tem No	Description	Quantity	Amount
	SECTION NO.1		
	BILL NO. 1		
	PRELIMINARIES		
	NOTES TO PRELIMINARIES		
	NOTE: TENDERERS ARE TO PRICE PRELIMINARIES BASED ON THE TERMS, INSTRUCTIONS AND CONDITIONS OF THE CONTRACT AND BILLS OF QUANTITIES INCLUDED HEREIN		
	STRUCTURE OF THIS PRELIMINARIES BILL		
	Section A: A recital of the headings of the individual clauses of the aforementioned JBCC Series 2000 Principal Building Agreement prepared by Joint Building Contracts Committee, Edition 6.2 - March 2018		
	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		
	SECTION A: PRINCIPAL BUILDING AGREEMENT		
1.1.1	Clause 1.0 - Definitions and interpretation		
	F: V: T:	Item	
1.1.2	Clause 2.0 - Law, regulations and notices		
1.1.3	Clause 3.0 - Offer and acceptance		
	F: V: T:	Item	
1.1.4	Clause 4.0 - Assignment and cession		
	F: V: T:	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought for	rward R	
1.1.5	Clause 5.0 - Contract documents		
	F: V: T:	Item	
1.1.6	Clause 6.0 - Employer's agents		
	F: V: T:	Item	
1.1.7	Clause 7.0 - Design responsibility		
	F: V: T:	Item	
	Insurance and security (A8-A11)		
1.1.8	Clause 8.0 - Works risk		
	F: V: T:	Item	
1.1.9	Clause 9.0 - Indemnities		
	F: V: T:	Item	
1.1.10	Clause 10.0 - Insurances		
	F: V: T: T:	Item	
1.1.11	Clause 11.0 - Security		
	F: V: T:	Item	
	Execution (A12 - A17)		
1.1.12	Clause 12.0 - Duties of the parties		
	F: V: T:	Item	
1.1.13	Clause 13.0 - Setting out		
	F: V: T:	Item	
1.1.14	Clause 14.0 - Nominated subcontractors		
	F: V: T:	Item	
	Carried for	orward R	
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	Brought forward	R	
1.1.15	Clause 15.0 - Selected subcontractors		
	F: V: T:	Item	
1.1.16	Clause 16.0 - Direct contractors		
	Attendance on direct contractors		
	In respect of direct contractors the contractor shall:		
	F: V: T:	Item	
1.1.17	Clause 17.0 - Contract instructions		
	Site 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:	Item	
	Completion (A18 - A24)		
1.1.18	Clause 18.0 - Interim completion		
	F: V: T:	Item	
1.1.19	Clause 19.0 - Practical completion		
	F: V: T:	Item	
1.1.20	Clause 20.0 - Sectional completion		
	F: V: T:	Item	
1.1.21	Clause 21.0 - Defects liability period and final completion		
	F: V: T:	Item	
1.1.22	Clause 22.0 - Latent defects liability period		
	F: V: T:	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought forward	R	
1.1.23	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]		
	In assessing his price and programme for the works to be completed by the given practical completion date/s (refer to Contract Data EC), the contractor shall take into account and shall allow 10 working days to be included in his construction programme (based on a five day working week), as a contingency period to cover any items such as rain & other delays. This contingency period will be used at the discretion of the Principal Agent		
	F: V: T:	Item	
1.1.24	Clause 24.0 - Penalty for late or non-completion		
	F: V: T:	Item	
	Payment (A25 - A27)		
1.1.25	Clause 25.0 - Payment		
	F: V: T:	Item	
1.1.26	Clause 26.0 - Adjustment of the contract value and final account		
	F: V: T:	Item	
1.1.27	Clause 27.0 - Recovery of expense and/or loss		
	F: V: T:	Item	
	Suspension and termination (A28 - A29)		
1.1.28	Clause 28.0 - Suspension by the contractor		
	F: V: T:	Item	
1.1.29	Clause 29.0 - Termination		
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	Brought forward	R	
	F: V: T:	Item	
	Dispute resolution (A30)		
1.1.30	Clause 30.0 - Dispute resolution		
	F: V: T:	Item	
	SECTION B: PRELIMINARIES		
	Interpretation (B1)		
1.1.31	Clause 1.1 - Definitions		
	F: V: T:	Item	
1.1.32	Clause 1.2 - Interpretation		
	F: V: T:	Item	
	Documents (B2)		
1.1.33	Clause 2.1 - Checking of documents		
	F: V: T:	Item	
1.1.34	Clause 2.2 - Provisional bills of quantities		
	The quantities in provisional bills of quantities are an indication of the works to be executed and are subject to remeasurement		
1.1.35	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	
	Carried forward Bill No. 1 PRELIMINARIES	R	
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	Brought forward	R	
	The construction documentation for the works is not complete and will only be completed during the construction period. The contractor and principal agent shall work together to identify the requirements for the provision of construction documentation. The contractor and principal agent shall agree the dates that are reasonable by when the contractor is to be provided with each outstanding item of the anticipated construction documentation.		
	The contractor and n/s subcontractor shall agree dates by when the n/s subcontractor is to be provided with each item of the outstanding documentation in terms of the programme.		
1.1.36	Clause 2.4 - Ordering of materials and goods		
	F: V: T:	Item	
	Previous work and adjoining properties (B3)		
1.1.37	Clause 3.1 - Previous work - dimensional accuracy		
	F: V: T:	Item	
	The contractor shall, within a reasonable period after taking possession of the site, but not exceeding ten (10) per cent of the construction period or twenty (20) working days whichever is the lesser, check the existing levels, lines, profiles and the like affecting the works and satisfy himself as to the dimensional accuracy of work previously executed. The contractor shall forthwith notify the principal agent and request a contract instruction regarding any dimensional inaccuracy found in work previously executed		
1.1.38	Clause 3.2 - Previous work - defects		
	F: V: T:	Item	
	The contractor, on becoming aware of a defect in work previously executed, shall forthwith notify the principal agent requesting a contract instruction regarding such a defect.		
1.1.39	Clause 3.3 - Inspection of adjoining properties		
	F: V: T:	Item	
	Carried forward	R	
	Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium		

	Brought forward	R	
	Before commencing the works, the principal agent and contractor shall arrange with the owners of adjacent buildings and properties and representatives of local authorities to inspect, among others, the buildings, structures, pavings, kerbs, channels and fences. The contractor shall record all conditions that the works could affect and copy the principal agent accordingly. The contractor shall pay particular attention to cracks, defects and existing levels related to structures, pavings, kerbs, channels and fences, which later could be claimed to have been caused or disturbed by the works.		
	Where instructed by the principal agent, levels and photographs shall be taken by the contractor and the cost thereof shall be for the employer's account. Certified copies shall be lodged with the principal agent.		
	The site (B4)		
1.1.40	Clause 4.1 - Defined works area		
	F: V: T:	Item	
1.1.41	Clause 4.2 - Handover of site in stages		
	F: V: T:	Item	
1.1.42	Clause 4.3 - Enclosure of the works		
	F: V: T:	Item	
1.1.43	Clause 4.4 - Geotechnical investigation		
	F: V: T:	Item	
1.1.44	Clause 4.5 - Encroachments		
	F: V: T:	Item	
1.1.45	Clause 4.6 - Existing premises occupied		
	F: V: T:	Item	
1.1.46	Clause 4.7 - Services - known		
	F: V: T:	Item	
	Carried forward	R	
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	Brought forward	R	
Clause 4.8 - Protection of trees and/or relevant natural fea	tures		
F: V: T:		Item	
Management of contract (B5)			
Clause 5.1 - Management of the works			
F: V: T:		Item	
Clause 5.2 - Progress meetings			
F: V: T:		Item	
Clause 5.3 - Technical meetings			
F: V: T:		Item	
Samples, shop drawings and manufacturer's instruction	ons (B6)		
Clause 6.1 - Samples of materials			
F: V: T:		Item	
Clause 6.2 - Workmanship samples			
F: V: T:		Item	
3 Clause 6.3 - Shop drawings			
F: V: T:		Item	
4 Clause 6.4 - Compliance with manufacturer's instructions			
F: V: T:		Item	
Deposits and fees (B7)			
5 Clause 7.1 - Deposits and fees			
F: V: T:		Item	
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	Brought forward	R	
	Temporary services (B8)		
1.1.56	Clause 8.1 - Water		
	F: V: T:	Item	
1.1.57	Clause 8.2 - Electricity		
	F: V: T:	Item	
1.1.58	Clause 8.3 - Ablution and welfare facilities		
	F: V: T:	Item	
1.1.59	Clause 8.4 - Communication facilities		
	F: V: T:	Item	
	Prime cost amounts (B9)		
1.1.60	Clause 9.1 - Responsibility for prime cost amounts		
	Where details of materials for which prime cost amounts are to be allowed <u>are</u> readily available, the quantity surveyor may elect to insert the relevant prime cost amounts in measured items, which measured items shall contain sufficient detail for the contractor to price for fixing and installation, waste, etc		
	F: V: T:	Item	
	Attendance on subcontractors (B10)		
1.1.61	Clause 10.1 - General attendance		
	F: V: T:	Item	
1.1.62	Clause 10.2 - Special attendance		
	General (B11)		
1.1.63	Clause 11.1 - Protection of the works		
	F: V: T:	Item	
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		Brought forward	R	
1.1.64	Clause 11.2 - Protection/isolation of existi	ing/sectionally occupied works		
	F: V: T:		Item	
1.1.65	Clause 11.3 - Security of the works			
	F: V: T:		Item	
1.1.66	Clause 11.4 - Notice before covering work	k		
	F: V: T:		Item	
1.1.67	Clause 11.5 - Disturbance			
	F: V: T:		Item	
	Clause 11.6 - Environmental disturbance			
	F: V: T:		Item	
1.1.68	Clause 11.7 - Works cleaning and clearin	ng		
	F: V: T:		Item	
1.1.69	Clause 11.8 - Vermin			
	F: V: T:		Item	
1.1.70	Clause 11.9 - Overhand work			
	F: V: T:		Item	
1.1.71	Clause 11.10 - Tenant installations by dir e	rect contractors		
	F: V: T:		Item	
1.1.72	Clause 11.11 - Advertising			
	F: V: T:		Item	
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	Brought forward	R	
Preliminaries schedule (B12)			
12.1 - Provisional bills of quantities [2.2]			
Yes			
12.2 - Availability of construction information [2.3]			
No			
12.3 - Previous work - dimensional accuracy [3.1] Yes			
12.4 - Previous work - defects [3.2]			
12.5 - Inspection of adjoining properties [3.3] Yes			
12.6 - Defined works area [4.1] Yes			
12.7 - Handover of site in stages [4.2] Yes			
12.8 - Enclosure of the works [4.3] Yes			
12.9 - Geotechnical investigation [4.4] Yes			
12.10 - Existing premises occupied [4.6] No			
12.11 - Services - known [4.7] Yes			
12.12 - Protection of trees and/or relevant natural features [4.8] Yes			
12.13 - Water [8.1]			
Option A (by contractor)			
No Option B (by employer - free of charge) No			
Option C (by employer - metered) Yes			
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12.14 - Electricity [8.2]		
Option A (by contractor) No		
Option B (by employer - free of charge) No		
Option C (by employer - metered) Yes		
12.15 - Ablution and welfare facilities [8.3]		
Option A (by contractor) Yes		
Option B (by employer) No		
12.16 - Communication facilities [8.4]		
12.17 - Protection of the works [11.1]		
12.18 - Protection/isolation of existing/sectionally occupied works [11.2]		
No		
12.19 - Disturbance [11.5]		
12.20 - Environmental disturbance [11.6]		
F: V: T:	Item	
SECTION C: SPECIFIC PRELIMINARIES		
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		
F: V: T:	Item	
Carried forward Bill No. 1	R	
PRELIMINARIES PRASA Prepared By SIST Consortium		
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	Brought forward	R	
1.1.73	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	
1.1.74	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	
1.1.75	Overloading		
	The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense		
	F: V: T:	Item	
1.1.76	Propping of floors below		
	The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor		
	F: V: T:	Item	
	Carried forward	R	
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1.1.77	Testing of flat roof waterproofing for watertightness		
	Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent , flooded with water and kept "ponded" for at least forty (40) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing		
	F: V: T:	Item	
1.1.78	Advertising rights		
	The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. Position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting the obligations under this agreement		
	F: V: T:	Item	
1.1.79	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	
1.1.80	Media releases		
	All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer		
	The contractor together with his subcontractors shall not, without the prior written consent of the employer , cause any statement or advertisement connected with this project to be printed, screened or aired by the media		
	F: V: T:	Item	
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	Brought forward	R	
1.1.81	Tenderers are 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 packing, duties, taxes, imposts, establishment charges, overheads, profit and all other obligations arising out of the agreement.		
	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 tenderer's omission to price any item will be entertained.		
	Prices for all plant, temporary works, services and other items provided shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary.		
	The contractor shall execute work during "overtime" hours as necessary in order to complete the project within the agreed construction period and shall provide such resources and work such overtime hours as necessary. Costs for the execution of this work under these conditions shall be included within the contract sum.	ltem	
1.1.82	Tenderers are advised that the nature of this contract is such that the detail design will evolve in parallel with construction.		
	The Tenderer acknowledges that he is aware that the project detail design and related planning and production of drawings are in an embryonic stage and that the appointments of major selected/nominated subcontractors have yet to take place and that notwithstanding this, the rates and prices contained herein, shall remain of full force and effect.	Item	
1.1.83	All costs incurred by the contractor in the preparation of claims to the satisfaction of the principal agent and/or quantity surveyor shall be borne by the contractor. The contractor shall provide a written opinion on all claims, including those submitted by selected/nominated subcontractors, pertaining to reduced time available for execution of the relevant work, out-of-sequence working, lack of access or claims of a similar nature.	ltem	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought fo	orward R	
1.1.84	Submission of a tender shall be deemed as acceptance by the contractor the is satisfied with the scope of the insurances effected by the employer, supplemented by any additional insurance considered necessary by himself		
	The employer warrants that the insurances effected by him shall remain in for the duration of the contract including the period of maintenance.	orce	
	Any clarification of the scope of cover provided by the policies arranged by temployer should be obtained from the employer's insurance brokers.	the	
	The contractor warrants that he shall give all notices and shall observe all the terms and conditions and requirements of all insurances applicable to this contract.	пе	
	Where the contractor is responsible for the appointment of sub-contractors, the contractor shall:	then	
	 i) ensure that potential and appointed subcontractors are aware of the whole content of Clauses A10.0, A11.0 and A12.0 ii) ensure the compliance of subcontractor with these Clauses where applicable. 	ltem	
1.1.85	In the In the event of any occurrence which is likely to give rise to a claim up the insurances arranged by the employer, the contractor / subcontractor sha	nder	
	i) In addition to any statutory requirement or other requirements conta in the agreement, immediately notify the employer's insurance broke by telephone or telefax, giving the circumstances, nature and an estimate of the loss or damage or liability;		
	ii) Complete a claims advice form per Annexure "L", in conjunction with both the principal agent and the employer and return it to the insura brokers without delay;		
	iii) Assist as required, in negotiations of the settlement of claims with the insurers through the employer's insurance brokers.	ne	
	The employer shall have the right to make all and any enquiry on the site or elsewhere as to the cause and results of any such occurrence and the control shall give the employer and his insurers full facilities for carrying out such	ractor	
	enquiries.	Item	
	Carried for Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	orward R	

