
<u>Saw cut, breaking up and removing 150m thick concrete surface beds including reducing ground by 150mm deep</u>					
21	Platforms	m2	234		
Carried Forward				R	
Section No. 8 Bill No. 1 External Works					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>Taking out and removing sundry metalwork</u>					
22	Signage panel from walls approximate size 750 x 1200mm high	No	4		
23	Signage structure comprises of steel posts (2000mm high) bolted onto concrete, signage approximate size 3000 x 500mm high, and hacking up concrete bases including back filling with imported soil and prepare surfaces to receive new (new elsewhere measured).	No	5		
<u>Concrete spalling</u>					
<u>Concrete spalling to existing concrete surfaces to included saw cut, break back 50mm to remove loose concrete aggregates and to expose steel, clean & wire brush steel, apply ABE Durarep ZR primer or similar approved to steel, apply Epidermix 344 or similar approved, apply ABE Durarep FR or similar approved 50mm thick, etc. all in accordance to engineer specifications</u>					
24	Existing concrete edges of platforms	m2	5		
<u>Earthworks</u>					
<u>Excavation other than bulk</u>					
25	Excavate to reduce levels for sub-base not exceeding 2m deep.	m3	354		
26	Extra over all excavations for loading, carting and dumping surplus excavated material to a dumping site to be found by the Contractor	m3	354		
27	Restrictive compaction of ground surfaces, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% mod AASHTO density	m2	786		
28	150mm Thick layer of C4 sub-base course under platforms, etc., with selected and natural G7 quality material, supplied and carted onto site by the contractor, compacted in layers of 150mm thickness to at least 95% Mod. AASHTO density.	m3	118		
Carried Forward					R
Section No. 8 Bill No. 1 External Works					

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
29	150mm Thick layer of G5 sub-base course under platforms, etc., with selected and natural G5 quality material, supplied and carted onto site by the contractor, compacted in layers of 150mm thickness to at least 95% Mod. AASHTO density.	m3	118
30	Keeping excavations free of all water other than subterranean water		Item
31	brand of weed killer applied by a registered pest control company under roads, parking and paving.	m2	786
32	Allow for the execution of all the prescribed density tests on filling, etc., as pointed out by the Engineer on site to the approval of the Principal Agent.		Item
<u>Concrete, Formwork and Reinforcement</u>			
<u>25MPa/19mm concrete</u>			
33	Surface beds on waterproofing	m3	118
<u>Test cubes</u>			
34	Making and testing set of three 150 x 150 x 150mm concrete strength test cube (Provisional)	No	20
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
35	Surface beds, slabs, etc,	m2	786
<u>Expansion joints with 12mm bitumen impregnated softboard between vertical concrete surfaces, including necessary formwork</u>			
36	12mm Joints not exceeding 300mm high	m	2 430
<u>Fabric reinforcement</u>			
37	Type ref. 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	786
<u>Waterproofing</u>			
Carried Forward			R
Section No. 8 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward			R
	<u>One layer of 375 micron "Consol Plastics" or other equally approved waterproof sheeting sealed at laps</u>		
38	Under surface beds	m2	786
	<u>"Sika" or other equally approved two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc.</u>		
39	12 x 12mm In horizontal expansion joints including raking out expansion joint filler as necessary	m	2 430
	<u>Ironmongery</u>		
	<u>Non-Statutory Signage (Prasa Specification)</u>		
	<u>Suspended Signs: Informational</u>		
40	Double sided signage, non-illuminated overall size 90mm wide x 500mm high x 3000mm long frame box. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type A1.2, page 1 of 12 and B01 of Prasa Specification, for full details.	No	2
	<u>Projecting: Iconography</u>		
41	Double sided signage, non-illuminated overall size 500 x 500mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type C2.1, page 4 of 12 of Prasa Specification, for full details.	No	4
42	Double sided signage, non-illuminated overall size 600 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type C2.2, page 4 of 12 of Prasa Specification, for full details.	No	2
	<u>Projecting: Naming</u>		
43	Double sided signage, non-illuminated overall size 500 x 3000mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type C3.1, page 4 of 12 of Prasa Specification, for full details.	No	2
	<u>Floor Mounted: End of Platform, Prohibitive</u>		
44	Double sided signage, non-illuminated overall size 300 x 1800mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type E1.3, page 7 of 12 of Prasa Specification, for full details.	No	2
Carried Forward			R
Section No. 8 Bill No. 1 External Works			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward			R
<u>Floor Mounted: Naming</u>			
45	Double sided signage, non-illuminated overall size 2600 x 750mm high fixed on posts. 2x posts 3600mm long with 600mm cast in concrete base, including cutting asphalt, excavations, backfilling and patching surfaces with asphalt etc. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type E2.1, page 7 of 12 of Prasa Specification, for full details.	No	2
<u>Internal Signage: Prohibitive</u>			
46	Wall mounted signage, overall size 300 x 800mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type J1.1, page 11 of 12 of Prasa Specification, for full details.	No	2
<u>Internal Signage: Digitally printed</u>			
47	Wall mounted signage, overall size 300 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type J1.2, page 11 of 12 of Prasa Specification, for full details.	No	6
48	Door and wall mounted signage, overall size 300 x 300mm high. Fixing all in accordance to specialist details. Tenderer are required to refer to Sign Type J2.1, page 11 of 12 of Prasa Specification, for full details.	No	6
<u>Plastering</u>			
<u>Screeds wood floated, on concrete</u>			
49	30mm Thick on floors	m2	180
<u>Floor Tiling</u>			
<u>Union Tiles or other approved 300 x 300 x 30mm Cement base product with Tac pins floor tiles (Code: ADMTAC21T) with 5mm grouting fixed with 'Tal Goldstar 6' and Tal Bond" tile adhesive to screeded / wood floated / power floated floors (screeds, wood floated or power floated elsewhere measured) and flush pointed with "Tal Floor" anti-bacterial grout in accordance with the manufacturer's instruction.</u>			
50	On floors	m2	180
Carried Forward			R
Section No. 8 Bill No. 1 External Works			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
<u>"Genesis" or other equally approved movement joints:</u>			
51	Aluminium standard intermediate joints (Code: MMA100.35)	m	36
<u>Polysulphide soft joint or equally approved at 3.0m intervals both ways as per supplier instructions</u>			
52	5 x 10mm Joints in floor tiles	m	120
<u>Paintwork</u>			
<u>100mm White luminous painted safety line on concrete surfaces as per Prasa specification</u>			
53	100mm White solid line	m	600
<u>Platform marking in English and Zulu – painted with "Plascon" road marking paint on polished concrete surfaces – colour yellow - font to be Arial</u>			
54	Platform marking to write as "NO STANDING BEYOND THE YELLOW LINE" overall size 4620 x 200mm high	No	32
55	Platform marking to write as "IMA NGEMUVA KOLAYINI OPHUZI" overall size 3580 x 200mm high	No	32
56	Covid 19 social distancing platform marking to write as 200mm diameter circular line of 50mm wide solid line	No	502
<u>Platform Furnitures, etc.</u>			
<u>Galvanised and polyurethane painted platform bench, colour mid grey, set into concrete bed including saw cutting existing premix / concrete surfaces, excavations, concrete base, cart away excavated materials, etc. all in accordance to Prasa Specifications (Code: M04)</u>			
57	Back-to-back sides bench 1800mm long with straight leg	No	8
Carried Forward			R
Section No. 8 Bill No. 1 External Works			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No	Unit	Quantity	Rate	Amount
<u>SECTION NO. 9</u>				
<u>BILL NO. 1</u>				
<u>EARTHWORKS</u>				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
<u>Nature of ground</u>				
Tenderers must acquaint themselves with the nature of the material to be excavated and also refer to the attached geotechnical investigation report annexed to the Bills of Quantities.				
<u>Carting away of excavated material</u>				
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 situated on the building site				
<u>Excavation for working space in rock</u>				
Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over"bulk excavation or trench and hole excavation as the case may be				
<u>Filling</u>				
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.				
Carried Forward			R	
Section No. 9 Bill No. 1 Earthworks				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward				R
<u>Testing</u>				
Prices for filling are to include for all necessary density tests in accordance with SABS 1200D				
Prices for filling are to include for all necessary density tests in accordance with SABS 1200D				
<u>RESTRICTIVE EXCAVATIONS</u>				
<u>Restrictive excavations in earth not exceeding 2m deep</u>				
1	Trenches	m3	17	
<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
<u>Excavation in earth not exceeding 2m deep</u>				
2	Reduced levels under floors	m3	5	
3	Edge thickening	m3	0,1	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Intermediate material	m3	2	
5	Hard material	m3	1	
<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	16	
<u>Risk of collapse of excavations</u>				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	48	
<u>Keeping excavations free of water</u>				
8	Keeping excavations free of all water other than subterranean water		Item	
Carried Forward				R
Section No. 9 Bill No. 1 Earthworks				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 95% Mod AASHTO density.</u>			
9	Backfilling to trenches, holes, etc.	m3	6	
	<u>Earth filling supplied by the contractor, compacted to 98% Mod. AASHTO density</u>			
10	Under floors of G5 material in accordance with SABS 1200 DM and compacted to 95% Mod. AASHTO density	m3	2	
11	Restricted filling under strip footings, etc. of G5 material in accordance with SABS 1200 DM and compacted to 95% Mod. AASHTO density	m3	3	
	<u>Compaction of surfaces</u>			
12	Compaction of ground surface under strip footings, etc. including grading, levelling and scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod. AASHTO density	m2	11	
13	Compaction of ground surface under surface beds, etc. including grading, levelling and scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod. AASHTO density	m2	15	
	<u>Prescribed density tests on filling</u>			
14	Modified AASHTO Density tests	No	2	
	<u>SOIL POISONING</u>			
	<u>brand of anti-termite soil poison applied by a registered Pest Control company and guaranteed against termite infestation for ten years</u>			
15	Under floors, etc. including forming and poisoning shallow furrows against foundation walls, etc. filling in furrows and ramming	m2	15	
16	To bottoms and sides of trenches, etc.	m2	59	
	Carried Forward to Summary of Section No. 9			R
	Section No. 9			
	Bill No. 1			
	Earthworks			