	Brought forward	R	
1.1.86	Copies of the structural engineer's drawings showing the positions of construction breaks and the extent of individual concrete pours are to be maintained by the contractor for record purposes and are to be submitted to the structural engineers for their records, at the end of the project.		
	All such as-built drawings are required to be lodged prior to the issue of the certificate of works completion (refer Clause A25 hereof).	Item	
1.1.87	The contractor shall obtain and hand over to the principal agent on practical completion, all relevant guarantees and operating and maintenance manuals, as required by the principal agent or provided by manufacturers, suppliers or subcontractors.		
	The contractor shall ensure that all warranties and guarantees received are fully ceded to the employer on works completion, failing which, the issue of the works completion certificate and the release of construction guarantee, will be withheld until this is satisfactorily completed.		
	The guarantees shall state that workmanship, materials and installations are guaranteed for a specified period reckoned from the date of practical completion of the works and that any defects in the workmanship, materials and installation that may arise during that period, shall be made good at the expense of the contractor / subcontractors doing the work, upon written notice from the principal agent or the employer to do so.	ltem	
1.1.88	At completion, the contractor shall leave the works secure with all accesses locked. The contractor shall account for and hand over to the principal agent all keys, properly labelled with an itemised schedule to be signed by the principal agent as receipt.	ltem	
1.1.89	The contractor shall take all appropriate measures for general security of the works	Item	
1.1.90	The contractor shall give adequate notice to the principal agent whenever any work or material which is subject to inspection or remeasurement is to be covered or concealed in any way. In default of such a notice being received timeously by the principal agent such work shall be exposed and later made good at the contractor's expense.	ltem	
1.1.91	The contractor shall execute the works with a minimum of disturbance to adjoining premises, any parts of the works already handled over and the occupants of those premises and/or parts.	Item	
1.1.92	The contractor shall execute the works without any unreasonable adverse effect on the environment.	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought forward	R	
1.1.93	The contractor shall produce, when required to do so by the principal agent, a method statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the works. Any approval given or observation made by the principal agent shall not relieve the contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the works.	Item	
1.1.94	The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works, scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc., to the principal agent for their approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agents requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole experience.	Item	
1.1.95	The contractor shall take all reasonable measures to ensure that all alteration works are structurally practicable and safe. The contractor shall provide and price under the relevant demolition item, for all necessary temporary propping and support which may be required.	Item	
1.1.96	The contractor shall remove from the site all materials not conforming with the relevant specification and condemned by the principal agent, whether incorporated in the works or not. He shall replace such material and re-execute the affected work in accordance with the contract and without expense to the employer.	Item	
1.1.97	Notwithstanding anything to the contrary contained herein, the principal agent at all times reserves the right to direct the order in which the various parts of the contract are to be executed. The contractor shall give priority to any individual section or portion of the works that, in the opinion of the principal agent, requires to be expedited.		
	Should the contractor and/or principal agent be of the opinion that such instruction warrants a revision to the contract programme, then the provisions of Clause A15.6.6 hereof shall apply.		
	Should it appear, in the principal agent's opinion, that work in any area is not being executed in accordance with the requirements of the programme, the contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the principal agent.	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought forward	R	
1.1.98	The contractor shall indemnify the principal agent against any action, claim, demand, costs or expenses arising from or incurred by reason of any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the contractor, but such indemnity shall not cover any use of the equipment or part thereof otherwise than in accordance with the provisions of the specification.		
	All payments and royalties payable in one sum or by instalments or otherwise, shall be included by the contractor in the price and shall be paid by him to those to whom they may be due or payable.		
	In the event of any claim being made or action brought against the principal agent arising out of the matter referred to in this clause, the contractor shall be promptly notified thereof and may, at his own expense, conduct negotiations for the settlement of the same and/or litigation, that may arise therefrom. The principal agent shall not, unless and until the contractor shall have failed to take over and conduct the negotiations of litigation, make any admission which might be prejudicial thereto.		
	The conduct by the contractor of such negotiations or litigation shall be conditional upon the contractor having first given the principal agent such reasonable security as shall from time to time be required by the principal agent, to cover the amount ascertained or agreed or estimated, as the case may be, or any compensation, damage, expenses and costs for which the principal agent may become liable in respect of such infringement as aforesaid. The principal agent shall, at the request of the contractor, afford all available assistance for the purpose of contesting any such claim or action and shall be repaid the expenses incurred in doing so.		
	The conduct by the contractor of such negotiations or litigation shall be conditional upon the contractor having first given the principal agent such reasonable security as shall from time to time be required by the principal agent, to cover the amount ascertained or agreed or estimated, as the case may be, or any compensation, damage, expenses and costs for which the principal agent may become liable in respect of such infringement as aforesaid. The principal agent shall, at the request of the contractor, afford all available assistance for the purpose of contesting any such claim or action and shall be repaid the expenses incurred in doing so.	Item	
1.1.99	Note: The contractor is to ensure that the following requirements, as stated in the subcontractor documentation in respect of specialist equipment and services installations by specialist subcontractors under his control, are adhered to:	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA	R	
	Prepared By SIST Consortium		

	Brought forward	R	
1.1.100	All specialist plant and equipment, subject to the principal agents sole discretion, is subject to acceptance tests, which shall be arranged in the works of the subcontractor / supplier within 10 days of notification that such plant or equipment is available for testing. The subcontractor shall inform the principal agent in writing, indicating the exact dates for these acceptance tests during the course of the last month of manufacture of such plant or equipment.		
	In the event that the principal agent or his representatives cannot witness such tests, the employer may:		
	i) appoint a specialist inspection organisation to witness such tests at his expense on behalf of the principal agent or his representatives.		
	OR		
	ii) accept the subcontractors certificate testifying as to the quality and performance of the specialist plant / equipment so supplied.		
	Should no inspection have been made by the date indicated by the subcontractor as set out above, the equipment will be deemed as accepted and packed accordingly for delivery.		
	The final acceptance will take place on site in the presence of the subcontractor responsible for the commissioning of the equipment. The principal agents representative shall also be present.		
	The subcontractor shall demonstrate to the principal agent the full scope of operation of the installation and shall ensure that he is satisfied that the principal agent is fully aware of all the operational aspects of the installation prior to handover at practical completion stage.		
	The principal agents shall be afforded access at all reasonable times to such part of the works on site or at the subcontractor's premises or the premises of the manufacturer of component parts, as may be necessary for the purpose of inspecting, examining and testing the materials, workmanship and performance of any plant or equipment for the works.		
	The subcontractor shall be responsible for the tests required by any local statute, building regulation, etc.		
	Any breakdown or mechanical failure and any damage or consequential losses which may arise from such breakdown, mechanical or structural failure, will be the responsibility of the subcontractor.	Item	
	Carried forward Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

	Brought forward	R	
1.1.101	The efficiency of the design is the responsibility of the subcontractor who shall ensure that the quality of workmanship and the installation of equipment meets the requirements of the specification and is done in such a manner that the equipment performance meets with the figures published by the manufacturers an/or suppliers. The subcontractor, by entering into this contract, shall be deemed to have offered his services, workmanship, materials and equipment to meet the requirements of the specification and shall further be deemed to have ensured that the suppliers and manufacturers of the equipment installed by him under this contract, have manufactured and supplied such equipment to perform within the recommended limits of the manufacturer's design and performance figures, as well as to comply with the specification supplied.	Item	
1.1.102	The subcontractor shall guarantee the complete installation for a period of one year from the date of acceptance of the installation by the principal agent against defects as a result of patent or latent defects of the design and apparatus, as well as against faulty materials and workmanship. The guarantee must provide that all parts, spares, consumables and appurtenances that become defective during the guarantee period, be replaced free of charge of any nature to the employer. The costs of labour and transportation required to replace such part of a defective installation, shall be borne by the subcontractor and shall be included in his guarantee.		
	The expiry of the one year guarantee period shall in no way relieve the subcontractor of any of his obligations and/or responsibilities in respect of latent defects in terms of Clause A27 hereof.		
	The subcontractor shall cede to the employer the remainder of any equipment guarantee which he has received from his suppliers and which extends beyond the period of twelve months mentioned herein.	ltem	
1.1.103	The subcontractor shall commission and test the entire installation at his own expense, including provision of all test equipment. Such testing is to be done in the presence of the principal agent, who shall have been notified of the dates and approximate duration of the tests, sufficiently in advance so as to allow attendance at such tests	Item	
	SUMMARY OF CATEGORIES		
	Category : Fixed R		
	Category : Value R		
	Category : Time R		
	Carried to Final Summary Bill No. 1 PRELIMINARIES PRASA Prepared By SIST Consortium	R	

Item No	Description	Quantity	Rate	Amount	
	SECTION NO. 2				
	BILL NO. 1				
	REPAIRS AND RENOVATIONS TO EXISTING BUILDINGS (PROVISIONAL)				
	NOTE: For the purposes of tendering, only the total quantity shall be used in calculating the amount for inclusion in the tender at the tendered rate. The quantities in the description column immediately below the item represent the quantities per section for information and administration only as follows:				
	A - Administration Block				
	B - Customer Service				
	C - Platform Shelter and TVP				
	D - External Works				
	E - HVAC				
	F - Fire Protection Equipments				
	G - Electrical Installation				
	H - Security and Cleaners Staff Accommodation				
	SUPPLEMENTARY PREAMBLES				
	<u>View site</u>				
	Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained				
	Carried forward		R		
	Bill No. 1 ALTERATIONS (PROVISIONAL) PRASA Prepared By SIST Consortium				

Brought forward	R	
<u>Explosives</u>		
No explosives whatsoever may be used for demolition purposes unless otherwise stated		
Taking Out and Removal of Asbestos		
Taking out and removing asbestos roof, gutters, underlay, fibreglass, downpipes, etc. must be in strict accordance with health and occupational safety regulations and a specialist firm must be contracted to dispose of the material		
<u>Demolitions</u>		
All demolition work is to be carried out in accordance with the local by-laws.		
All demolition is to be carried out in strict accordance with the instructions and to the satisfaction of the Principal Agent.		
General		
Descriptions of taking out shall be deemed to include carting away from site to a dump ground to be found by the contractor		
The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent		
Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent		
Carried forward	R	
Bill No. 1 ALTERATIONS (PROVISIONAL) PRASA Prepared By SIST Consortium		
	l l	1

Brought forward	R	
fanlights, fittings, frames, linings, etc which are to sed shall be thoroughly overhauled before including taking off, easing and rehanging, ag up, re-wedging as required and making good, dowels, etc, and easing, oiling, adjusting and g ironmongery as necessary, replacing any glass ed in removal or subsequently and stopping up and screw holes with tinted plastic wood to imber, unless otherwise described. Re-painting arnishing is given separately		
for taking out of doors, windows, etc shall include oval of all beads, architraves, ironmongery, etc		
gard to building up of openings in existing walls, screeds and pavings, granolithic, tops of walls, all be levelled and prepared for raising of bork		
good of finishes shall include making good of k and concrete surfaces onto which the new are applied, where necessary		
ntractor will be required to take all dimensions g the existing buildings on the site and he will be lely responsible for the accuracy of all such ions where used in the manufacture of new items windows, fittings, etc)		
ntractor to acknowledge that sequencing of the ill be necessary to accommodate the operational of the school. The Contractor to accordingly ne above requirement in the construction name and pricing		
ntractor will be held responsible for any damage ons and property and for the safety of the res and he is to allow for protecting and ifying persons using the existing buildings from y virtue of the building operations, including ng necessary barriers, signs, etc.		
VAL OF EXISTING WORK		
Carried forward . 1 ATIONS (PROVISIONAL) d By SIST Consortium	R	
	fanlights, fittings, frames, linings, etc which are to seed shall be thoroughly overhauled before including taking off, easing and rehanging, ag up, re-wedging as required and making good, dowels, etc, and easing, oiling, adjusting and gironmongery as necessary, replacing any glass and in removal or subsequently and stopping up and screw holes with tinted plastic wood to imber, unless otherwise described. Re-painting irnishing is given separately for taking out of doors, windows, etc shall include oval of all beads, architraves, ironmongery, etc gard to building up of openings in existing walls, screeds and pavings, granolithic, tops of walls, all be levelled and prepared for raising of rk good of finishes shall include making good of k and concrete surfaces onto which the new are applied, where necessary Intractor will be required to take all dimensions githe existing buildings on the site and he will be lely responsible for the accuracy of all such ions where used in the manufacture of new items windows, fittings, etc) Intractor to acknowledge that sequencing of the libe necessary to accommodate the operational of the school. The Contractor to accordingly he above requirement in the construction me and pricing Intractor will be held responsible for any damage ones and property and for the safety of the sea and he is to allow for protecting and ifying persons using the existing buildings from yvirtue of the building operations, including an ecessary barriers, signs, etc. VAL OF EXISTING WORK	fanlights, fittings, frames, linings, etc which are to sed shall be thoroughly overhauled before including taking off, easing and rehanging, go up, re-wedging as required and making good dowels, etc, and easing, oiling, adjusting and go ironmongery as necessary, replacing any glass add in removal or subsequently and stopping up and screw holes with tinted plastic wood to imber, unless otherwise described. Re-painting imber, unless otherwise described and preparately for taking out of doors, windows, etc shall include oval of all beads, architraves, ironmongery, etc gard to building up of openings in existing walls, screeds and pavings, granolithic, tops of walls, sold be levelled and prepared for raising of rk. good of finishes shall include making good of k and concrete surfaces onto which the new are applied, where necessary utractor will be required to take all dimensions go the existing buildings on the site and he will be lely responsible for the accuracy of all such ons where used in the manufacture of new items windows, fittings, etc) Intractor to acknowledge that sequencing of the libe necessary to accommodate the operational of the school. The Contractor to accordingly the above requirement in the construction name and pricing Intractor will be held responsible for any damage ones and property and for the safety of the eas and he is to allow for protecting and frying persons using the existing buildings from yortuce of the building operations, including go necessary barriers, signs, etc. VAL OF EXISTING WORK

		Brought forward			R	
	Breaking down and removing brickw	vork etc				
2.1.1	One brick walls		m2	3		
	A:0 B:3 C:0	D:0				
	E:0 F:0 G:0	H : 0				
	Taking out and removing doors, wind including thresholds, sills, etc and p to receive new door and gates					
2.1.2	Timber single door size, door size 813	x 2032mm high.	No	11		
	A:0 B:2 C:0	D:0				
	E:0 F:0 G:0	H:9				
2.1.3	Steel gate size, door size 813 x 2032m	m high.	No	1		
	A:1 B:0 C:0	D:0				
	E:0 F:0 G:0	H:0				
	Taking out and removing doors, wind including thresholds, sills, etc and be openings in brick walls including machine the company of the comp					
2.1.4	Steel window size 600 x 400mm High		No	1		
	A:1 B:0 C:0	D:0				
	E:0 F:0 G:0	H:0				
	Taking out doors, windows, etc, including thresholds, sills, etc. setting aside for later re-fixing in similar new position	or re-use and				
2.1.5	Glazed steel window 1000 x 600m high setting up and building in new brickwor any broken glass panes with 6mm clea A:0 B:0 C:0	k and replacing	No	4		
	E:0 F:0 G:0	H : 4				
	Bill No. 1 ALTERATIONS (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward			R	

				Brought forward			R	
	Taking down ar ceilings, partition barges, chalkboo completely (new including cartin	ons, gutters oards, pinn w work else	s, downpip ing boards	oes, fascias, s, etc.				
2.1.6	Gypsum plastert brandering, etc	ooard ceiling	gs including	cornices, timber	m2	334		
	A : 215	B: 37	C:0	D:0				
	E:0	F:0	G:0	H : 82				
2.1.7	Fibre cement fas	scia boards	and fixings		m	127		
	A : 23	B : 64	C:0	D:0				
	E:0	F:0	G:0	H : 39				
2.1.8						32		
2.1.0	Fibre cement ba	rge boards a	and lixings C:0	D:0	m	32		
	E:0	F:0	G:0	H : 18				
2.1.9	Aluminium rainw	_	_		m	127		
	A : 23	B : 64	C:0	D:0				
	E:0	F:0	G:0	H : 39				
2.1.10	Aluminium rainw	ater downpi	pes and fix	kings	m	88		
	A : 21	B: 25	C:0	D:0				
	E:0	F:0	G:0	H : 42				
	fittings	aking good	l pipework	to receive new				
2.1.11	Vitreous paraple short lengths of		with flush	valve, including	No	2		
	A : 1	B : 1	C:0	D:0	110			
	E:0	F:0	G:0	H:0				
2.1.12	Vitreous china w	all hung urii	nal with flu		No	3		
	A : 3	B:0	C:0	D:0]		
	E:0	F:0	G:0	H:0				
	Bill No. 1 ALTERATIONS PRASA Prepared By SIST		-	Carried forward			R	

				Brought forwa	ard		R
2.1.13	Vitreous china w of piping, etc	ash hand b	asin, includ	ding short length	s No	7	
	A:6	B : 1	C:0	D:0			
	E:0	F:0	G:0	H:0			
	Taking out/off a	nd removi	ng sundry	<u>metalwork</u>			
2.1.14	Remove existing 450mm wide	steel slatte	ed seating	5800mm long x	No	12	
	A:0	B:0	C : 12	D:0			
	E:0	F:0	G:0	H : 0			
	Taking out and	removing	sundry joi	nery work			
2.1.15	Timber skirtings	from brickw	ork		m	306	
	A: 37	B: 197	C:0	D:0			
	E:0	F:0	G:0	H : 72			
	Taking up and i	removing v	inyl floor	coverings,			
2.1.16	Ceramic tile floor new vinyl floor co		ncluding pr	eparing screed f	or m2	252	
	A : 69	B: 183	C:0	D:0			
	E:0	F:0	G:0	H:0			
	Taking out and	removing	glass and	mirrors			
.1.17	Glass from steel and preparing fo measured)				es m2	1	
	A:0	B:0	C:0	D:0			
	E:0	F:0	G:0	H : 0			
	BUILDING UP	OPENING	i <u>S</u>				
	Brickwork in Ni		n class II r	nortar in			
	building up ope	<u>enings</u>					
2.1.18	One brick walls	5.0	2 2	D 0	m2	2	
	A:0		C:0	D:0			
	E:0	F:0	G:0	H : 0			
	MAKING GOO	D OF FINI	SHES ET	<u>C</u>			
	Bill No. 1 ALTERATIONS PRASA Prepared By SIST	•	•	Carried forwa	ard		R