Item No	Unit	Quantity	Rate	Amount
<u>BILL NO. 2</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item <u>SUPPLEMENTARY PREAMBLES</u> <u>Cost of tests</u> 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 Engineer. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Engineer. (Test cubes are measured separately) <u>Breeze concrete</u> Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated <u>Lightweight concrete</u> Lightweight concrete shall have a density of 600kg/m3 for the top 50mm and 400kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc. shall be 50mm				
Carried Forward			R	
Section No. 9 Bill No. 2 Concrete, Formwork & Reinforcement				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward <u>Formwork</u> Description 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 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" Formwork to soffits of solid, etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described and propping not exceeding 3,5m high unless otherwise stated. Formwork to walls and columns is not exceeding 3,5m high above bearing level unless otherwise stated.			R	
Carried Forward Section No. 9 Bill No. 2 Concrete, Formwork & Reinforcement			R	

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward				R
<u>Polished Concrete:</u>				
It must be noted that where polished concrete finishes are required, the pouring and polishing of such concrete should be done by the same specialist contractor.				
The Contractor is to allow for sufficient and adequate protection of all concrete surfaces which are to have a polished finish surface.				
To achieve the optimum aesthetic finish to the floors, the casting and finishing of such concrete in connection with the laying process is of extreme importance, requiring a high degree of accuracy in placing. When grinding, the top surface of the concrete is exposed and any defects such as cracks, pores and 'gumboot marks' that originated during casting will become evident and will not be accepted and it will be required that such defects are corrected to the complete satisfaction of the Architect.				
Place concrete to a FM2 tolerance using a bull float. Separation of aggregate from walking in the green concrete is to be prevented and avoided.				
Saw cutting where required is to be done in squares to minimise the risk of shrinkage cracks and shall be done timeously within 12 hours of placing the concrete.				
During the grinding and polishing process all depressions and imperfections must be corrected and repaired to the satisfaction of the Architect.				
During grinding and polishing the required silicate densifier and stain resistant products shall be applied in accordance with the manufacturer's specifications.				
A sample panel of the polished finish is to be provided for the Architect's approval prior to any work commencing.				
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>25MPa/19mm concrete</u>				
1	Strip footings	m3	3	
2	Edge thickening	m3	0,1	
Carried Forward				R
Section No. 9 Bill No. 2 Concrete, Formwork & Reinforcement				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
3	Surface beds on waterproofing	m3	2	
	<u>TEST CUBES</u>			
4	Making and testing set of three 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
5	Surface beds, slabs, etc,	m2	15	
	<u>FORMWORK</u>			
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>			
	<u>Smooth formwork to sides</u>			
6	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	16	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>Expansion joints with 12mm bitumen impregnated softboard between vertical concrete surfaces, including necessary formwork</u>			
7	12mm Joints not exceeding 300mm high	m	16	
	<u>REINFORCEMENT (PROVISIONAL)</u>			
	<u>High tensile steel reinforcement to structural concrete work</u>			
8	Bars of various diameters	t	0,36	
	<u>Fabric reinforcement</u>			
9	Type ref. 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	15	
Carried Forward to Summary of Section No. 9				R
Section No. 9				
Bill No. 2				
Concrete, Formwork & Reinforcement				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 3</u>				
	<u>MASONRY</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>SAMPLES</u>				
	Samples of masonry building units to be provided before construction commences				
	<u>SIZES IN DESCRIPTIONS</u>				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	<u>HOLLOW WALLS</u>				
	Descriptions of hollow walls shall be deemed to include every fifth perpend of the bottom course of the external skin open as a weep hole				
	<u>BAGGED AND SEALED WALLS</u>				
	User Note: The following preamble generally applies for works in hot and humid coastal areas.				
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating.				
	Carried Forward			R	
	Section No. 9 Bill No. 3 Masonry				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>FACE BRICKS</u>					
Bricks shall be ordered timeously to obtain uniformity in size and colour.					
All facebrick work is to be protected from other finishing trades during the construction period.					
All interior face brickwork is to receive two coats water based silicone sealant at completion including preparatory work as per manufacturer's instructions.					
<u>POINTING</u>					
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing etc.					
<u>FOUNDATIONS (PROVISIONAL)</u>					
<u>Brickwork of NFX bricks in class II mortar</u>					
1	One brick walls	m2	14		
<u>SUPERSTRUCTURE</u>					
<u>Brickwork of NFX bricks in class II mortar</u>					
2	One brick walls	m2	34		
<u>BRICKWORK SUNDRIES</u>					
<u>2.5mm Galvanised brickwork reinforcement</u>					
3	155mm Wide reinforcement built in horizontally	m	133		
<u>Bagging of 1:3 cement and sand mixture</u>					
4	On brick walls, piers, etc	m2	34		
<u>FACE BRICKWORK</u>					
<u>"Corobrick Firelight Satin FBX The Black Brick" or other equally approved face bricks pointed with tinted recessed horizontal and vertical joints</u>					
5	Extra over brickwork for face brickwork in foundations (Provisional)	m2	4		