	Brought forward			R	
	Making good face brickwork				
2.1.19	Cleaning and sealing of existing face brickwork A: 330 B: 0 C: 309 D: 0 E: 0 F: 0 G: 0 H: 0 Servicing of existing windows/doors	m2	639		
2.1.20	Servicing of window mechanism A: 10 B: 15 C: 0 D: 0 E: 0 F: 0 G: 0 H: 0 OPENINGS THROUGH EXISTING WALLS ETC Breaking out for and forming openings through brick walls for new windows, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with sloping fibre-	No	25		
2.1.21	cement sills on outside and flat fibre-cement sills on inside (new windows and making good paintwork elsewhere) Opening for window 600 x 400mm high through one brick wall A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0	No	1		
	Carried Forward to Sectional Summary: Bill No. 1 ALTERATIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Description	Unit	Quantity	Rate	Amo
SECTION NO. 2				
BILL NO. 2				
EARTHWORKS (PROVISIONAL)				
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
SUPPLEMENTARY PREAMBLES				
Classification of materials				
The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"				
If the contractor considers that any of the excavations are more difficult in nature than excavations in "earth", he shall immediately notify the Engineer and quantity surveyor in writing. If the contractor fails to make such notification, the excavations shall be deemed to be in "earth" and shall be measured, and valued, accordingly.				
The contractor may, with the prior written permission of the Engineer and in terms of the conditions of contract, use any method he chooses to excavate any class of material, but his chosen method of excavation shall not determine the classification of the materials excavated.				
Carting away of excavated material				
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				
Keeping excavations free of water				
The contractor shall protect the excavations from the ingress of water. Any water which occurs in the excavations, whether as a result of seepage, rain, or other causes, shall immediately be removed by baling, pumping, or other approved means.				
Carried forward Bill No. 2 EARTHWORKS (PROVISIONAL)			R	
PRASA Prepared By SIST Consortium				

				Brought forward			R
	<u>Formwork</u>						
	etc will only be Engineer for de irregularity or co measured and t	measured values of each of the cost the allowance for the excavation.	where it is poss. Formwork cavated fareof shall be or taking the	e deemed to be e risk of collapse			
	Spescification						
	Where BOQ ite Engineers spec the Engineers s	ification, Dr					
	EXCAVATION	OTHER 1	THAN BUL	<u>_K</u>			
	Excavate in ea	rth not exc	eeding 2m	deep			
.1	To reduce level	s under floc	ors		m3	0.2	
	A: 0.2	B: 0.0	C: 0.0	D: 0.0			
	E: 0.0	F: 0.0	G: 0.0	H: 0.0			
	Excavation in	earth not e	xceeding 2	m deep			
.2	Trenches				m3	53	
	A : 7	B : 19	C: 10	D:0			
	E:0	F:0	G:0	H : 18			
.3	Holes				m3	1	
	A : 0	B:0	C:0	D : 1			
	E:0	F:0	G:0	H : 0			
	Extra over tren	nch and hol	e excavati	ons in earth for			
4	Soft rock				m3	5	
•	A : 1	B:2	C : 1	D:0			
	E:0	F:0	G:0	H:2			
	Bill No. 2 EARTHWORKS PRASA Prepared By SIS	•	•	Carried forward			R

				Brought forward			R	
2.2.5	Hard rock				m3	15	1	
	A : 1	B:4	C:2	D : 4				
	E:0	F:0	G:0	H : 4				
	WORKING SP	ACE						
	Back excavation earth for working compacted to 9	ng space in	cluding ba	ackfilling				
2.2.6	for placing and r 1500mm deep e			m2	266			
	A : 22	B : 64	C:32	D : 88				
	E:0	F:0	G:0	H : 60				
	Extra over back space for excav			for working				
2.2.7	Back excavation deep etc. 300mr				m2	5		
	A : 1	B:2	C : 1	D:0				
	E:0	F:0	G:0	H : 2				
	Extra over back space for excav			for working				
2.2.8	Back excavation deep etc. 300mr				m2	44		
	A : 4	B : 13	C:6	D:8				
	E:0	F:0	G:0	H : 12				
	CARTING AW	<u>AY</u>						
	Extra over all e	xcavations	for carting	g away				
2.2.9	Surplus material site to a dumping No allowance main rate)	g site to be	located by		m3	47		
	A:4	B : 12	C:6	D : 15				
	E:0	F:0	G:0	H : 11				
	RISK OF COL	LAPSE						
	Bill No. 2 EARTHWORKS PRASA Prepared By SIST		-	Carried forward			R	
				- 31-				

	Brought forward			R	
Risk of collapse of excavations					
Sides of trench and hole excavations not 1,5m deep A: 22 B: 64 C: 32 E: 0 F: 0 G: 0	t exceeding D:0 H:60	m2	178		
KEEPING EXCAVATIONS FREE OF	WATER				
Keeping excavations free of water					
Keeping excavations free of all water oth subterranean water	ner than		Item		
FILLING, ETC:					
Backfilling to trenches, holes, etc		m3	29		
A:3 B:8 C:4	D : 7				
	H:/				
Compaction of surfaces					
floors etc including scarifying for a depth breaking down oversize material, adding material where necessary and compactin AASHTO density	of 150mm, suitable	m2	1		
A:1 B:0 C:0	D:0				
	H:0				
Prescribed density tests on filling					
"Modified AASHTO Density" test on requencement	uest by the	No	1		
A:1 B:0 C:0	D:0				
E:0 F:0 G:0	H:0				
Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward			R	
	Risk of collapse of excavations Sides of trench and hole excavations no 1,5m deep A: 22 B: 64 C: 32 E: 0 F: 0 G: 0 KEEPING EXCAVATIONS FREE OF COLLARS (Collaborate Processing Excavations free of water) Keeping excavations free of all water off subterranean water FILLING, ETC: Earth filling obtained from the excavate prescribed stock piles on site, compart Mod AASHTO density Backfilling to trenches, holes, etc A: 3 B: 8 C: 4 E: 0 F: 0 G: 0 COMPACTION Compaction of surfaces Trim, level off and compaction of ground floors etc including scarifying for a depth breaking down oversize material, adding material where necessary and compaction AASHTO density A: 1 B: 0 C: 0 E: 0 F: 0 G: 0 TESTS Prescribed density tests on filling "Modified AASHTO Density" test on requenting engineer A: 1 B: 0 C: 0 E: 0 F: 0 G: 0	Sides of trench and hole excavations not exceeding 1,5m deep A:22 B:64 C:32 D:0 E:0 F:0 G:0 H:60 KEEPING EXCAVATIONS FREE OF WATER Keeping excavations free of water Keeping excavations free of all water other than subterranean water FILLING, ETC: Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density Backfilling to trenches, holes, etc A:3 B:8 C:4 D:7 E:0 F:0 G:0 H:7 COMPACTION Compaction of surfaces Trim, level off and compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 TESTS Prescribed density tests on filling "Modified AASHTO Density" test on request by the engineer A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried forward Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA	Risk of collapse of excavations Sides of trench and hole excavations not exceeding 1,5m deep A:22 B:64 C:32 D:0 E:0 F:0 G:0 H:60 KEEPING EXCAVATIONS FREE OF WATER Keeping excavations free of water Keeping excavations free of all water other than subterranean water FILLING, ETC: Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density Backfilling to trenches, holes, etc A:3 B:8 C:4 D:7 E:0 F:0 G:0 H:7 COMPACTION Compaction of surfaces Trim, level off and compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 TESTS Prescribed density tests on filling "Modified AASHTO Density" test on request by the engineer A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried forward Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA	Risk of collapse of excavations Sides of trench and hole excavations not exceeding 1,5m deep A: 22 B: 64 C: 32 D: 0 E: 0 F: 0 G: 0 H: 60 KEEPING EXCAVATIONS FREE OF WATER Keeping excavations free of water Keeping excavations free of all water other than subterranean water FILLING, ETC: Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density Backfilling to trenches, holes, etc A: 3 B: 8 C: 4 D: 7 E: 0 F: 0 G: 0 H: 7 COMPACTION Compaction of surfaces Trim, level off and compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density A: 1 B: 0 C: 0 D: 0 E: 0 F: 0 G: 0 H: 0 TESTS Prescribed density tests on filling "Modified AASHTO Density" test on request by the engineer A: 1 B: 0 C: 0 D: 0 E: 0 F: 0 G: 0 H: 0 Carried forward Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA	Risk of collapse of excavations Sides of trench and hole excavations not exceeding 1,5m deep A:22 B:64 C:32 D:0 E:0 F:0 G:0 H:60 KEEPING EXCAVATIONS FREE OF WATER Keeping excavations free of water Keeping excavations free of all water other than subterranean water FILLING, ETC: Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density Backfilling to trenches, holes, etc A:3 B:8 C:4 D:7 E:0 F:0 G:0 H:7 COMPACTION Compaction of surfaces Trim, level off and compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 TESTS Prescribed density tests on filling "Modified AASHTO Density" test on request by the engineer A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried forward Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA

	Brought forward			R	
2.2.15	"Field Density" test including "Optimum Moisture Content" (four readings per test) A:1 B:0 C:0 D:0	No	1		
	E:0 F:0 G:0 H:0				
	SOIL POISONING				
	Approved brand of anti-termite soil poison applied by a Registered Pest control company and guaranteed against termite infestation for ten years. Soil Insecticide in accordance with SANS 5859				
2.2.16	To bottoms and sides of trenches etc A: 29 B: 83 C: 42 D: 109	m2	341		
	E:0 F:0 G:0 H:78				
	Carried Forward to Sectional Summary: Bill No. 2 EARTHWORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	BILL NO. 3				
	CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Cost of tests				
	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 architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)				
	<u>Concrete</u>				
	Where concrete is described as "cast against excavated surfaces" the Contractor is to allow in his rates for additional concrete to make up this tolerance/overbreak. The final net volumes of concrete shall be measurable from drawings only and no claims with regard to additional concrete to compensate for tolerances shall be entertained				
	Contractors are to include for any supplementary materials, placing, pumping, vibration or waste on placed quantities etc that are required in order to provide for a fully installed rate. (Net placed volumes are measured in the bills of quantities)				
	<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 reuse				
	Carried forward Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT (PR PRASA Prepared By SIST Consortium			R	

				Brought forward			R	
	The vertical strutt construction as is required support position until the support itself.	sufficiently without dar	/ strong to nage and s	afford the shall remain in				
	Formworks to soft slabs not exceed described							
	Formwork to side columns, etc., in and paid for only appointed Consu	foundations where spe	s is to be fi cifically ins	nally measured tructed by the				
	Specification							
	Where BOQ item Engineers specifi the Engineers sp	cation, Dra	wing "Gene	eral Notes". Then				
	UNREINFORCE EXCAVATED S			ST AGAINST				
	15MPa/19mm co	<u>oncrete</u>						
2.3.1	Surface blinding	under footir	ngs and ba	ses	m3	4		
	A:0	B : 1	C:0	D : 1				
	E:0	F:0	G:0	H:1				
	REINFORCED FORMWORK	CONCRE	TE CAST	ON/IN				
	25MPa/19mm co	ncrete						
2.3.2	Strip Footings				m3	16		
	A:2	B:6	C:3	D:0	6			
	E:0	F:0	G:0	H:5				
2.3.3	Bases				m3	2		
	A:0	B:0	C:0	D:2				
	E:0	F:0	G:0	H:0				
	Bill No. 3 CONCRETE, FO PRASA Prepared By SIST			Carried forward			R	

			i	Brought forward			R	
2.3.4	Concrete bench				m3	4		
	A : 1	B:0	C:3	D:0				
	E:0	F:0	G:0	H:0				
	30MPa/19mm cor	<u>ncrete</u>						
2.3.5	Stairs including la	ndings, bea	ms and inve	erted beams	m3	3		
	A:3	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 0				
	CONCRETE SU	<u>NDRIES</u>						
	Test Blocks							
2.3.6	Making and testing strength test cube) x 150mm (concrete	No	5		
	A:0	B:5	C:0	D:0				
	E:0	F:0	G:0	H : 0				
	Finishing top sur		oncrete sm	ooth with a				
2.3.7	Surface beds, ram	ne etc			m2	35		
2.0	A:0	в : 1	C : 34	D:0	1112	00		
	E:0		G:0	H:0				
	FORMWORK							
	ROUGH FORM	WORK (DE	GREE OF	ACCURACY				
	Rough formwork	to sides						
2.3.8	Strip footings not	_	•		m	178		
	A : 22	B: 64	C:32	D:0				
	E:0	F:0	G:0	H : 60				
	ROUGH FORMV	NORK (DE	GREE OF	ACCURACY				
				Carried forward			R	
	Bill No. 3							
	CONCRETE, FOR	RMWORK A	AND REINFO	ORCEMENT (PR				
	PRASA Prepared By SIST (Consortium						

				Brought forward			R	
	Rough formwo	ork to sides	<u>i</u>					
2.3.9	Sloping and ste 350mm high ex		edges of st	airs not exceeding	m	6		
	A : 6	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.3.10	Edges, risers, e high or wide	nds and re	/eals not ex	cceeding 300mm	m	105		
	A : 30	B:0	C:75	D:0				
	E:0	F:0	G:0	H:0				
2.3.11	Edges, risers, e high or wide	nds and re	/eals not ex	cceeding 300mm	m	10		
	A : 10	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	Rough formwo	ork to soffit	<u>s</u>					
2.3.12	Stairs with slopi	ing soffits			m2	1		
	A : 1	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.3.13	Landings				m2	35		
	A : 1	B:0	C:34	D:0				
	E:0	F:0	G:0	H:0				
	REINFORCE	MENT (PRO	OVISIONA	<u>.L)</u>				
	High tensile & concrete work		reinforcem	ent to structural				
2.3.14	Various Diamet	er Bars			t	4.48		
	A : 0.37	B: 0.58	C: 0.29	D : 2.71				
	E:0.00	F: 0.00	G: 0.00	H : 0.54				
	Fabric reinforc	<u>ement</u>						
2.3.15	Type 193 fabric bases etc.	reinforcem		surface beds,	m2	34		
	A:0	B:0	C:34	D:0				
	E:0	F:0	G:0	H:0				
		Carried Fo	rward to S	ectional Summary:			R	
	PRASA			NFORCEMENT (PR				
	Prepared By SIS	i Consortiu	111					
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Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	BILL NO. 4				
	MASONRY (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.				
	Specification				
	Where BOQ item descriptions are in conflict with Engineers specification, Drawing "General Notes". Then the Engineers specification is to take preference.				
	Hollow walls				
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole				
	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 "Brixeal" bitumen emulsion waterproofing coating				
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	<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				
	BLOCKWORK				
	Carried forward Bill No. 4 MASONRY (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Concrete masonry Blocks are to be econcrete masonry							
concrete masonry	either solid						
as mulcaled in ite		ng a comp					
<u>Blockwork</u>							
		SANS 101	45 "Concrete				
FOUNDATION	<u>IS</u>						
							
Brickwork of NF							
Half brick wall				O	4		
A : 4	B:0	C : 0	D:0	m2	4		
E:0	F:0	G:0	H : 0				
One brick wall				m2	31		
A : 4	B:7	C:0	D:0				
E:0	F:0	G:0	H : 20				
SUPERSTRUC	CTURE						
BRICKWORK							
Brickwork of NFI	P clay bric	ks in clas	s II mortar				
Half brick walls				m2	18		
A : 18	B:0	C:0	D:0		.0		
E:0	F:0	G:0	H:0				
One brick walls fo wall ties	rmed from	two 90mm	skins including	m2	3		
A : 3	B:0	C:0	D:0				
E:0	F:0	G:0	H : 0				
BRICKWORK S	UNDRIES	<u> </u>					
PRASA		-	Carried forward			R	
	Blockwork Blockwork shall company Construction FOUNDATION BRICKWORK Brickwork of NF: strength) clay im Half brick wall A:4 E:0 One brick wall A:4 E:0 SUPERSTRUCT BRICKWORK Brickwork of NF: Half brick walls A:18 E:0 One brick walls A:18 E:0 BRICKWORK Brickwork of NF: Half brick walls A:18 E:0 BRICKWORK Brickwork of NF: Wall ties A:3 E:0 BRICKWORK S BRICKWORK S BRICKWORK S BRICKWORK S	Blockwork shall comply with Masonry Construction" FOUNDATIONS BRICKWORK Brickwork of NFX (14 MPa strength) clay imperial brick Half brick wall A:4 B:0 E:0 F:0 One brick wall A:4 B:7 E:0 F:0 SUPERSTRUCTURE BRICKWORK Brickwork of NFP clay brick Half brick walls A:18 B:0 E:0 F:0 One brick walls formed from wall ties A:3 B:0 E:0 F:0 BRICKWORK SUNDRIES BRICKWORK SUNDRIES	Blockwork shall comply with SANS 101 Masonry Construction" FOUNDATIONS BRICKWORK Brickwork of NFX (14 MPa nominal of strength) clay imperial bricks in cementary in the strength of the stre	Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" FOUNDATIONS BRICKWORK Brickwork of NFX (14 MPa nominal compressive strength) clay imperial bricks in cement mortar Half brick wall A:4 B:0 C:0 D:0 E:0 F:0 G:0 H:0 One brick wall A:4 B:7 C:0 D:0 E:0 F:0 G:0 H:20 SUPERSTRUCTURE BRICKWORK Brickwork of NFP clay bricks in class II mortar Half brick walls A:18 B:0 C:0 D:0 E:0 F:0 G:0 H:0 One brick walls A:3 B:0 C:0 D:0 E:0 F:0 G:0 H:0 BRICKWORK SUNDRIES Carried forward Bill No. 4 MASONRY (PROVISIONAL) PRASA	Blockwork Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" FOUNDATIONS BRICKWORK Brickwork of NFX (14 MPa nominal compressive strength) clay imperial bricks in cement mortar Half brick wall A: 4 B: 0 C: 0 D: 0 E: 0 F: 0 G: 0 H: 0 One brick wall A: 4 B: 7 C: 0 D: 0 E: 0 F: 0 G: 0 H: 20 SUPERSTRUCTURE BRICKWORK Brickwork of NFP clay bricks in class II mortar Half brick walls A: 18 B: 0 C: 0 D: 0 E: 0 G: 0 H: 0 One brick walls formed from two 90mm skins including wall ties A: 3 B: 0 C: 0 D: 0 E: 0 G: 0 H: 0 BRICKWORK SUNDRIES Carried forward Bill No. 4 MASONRY (PROVISIONAL) PRASA	Blockwork Blockwork Blockwork SANS 10145 "Concrete Masonry Construction"	Blockwork Blockwork SANS 10145 "Concrete Masonry Construction"