Carried Forward					R
Section No. 9 Bill No. 3 Masonry					

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 4</u>				
	<u>WATERPROOFING</u>				
	Tenderers are advised to refer to the Model Preambles for trades before pricing these provisional Bill of Quantities.				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>Waterproofing</u>				
	All new waterproofing, etc shall be guaranteed against leaks for a period of 10 (ten) years calculated from the date of issue of Practical Completion Certificate by the Project Manager. The guarantee shall be to the satisfaction of the Employer and shall be capable of cession to the Employer. The guarantee shall be submitted to the Project Manager prior to the commencement of the waterproofing works comprising this contract.				
	<u>WATERPROOFING OF WALLS AND FLOORS</u>				
	<u>One layer of 375 Micron "Consol Plastics Brikgrip DPC" embossed damp proof course.</u>				
1	In walls	m2	4		
	<u>One layer 250 micron " Consol Plastic Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	15		
	<u>Two coats brixal bitumen emulsion waterproof coating</u>				
3	On bagged brick walls	m2	34		
	<u>SEALING STRIPS, JOINT SEALANTS, ETC.</u>				
	<u>Sika or other two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
4	12 x 10mm In expansion joints in floors including raking out expansion joints filler as necessary.	m	16		
	Carried Forward to Summary of Section No. 9				
	Section No. 9				
	Bill No. 4				
	Waterproofing				
				R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	BILL NO. 5				
	METALWORK				
	PREAMBLES				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	GALVANISED STEEL GATES, SCREENS, ETC				
	Hot dipped galvanised steel gates				
1	Double gate size 1500 x 2100mm high with 19mm dia. tubular steel infills @ 100mm centres welded to frames and 40 x 6mm horizontal support with and including frame 38 x 60 x 3mm tubular gate surround concealed fixed wall with raw bolts (A.G1). Tenderers are referred to Architects drawings annexed to these Bills of Quantities for the full description of the gate	No	1		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 Bill No. 5 Metalwork				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 7</u>				
	<u>PLUMBING AND DRAINAGE</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SOIL DRAINAGE</u>				
	<u>Alterations to existing drains, manholes etc:</u>				
1	Break through one side of precast concrete manhole for and connect up new 110mm Class 34 uPVC pipe (elsewhere measured) and make good all round including new channels, benching, etc.	No	1		
	<u>uPVC pipes in class C bedding:</u>				
2	110mm Pipes vertically or ramped to cleaning eyes, etc. (no excavation)	m	1		
3	110mm Pipes laid in and including trenches not exceeding 1m deep	m	25		
	<u>Extra over uPVC pipes for fittings:</u>				
4	110mm Bend	No	4		
5	110mm Access junction	No	1		
6	110mm Rodding eye with cast iron cover and frame	No	1		
	<u>SANITARY FITTINGS</u>				
	<u>Floor traps</u>				
7	Stainless steel floor trap as herbish HB 200 (H) NW100 or equally approved connected to sewer line	No	1		
	Carried Forward			R	
	Section No. 9 Bill No. 7 Plumbing & Drainage				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward				R
<u>TAPS, VALVES, ETC.</u>				
Taps, valves, etc. jointed to copper pipes are to include brass connectors, adaptors etc. Installation and fixings to be as per manufacturers specifications and SANS 1808-9 compliant.				
8	22mm Ball-O- stop valves	No	1	
<u>SANITARY PLUMBING</u>				
<u>uPVC pipes cast into concrete slabs, fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications</u>				
9	110mm Pipes	m	5	
<u>Extra over uPVC pipes for:</u>				
10	110mm Bend	No	1	
11	110mm Access bend	No	1	
<u>TAPS, VALVES, ETC.</u>				
<u>"Cobra Watertech" or equally approved</u>				
12	3/4" Rough brass hose bib tap 209	No	1	
<u>DOMESTIC WATER SUPPLIES</u>				
<u>HDPE class 12 pipes in ground</u>				
13	32mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	25	
<u>Extra over HDPE pipes for fittings:</u>				
14	32mm Elbow	No	4	
15	32mm Tee	No	1	
Carried Forward				R
Section No. 9 Bill No. 7 Plumbing & Drainage				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
	<u>Geberit Mepla or other equally approved pipes fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications:</u> All piping embedded into concrete or chased into walls to be twice wrapped in strong approved building paper. Rates for surface mounted copper pipe shall be deemed to include all fixtures and fittings for pipes fixed to walls, in chases, and in ceilings.			
16	20mm Pipes	m	2	
	<u>Extra over Mepla pipes for fittings:</u>			
17	20mm Bend	No	2	
	<u>Extra over Mepla pipes for brass compression fittings:</u>			
18	22mm Wallplate elbow	No	1	
19	22mm coupling	No	1	
	<u>TESTING</u>			
20	Allow for testing the whole of the Stormwater drainage, Sewer drainage, Plumbing, Water and Fire supplies and all fittings to the satisfaction of the Architect, Engineer and Local Authorities. All defective work is to be taken out and replaced at the contractor's expense and the whole re-tested until acceptable		Item	
	<u>AS-BUILT DRAWINGS</u>			
21	Provide a full set of as-built drawings on completion of the installation		Item	
Carried Forward to Summary of Section No. 9				R
Section No. 9				
Bill No. 7				
Plumbing & Drainage				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>BILL NO. 8</u>				
	<u>PAINTWORK</u>				
	<u>PREAMBLES</u>				
	The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>PREPARATORY WORK TO EXISTING WORK</u>				
	<u>Previously painted plastered surfaces</u>				
	Surfaces shall be thoroughly water pressure cleaned and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished to match existing surfaces.				
	<u>PAINTWORK, ETC TO NEW SURFACES</u>				
	<u>ON EXTERNAL FLOATED PLASTER SURFACES</u>				
	<u>"Plascon" or other equally approved alkali resistant primer and two coats "Micatex" emulsion paint for exterior use</u>				
1	On walls	m2	34		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9				
	Bill No. 8				
	Paintwork				

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Bill No	SECTION SUMMARY - Refuse Area	Page No	Amount
1	Earthworks	153	
2	Concrete, Formwork & Reinforcement	157	
3	Masonry	160	
4	Waterproofing	161	
5	Metalwork	162	
6	Plastering	163	
7	Plumbing & Drainage	166	
8	Paintwork	167	
Carried to Final Summary			R
Section No. 9			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 10</u>				
	<u>BILL NO. 1</u>				
	<u>Electrical Installation</u>				
	<u>Electrical Cables and cable ways</u>				
	<u>Cables</u>				
1	150 mm ² 4 core Alu PVC SWA PVC ECC cable from Main Non Essential kiosk to DB1-NE	m	75		
2	Extra on last to install in sleeves and manholes	m	75		
3	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
4	35 mm ² 4 core Alu PVC SWA PVC ECC cable from DB1-NE to DB2-NE	m	50		
5	Extra on last to install in sleeves and manholes	m	50		
6	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
7	25 mm ² 4 core Alu PVC SWA PVC ECC cable from DB1-NE to DB-3NE	m	75		
8	Extra on last to install on cable ladder at 4 000 AFFL	m	75		
9	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
10	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
11	16 mm ² 4 core Alu PVC SWA PVC ECC cable from DB1-E to DB2-E	m	58		
12	Extra on last to install in sleeves and manholes	m	58		
13	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
	Carried Forward				
	Section No. 10 Bill No. 1 Electrical Installation			R	