				Brought forward	ı		R	
	Bagging of 1:3	3 cement an	d sand mi	xture				
2.4.5		ır required ir ing around w	raising wa	lls including any all in two separate d / or brick D:0 H:0	m2	3		
	Slip joints	1.0	G.0	11.0				
2.4.6	230mm Wide h	g brick walls	consisting	inction of slabs of two layers of 3 asonry surfaces	m	10		
	A:0	B:0	C:0	D : 10				
	E:0	F:0	G:0	H:0				
	Brickwork rein	forcement						
2.4.7	75mm Wide rei A : 70 E : 0	nforcement B:0 F:0	built in hori: C:0 G:0	zontally D:0 H:0	m	70		
2.4.8	150mm Wide ro A : 91 E : 0				m	655		
	Prestressed fa	bricated co	ncrete lint " supports	els including				
2.4.9	110 x 75mm Li A : 12 E : 0	ntels in leng B:0 F:0	ths not exc C:0 G:0	eeding 3m long D:0 H:0	m	12		
	Galvanised wi		0.0	11.0				
2.4.10	30 x 1.6mm Ro			ne end built into r	No	120		
	A : 22	B : 61	C:0	D:0				
	E:0	F:0	G:0	H : 37				
	Bill No. 4 MASONRY (PF PRASA Prepared By SIS		•	Carried forward	i		R	

				Brought forw	ard		R	
	Air bricks etc							
2.4.11	229 x 152mm	Terra-cotta ve	ermin proof	air brick	No	16		
	A:4	B:4	C:0	D:0				
	E:0	F:0	G:0	H:8				
	FACE BRICK							
	FBS face brick and perpends	ks in stretch internally a	er bond wi nd externa	th ruled joints lly				
2.4.12	Extra over bricl	kwork for face	e brickwork	(LI)	m2	3		
	A:3	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
		Carried For	ward to Se	ctional Summa	nry:		R	
	Bill No. 4 MASONRY (PR	ROVISIONAL	-)					
	PRASA Prepared By SIS							
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Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO. 2			ii	
	BILL NO. 5				
	WATERPROOFING (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	GENERAL				
	PREPARATION: All surfaces to receive waterproofing are to be thoroughly cleaned down to remove grease spots, concrete laitance, etc., wire brushed and free from dust and loose material and thoroughly dry before commencement of any waterproofing.				
	SPECIALIST WATERPROOFER: The waterproofer shall apply the waterproofing and secondary materials in accordance with application techniques which are approved by the manufacturer of the waterproofing.				
	MATERIALS				
	GENERAL: All waterproofing to be layed in accordance with SABS 021-1973 "The Waterproofing of Buildings".				
	BITUMEN: Bitumen primer is to be spread at a rate of 0,3 litres per m² and allowed to dry before the waterproof sheeting is laid.				
	WATERPROOF SHEETING: Tenderers must allow for the design, supply and installation of all waterproofing for areas included. Tenderers are to include for the preparation of the substrate in accordance with manufacturers specifications.				
	Proprietary waterproofing specifications available to tenderers include, but is not limited to, Derbigum, Index, Bituthene. Any proposed specification, which must have a proven track record, shall be submitted to the Principal Agent for comment and record purposes. The subcontractor shall be an approved applicator of the chosen system/specification. The manufacturer is required to do regular inspections and be present at all flood and drench tests."				
	Carried forward Bill No. 5 WATERPROOFING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

				Brought forward			R	
	PROTECTION							
	All necessary proprotection of con			en for the				
	PRICES							
	Prices are to increceive waterpro layers and for cle	ofing, prepa	aration of su	urfaces between				
	Prices are to inc		oing and se	ealing, etc. and all				
	WATERPROOF	ING GUAR	<u>ANTEE</u>					
	GUARANTEE : waterproofing gu including flashing	ıarantee for	all the water	erproofing				
	DAMP-PROOF	ING OF W	/ALLS AN	D FLOORS				
	One layer of 37	5 micron e	mbossed c	damp proof				
2.5.1	In walls, in caviti etc.	es, in lintels	s, under cop	oings, under sills,	m2	2		
	A:2		C:0	D:0				
	E:0	F:0	G:0	H:0				
	Two coats brixe coating	eai bitumer	<u>emuision</u>	waterproot				
2.5.2	On brick walls				m2	3		
	A:3	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	Bill No. 5 WATERPROOF PRASA Prepared By SIST	ING (PROV	ISIONAL)	ctional Summary:			R	

Item No	Description					Quantity	Rate	Amount	
	SECTION NO	<u>). 2</u>							
	BILL NO. 6								
	CARPENTRY (PROVISION		<u>INERY</u>						
	Wrought softw								
2.6.1	_				m	712			
2.0.1	76 x 50mm Purl A : 443	B : 104	C:0	D:0	""	712			
	E:0	F:0	G:0	H : 165					
2.6.2	38 x 114mm Tin facsia boards (L		g board fixe	ed onto rafter for	m	127			
	A : 23	B:64	C:0	D:0					
	E:0	F:0	G:0	H : 39					
	EAVES, VERG	SES, ETC.							
	Medium densit			nent boards to					
2.6.3	12mm x 300mm profile fascia joil washers			ng aluminium H- sed screws and	m	127			
	A : 23	B:64	C:0	D:0					
	E:0	F:0	G:0	H : 39					
2.6.4	12mm x 300mm jointing strips	n Barge boar	ds includin	g H-profile	m	32			
	A:7	B:7	C:0	D:0					
	E:0	F:0	G:0	H : 18					
	<u>SKIRTINGS</u>								
	Wrought merar	<u>nti</u>							
2.6.5	16 x 100mm Hig plugged	gh skirtings i	ncluding qı	uadrant bead,	m	306			
	A : 37	B : 197	C:0	D:0					
	E:0	F:0	G:0	H : 72					
	DOORS, ETC.	-							
				Carried forward			Б		
	Bill No. 6 CARPENTRY A	.ND JOINER	Y(PROVIS	Carried forward			R		
	PRASA Prepared By SIS		•	-					
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	Brought forward		R	
	Note: Tenderers to refer to the following drawing numbers when pricing items below: Prasa Blue Print Book			
	Semi-solid flush doors with 3,2mm plain (to receive primer and paint, measured elsewhere) hardboard covering on both sides, hung to steel frames			
2.6.6	44mm Thick semi-solid flush panel door size 813 x 2032mm high	10		
	A:0 B:2 C:0 D:0 E:0 F:0 G:0 H:8			
	Double sided framed, braced and ledged hardwood doors including saligna weather bar at bottom (to receive varnish, measured elsewhere), hung to steel frames			
2.6.7	44mm Thick door size 1000 x 2032mm high - Disabled door No	2		
	E:0 F:0 G:0 H:1			
	FITTINGS GRANITE COUNTER TOPS, ETC			
	32mm Thick "Rusternberg" or similar and equally approved worktop with a beveled front edge including 80mm Diameter support post fixed to floor and counter top, complete with counter top fixed and sealed to brick walls by specialists			
2.6.8	2220 x 600 x 32mm Thick counter top with bullnosed edges all round including 50 x 50 x 3mm mild steel angle support as per Architects drawing Arch-289-22 A: 2 B: 0 C: 0 D: 0 E: 0 F: 0 G: 0 H: 0	2		
	COUNTER TOPS AND CUPBOARDS			
	Carried forward Bill No. 6 CARPENTRY AND JOINERY(PROVISIONAL) PRASA Prepared By SIST Consortium		R	

				Brought forward			R	
	32mm Thick hea equally approve including 80mm and counter top and sealed to br	d worktop Diameter s , complete	with a bevolute by with coun	reled front edge ost fixed to floor ter top fixed				
2.6.9	1598mm long x 6 cupboards (granit accordance with t	te elsewher	e measure	d) floor unit in	No	1		
	A:0	B:1	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.6.10	2441mm long x 6 cupboards (granit accordance with t	te elsewher the Archited	e measure ct's drawing	d) floor unit in J no. GA-002	No	1		
	A : 0	B : 1	C:0	D:0				
2.6.11	E:0 3440mm long x 6 cupboards (granit	te elsewher	e measure	d) floor unit in	No	1		
	A : 0	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 1				
2.6.12	2280mm long x 6 store worktops in drawing no. GA-0	accordance			No	1		
	A : 0	B:0	C:0	D:0	140	'		
	E:0	F:0	G:0	H:1				
2.6.13	L-shaped 6785mi store 01 and 02 v	m long x 60	0mm wide	x 900mm High				
	Architect's drawin				No	1		
	A:0	B:1	C:0	D:0				
	E:0	F:0	G:0	H:0				
	C. Bill No. 6 CARPENTRY AN PRASA Prepared By SIST	ID JOINER	Y(PROVIS	ctional Summary: IONAL)			R	

Item No	Description	Quantity	Rate	Amount
	SECTION NO. 2			
	BILL NO. 7			
	CEILINGS & PARTITIONS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	Pricing of Bills			
	Tenderers are advised to inspect the drawings issued with this enquiry and to satisfy themselves as to the nature and requirements of the contract. No extras will be allowed due to the Contractor's failure in this respect.			
	Quantities contained in these Bills of Quantities are only indicative of the actual final quantities required and shall not be used for ordering purposes.			
	The descriptions contained in these Bills of Quantities are intended as a means of identifying the various facets of the work. Tenderers shall allow for all costs in connection with the various items taking full cognizance of drawings, schedule of finishes and the Bills of Quantities descriptions.			
	Final measurement shall be made from construction drawings or from measurements taken on site.			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.			
	<u>Ceilings</u>			
	All units shall be readily removable from either side without disturbing adjacent units.			
	Unless otherwise described ceilings shall be deemed to be horizontal.			
	Carried forward Bill No. 7		R	
	CEILINGS (PROVISIONAL) PRASA			
	Prepared By SIST Consortium			

Brought forward	R	
Proprietary suspended ceilings		
Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations.		
Electrical light fittings, diffusers, panels etc are generally "lay-in" units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof).		
Flush plastered gypsum plasterboard suspended ceilings		
Ceilings shall comprise 9mm and 12mm gypsum plasterboard boards screwed to and including screw-up suspension grid consisting of main tees at 1 200mm centres and galvanised steel capped cross tees at 400mm centres and with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface.		
The grid shall be suspended by means of galvanised steel L-section hangers at suitable centres, securely shot-pinned or screwed to concrete, steel or wood.		
The tenderers are to allow for a continuous corner bead edge trim to the exposed plasterboard edges.		
Flush plastered gypsum plasterboard suspended bulkheads		
Bulkheads shall comprise galvanised steel studding of 63,5mm top and bottom tracks with vertical studs at maximum 400mm centres, pop-riveted to the top and bottom tracks with similar additional vertical studs as necessary at abutments, ends, etc and covered as described with plasterboard screwed to studding with drywall screws at maximum 300mm centres. Boards shall be butt jointed and finished with tape and jointing compound and the whole finished with gypsum plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer.		
Carried forward Bill No. 7 CEILINGS (PROVISIONAL)	R	

for ceilings, parance with SANS ed insulation ass mineral wool bely fitted with eluspended ceiling 37	reinforced inds butted firmly is, nailed up D:0 H:82 Stic panels on ncluding hangers, dges, etc	m2	334		
ed insulation ass mineral wool beely fitted with eluspended ceiling 37 C:0 5:0 G:0 LINGS e-painted acoun n grid system in clips and we not exceeding 1r 3:0 C:0 5:0 G:0	reinforced ands butted firmly as, nailed up D:0 H:82 Stic panels on acluding hangers, dges, etc a below timber D:0	m2			
ed insulation ass mineral wool beely fitted with eluspended ceiling 37 C:0 5:0 G:0 LINGS e-painted acoun n grid system in clips and we not exceeding 1r 3:0 C:0 5:0 G:0	reinforced ands butted firmly as, nailed up D:0 H:82 Stic panels on acluding hangers, dges, etc a below timber D:0	m2			
ass mineral wool sely fitted with eluspended ceiling : 37	ends butted firmly is, nailed up D:0 H:82 Stic panels on including hangers, dges, etc The below timber D:0				
ass mineral wool sely fitted with eluspended ceiling : 37	ends butted firmly is, nailed up D:0 H:82 Stic panels on including hangers, dges, etc The below timber D:0				
sely fitted with euspended ceiling : 37	ends butted firmly is, nailed up D:0 H:82 Stic panels on including hangers, dges, etc The below timber D:0				
e-painted acoungrid system in clips and we not exceeding 1r	H:82 stic panels on ncluding hangers, dges, etc n below timber D:0		33		
e-painted acount of grid system is and we not exceeding 1r 3:0 C:0 5:0 G:0	stic panels on ncluding hangers, dges, etc n below timber		33		
e-painted acount grid system in clips and we not exceeding 1r	ncluding hangers, dges, etc n below timber		33		
n grid system in grid	ncluding hangers, dges, etc n below timber		33		
3:0 C:0 5:0 G:0	D:0	m2	33		
G:0					
	H:0			ll l	ı
pre-painted acc					
	oustic panels on ocluding hangers, dges, etc				
not exceeding 1r	n below timber	m2	133		
3:0 C:0	D:0				
G:0	H : 0				
<u>s</u>					
ONAL) sortium	Carried forwar	rd		R	
	ONAL)	Carried forwar	Carried forward	Carried forward	Carried forward R

			Brought forward	a		R	
covered with wi 600mm, laid on demountable su galvanised main suspended with exceeding 1200 with Shadowline	hite embos fire rated C uspension s n tees, cros n galvanise mm, with c e W-trim pl	sed vinyl, Cliq syster system ind s tees, et d hangers eiling per ugged at 2	size 1200 x m S3 exposed cluding c., all at centres not imeter finished 200mm centres,				
centres in one di and hung with su	rection only uspension b	, joined wit rackets inc	th joiner sections cluding standard	m2	168		
A : 49	B:37		D:0				
F·0	F·0		H · 82				
Extra over ceiling rebated framing	g for 600 x 6 cross brand	600mm tra _l ers covere	p door including	No	2		
A : 2	B:0	C:0	D:0				
E:0	F:0	G:0	H:0				
CORNICE							
Gypsum plaster	rboard corr	<u>ices</u>					
65mm Coved co	rnicos			m	247		
		0.0	D . 0	""	241		
E:0	F:0	G:0	H : 115				
Shadow line							
				m	203		
E:0	F:0	G:0	H:0				
Bill No. 7 CEILINGS (PRO PRASA	VISIONAL)		ectional Summary	:		R	
	covered with with 600mm, laid on demountable sugalvanised main suspended with exceeding 1200 with Shadowline and all installed. Ceilings including centres in one diand hung with susteel perimeter at A:49 E:0 Extra over ceiling rebated framing board and fitted A:2 E:0 CORNICE Gypsum plaster 65mm Coved con A:132 E:0 Shadow line 25 x 25mm Shadte grid between A:203 E:0	covered with white embose 600mm, laid on fire rated Community and tees, cross suspended with galvanised exceeding 1200mm, with compared to with Shadowline W-trim pland all installed to manufact centres in one direction only and hung with suspension by steel perimeter angles fixed A:49 B:37 E:0 F:0 Extra over ceiling for 600 x 60 rebated framing cross brand board and fitted flush in operation of the fixed and fitted flush in operation of the fixed and fitted flush in operation of the fixed and fixed flush in operation of the fi	covered with white embossed vinyl, 600mm, laid on fire rated Cliq system demountable suspension system in galvanised main tees, cross tees, et suspended with galvanised hangers exceeding 1200mm, with ceiling per with Shadowline W-trim plugged at a and all installed to manufacturer's in Ceilings including standard steel brand centres in one direction only, joined with and hung with suspension brackets income steel perimeter angles fixed to walls etc. A: 49 B: 37 C: 0 E: 0 F: 0 G: 0 Extra over ceiling for 600 x 600mm trainedated framing cross branders covered board and fitted flush in opening A: 2 B: 0 C: 0 E: 0 F: 0 G: 0 CORNICE Gypsum plasterboard cornices A: 132 B: 0 C: 0 E: 0 F: 0 G: 0 Shadow line 25 x 25mm Shadowline angle cornice tee grid between suspended ceiling an A: 203 B: 0 C: 0 E: 0 F: 0 G: 0 Carried Forward to Set Bill No. 7 CEILINGS (PROVISIONAL)	Extra over ceiling for 600 x 600mm trap door including rebated framing cross branders covered with ceiling board and fitted flush in opening A:2 B:0 C:0 D:0 E:0 F:0 G:0 H:0 CORNICE Gypsum plasterboard cornices A:132 B:0 C:0 D:0 E:0 F:0 G:0 H:115 Shadow line 25 x 25mm Shadowline angle cornice "L" trim, to match tee grid between suspended ceiling and wall A:203 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried Forward to Sectional Summary Bill No. 7 CEILINGS (PROVISIONAL) PRASA	covered with white embossed vinyl, size 1200 x 800mn, 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, with ceiling perimeter finished with Shadowline W-trim plugged at 200mm centres, and all installed to manufacturer's instructions Ceilings including standard steel brandering at 450mm centres in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc m2 A:49 B:37 C:0 D:0 E:0 F:0 G:0 H:82 Extra over ceiling for 600 x 600mm trap door including rebated framing cross branders covered with ceiling board and fitted flush in opening No A:2 B:0 C:0 D:0 E:0 F:0 G:0 H:0 CORNICE Gypsum plasterboard cornices 65mm Coved cornices m A:132 B:0 C:0 D:0 E:0 F:0 G:0 H:115 Shadow line 25 x 25mm Shadowline angle cornice "L" trim, to match tee grid between suspended ceiling and wall m A:203 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried Forward to Sectional Summary: Bill No. 7 CEILINGS (PROVISIONAL) PRASA	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, with ceilling perimeter finished with Shadowline W-trim plugged at 200mm centres, and all installed to manufacturer's instructions Ceilings including standard steel brandering at 450mm centres in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc	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 qaivanised hangers at centres not exceeding 1200mm, with ceiling perimeter finished with Shadowline W-trim plugged at 200mm centres, and all installed to manufacturer's instructions Ceilings including standard steel brandering at 450mm centres in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc A:49 B:37 C:0 D:0 E:0 F:0 G:0 H:82 Extra over ceiling for 600 x 600mm trap door including rebated framing cross branders covered with ceiling board and fitted flush in opening A:2 B:0 C:0 D:0 E:0 F:0 G:0 H:0 CORNICE Gypsum plasterboard cornices 65mm Coved cornices A:132 B:0 C:0 D:0 E:0 F:0 G:0 H:115 Shadow line 25 x 25mm Shadowline angle cornice "L" trim, to match tee grid between suspended ceiling and wall A:203 B:0 C:0 D:0 E:0 F:0 G:0 H:0 Carried Forward to Sectional Summary: R Bill No. 7 CEILINGS (PROVISIONAL) PRASA