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
14	25 mm ² 4 core Alu PVC SWA PVC ECC cable from DB1-NE to DB-3E	m	75		
15	Extra on last to install on cable ladder at 4 000 AFFL	m	75		
16	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
17	25 mm ² 4 core Alu PVC SWA PVC ECC cable from DB1-E to DB-light - E	m	50		
18	Extra on last to install in sleeves and manholes	m	50		
19	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
20	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	4		
21	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	2		
22	10 mm ² 4 core Alu PVC SWA PVC ECC cable from Main Non Essential Metering Panel to External lighting	m	450		
23	Extra on last to install in sleeves and manholes	m	450		
24	Extra for terminating and connecting end including supply of CCG cable gland and lugs	No	25		
25	Extra over cabling exposed on soffits and walls to be covered with hot dipped galvanised 30 x 30 x 5mm thick angle section steel with and including pre-drilled fixing lugs at 500mm centres with and including vandal proof plugs	m	450		
	<u>Cables ladders and trunking</u>				
26	Supply and install 400 mm wide electro galvanised cable ladder (medium duty), fixed to trapeze hangers inclusive of splices, bends, elbows, T pieces etc.	m	100		
27	Supply and install 200 mm wide electro galvanised cable ladder (medium duty), fixed to trapeze hangers inclusive of splices, bends, elbows, T pieces etc. as shown on layout drawings mounted at 4 000 mm AFFL	m	100		
	Carried Forward			R	
	Section No. 10 Bill No. 1 Electrical Installation				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
28	Supply and install P9000 trunking suspended from purlins with bracket hanger inclusive of hanger every inclusive of splices, bends, elbows, T pieces etc. as shown on layout drawings mounted at 4 000 mm AFFL	m	300		
	<u>Trenches on platform and to electrical room</u>				
29	Trenching, concrete casting, backfilling, etc in earth including supply and fitting 4 x 110mm nextube or other equally approved	m	50		
30	Trenching, concrete casting, backfilling, etc in tar or paving including fitting 4 x 110mm nextube or other equally approved	m	600		
31	Supply and install 600 x 600 manhole to specification complete with heavy duty manhole vandalproof cover	No	16		
	<u>Electrical Distribution boards</u>				
	The following boards supplied by 'EDS' Switchboard Manufacturers or other equally approved				
32	Main Electrical Kiosk	No	1		
33	Distribution board DB-3/3E	No	1		
34	Distribution board Lighting Sub-DB	No	1		
	<u>Light Fittings</u>				
	Supply & delivery of the following luminaires as per ; Prasa Electrical Specifications				
35	Type AE (Vandalproof bulkhead with 15min battery)	No	40		
36	Extra over above for hot dipped galvanised vandal proof cage bolted to walls or soffits	No	40		
37	Type BE (LED 600 x 600 recessed panel light)	No	12		
38	Extra over above for hot dipped galvanised vandal proof cage bolted to walls or soffits	No	12		
39	Type FE (Corrosion & vandalproof linear fitting)	No	24		
40	Extra over above for hot dipped galvanised vandal proof cage bolted to walls or soffits	No	24		
	Carried Forward			R	
	Section No. 10 Bill No. 1 Electrical Installation				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward					R
<u>Small power</u>					
Supply and install the following:-					
41	25mm 'Bosal' or other equally approved conduit surface mounted in ceiling void or fixed to external trusses	m	550		
42	25mm PVC conduit built into brickwork or cast in concrete	m	500		
43	2.5mm Cu PVC wire pulled into conduit or installed in power skirting/trunking	m	3 500		
44	'Crabtree' or other equally approved 16A dedicated red/blue 3 pin switched socket outlet in power skirting inclusive of cover	No	15		
45	'Crabtree' or other equally approved 16A 3 pin switched socket outlet in power skirting	No	15		
46	Cut 80 x 40 slot in back of power skirting, trim edge and fit grommet	No	6		
47	'Crabtree' or other equally approved 16 A dedicated red/blue 3 pin switched socket outlet in conduit box	No	1		
48	'Crabtree' or other equally approved 16 A 3 pin switched socket outlet in conduit box	No	15		
49	'Crabtree' or other equally approved 16 A 3 pin double switched socket outlet in 100 x 100 conduit box	No	20		
50	'Crabtree' or other equally approved 16 A 3 pin universal double switched socket outlet in 100 x 100 conduit box	No	10		
51	100 x 50 surface mounted galvanised steel conduit box	No	25		
52	100 x 100 surface mounted galvanised steel conduit box	No	35		
53	2.5 mm ² 2 core and earth surfix installed in ceiling void	m	200		
54	Terminate above surfix	No	20		
55	'Crabtree' or other equally approved 20 A double pole isolator in surface 'Bosal' or other equally approved conduit box for HWC	No	2		
Carried Forward					R
Section No. 10 Bill No. 1 Electrical Installation					

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
56	'Crabtree' or other equally approved 20 A double pole flush mounted isolator for A/C	No	6		
57	Round 65 mm dia. steel conduit box built into brickwork	No	6		
	'Power Comm' or other equally approved galvanised flush cluster box complete with dividers;				
58	9-way cluster conduit box	No	4		
59	9-way cover plate to cluster box complete with yoke	No	4		
	Switches, outlets etc complete with engraved cover plate as required, fixed to cluster box;				
60	16A three pin normal switched socket outlet	No	4		
61	16A three pin dedicated switched socket outlet	No	4		
62	RJ11 telephone outlet	No	4		
63	RJ45 data outlet	No	4		
64	Blank cover plate	No	4		
65	RF/TV outlet	No	4		
66	Euro switched socket outlet	No	4		
	<u>Lighting</u>				
	Supply and install the following:-				
67	25 mm 'Bosal' or other equally approved conduit fixed to trusses	m	350		
68	2.5 mm ² Cu PVC wire pulled into conduit and trunking	m	1 250		
69	2.5 mm ² 2 core surfix	m	250		
70	Terminate 2.5 mm ² 2 core surfix	No	25		
71	1 No. 5 amp 3 pin socket outlets mounted in 65 mm dia. PVC conduit box / on trunking	No	58		
72	100 x 100/50 galvanised steel conduit box installed in ceiling void	No	10		
	Carried Forward			R	
	Section No. 10				
	Bill No. 1				
	Electrical Installation				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
73	65 mm dia. Bosal conduit box installed	No	20		
74	'20 amp double pole isolator mounted 100 x 100 conduit box for toilet vent fan	No	6		
75	'20 amp three phase isolator mounted 100 x 100 conduit box extractor	No	6		
76	2No. 1 lever 1 way + dimmer 16 Amp 'Crabtree' or other equally approved light switch with steel cover	No	2		
77	1 lever 1 way 16 Amp 'Crabtree' or other equally approved light switch with white steel cover	No	5		
	Allow for installation of the following luminaires with lamps wrapped in plastic initially and then the removal of the plastic and installation of the diffuser at a later stage				
78	Type AE	No	6		
79	Type BE	No	2		
80	Type FE (Corrosion proof fluorescent fitting with battery)	No	1		
	<u>Fire and security</u>				
	Supply and install the following:-				
81	25 mm ² 'Bosal' or other equally approved conduit fixed to surface to concrete soffit or built into brickwork	m	250		
82	100 x 100 galvanised steel surface conduit box	No	15		
83	2.5 mm ² PVC copper wire installed in conduit as draw wire	m	250		
	<u>Telephone and data</u>				
	Supply and install the following:-				
84	25 mm dia. 'Bosal' or other equally approved conduit built into brickwork or in ceiling void	m	300		
85	Galvanised draw wire pulled into conduit	m	300		
86	Blank cover for telephone/data RJ11/RJ45 outlet in power skirting	No	10		
	Carried Forward			R	
	Section No. 10 Bill No. 1 Electrical Installation				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
87	Blank cover for 100 x 100/50 conduit box	No	10		
88	100 x 100/50 conduit box built into brickwork for power skirting entry	No	15		
89	Cut 80 x 40 slob in back of power skirting, trim edge and fit grommet	No	4		
90	'32mm 'Bosal' or other equally approved conduit built into brickwork or ceiling void	m	100		
91	'600 x 600 steel telephone JB surface mounted	No	1		
92	Earthing and bonding		Item		
93	Testing and commissioning inclusive of completing test sheet and circuit cards as specified		Item		
	Supply and install the following:-				
94	20 mm flexible PVC conduit	m	150		
95	25 mm flexible PVC conduit	m	150		
	<u>Powerskirting</u>				
96	Supply and install 3 compartment steel power skirting with matching two separate covers complete with splices etc (colour beige)	m	50		
97	Supply and install 90 deg. Internal/external bends of the same make and colour as above	No	12		
98	Supply and install blank telephone/data matching outlet cover	No	10		
99	Supply and install end caps the same make and colour as above	No	15		
	GENERAL ITEMS				
	REFER TO DRAWING				
100	Install and connect DB 1 on brickwork. Allow for protecting DB with heavy duty plastic during construction	No	1		
	Carried Forward			R	
	Section No. 10				
	Bill No. 1				
	Electrical Installation				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward				R
101	Install and connect DB 3 and lighting DB on brickwork. Allow for protecting DB with heavy duty plastic during construction <u>External lighting</u> Install the following luminaires with lamps;	No	2	
102	Type H (Beka or other approved "Solarflood" combined with the OMNISTAR-MINI luminaire - installed as per manufacturer's specifications)	No	12	
Carried Forward to Summary of Section No. 10 Section No. 10 Bill No. 1 Electrical Installation				R

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 2</u>			
	<u>Electronic Installation</u>			
	<u>Support housing and brackets</u>			
1	Steel Header for speaker to pole, including speaker Header for top of EDB pole	No 8		
2	Full Victorian Steel Header for camera / speaker to pole	No 8		
3	Stainless steel bracket for two speaker to pole	No 5		
4	Steel Bracket for Speaker to Structure/Shelter	No 3		
5	Steel Bracket for Camera to Structure/Shelter	No 3		
6	Steel EDB Pole - L Type	No 3		
7	Steel EDB Pole - T Type	No 6		
	<u>PA systems</u>			
8	Doms	No 1		
9	DCS	No 1		
10	UIM	No 1		
11	Amps	No 1		
12	MSU	No 1		
13	SCU	No 1		
14	Platform Speakers (Horn Type)	No 12		
15	Ceiling speakers	No 8		
16	Speaker cable	m 350		
	<u>Access control</u>			
17	Card Readers	No 16		
18	KDM	No 2		
	Carried Forward		R	
	Section No. 10 Bill No. 2 Electronics			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward				R
19	KDA	No	1	
20	KDR	No	1	
21	PS64 PSU	No	1	
22	Interlocking door controller (booth)	No	1	
23	Maglock	No	5	
24	Babylon Workstation	No	1	
25	Door Junction Box	No	5	
26	Equipment Junction Box (field note)	No	1	
27	Roller Shutter / Gate Monitor	No	2	
28	BGU for emergency exit (Green)	No	12	
29	2 pair cable	m	210	
30	4 pair cable	m	110	
31	8 pair cable	m	290	
32	Alarm Siren and Strobe	No	2	
33	Alarm Keypad	No	1	
34	360 Degree Ceiling Mounted IR Detector	No	11	
35	Corner PIR wall mounted	No	2	
36	Panic Button	No	6	
37	Door Monitor	No	2	
38	Six door intercom system	No	1	
39	Intercom door station	No	2	
40	4 pair cable (Intercom)	m	40	
Carried Forward				R
Section No. 10				
Bill No. 2				
Electronics				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward		R
	<u>Fire control</u>		
41	8 Zone Fire Panel	No	1
42	Optical smoke detectors	No	9
43	Optical heat detectors	No	4
44	LED Minidisk remote indicators	No	4
45	Loop Sounder	No	2
46	Line Interface A/C Cutoff	No	1
47	Manual Call Point (Red BGU)	No	1
48	PH 120 1,0mm Fire rated cable	m	180
49	Fire Beacon and Sounder Indoor	No	1
50	Fire Bell and Sounder	No	2
51	Fire Bell External	No	2
	<u>Cabling</u>		
	<u>Equipment rack componenets</u>		
52	3 kVA UPS	No	1
53	6 kVA UPS	No	2
54	10 KVA CVT	No	1
55	Distribution Unit incl circuit breakers, surge arrestors & lightning arrestors) (MSU 3.1.6)	No	3
56	Distribution Unit incl circuit breakers, surge arrestors & lightning arrestors) in Racks	No	3
57	24 Port Fibre Switch (7.1.6)	No	1
58	24 Port POE Switch (7.1.7)	No	1
59	KVM Switch	No	1
60	Keyboard and Monitor Drawer	No	1
	Carried Forward		R
	Section No. 10		
	Bill No. 2		
	Electronics		

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
61	Cat 5 Patchleads (1m)	No	24
62	Cat 5 Cables (UTP all colours)	m	350
63	2,5mm Surfix	m	230
64	4mm Surfix	m	200
65	Patch Panel (Fibre) Equipment Room	No	2
66	43U, 19" Rack	No	2
Carried Forward to Summary of Section No. 10			R
Section No. 10			
Bill No. 2			
Electronics			