Item No	Description					Quantity	Rate	Amount	
	SECTION NO). <u>2</u>							
	BILL NO. 8								
	IRONMONGE	RY (PRC	VISIONA	<u>AL)</u>					
	Note: All ironmo								
	<u>HINGES</u>								
2.8.1	100 x 75 x 3mm	Stainless s	teel ball be	aring butt hinge	No	36			
	A:3	B:6	C:0	D:0					
	E:0	F:0	G:0	H : 27					
	<u>LOCKS</u>								
2.8.2	Four lever morti plate	ce lockset	with stainle	ss steel strike	No	12			
	A : 1	B:2	C:0	D:0					
	E:0	F:0	G:0	H : 9					
	<u>HANDLES</u>								
2.8.3	Dove pull handle onto door panel	with 152 x	152mm Ba	ackplate screwed	Pairs	12.0			
	A : 1.0	B: 2.0	C:0.0	D: 0.0					
	E:0.0	F: 0.0	G: 0.0	H : 9.0					
	KICK PLATES	& PUSH	<u>PLATES</u>						
2.8.4	Stainless steel k	ick plate siz	e 300 x 80	0 x 1.2mm Thick	No	2			
	A : 2	B:0	C:0	D:0					
	E:0	F:0	G:0	H:0					
	DOOR CLOSE	RS							
2.8.5	Cam motion doo	r closer			No	2			
	A : 2	B:0	C:0	D:0					
	E:0	F:0	G:0	H:0					
	Bill No. 8 IRONMONGERY PRASA Prepared By SIST	-		Carried forwa	ard		R		

				Brought forward			R	
	<u>SUNDRIES</u>							
2.8.6	Brushed stainless	s steel floor	door stop	with rubber	No	12		
	A : 1	B:2	C:0	D:0				
	E:0	F:0	G:0	H:9				
2.8.7	Rubber tipped ha	at and coat	hook		No	11		
	A : 11	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	WASTE BINS							
2.8.8	Steel litter bin siz capacity with stee polyurethane pail	el ash tray,			No	8		
	A:0	B:0	C:8	D:0				
	E:0	F:0	G:0	H:0				
	BATHROOM F	<u>ITTINGS</u>						
2.8.9	Satin stainless st and refillable 1 lit screwed to the w	re containe	r, cylinder l	ock, plugged and	No	10		
	A:6	B:3	C:0	D:0				
	E:0	F:0	G:0	H : 1				
2.8.10	Stainless steel ju indicator and cyli wall with stainles	nder lock, p	olugged and		No	12		
	A : 5	B:2	C:0	D:0				
	E : 0	F:0	G:0	H : 5				
2.8.11	304 stainless ste plugged and scre	s) or equal a el finish, ov ewed to wal	approved w erall size 8 I with stainl	ith brushed grade 42mm long, ess steel screws.	No	2		
	A : 1 E : 0	B:0 F:0	C:0 G:0	D:0 H:1				
	L.0	F.0	G.0	11.1				
				Carried forward			R	
	Bill No. 8 IRONMONGERY PRASA Prepared By SIST		,					

				Brought forw	ard		R	
2.8.12	Bathroom Butler 3 supports (code brushed grade 30 750 x 750mm, pl stainless steel so	: GRDG03I 04 stainless ugged and	3) or equal as steel finish	approved with , overall size	No No	2		
	A : 1	B:0	C:0	D:0	NO	2		
	E:0	F:0	G:0	H:1				
2.8.13	Satin stainless st capacity of min10 (plugged and scr screws)	O litres, free	standing, c	or wall mounted				
	3016W3)				No	8		
	A:6	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 2				
	Bill No. 8 IRONMONGERY PRASA Prepared By SIST	(PROVISI	ONAL)	ctional Summa	ary:		R	

Item No	Description	Quantity	Rate	Amount
	SECTION NO. 2			
	BILL NO. 9			
	METALWORK (PROVISIONAL)			
	STAINLESS STEEL HANDRAILS			
	Welded handrails to stainless steel base plate			
2.9.1	38mm diameter x 15000mm long stainless steel handrail fixed to brickwork as per Architect's drawing - Holding Cell			
	No	2		
	A:2 B:0 C:0 D:0 E:0 F:0 G:0 H:0			
	WELDED GALVANISED STEEL SCREENS, GATES, ETC.			
	Screens and gates			
2.9.2	Single gate size 900 x 2100mm high of 60 x 40 x 2mm Mild steel rods at 110mm centres and 40 x 6mm horizontal supports with 20mm holes for vertical rods fixed onto 50 x 50 x 3mm Angle iron frame with 50 x 50mm Lugs welded on at 450mm centres and bolted to reveal with 10mm Diameter rawl bolts fixed to walls with bolts and lugs including opening for deadbolt - as per door schedule (All Buildings) A:1 B:0 C:0 D:0 E:0 F:0 G:0 H:0	1		
	SUNDRY STAINLESS STEELWORK			
	HOT DIPPED GALVANISED MILD STEEL DOOR FRAMES 1,6mm Double rebated pressed steel door frames suitable for one brick walls			
2.9.3	Frame for door type A 813 x 2032mm high No	20		
	A:1 B:2 C:0 D:0 E:0 F:0 G:0 H:17			
	GALVANISED STEEL WINDOWS, DOORS, ETC			
	Carried forward Bill No. 9 METALWORK (PROVISIONAL) PRASA Prepared By SIST Consortium		R	

	Brought forward			R	
	Standard galvanised mild steel windows with galvanised mild steel burglar bars to fixed panes and opening sections (burglar bars to be factory fitted to the window frames prior to galvanising), including all window ironmongery in accordance with the Architect's window schedules				
2.9.4	Window size 400 x 600mm high	No	1		
	A:1 B:0 C:0 D:0				
	E:0 F:0 G:0 H:0				
2.9.5	Door size 1600 x 2032mm high including vent louvres	No	2		
	A:0 B:2 C:0 D:0				
	E:0 F:0 G:0 H:0				
	STEEL STRONGROOM DOORS, VENTILATORS, ETC				
	Strong room doors, etc.				
2.9.6	'Category 2' or equal and approved 30mm thick pre- painted strong room door, approximate overall size 830 x 1932mm high including frame, all standard ironmongery, etc. supplied and fixed in accordance with the manufacturer's instructions all to the approval of the Architect	No	1		
	A:0 B:1 C:0 D:0	140	'		
	E:0 F:0 G:0 H:0				
	BULLET PROOF WINDOWS				
	Level G3 bullet resistant glazed & natural anodised aluminium transaction window with 30mm deep stainless steel dish tray and speech transfer posts (interior applications only)				
2.9.7	Transaction window overall size 915 x 600mm high	No	1		
	A:1 B:0 C:0 D:0				
	E:0 F:0 G:0 H:0				
	Carried Forward to Sectional Summary: Bill No. 9 METALWORK (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description				Unit	Quantity	Rate	Amount
	SECTION NO) <u>. 2</u>						
	BILL NO. 10							
	PLASTERING	(PROVI	SIONAL)					
	SUPPLEMENT							
	GENERAL							
	V-Joints or the lil shall be deemed on walls rate.							
	SCREEDS							
	Screeds steel tr	rowelled on	concrete					
2.10.1	30mm Thick on f	floors			m2	256		
	A : 73	B : 183	C:0	D:0				
	E:0	F:0	G:0	H : 0				
	INTERNAL PL	<u>ASTER</u>						
	Cement plaster finished with a	on brickwo steel trowe	ork, blockw <u>I</u>	ork or concrete				
2.10.2	On soffits of slab	s and bean	าร		m2	1		
	A : 1	B:0	C:0	D:0				
0.40.0	E:0	F:0	G:0	H:0	•			
2.10.3	On raking soffits A:1	of stairs B:0	C:0	D:0	m2	1		
	E:0	F:0	G:0	H:0				
2.10.4	On narrow width	S			m2	1		
	A:1	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 0				
2.10.5	On raking and st	tepped edge	of stairs 3	50mm extreme	m	6		
	A:6	B:0	C:0	D:0	111			
	E:0	F:0	G:0	H:0				
	Bill No. 10 PLASTERING (F PRASA Prepared By SIST	PROVISION	AL)	ctional Summary:			R	

Quantity	Rate	Amount
	R	
	Quantity	

				Brought forward			R	
	internal floor so	creed with tild with bond bints continuth tile grout, leaned with 120/m² in the	le adhesi ing liquid lous in b excess g water as rate for	I in lieu of water oth directions grout on the work proceeds				
2.11.1	On walls				m2	326		
	A : 124	B: 95	C:0	D:0				
	internal floor so	creed with ti d with bond bints continu th tile grout, leaned with 120/m² in the	le adhesi ing liquid lous in b excess of water as a rate for	I in lieu of water oth directions grout on the work proceeds				
2.11.2	To floors				m2	319		
	A : 69	B : 183	C:0	D:0				
	E:0	F:0	G:0	H : 67				
2.11.3	Circular cutting				m	80		
	A : 17	B : 46	C:0	D:0				
	E:0	F:0	G:0	H : 17				
	<u>SUNDRIES</u>							
	Supply and inst	tall Aluminiu	ım edge t	<u>trim</u>				
2.11.4	12mm Aluminiur edges and ends			ed vertically to	m	450		
	A:0	B: 335	C:0	D:0				
	E:0	F:0	G:0	H : 115				
	Bill No. 11 TILING (PROVIS PRASA	SIONAL)	ard to Se	ectional Summary:			R	
	Prepared By SIST	「Consortium						

SECTION NO. 2 BILL NO. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PLUMBING NOTE: Prices for sanitary fittings fixed to walls or abuting walls, etc. shall include for sealing against walls with silicone sealing compound. This shall apply to wash hand basins, sinks and drainers, urinals, WC cisterns, wash troughs, shower trays and the like RAINWATER DISPOSAL 'Seamless' aluminium gutters OGEE 125 x 75mm 0.6mm Seamless aluminium proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets A:28 B:04 C:0 D:0 E:0 F:0 G:0 H:30 Extra over eaves gutter for stopped ends A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 Aluminium downpipes 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward R BII No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA Prepared By SIST Consortium	Item No	Description					Quantity	Rate	Amount
PLUMBING AND DRAINAGE (PROVISIONAL) PLUMBING NOTE: Prices for sanitary fittings fixed to walls or abutting walls, etc. shall include for sealing against walls with silicone sealing compound. This shall apply to wash hand basins, sinks and drainers, urinals, WC cisterns, wash troughs, shower trays and the like RAINWATER DISPOSAL 'Seamless' aluminium gutters OGEE 125 x 75mm 0.6mm Seamless aluminium proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets m 127 A:23 B:64 C:0 D:0 E:0 F:0 G:0 H:39 Extra over eaves gutter for stopped ends No 16 A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 box 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 Extra over rainwater downpipes for bends No 50 A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:42 Extra over eaver gutter for dop bends No 50 A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:42 Extra over rainwater downpipes for bends No 50 A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24		SECTION NO	<u>). 2</u>						
PLUMBING		BILL NO. 12							
PLUMBING				<u>INAGE</u>					
abutting walls, etc. shall include for sealing against walls with silicone sealing compound. This shall apply to wash hand basins, sinks and drainers, urinals, WC cisterns, wash troughs, shower trays and the like RAINWATER DISPOSAL 'Seamless' aluminium gutters 2.12.1 OGEE 125 x 75mm 0.6mm Seamless aluminium proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets m 127 A:23 B:64 C:0 D:0 E:0 F:0 G:0 H:39 2.12.2 Extra over eaves gutter for stopped ends No 16 A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends No 50 A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24		PLUMBING							
Seamless' aluminium gutters OGEE 125 x 75mm 0.6mm Seamless aluminium proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets m 127		abutting walls, e with silicone sea wash hand basir	tc. shall incl lling compoเ าร, sinks an	ude for sea und. This s d drainers,	aling against walls shall apply to urinals, WC				
2.12.1 OGEE 125 x 75mm 0.6mm Seamless aluminium proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets m 127 A:23 B:64 C:0 D:0 E:0 F:0 G:0 H:39 2.12.2 Extra over eaves gutter for stopped ends A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		RAINWATER	DISPOSAL	<u>.</u>					
proprietary eaves eaves gutters with baked enamel finished fixed with concealed brackets m A:23 B:64 C:0 D:0 E:0 F:0 G:0 H:39 2.12.2 Extra over eaves gutter for stopped ends A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish m A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		'Seamless' alur	ninium gut	<u>ters</u>					
2.12.2 Extra over eaves gutter for stopped ends A:4 B:4 C:0 D:0 E:0 F:0 G:0 H:8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA	2.12.1	proprietary eave	s eaves gut	ters with ba		m	127		
2.12.2 Extra over eaves gutter for stopped ends A: 4 B: 4 C: 0 D: 0 E: 0 F: 0 G: 0 H: 8 2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A: 6 B: 7 C: 0 D: 0 E: 0 F: 0 G: 0 H: 12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A: 21 B: 25 C: 0 D: 0 E: 0 F: 0 G: 0 H: 42 2.12.5 Extra over rainwater downpipes for bends A: 12 B: 14 C: 0 D: 0 E: 0 F: 0 G: 0 H: 24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		A : 23							
2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		E:0	F:0	G:0	H : 39				
2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA	2.12.2	Extra over eaves	-			No	16		
2.12.3 Extra over eaves gutter for drop box suitable 155 x 100mm box gutter A:6 B:7 C:0 D:0 E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA									
100mm box gutter		E:0	F:0	G:0	H : 8				
E:0 F:0 G:0 H:12 Aluminium downpipes 2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish m A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA	2.12.3	100mm box gutt	er			No	25		
2.12.4 100 x 75mm 0.6mm Fluted aluminium downpipes with baked enamel finish m 88 A: 21 B: 25 C: 0 D: 0 E: 0 F: 0 G: 0 H: 42 2.12.5 Extra over rainwater downpipes for bends No No A: 12 B: 14 C: 0 D: 0 E: 0 F: 0 G: 0 H: 24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA									
2.12.4		E:0	F:0	G:0	H : 12				
baked enamel finish m 88 A:21 B:25 C:0 D:0 E:0 F:0 G:0 H:42 2.12.5 Extra over rainwater downpipes for bends No A:12 B:14 C:0 D:0 E:0 F:0 G:0 H:24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		Aluminium dow	<u>/npipes</u>						
2.12.5 Extra over rainwater downpipes for bends No A: 12 B: 14 C: 0 D: 0 E: 0 F: 0 G: 0 H: 24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA	2.12.4			aluminium	downpipes with	m	88		
2.12.5 Extra over rainwater downpipes for bends A: 12 B: 14 C: 0 D: 0 E: 0 F: 0 G: 0 H: 24 Carried forward Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		A : 21	B : 25	C:0	D:0				
A: 12 B: 14 C: 0 D: 0 E: 0 F: 0 G: 0 H: 24 Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		E:0	F:0	G:0	H : 42				
Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA	2.12.5	Extra over rainw	ater downpi	pes for ber	nds	No	50		
Carried forward R Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		A : 12	B : 14	C:0	D:0				
Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA		E:0	F:0	G:0	H : 24				
Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA									
Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) PRASA					Carried famuard			D	
PRASA								K	
			DRAINAG	SE (PROVI	SIUNAL)				
			Γ Consortiun	n					
,									