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

SECTION SUMMARY - Electrical Installation		Page No	Amount	
Bill No				
1	Electrical Installation	176		
2	Electronics	180		
Section No. 10		Carried to Final Summary	R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 11</u>				
	<u>BILL NO. 1</u>				
	<u>MECHANICAL INSTALLATION</u>				
	For the supply, delivery, installation and commissioning the following Variable Refrigerant Flow system ('Daikin' series Heat Pump or other equally approved), complete with condensing and evaporator units, all with electrical connection to isolator, refrigeration- and drain piping, electrical control wiring, brackets, supports and all necessary accessories, as per the specification and manufacturer's recommendation. Condensing unit to come complete with LG Ocean Blackfin treatment				
	<u>Air-conditioning and ventilation installation</u>				
	<u>For the supply, delivery, installation, connecting & commissioning of the complete outside condensing/compressor units</u>				
1	RXYSQ4T8V, 'Daikin' or other equally approved Cooling capacity - 11,9 kW Heating capacity - 9,2 kW SEER - 7 SCOP - 4,4	No	1		
	<u>Refnet joints and multi connection piping kit (for a two-pipe system) and reducers as per the manufacturer's specification and recommendations, supplied and installed complete with insulation.</u>				
2	KHRQ22M20T, Daikin or other approved	No	1		
	<u>For the complete supply, delivery and installation of the insulated refrigerant piping, including bends, joints, T's, supports, brackets, fittings in accordance to the specification and manufacturer's recommendations, between indoor and outdoor unit(s) and supports, as per engineers drawings.</u>				
3	Piping Liquid - 6,35mm (1/4 inch)	m	3		
4	Piping Liquid - 9,52mm (3/8 inch)	m	20		
5	Piping Liquid - 12,70mm (1/2 inch)	m	3		
6	Piping Gas - 12,70mm (1/2 inch)	m	3		
	Carried Forward			R	
	Section No. 11 Bill No. 1 Hvac				

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
7	Piping Gas - 15,88mm (5/8 inch)	m	20
8	Piping Gas - 19,05mm (3/4 inch)	m	3
<u>For the complete supply, delivery and installation of the insulated uPVC condensate drain piping, including bends, T's, joints, supports, brackets, fittings, traps in accordance to the specification and manufacturer's recommendations, as per engineers drawings.</u>			
9	Piping drain - Ø16mm	m	20
10	Piping drain - Ø25mm	m	20
11	Piping drain - Ø32mm	m	5
<u>For the complete supply, delivery and installation of hard wired remote controllers, including control wiring, supports, brackets, fittings, in accordance to the specification and manufacturer's recommendations, as per engineers drawings.</u>			
12	Wide Wired Remote controller (Model BRC1H52W) 'Daikin' or other equally approved	No	1
13	Control wiring (two core non screened stranded wire)	m	10
14	dia 20mm PVC Conduit saddled/fixed to cable tray or building structure.	m	10
15	dia 20mm flexible Conduit for connection to equipment.	m	10
16	dia 50mm PVC round box.	No	1
17	Writing Control Program & Commissioning		Item
18	Additional refrigerant charge	kg	1
Carried Forward			R
Section No. 11 Bill No. 1 Hvac			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Brought Forward			R
<u>Supply, deliver, install and commission the following Direct Expansion, Inverter split type air conditioning system ('Daikin' or other equally approved), complete with condensing and evaporator units, all with electrical connection to isolator, refrigeration- and drain piping, electrical control wiring, brackets, supports, auxiliary extended drip tray at each indoor unit and all necessary accessories, as per the specification and manufacturer's recommendation.</u>			
19	5 kW cooling & 5,8 kW heating Wall mounted type Indoor Evaporator unit (FTXM50M/N)	No	2
20	5 kW cooling & 5,8 kW heating Outdoor Condensing unit, complete with wall mounted bracket. (RXM50M/N) SEER - 7,33 SCOP - 4,6	No	2
21	Diameter 6.35mm insulated refrigerant piping, installed inside trunking.	m	60
22	Diameter 12.7mm insulated refrigerant piping, installed inside trunking.	m	60
23	Diameter 25mm uPVC condensate drain piping, installed inside trunking.	m	60
24	Hard wired controller	No	2
25	(100x40)mm uPVC Trunking.	m	20
<u>Coil treatment for the following equipment (Original 'Bluechem' or other equally approved)</u>			
26	RXYSQ4T8V, Daikin or other approved	No	1
27	RXM50M/N, Daikin or other approved	No	2
<u>Allow for delivery to site (including air suspended transport where necessary), crainage and rigging of the following units</u>			
<u>VRF System units</u>			
28	RXYSQ4T8V, 'Daikin' or other equally approved - Condensing Unit	No	1
Carried Forward			R
Section No. 11 Bill No. 1 Hvac			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R
29	RXM50M/N, 'Daikin' or other equally approved - Condensing unit	No	2	
30	FTXM50M/N, 'Daikin' or other equally approved (Wall mounted type)	No	2	
	<u>FTXM50M/N, 'Daikin' or other equally approved (Wall mounted type)</u>			
	<u>Supply, deliver and install the following ventilation fans complete with electrical connection to isolator or light circuit as specified, ducting, flexible connections, including hangers, supports, brackets, sound attenuators matching the fan capacities and all necessary accessories.</u>			
31	F1 - LINEO INLINE 315VO at in-line fan complete with speed controller at (237) l/s and 300 Pa, single phase/220V. 'Donkin' or other equally approved	No	1	
32	Matching Sound Attenuators.	No	2	
33	Matching Sound Attenuators.	No	4	
34	F3 - VORTICE VARIO 150/6 ARI LLS window/wall fan complete with speed controller at (86) l/s and 50 Pa, single phase/220V. 'Donkin' or other equally approved.	No	1	
35	F4 - HCDF-34-4T, wall mounted axial flame-proof fan complete with spark-proof motor @ 800 l/s and 100 Pa. fan to be complete with aluminium louvre shutter 'Donkin' or other equally approved	No	1	
	<u>DUCTWORK AND FITTINGS</u>			
	<u>Supply, deliver and install LOW PRESSURE galvanized externally-insulated ductwork as per the specification including fittings, reducers, radius bends, stop end, branches, tees and transformations all hangers, straps, supports, clamps and necessary accessories.</u>			
	ROUND DUCTING			
	Complete with fittings including hangers, clamps, brackets, nuts and bolts, etc. (including 15mm thermoflex external insulation)			
	Carried Forward			R
	Section No. 11			
	Bill No. 1			
	Hvac			