				Brought for	ward		R	1
2.12.6	Extra over rainwa	ater downni	nge for eho	20	No	25		
2.12.0	A:6	B:7	C:0	D:0	140	23		
	E:0	F:0	G:0	H : 12				
	SANITARY FIT	TINGS						
	Public Ablutions	s - Wash h	and Basin					
2.12.7	Size 420 x 420m top (elsewhere sp sealant where ba conjunction with specified V05-V0	pecified) an sin rim mee wall mounte	d sealed wets vanity to	ith silicone op. To be used	d in	2		
	A:0	B:2	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.8	Size 510 x 405m overflow and cha 10mm bolts and hanger springs a basin meets wall paraplegic tap V0	instay hole including U nd sealed v . To be use	bolted to we niversal had vith silicone d in conjun	vall with two x If pedestal with e sealant where	1	1		
	A:0	B:0	C:0	D:0				
	E:0	F:0	G:0	H:1				
	Public Ablutions	s - Water c	loset					
2.12.9	Wall hung closed pan fixations, vitr manufacturers sp recommended. S height options. C pan. Pan Weight pan flush volume ceramic.	eous china pecification. ABS and IS oncealed c 23kg - widt	, Installation Certified p SO certified istern to be th 370mm -	n as per lumber . Adjustable used with this height 420mn	;	2		
	A:0	B:2	C:0	D:0				
	E:0	F:0	G:0	H:0				
				_				
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST		•	Carried for	ward		R	

				Brought forward			R	
2.12.10	Wall hung closed pan fixations, vitre manufacturers sprecommended. So height options. Copan. Pan Weight pan flush volume ceramic Paraple	eous china ecification. ABS and IS oncealed c 23kg - wid 3/6 Lt, 10	, Installation Certified p SO certified istern to be th 370mm -	n as per lumber . Adjustable used with this height 420mm -	No	1		
	E:0	F:0	G:0	H:1				
	Staff - Ablutions							
2.12.11	Size 420 x 420mr top (elsewhere sp sealant where bas conjunction with w specified V05-V06 A:4	m fitted into ecified) an sin rim me vall mounte	d sealed wets vanity to	ith silicone op. To be used in	No	5		
	E:0	F:0	G:0	H:0				
	Staff Ablutions -	Water clo	set					
2.12.12	Wall hung closed pan fixations, vitre manufacturers sprecommended. Scheight options. Copan. Pan Weight pan flush volume ceramic. A:4 E:0 Holding Cell - At	eous china ecification. ABS and IS oncealed c 23kg - wid 3/6 Lt, 10 B:0 F:0	, Installation Certified p SO certified istern to be th 370mm -	n as per lumber . Adjustable used with this height 420mm -	No	8		
2.12.13	Rounded wall-hur white with three s overflow, and cha punched tapholes A:1 E:0	emi-punch in stay hol	ed tapholes	s, integrated	No	1		
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST			Carried forward SIONAL)			R	

				Brought forward			R	
2.12.14	Wall mounted top china, Installation Certified plumber certified. Weight 9 year warranty on	as per mai recommen kg - width	nufacturers ded. SABS 300mm - le	specification. and ISO	No	3		
	A:3	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.15	Vitreous china ba pan compatible w matching 6/3 litre fitments, flush val seat.	ith back inle top dual flu	et exposed ush cistern	flush valve and including lid and	No	1		
	A : 1	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.16	Wash Hand Basir tap - Vandal resis		mounted pu	ısh on demand	No	1		
	A : 1	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.17	Standard Univers 480mm (d) x 410r manufacturer's sp	mm (h). Ins	tallation as		No	1		
	A : 0	B : 1	C:0	D:0	1.0	·		
	E:0	F:0	G:0	H:0				
	Stainless steel							
2.12.18	Grade 304 18/10 bowl inset sink, or x 370 x 140mm d fitted onto cupboa (trap elsewhere s	verall size 8 eep bowl, v ard (elsewh	800 x 460m with integra ere specifie	nm with one 340 ted overflow ed) including trap	No	3		
	A:2	B:0	C:0	D:0				
	E:0	F:0	G:0	H:1				
	Precast concrete	wash tro	ugh					
2.12.19	Single precast con x 340mm deep wi	th reinforce	ed concrete	pedestals (LI)	No	1		
	A:0	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 1				
	SANITARY PLU	<u>JMBING</u>						
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST			Carried forward			R	

				Brought forward			R	
	Black uPVC UV	stabilised	pipes					
2.12.20	110mm Vent pip	es			m	52		
	A : 20	B : 12	C:0	D:0				
	E:0	F:0	G:0	H:20				
	Extra over Blace fittings	k uPVC UV	' stabilised	d pipes for				
2.12.21	Vent cowl forme and black shade				No	14		
	A : 6	B:3	C:0	D:0				
	E:0	F:0	G:0	H : 5				
	uPVC pipes							
2.12.22	50mm Pipes				m	40		
	A : 24	B : 12	C:0	D:0				
	E:0	F:0	G:0	H:4				
2.12.23	50mm Pipes inc	luding chasi	ing		m	12		
	A : 12	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.24	110mm Pipes				m	13		
	A : 5	B:3	C:0	D:0				
	E:0	F:0	G:0	H : 5				
2.12.25	110mm Pipes in	cluding cha	sing		m	80		
	A : 80	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	Extra over uPV	C pipes for	fittings					
2.12.26	50mm Bend				No	20		
	A : 12	B:6	C:0	D:0				
	E:0	F:0	G:0	H:2				
2.12.27	110mm Bend				No	26		
	A : 10	B:6	C:0	D:0				
	E:0	F:0	G:0	H : 10				
	Bill No. 12 PLUMBING ANI PRASA Prepared By SIS			Carried forward SIONAL)			R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

				Brought forward			R
2.12.28	50mm Access be	end			No	10	
	A : 6	B:3	C:0	D:0			
	E:0	F:0	G:0	H:1			
2.12.29	110mm Access b	and			No	13	
2.12.29	A : 5	B:3	C:0	D:0	NO	13	
	E:0	F:0	G:0	H:5			
0.40.00		1.0	0.0	11.0		4.0	
2.12.30	50mm Junction			D 0	No	10	
	A : 6	B:3	C:0	D:0			
	E:0	F:0	G:0	H : 1			
2.12.31	110mm Junction				No	13	
	A : 5	B:3	C:0	D:0			
	E:0	F:0	G:0	H : 5			
2.12.32	110mm Reducing	j junction			No	13	
	A : 5	B:3	C:0	D:0			
	E:0	F:0	G:0	H : 5			
2.12.33	110mm Pan conr	nector			No	13	
	A : 5	B:3	C:0	D:0			
	E:0	F:0	G:0	H : 5			
	TRAPS ETC						
2.12.34	40mm 260 CD be	attle tren			No	13	
2.12.34	40mm 360 CP bo	B:3	C:0	D:0	INO	13	
	E:0	F:0	G:0	H:1			
			0.0				
	WASTE UNION	IS, ETC.					
2.12.35	32mm chrome pl			62mm diameter	No	2	
	A : 1	B:0	C:0	D:0			
	E:0	F:0	G:0	H:1			
2.12.36	40mm chrome pla	ated waste	with anti-th	neft plug and	No	8	
	A : 5	B:3	C:0	D:0	. 10		
	E:0	F:0	G:0	H:0			
				Carried forward			R
	Bill No. 12 PLUMBING AND	DRAINAG	SE (PROVI	SIONAL)			
	PRASA Prepared By SIST	Consortiun	n				

				Brought forward			R	
	TAPS, VALVES	S, ETC						
2.12.37	Fullway isolating steel lever handle		with plastic	coated plated	No	13		
	A : 5	B:3	C:0	D:0				
	E:0	F:0	G:0	H:5				
2.12.38	Fullway isolating steel lever handle		with plastic	coated plated	No	5		
	A : 4	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 1				
2.12.39	15mm Chromium hold open feature			tap with non-	No	8		
	A : 5	B:3	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.40	15mm Chromium	n plated elb	ow action p	illartap	No	2		
	A : 1	B:0	C:0	D:0				
	E:0	F:0	G:0	H:1				
2.12.41	Standard flushma including back er with push rod, ru breaker and non-	ntry, econof bber pan co	ilush push b onnectore, i	outton assembly	No	11		
	A : 4	B:3	C:0	D:0				
	E:0	F:0	G:0	H : 4				
2.12.42	CP Urinal flushva entry, econoflush rubber pan conno non-hold open fe	n push butto ectore, integ ature	on assembly gral vacuum	y with push rod, n breaker and	No	3		
	A:3	B:0	C:0	D:0				
	E:0	F:0	G:0	H : 0				
2.12.43	flushpipe compre rubber seat buffe	ession pan or er and integ	connector a ral vacuum	breaker	No	2		
	A:1	B:0	C:0	D:0				
	E:0	F:0	G:0	H:1				
	WATER SUPP	LIES						
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST			Carried forward			R	
	Frepared by SIST	Consortium	II					

				Brought forward			R
	Copper piping v	60/1 above	ground a	oression type nd Class 460/2			
	under ground o	_					
2.12.44	15mm Pipes cha				m	26	
	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H : 2			
2.12.45	22mm Pipes				m	26	
	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H:2			
2.12.46	22mm Pipes cha	sed into bri	ck walls		m	26	
	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H:2			
2.12.47	28mm Pipes				m	36	
	A : 24	B:9	C:0	D:0			
	E:0	F:0	G:0	H:3			
	Fretus aven elece						
	Extra over class fittings, angle a connectors						
2.12.48					No	36	
2.12.40	15mm Fittings A: 24	B:9	C:0	D:0	INO	30	
	E:0	F:0	G:0	H:3			
		1.0	0.0	11.0			
2.12.49	22mm Fittings				No	26	
	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H : 2			
2.12.50	28mm Fittings				No	26	
	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H : 2			
	Extra over 460/1 compression fit	l copper p tings	ipes for br	ass_			
2.12.51	15mm Fittings				No	26	
 .	A : 18	B:6	C:0	D:0			
	E:0	F:0	G:0	H : 2			
	Dill N - 40			Carried forward			R
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST		•	SIONAL)			

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

				Brought forward	d		R	
2.12.52	22mm Fittings				No	23		
	A : 15	B:6	C:0	D:0				
	E:0	F:0	G:0	H:2				
2.12.53	28mm Fittings				No	23		
	A : 15	B:6	C:0	D:0				
	E:0	F:0	G:0	H:2				
	MEPLA Piping a							
2.12.54	15mm fixed to wa	alle ceiling	etc		m	30		
2.12.04	A : 30	B:0	C:0	D:0	""	30		
	E:0	F:0	G:0	H:0				
2.12.55	20mm fixed to wa				m	32		
	A:32	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.56	25mm fixed to wa	alls, ceiling	etc.		m	18		
	A : 18	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.57	32mm fixed to wa	alls. ceiling	etc.		m	12		
	A : 12	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.58	40mm fixed to wa	alls, ceiling	etc.		m	12		
	A : 12	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.59	50mm fixed to wa	alls, ceiling	etc.		m	14		
	A:14	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	Extra over Mepla valves, straight sealing set and	reducers,	plastic pip	tees, isolation oe clambs,				
	_					4.5		
2.12.60	15mm fittings.	Б. С	0 0	D . 2	No	12		
	A : 12	B:0	C:0	D:0				
	E : 0	F:0	G:0	H : 0				
	Bill No. 12 PLUMBING AND PRASA Prepared By SIST		-	Carried forward	d		R	
	Prepared By SIST	Consortiun	n					

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

				Brought forward	. L		R	
2.12.61	20mm fittings.				No	36		
	A : 36	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.62	25mm fittings.				No	20		
	A : 20	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
2.12.63	32mm fittings.				No	20		
	A : 20	B:0	C:0	D:0	140	20		
	E:0	F:0	G:0	H : 0				
2.12.64	40mm fittings.				No	15		
2.12.04	A : 15	B:0	C:0	D:0	140			
	E:0	F:0	G:0	H:0				
2.12.65	50mm Reducer	ŕ		-	No	18		
2.12.00	50mm Reducer A : 18	B:0	C:0	D:0	No	10		
	E:0	F:0	G:0	H:0				
	Pipes laid belo backfill, etc. co		<u>d including</u>	g excavations,				
	Class 12 HDPE							
2.12.66	54mm Pipe laid ir	n and inclu	dina trench	es not exceeding				
	1m deep	r arra miora	anig a crion	oo not oxecouning	No	15		
	A : 15	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
	Extra over Class	12 HDPE	pipes for	<u>fittings</u>				
2.12.67	54mm fittings				No	10		
	A : 10	B:0	C:0	D:0				
	E:0	F:0	G:0	H:0				
				Carried forward	t k		R	
	Bill No. 12 PLUMBING AND	DRAINAC	SE (PROVIS	SIONAL)				
	PRASA		-	JIVIAL)				
	Prepared By SIST	Consortiur	n					

				Brought forward			R	
	ELECTRIC WA	TER HEA	TERS					
2.12.68	Zip stainless stee 460mm high with control, connecte volt 15 amp elect screwed to wall a A:1 E:0	el 7,5 litre H i instant boil ed to 15mm trical power	ydroboil, si ing water, cold water supply, plu	two way tap supply and 220 igged and	No	1		
2.12.69	150L slim line ge pipework, fittings	yser comple , valves, pre	ete with ass	sociated	No	1		
	hangers and drip A:1	нау. В:0	C:0	D:0	INO	'		
	E:0	F:0	G:0	H:0				
	C Bill No. 12 PLUMBING AND PRASA Prepared By SIST	DRAINAG	E (PROVIS	ctional Summary: SIONAL)			R	

Item No	Description		Quantity	Rate	Amount
	SECTION NO. 2				
	BILL NO. 13				
	GLAZING (PROVISIONAL				
	GLAZING TO WOOD/STEEL	<u> WITH PUTTY</u>			
	6mm Thick obscure safety gla	ass_			
2.13.1		C:0 D:0	1 1		
		G:0 H:0			
	MIRRORS, ETC	oor booked mirrore			
	6mm Silvered float glass copp with polished edges holed for chromium plated dome cappe rubber buffers to plugs in brid	and fixed with direction screws with			
2.13.2	Mirror 450 x 450mm high		lo 10		
		C:0 D:0 G:0 H:1			
	Carried Forward	d to Sectional Summary:		R	
	GLAZING (PROVISIONAL) PRASA Prepared By SIST Consortium				

em No	Description	Quantity	Rate	Amount	
	SECTION NO. 2				
	BILL NO. 14				
	PAINTWORK (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	PRICING OF BILLS				
	Tenderers are advised to inspect the drawings issued with this enquiry and to satisfy themselves as to the nature and requirements of the contract. No extras will be allowed due to the Contractor's failure in this respect.				
	The Contractor shall be responsible for adequately protecting his work during installation and shall provide a suitable protective covering to be removed when so directed by the Main Contractor.				
	Quantities contained in these Bills of Quantities are only indicative of the actual final quantities required and shall not be used for ordering purposes.				
	The descriptions contained in these Bills of Quantities are intended as a means of identifying the various facets of the work. Tenderers shall allow for all costs in connection with the various items taking full cognizance of drawings, schedule of finishes and the Bills of Quantities descriptions.				
	Final measurement shall be made from construction drawings or from measurements taken on site.				
	PROGRAMME REQUIREMENTS				
	Tenderers are advised to discuss their programme with the Principal Agent to ensure that no delays occur.				
	Tenderers will be required to have sufficient teams on site, at all times, as to ensure that the programme dates are met. Tenderers are to allow for this in their tenders as no claim for additional teams or workmen will be entertained at a later stage.				
	SITE REPRESENTATIVE				
	Tenderers are to allow for a full time site representative.				
	Carried forward		R		
	Bill No. 14 PAINT WORK (PROVISIONAL) PRASA Prepared By SIST Consortium				

		Brought forward			R	
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance specifications unless otherwise describe					
	COLOURS					
	Unless otherwise described all paintwork deemed to have a colour value in exces Munsell system in accordance with SAN	s of 7 on the				
	GUARANTEE					
	A Project Guarantee Request Sheet mu and passed on to the relevant Supplier of Please request this from your specifier of client/contractor must notify the Supplier prior to commencement of the project to necessary QA.	representative. consultant. The · TWO weeks				
	PAINTWORK, ETC. TO NEW W	ORK				
	ON INTERNAL FLOATED PLASTE	R SURFACES				
	Prepare and brush surface to remove contaminants and apply one coat alka primer, one undercoat and two coats for interior use	ali resistant				
2.14.1	Walls A: 42 B: 0 C: 0		m2	42		
	E:0 F:0 G:0	H:0				
	ON PLASTERBOARD SURFACES Prepare and brush surface to remove contaminants and apply one coat alka primer, one undercoat and two coats for interior use	ali resistant				
2.14.2	Ceilings and bulkheads		m2	334		
	A:215 B:37 C:0	D:0				
	E:0 F:0 G:0	H: 82				
	ON FIBRE-CEMENT BOARD SURF	ACES				
	Bill No. 14 PAINT WORK (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward			R	

		Brought forward	1		R	
	Prepare and brush surface to remo contaminants and apply one coat a primer and two coats superior qual emulsion paint for exterior use	lkali resistant				
2.14.3	Fascias and barge boards, including pointing strips	oriming metal	m2	112		
	A:23 B:48 C:0	D:0				
	E:0 F:0 G:0	H : 41				
	ON METAL SURFACES					
	Prepare surfaces and remove all lo apply one coat water based primer based universal undercoat and two quality universal enamel paint	, one coat alkyd				
2.14.4	Door frames		m2	12		
	A:1 B:2 C:0	D:0				
	E:0 F:0 G:0	H : 9				
	ON WOOD SURFACES					
	Prepare surfaces and remove all lo apply one coat wood primer, one cuniversal undercoat and two coats gloss paint. Colour TBC. by Architecoats)	oat alkyd based super quality				
2.14.5	On doors		m2	48		
	A:4 B:8 C:0	D:0				
	E:0 F:0 G:0	H:36				
2.14.6	Skirtings, rails, etc not exceeding 300	mm girth	m	306		
	A:37 B:197 C:0	D:0				
	E:0 F:0 G:0	H:72				
	PAINTWORK, ETC. TO PREV	<u>IOUSLY</u>				
	ON EXTERNAL FLOATED PLAS	TER SURFACES				
	Bill No. 14 PAINT WORK (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward			R	

	Ві	rought forward		R	
	Prepare and brush surface to remove al contaminants and apply one coat alkali primer, one undercoat and two coats enfor interior use	resistant			
2.14.7	Walls A:138 B:240 C:0 E:0 F:0 G:0 H	m2 D:0 1:162	540		
	ON INTERNAL FLOATED PLASTER	<u>SURFACES</u>			
	Prepare and brush surface to remove al contaminants and apply one coat alkali primer, one undercoat and two coats enfor interior use	resistant			
2.14.8	Walls A: 123 B: 570 C: 0	m2 D:0	792		
	Prepare and brush surface to remove al contaminants and apply one coat alkali primer, one undercoat and two coats enfor interior use	resistant			
	ON METAL SURFACES				
	Prepare and brush surface to remove al contaminants and apply one coat alkali primer, one undercoat and two coats enfor interior use	<u>resistant</u>			
2.14.9	On windows	m2	3		
	A:1 B:0 C:0	D:0			
2.14.10	E:0 F:0 G:0 Corrugated roofs (measured on flat)	H:2	217		
2.14.10	A:0 B:0 C:217	D:0	217		
	E:0 F:0 G:0	H:0			
	Bill No. 14 PAINT WORK (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward		R	

		Brought forward		R	
1	Prepare and brush surface of structure by abrasively blast to ST 2.5 of swed SIS 055900 and blast to PSH 2.4.1 as code. Apply one coat of Sigma cover epoxy and one coat of Sigma cover 4 epoxy to suite Prasa colours.	ish standard per SANS 064 630 polyamide			
2.14.11	On solid steel balustrades - Bridges A:519 B:0 C:0 E:0 F:0 G:0 ON WOOD SURFACES	D:0 H:0	n2 519		
	Prepare and brush surface to remove contaminants and apply one coat alk primer, one undercoat and two coats for interior use	ali resistant			
2.14.12	On doors A: 44 B: 76 C: 0 F: 0 G: 0	r D : 0 H : 12	132		
	Carried Forward to Sec	ctional Summary:		R	
	Bill No. 14 PAINT WORK (PROVISIONAL) PRASA Prepared By SIST Consortium				

Item No	Description				Quantity	Rate	Amount
	SECTION N	O. 2					
	BILL NO. 15	<u>i</u>					
	BUDGETAR (PROVISION		<u>VANCES</u>				
				nt Clauses in the for Trades (2008			
	SIGNAGE						
	<u>Signage</u>						
2.15.1	Provide the am Rand) for the S		0,000.00 (F C : 0.00	ifty Thousand	Item		50 000 00
	E: 0.00	F: 0.00	G: 0.00	H: 0.00			
	BUILT-IN CU	PBOARDS	6				
	Built-in Cupbo		_				
2.15.2	Provide the am Rand) for the B			ixteen Thousand	Item		16 000,00
	A: 0.00	B: 1.00	C: 0.00	D: 0.00			
	E:0.00	F: 0.00	G: 0.00	H: 0.00			
	STAFF LOCK	<u>(ERS</u>					
	Staff Lockers						
2.15.3	Five Hundred F	Rand) for St	aff Lockers	ifteen Thousand	Item		15 500.00
	A: 0.00 E: 0.00	B: 0.00 F: 0.00	C : 0.00 G : 0.00	D : 0.00 H : 1.00			
			G . 0.00	н. 1.00			
	STAFF BENC						
	Staff Benches						
2.15.4	Provide the am Eight Hundred			leven Thousand es	Item		11 800.00
	A: 0.00	B: 0.00	C: 0.00	D: 0.00			
	E:0.00	F:0.00	G: 0.00	H : 1.00			
				Carried forward		R	
	Bill No. 15 BUDGETARY A PRASA Prepared By SIS			/ISIONAL)			

	Brought forward		R	
	CARPORT			
	Carports - Staff Parking			
2.15.5	Provide the amount of R 40,000.00 (Forty Thousand Rand) for Demolition of Existing Staff Parking Carports A: 0.00 B: 0.00 C: 0.00 D: 1.00 E: 0.00 F: 0.00 G: 0.00 H: 0.00	Item		40 000 00
2.15.6	Provide the amount of R 120,000.00 (One Hundred and Twenty Thousand Rand) for New Staff Parking Carports A: 0.00 B: 0.00 C: 0.00 D: 1.00 E: 0.00 F: 0.00 G: 0.00 H: 0.00 TICKET VERIFICATION POINT (TVP)	Item		120 000.00
2.15.7	Provide the amount of R 22,200.00 (Twenty Two Thousand Two Hundred and Fifty Rand) for Demolition of Existing Ticket Verification Point A:0.00 B:0.00 C:0.00 D:1.00 E:0.00 F:0.00 G:0.00 H:0.00	Item		22 200.00
2.15.8	Provide the amount of R 76,000.00 (Seventy Six Thousand Rand) for New Ticket Verification Point A:0.00 B:0.00 C:0.00 D:1.00 E:0.00 F:0.00 G:0.00 H:0.00 GLASS PARTITIONS	Item		76 000.00
2.15.9	Provide the amount of R 5,695.00 (Five Thousand Six Hundred and Ninety Five Rand) for Glass Partitions A: 1.00 B: 0.00 C: 0.00 D: 0.00 E: 0.00 F: 0.00 G: 0.00 H: 0.00	ltem		5 695.00
	Carried forward Bill No. 15 BUDGETARY ALLOWANCES (PROVISIONAL) PRASA Prepared By SIST Consortium		R	

				Brought forward		R	
	Refurbshment	of Existing	g Bridge				
2.15.10	Provide the am Rand) for Refu	ount of R 10	00,000.00 (of Existing	One Thousand Bridge	ltam		100 000 00
	A: 0.00 E: 0.00	B:0.00 F:0.00	C: 0.00 G: 0.00	D: 1.00 H: 0.00	Item		100 000.00
	Bill No. 15 BUDGETARY PRASA Prepared By SIS	ALLOWAN	CES (PROV	ectional Summary: /ISIONAL)		R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

Bill No	SUMMARY	Page No		Amount
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	Carried to Final Summary PRASA Prepared By SIST Consortium		R	

Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO.3	ı			
	BILL NO. 1				
	EXTERNAL WORKS				
	GENERAL SITEWORKS				
	Site clearance				
3.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	1 000		
3.1.2	Stripping average 150mm thick layer of top soil and stockpiling on site	m2	1 000		
	REMOVAL OF TREES ETC				
	Taking out and removing, grubbing up roots and filling in holes				
3.1.3	Tree stump exceeding 200mm and not exceeding 500mm girth	No	10		
	FILLING ETC				
	Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density				
3.1.4	Backfilling to trenches	m3	50		
	COMPACTION				
	Compaction of surfaces				
3.1.5	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density.	m2	100		
	Carried Forward to Sectional Summary: Bill No. 1 GENERAL SITEWORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO. 2				
	EXTERNAL WORKS				
	SOIL DRAINAGE				
	Heavy duty (Class 34) uPVC sewer and drain pipes				
3.2.1	50mm Pipes laid in and including trenches exceeding not exceeding 1m deep	m	38		
3.2.2	110mm Pipes laid in and including trenches not exceeding 1m deep	m	69		
3.2.3	110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	30		
3.2.4	110mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep	m	13		
	Extra over heavy duty (Class 34) uPVC sewer and drain pipes for fittings				
3.2.5	50mm Bend (90)°	No	10		
3.2.6	110mm Bend (90)°	No	9		
3.2.7	50mm Tee junction (90°)	No	15		
3.2.8	110mm Tee junction (90°)	No	2		
3.2.9	110mm Junction	No	7		
3.2.10	110mm Rodding eye	No	10		
	Extra over all excavations for excavation in				
3.2.11	Intermediate material	m3	15		
3.2.12	Hard rock	m3	12		
	Carried forward Bill No. 2 SOIL DRAINAGE (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	INSPECTION CHAMBER				
	Tenderers are to price all items in this section of work as per Engineers drawing no: 01-2119-110-03/04 Rev A				
	Excavate and build 1000mm diameter circular manhole formed from precast concrete splay rebated rings not less than 65mm thick and jointed with suitable watertight joint, built off and including 20Mpa/19mm 250mm thick concrete base and fitted with precast cover and frame (elsewhere) benching up in 20MPa/8mm concrete and finished smooth in 1:1 cement plaster around channels				
3.2.13	Depth exceeding not exceeding 1m deep internally	No	2		
3.2.14	Depth exceeding 1m and not exceeding 2m deep internally	No	1		
3.2.15	Depth exceeding 2m and not exceeding 3m deep internally	No	2		
	SUNDRIES				
	Altering Existing Manholes				
3.2.16	Raising or lowering of existing manholes	No	2		
	Muncipal connection points				
3.2.17	Cut into existing sewer manhole for new 110mm pipe not exceeding 4m deep, including making good and all connections necessary	No	1		
	<u>Testing</u>				
3.2.18	Testing soil drainage system		Item		
	Carried Forward to Sectional Summary: Bill No. 2 SOIL DRAINAGE (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description	Unit	Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO. 3				
	EXTERNAL WORKS				
	STORMWATER DRAINAGE				
	Class 100D SS concrete pipes with spigot and socket joints with rubber rings				
3.3.1	300mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	90		
3.3.2	600mm Pipes laid in and including trenches exceeding 2m not exceeding 3m deep	m	140		
	MANHOLES				
	Excavate in earth and build 805 x 805mm size internally formed from one brick 14Mpa NFP clay bricks walls cement plastered to internal face including 25Mpa/19mm 250mm thick concrete with mesh ref 245 in base and cover slabs, cover slab to have recessed opening to suit 1200 x 1200mm cast iron manhole cover frame with 230 x 230mm Grid inlet (cover, grating and frame measured elsewhere) benching up in 20MPa/8mm concrete and finished smooth in 1:1 cement plaster around channels				
3.3.3	Not exceeding 1m deep	No	5		
3.3.4	Exceeding 1m but not exceeding 2m deep	No	3		
3.3.5	Exceeding 2m but not exceeding 3m deep	No	1		
3.3.6	Excavate for and build catchpit with one brick sides fitted with 520mm x 790mm x 127.4kg cast iron heavy duty dished grating and frame, size internally 480mm x 795mm and not exceeding 1m deep.	No	5		
	Carried forward Bill No. 3 STORMWATER DRAINAGE (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
3.3.7	Excavate for and build catchpit with one brick sides fitted with 520mm x 790mm x 127.4kg cast iron heavy duty dished grating and frame, size internally 480mm x 795mm and exceeding 1m and not exceeding 2m deep.	No	4		
	Extra over all manhole excavations for excavation in				
3.3.8	Hard rock	m3	10		
	COVERS & GRATINGS (SUPPLY AND INSTALL COMPLETE)				
	Cast iron gratings, covers, etc				
3.3.9	1200 x 1200mm Heavy duty cover frame with 230 x 230mm Grid inlet including all fixings to brickwork and stormwater channel.	No	9		
	SUNDRIES				
	Altering Existing Manholes				
3.3.10	Raising or lowering of existing manholes	No	2		
	Muncipal connection points				
3.3.11	Cut into existing manhole for new 300mm pipe not exceeding 3m deep, including making good and all connections necessary	No	1		
3.3.12	Cut into existing manhole for new 600mm pipe not exceeding 3m deep, including making good and all connections necessary	No	1		
	Municipal connection fees				
3.3.13	Allow the sum of R10,000.00 for municipal connection fees		Item		10 000.00
	Testing				
3.3.14	Testing stormwater drainage system		Item		
	Carried Forward to Sectional Summary: Bill No. 3 STORMWATER DRAINAGE (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description	Quantity	Rate	Amount
	SECTION NO. 3			
	BILL NO. 4			
	PAVED AREAS (ALL TRADES PROVISIONAL)			
	<u>EARTHWORKS</u>			
	SITE CLEARANCE ETC			
	Site clearance			
3.4.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc (LI)	572		
	EXCAVATION OTHER THAN BULK			
	Excavation in earth not exceeding 2m deep			
3.4.2	Reduce levels under floors m3	117		
	CARTING AWAY			
	Extra over all excavations for carting way			
3.4.3	Surplus material from excavations and/or stocked piles on site to a dumping site to be located by the contractor m3	117		
	FILLING, ETC.			
	Earth filling supplied by the contractor under surface beds			
3.4.4	Imported G7 filling material from commercial sources by the contractor in accordance with SABS 1200 and the Engineers specifications, to be stabilized and compacted, to 95% Mod AASHTO density m3	86		
	Carried forward		R	
	Bill No. 4 PARKING AND DRIVEWAYS (PROVISIONAL) PRASA Prepared By SIST Consortium			

	Brought forward			R	
3.4.5	Imported C4 stabilised natural gravel filling material from commercial sources by the contractor in accordance with SABS 1200 and the Engineers specifications, compacted to 97% Mod AASHTO density	m3	86		
	Prescribed density tests on filling				
3.4.6	"Modified AASHTO Density" test on request by the engineer	No	6		
	Compaction of surfaces				
3.4.7	Compaction of ground surface under floors etc including ripping and recompacting for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% modified AASHTO density	m2	572		
	SOIL POISONING				
	Soil insecticide				
3.4.8	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	572		
	BRICK PAVING				
3.4.9	220 x 108 x 50mm Thick heavy duty Clay brick paving with butt joints including saw cutting and laid to interlocking pattern bedded on and including 50mm thick river sand	m2	481		
	PAINTED PARKING LINES				
	Carried forward			R	
	Bill No. 4 PARKING AND DRIVEWAYS (PROVISIONAL) PRASA Prepared By SIST Consortium				
	-				

	Brought forward			R	
	Prepare and apply one coat and two coats 'Road Marking Paint', on paved surface in accordance with manufacturers instructions to be guaranteed against delamination from court surface or wear for a period of 5 years from date of issue of Final Completion Certificate				
3.4.10	White road paint in individual lettering of STOP sign painted on paving, all in accordance with manufacturer's specification, each letter size approximately 600 x 900mm wide extreme	No	12		
3.4.11	Numeral or letter 100mm high	No	11		
3.4.12	Directional arrow 4700 x 500 wide extreme	No	32		
3.4.13	Paraplegic emblem 500 x 1500mm wide extreme	No	12		
3.4.14	Parking lines 100mm wide	m	136		
	PRECAST CONCRETE				
	PRECAST CONCRETE TACTILE PAVING				
	Cement base product with Tac pins				
3.4.15	Tactile pavers, size 300 x 300 x 30mm thick laid externally with 5mm joints grouted with suitable grout, bedded on 20-30mm thick river sand bed, on base course and subgrade, conforming to SANS 1200 MJ Degree Of Accuracy I. Tactile to comply to SANS 784:2008	m2	336		
	PRECAST CONCRETE KERBING				
	Concrete kerbing incl vertical joints between kerbs sealed with DOW CORNING 888 silicone joint sealant 6mm deep				
3.4.16	Fig. 3 Kerb (SABS 927) size 150 x 300mm, on and including 150mm wide base and 200 x 200mm (class 15/19) unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc	m	150		
	Carried forward Bill No. 4 PARKING AND DRIVEWAYS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward		R	
	RESURFACING PLATFORMS			
	Bituminous premix road surfacing			
3.4.17	50mm Thick paving to parking areas, roadways, etc including bituminous spray to base course (0.65l/m²) m2	2 376		
	Carried Forward to Sectional Summary:		R	
	Bill No. 4 PARKING AND DRIVEWAYS (PROVISIONAL) PRASA Prepared By SIST Consortium			

Item No	Description	Quantity	Rate	Amount	
	SECTION NO. 3				
	BILL NO.5				
	FENCING AND GATES				
	SUPPLEMENTARY PREAMBLES				
	Design Responsibility				
	Tenderers are responsible for the design and supply of the fencing system and rates shall include approval and sign off from an approved Engineer				
	Shop Drawings				
	The successful Tenderer shall provide full shop drawings and calculations for approval by the Architect and Engineer prior to commencing work. The cost of such shop drawings shall be included in the rates below				
	Design Responsibility				
	Tenderers are responsible for the design and supply of the fencing system and rates shall include approval and sign off from an approved Engineer				
	Shop Drawings				
	The successful Tenderer shall provide full shop drawings and calculations for approval by the Architect and Engineer prior to commencing work. The cost of such shop drawings shall be included in the rates below				
	CLEAR VIEW FENCE				
	Carried forward Bill No. 5 FENCING (PROVISIONAL) PRASA Prepared By SIST Consortium		R		