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward			R	
	Sheet-metal Thickness for round ducting unless otherwise indicated up to 300mm dia. :0.5mm, 301dia to 800dia : 0.6mm, 801dia to 1000dia. : 0.8mm, 1001 to 1200dia : 1.0mm, Jointing shall be beaded				
	<u>Straight sections</u>				
36	Ø200	m	3		
37	Ø400	m	12		
	<u>Lobster bends</u>				
38	Ø200	No	3		
39	Ø400	No	3		
	<u>Reducers</u>				
40	400ø-200ø	No	3		
	<u>End cap</u>				
41	Ø200	No	2		
42	Ø400	No	2		
	<u>Flexible ducting (foil faced 50mm mineral wool)</u>				
43	Ø200	m	3		
44	Ø400	m	8		
	<u>Disc valves</u>				
45	DVS1 - Diameter 125mm Ceiling mounted disc valve for supply air ('Trox' type Z-LVS or other approved) epoxy colour coated to architect's detail. Various air flow rate.	No	1		
46	DVS2 - Diameter 200mm Ceiling mounted disc valve for supply air ('Trox' type Z-LVS or other equally approved) epoxy colour coated to architect's detail. Various air flow rate.	No	1		
47	DVE1 - Diameter 125mm Ceiling mounted disc valve for extract air ('Trox' type LVS or other equally approved) epoxy colour coated to architect's detail. Various air flow rate.	No	3		
	Carried Forward			R	
	Section No. 11 Bill No. 1 Hvac				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

	Brought Forward				R
48	DVE2 - Diameter 200mm Ceiling mounted disc valve for extract air ('Trox' type LVS or other equally approved) epoxy colour coated to architect's detail. Various air flow rate.	No	4		
	<u>Dampers</u>				
49	D1- Ø125 Circular Volume Control Damper, (manual) ('Trox' or other equally approved).	No	1		
50	D2 - Ø200 Circular Volume Control Damper, (manual) ('Trox' or other equally approved).	No	4		
51	D3 - Ø300 Circular Volume Control Damper, (manual) ('Trox' or other equally approved).	No	5		
52	D3 - Ø300 Circular Volume Control Damper, (manual) ('Trox' or other equally approved).	No	5		
	<u>Washable Pleated Filters</u>				
53	295x295x50mm Washable primary pleated filters ('Trox' type WP-PS/ 295x295x50 or other equally approved)	No	1		
	<u>Weather Louvres</u>				
54	WL1 - (300x300)mm Weather Louvre ('Trox' AWG or other equally approved) complete with wire mesh screen epoxy colour coated finish to Engineers detail	No	1		
55	WL2 - (400x450)mm Weather Louvre ('Trox' AWG or other equally approved) complete with wire mesh screen epoxy colour coated finish to Engineers detail	No	1		
56	WL3 - (300x200)mm Weather Louvre ('Trox' AWG or other equally approved) complete with wire mesh screen epoxy colour coated finish to Engineers detail	No	1		
	<u>Grilles (return - & extract air)</u>				
57	RAG1 - (600x600)mm Return air grille ('Trox' type PE or other equally approved), made from aluminium, complete with OBD, spigot connection to ducting, complete with filter frame, epoxy colour coated finish to architect's detail.	No	1		
	Carried Forward				R
Section No. 11 Bill No. 1 Hvac					

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

Brought Forward			R
<u>Controls</u>			
58	For the supply, delivery and installation of the new main control panel (IP 54 sheet metal enclosure) complete with Fuses, Warning lights & alarms, Toggle switches, Timers, Fire System interface interlocking, control wiring, conduit, saddles, supports and brackets, and all necessary fittings and accessories per the manufacturer's recommendation and the Specification. Panels to be weather proof.	No	1
	Panel 1 - VRF plant		
	VRF condensing unit		
	Panel 2 - Offices		
	Fans and indoor fan coil units		
59	Control wiring (two core non screened stranded wire)	m	50
60	dia 20mm PVC Conduit saddled/fixed to cable tray or building structure.	m	50
61	dia 20mm flexible Conduit for connection to equipment.	m	50
62	dia 50mm PVC round box.	No	12
63	Writing Control Program & Commissioning		Item
Carried Forward to Summary of Section No. 11			R
Section No. 11			
Bill No. 1			
Hvac			

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION

SECTION SUMMARY - Mechanical Installation		Page No	Amount	
1	Hvac	188		
2	Lifts	189		
Section No. 11		Carried to Final Summary	R	

REFURBISHMENT, ALTERATIONS AND ADDITIONS AT CLUSTER 7: KUYASA STATION

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**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Item No		Unit	Quantity	Rate	Amount
	<u>SECTION NO. 13</u>				
	<u>BILL NO. 1</u>				
	<u>PROVISIONAL SUMS</u>				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>General</u>				
	Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances.				
	Prime cost amounts and provisional sums are net.				
	The Contractor must note that attendance includes the provision of hoisting and access facilities for a sub-contractor.				
	The Contractors profit and attendance shall include for the storage of such equipment and materials.				
	The Contractor must ensure that the capacities of his hoisting equipment is sufficient to deal with the masses and the quantities of the items hoisted.				
	Provide the necessary personnel to operate such hoisting and access equipment.				
	Prime cost amounts include for delivery to site of all articles concerned Provisional sums are for material and equipment supplied and installed complete by firms of specialists.				
	<u>EXTERNAL FACADE CLADDING AND SIGNAGE</u>				
1	Provide the sum of R 200,000.00 (Two Hundred Thousand Rand) for external facade cladding and signage		Item		200 000,00
2	Profit		Item		
3	Attendance		Item		
	Carried to Final Summary			R	
	Section No. 13				
	Bill No. 1				
	Provisional Sums				

**REFURBISHMENT, ALTERATIONS AND ADDITIONS
AT CLUSTER 7: KUYASA STATION**

Section No		Page No	Amount	
<u>FINAL SUMMARY</u>				
1	Preliminaries	44		
2	Ticket Office & Security Office Building (A1)	86		
3	Concourse Ablutions (A2)	107		
4	Waiting Area (B)	120		
5	Waiting Area (C)	132		
6	Pedestrian Access Ramp 1	136		
7	Pedestrian Access Ramp 2	140		
8	Platform and External Works	150		
9	Refuse Area	168		
10	Electrical Installation	181		
11	Mechanical Installation	190		
12	Fire Installation	191		
13	Provisional Sums	192		
Sub - Total			R	
Add Contingency: Sum of R 1 200 000.00 (One Million Two Hundred Thousand Rand)		Item		1 200 000,00
Sub-Total			R	
Value Added Tax (15%)			R	
Carried to Form of Tender			R	