	Brought forward			R	
	Galvanised clear view security fence with steel posts, stays, gates, etc. including galvanised steel bolts, straining eye bolts, etc, site clearance and preparation of ground	1			
3.5.1	High Density Anti-climb security fence 3m (3m High above ground) high with anti-cut pressed mesh panel of panels at 3,305m widths and apertures 76,2mm x 12,7mm with vertical wire 4mm and horizontal wire of 3mm including all galvanised posts 2,1m High and anti-climb galvanised mesh, PVC coating and applicable corrosion protection complete with all earthworks, concrete bases etc. as confirmed and approved by the suppliers Engineer.	m	291		
3.5.2	4000mm wide x 1800mm High automated sliding gate with steel track, ground beams etc. complete (gate to match fence panel type)	No	3		
	Carried Forward to Sectional Summary: Bill No. 5 FENCING (PROVISIONAL) PRASA			R	
	Prepared By SIST Consortium				

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

Bill No	SUMMARY		Page No		Amount
3.1	GENERAL SITEWORKS (PR	OVISIONAL)	80		
3.2	SOIL DRAINAGE (PROVISIO	NAL)	82		
3.3	STORMWATER DRAINAGE	(PROVISIONAL)	84		
3.4	PARKING AND DRIVEWAYS	(PROVISIONAL)	88		
3.5	FENCING (PROVISIONAL)		90		
	PRASA Prepared By SIST Consortium	Carried to Final Summary		R	

Item No	Description		Quantity	Rate	Amount
	SECTION NO. 4				
	BILL NO. 1				
	ELECTRICAL INSTALLATION (PROVISIONAL)				
	ADMINISTRATION BUILDING AND STAFF PARKING				
	DISTRIBUTION BOARDS				
	Supply, Installation and commissioning of the Distribution Board, including making off all wire connections (external wiring, conduit, armoured cable and terminations given elsewhere)				
	DB-A				
4.1.1	Supply	No	1		
4.1.2	Install	No	1		
	Security System				
	Installation of Camera System equipment as specified in Section E of the Detailed Specification.				
	360 Degree resolution				
4.1.3	Supply	No	22		
4.1.4	Install	No	22		
	HiKvision DS-K2602 Double Door Access Controller Panel				
4.1.5	Supply	No	2		
4.1.6	Install	No	2		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R
	iometric Scanner (ZKTec x7 Finderprint Keypad eader-Standalone			
.1.7 Sı	upply	No	2	
.1.8 In	stall	No	2	
<u>M</u>	agnetic Lock 544 KG Holding Force			
1.9 Sı	upply	No	2	
.10 In	stall	No	2	
<u>E</u>	mergency Door Release Call Point (Breaker Glass)			
.11 Sı	upply	No	2	
.12 In	stall	No	2	
<u> </u>	ELEPHONE AND DISTRIBUTION BOARDS			
A fc	upply and installation of the following metal ncillary Distribution Boards and coverplates or Telephone outlets. (Conduit and Conduit oxes given elsewhere).			
<u>Te</u>	elephone Distribution Board (600mm x 600mm).			
3 Si	upply	No	1	
4 In	stall	No	1	
<u>B</u>	lank Coverplates			
5 Sı	upply	No	10	
16 In	stall	No	10	
<u>D</u> :	ata Distribution Board (600mm x 600mm).			
17 Sı	upply	No	1	
18 In	stall	No	1	
AI PF	Carried forward ill No. 1 DMIN & STAFF PARKING (PROVISIONAL) RASA repared By SIST Consortium			R

	Brought forward			R	
	CONDUITS				
	25mm Conduit				
4.1.19	Supply	m	1 500		
4.1.20	Install	m	1 500		
	CONDUIT BOXES & ENDS				
	Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit.				
	25mm Conduit				
4.1.21	Supply	No	250		
4.1.22	Install	No	250		
	CONDUIT ENDS				
	Terminate and connect one pair of conduit ends including lock nuts, bushes, etc. connecting into board tray, wiring channel etc. including cutting holes for conduit entries, but excluding conduit box. 25mm uPVC Conduit				
4.1.23	Supply	No	450		
4.1.24	Install	No	450		
	CONDUCTORS				
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward	Ī		R	
	Supply and installation of PVC insulated copper conductors drawn into conduit or wiring channel in groups of 2, 3, 4, etc. with the required colour coding, but excluding any wiring connections.				
	2,5 mm² PVC Conductors				
4.1.25	Supply	m	3 000		
4.1.26	Install	m	3 000		
	4 mm² PVC Conductors				
4.1.27	Supply	m	1 500		
4.1.28	Install	m	1 500		
	EARTH CONDUCTORS				
	Supply and drawing into conduit PVC insulated earth conductors, excluding any connections				
	2.5 mm² Conductors				
4.1.29	Supply	m	3 000		
4.1.30	Install	m	3 000		
	4 mm² Conductors				
4.1.31	Supply	m	1 500		
4.1.32	Install	m	1 500		
	<u>LIGHT SWITCHES</u>				
	Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates.				
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	16A 1 Lever				
4.1.33	Supply	No	25		
4.1.34	Install	No	25		
	<u>LUMINAIRES</u>				
	Supply and Installation of the following luminaires, complete with lamps as specified in Part C				
	Type A1				
4.1.35	Supply	No	35		
4.1.36	Install	No	35		
	Type B1				
4.1.37	Supply	No	16		
4.1.38	Install	No	16		
	Type C1				
4.1.39	Supply	No	20		
4.1.40	Install	No	20		
	Type J1				
4.1.41	Supply	No	15		
4.1.42	Install	No	15		
	DAYLIGHT SWITCHES / PHOTO-CELLS				
	Supply and installation of approved daylight switch.				
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Occupancy sensor				
4.1.43	Supply	No	5		
4.1.44	Install	No	5		
	Daylight Switch				
4.1.45	Supply	No	5		
4.1.46	Install	No	5		
	SOCKET OUTLETS				
	Supply, fitting and electrical connection of flush or surface mounted switched socket in either 100 x 100, 100 x 50, round box or wiring channel, excluding box (for flush type) and conduit connections, but including cover plate				
	16A Double SSO c/w coverplate				
4.1.47	Supply	No	14		
4.1.48	Install	No	14		
	POWERSKIRTING				
	Installation of powerskirting equipment as specified in Clause				
	Powerskirting				
4.1.49	Supply	No	100		
4.1.50	Install	No	100		
	Supply End Caps				
4.1.51	Supply	No	55		
4.1.52	Install	No	55		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward	Ī		R	
	Supply Body Joint				
4.1.53	Supply	No	55		
4.1.54	Install	No	55		
	Cover Joint				
4.1.55	Supply	No	55		
4.1.56	Install	No	55		
	16A SSO's c/w cover powerskirting				
4.1.57	Supply	No	13		
4.1.58	Install	No	13		
	RJ11 Connector with cradle/ cover and mod blank				
4.1.59	Supply	No	10		
4.1.60	Install	No	10		
	RJ45 Connector with cradle/ cover mod blank				
4.1.61	Supply	No	10		
4.1.62	Install	No	10		
	<u>ISOLATORS</u>				
	Supply, fitting and electrical connection of flush or surface mounted Metal Clad Isolators in either 100x100,100x50, round connections, but including cover plate.				
	32A DP Flush Isolator for Hand Dreyer				
4.1.63	Supply	No	4		
4.1.64	Install	m	4		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	30A DP Weather proof isolator for HVAC				
4.1.65	Supply	No	6		
4.1.66	Install	m	6		
	WEATHERPROOF BOXES				
	Supply and installation of a weatherproof york(200x200mm) box for isolators excluding conduit connections				
	200x200 york box				
4.1.67	Supply	No	3		
	APPLIANCE CONNECTIONS				
	Electrical connection of appliances supplied and installed by				
	Connect Airconditioners single				
4.1.68	Supply	No	6		
	Connect Hydroboil				
4.1.69	Supply	No	1		
	TELEPHONE INSTALLATION				
	Supply and installation of the following items for the Telephone Installation				
	25mm PVC Conduit				
4.1.70	Supply	m	17		
4.1.71	Install	m	17		
	25mm PVC Conduit end				
4.1.72	Supply	m	12		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
	Fiepaled by 3131 Collsoftium				

	Brought forward			R	
4.1.73	Install	m	12		
	25mm PVC Conduit box				
4.1.74	Supply	m	8		
4.1.75	Install	m	8		
	Blank Covers				
4.1.76	Supply	m	7		
4.1.77	Install	m	7		
	DATA INSTALLATION				
	Supply and installation of the following items for the Data installation				
	25mm PVC Conduit				
4.1.78	Supply	m	17		
4.1.79	Install	m	17		
	25mm PVC Conduit end				
4.1.80	Supply	No	12		
4.1.81	Install	No	12		
	25mm PVC Conduit box				
4.1.82	Supply	No	8		
4.1.83	Install	No	8		
	PROVISIONAL SUMS				
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	ALARM SYSTEM				
4.1.84	Complete supply, installation and commissioning of the alarm system to the Ticket Office - ABT		Item		15 000.00
4.1.85	Add for profit upon above, if required.			%	
4.1.86	Add for attendance upon above, if required.			%	
	SIREN				
4.1.87	Complete supply, installation and commissioning a Siren with bell switch		Item		
	LIGHTNING PROTECTION				
	<u>Down Conductors</u>				
	Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.				
4.1.88	50mm² aluminium conductor	m	22.4		
	Air Terminal Conductors				
4.1.89	Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.	m	22.4		
	Terminations of Down Conductors to Air Terminals				
	Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc.				
4.1.90	50mm² aluminium conductor to metal roof.	No	4		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Earthing Conductors				
	Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints.				
4.1.91	70mm² Green PVC insulated copper conductor	m	22.4		
	Termination of Earthing Conductors to Down Conductors				
	Termination of earth conductor to aluminium down conductor and earth electrodes including making off the ends, lugs, clamps, etc.				
4.1.92	50mm² Termination to 70mm² conductor	No	4		
	Earth Electrodes				
	Supply and installation of earth electrodes generally as specified in Clause A1.3.3.				
4.1.93	3,6m long earth electrodes	No	4		
	Termination of Earth Conductors to Earth Electrodes				
	Termination of Earth Conductors to Earth Electrodes including making off of ends, lugs, clamps, etc.				
4.1.94	70mm² Earth Conductor to Earth Electrode	No	4		
	General Earth Bonding				
4.1.95	Bonding of metal drainage down pipes and items.		Item		
	<u>Testing</u>				
	Supply and testing apparatus and testing in accordance with SANS Code.				
4.1.96	Testing of joint continuity		Item		
	Carried forward Bill No. 1 ADMIN & STAFF PARKING (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

	Brought forward		R		
4.1.97	Testing of Lightning Protection System	Item			
4.1.98	Testing of Earthing Points	Item			
4.1.99	Soil Resistivity Test and Report	Item			
	Carried Forward to Sectional Summary: Bill No. 1		R		
	ADMIN & STAFF PARKING (PROVISIONAL) PRASA				
	Prepared By SIST Consortium				
		l	l		

Description		Quantity	Rate	Amount
SECTION NO. 4				
BILL NO. 2				
ELECTRICAL INSTALLATION (PROVISIONAL)				
PLATFORMS				
Security System				
Installation of Camera System equipment as specified in Section E of the Detailed Specification.				
360 Degree resolution				
Supply	No	12		
Install	No	12		
CONDUITS				
25mm Conduit				
Supply	m	80		
Install	m	80		
CONDUIT BOXES & ENDS				
Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit.				
25mm Conduit				
Supply	No	30		
Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
	SECTION NO. 4 BILL NO. 2 ELECTRICAL INSTALLATION (PROVISIONAL) PLATFORMS Security System Installation of Camera System equipment as specified in Section E of the Detailed Specification. 360 Degree resolution Supply Install CONDUITS 25mm Conduit Supply Install CONDUIT BOXES & ENDS Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit. 25mm Conduit Supply Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	SECTION NO. 4 BILL NO. 2 ELECTRICAL INSTALLATION (PROVISIONAL) PLATFORMS Security System Installation of Camera System equipment as specified in Section E of the Detailed Specification. 360 Degree resolution Supply No Install No CONDUITS 25mm Conduit Supply m Install m CONDUIT BOXES & ENDS Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit. 25mm Conduit Supply No Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	SECTION NO. 4 BILL NO. 2 ELECTRICAL INSTALLATION (PROVISIONAL) PLATFORMS Security System Installation of Camera System equipment as specified in Section E of the Detailed Specification. 360 Degree resolution Supply No 12 Install No 12 CONDUITS 25mm Conduit Supply m 80 Install m 80 CONDUIT BOXES & ENDS Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit. 25mm Conduit Supply No 30 Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	SECTION NO. 4 BILL NO. 2 ELECTRICAL INSTALLATION (PROVISIONAL) PLATFORMS Security System Installation of Camera System equipment as specified in Section E of the Detailed Specification. 360 Degree resolution Supply No 12 CONDUITS 25mm Conduit Supply m 80 CONDUIT BOXES & ENDS Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit. 25mm Conduit Supply No 30 Carried forward R Bill No. 2 PLATFORMS (PROVISIONAL) PRASA

	Brought forward			R	
4.2.6	Install	No	30		
	CONDUIT ENDS				
	Terminate and connect one pair of conduit ends including lock nuts, bushes, etc. connecting into board tray, wiring channel etc. including cutting holes for conduit entries, but excluding conduit box.				
	25mm uPVC Conduit				
4.2.7	Supply	No	35		
4.2.8	Install	No	35		
	CONDUCTORS				
	Supply and installation of PVC insulated copper conductors drawn into conduit or wiring channel in groups of 2, 3, 4, etc. with the required colour coding, but excluding any wiring connections.				
	2,5 mm² PVC Conductors				
4.2.9	Supply	m	250		
4.2.10	Install	m	250		
	4 mm² PVC Conductors				
4.2.11	Supply	m	100		
4.2.12	Install	m	100		
	EARTH CONDUCTORS				
	Supply and drawing into conduit PVC insulated earth conductors, excluding any connections				
	Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	2,5 mm² Conductors				
4.2.13	Supply	m	450		
4.2.14	Install	m	450		
	4 mm² Conductors				
4.2.15	Supply	m	150		
4.2.16	Install	m	150		
	<u>LUMINAIRES</u>				
	Supply and Installation of the following luminaires, complete with lamps as specified in Part C				
	Type A1				
4.2.17	Supply	No	24		
4.2.18	Install	No	24		
	Type J1				
4.2.19	Supply	No	41		
4.2.20	Install	No	41		
	DAYLIGHT SWITCHES / PHOTO-CELLS				
	Supply and installation of approved daylight switch.				
	Daylight Switch				
4.2.21	Supply	No	4		
4.2.22	Install	No	4		
	Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Loud speaker at a train station				
4.2.23	Supply	No	4		
4.2.24	Install	No	4		
	SOCKET OUTLETS				
	Supply, fitting and electrical connection of flush or surface mounted switched socket in either 100 x 100, 100 x 50, round box or wiring channel, excluding box (for flush type) and conduit connections, but including cover plate				
	16A Double SSO c/w coverplate				
4.2.25	Supply	No	4		
4.2.26	Install	No	4		
	WEATHERPROOF BOXES				
	Supply and installation of a weatherproof york(200x200mm) box for isolators excluding conduit connections				
	200x200 york box				
4.2.27	Supply	No	4		
	PROVISIONAL SUMS				
	ALARM SYSTEM				
4.2.28	Complete supply, installation and commissioning of the alarm system to the Ticket Office - ABT		Item		15 000 00
4.2.29	Add for profit upon above, if required.			%	
4.2.30	Add for attendance upon above, if required.			%	
	Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Brought forward			R	
LIGHTNING PROTECTION				
Down Conductors				
Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.				
50mm² aluminium conductor	m	11.2		
Air Terminal Conductors				
Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.	m	11.2		
Terminations of Down Conductors to Air Terminals				
Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc.				
50mm² aluminium conductor to metal roof.	No	4		
Earthing Conductors Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5				
excluding terminations. Rates quoted shall allow for wastage, off-cut and joints.				
70mm² Green PVC insulated copper conductor	m	11.2		
Termination of Earthing Conductors to Down Conductors				
Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
	LIGHTNING PROTECTION Down Conductors Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. 50mm² aluminium conductor Air Terminal Conductors Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. Terminations of Down Conductors to Air Terminals Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc. 50mm² aluminium conductor to metal roof. Earthing Conductors Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints. 70mm² Green PVC insulated copper conductor Termination of Earthing Conductors to Down Conductors Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	LIGHTNING PROTECTION Down Conductors Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. 50mm² aluminium conductor Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. Terminations of Down Conductors to Air Terminals Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc. 50mm² aluminium conductor to metal roof. No Earthing Conductors Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints. 70mm² Green PVC insulated copper conductor m Termination of Earthing Conductors to Down Conductors Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	LIGHTNING PROTECTION Down Conductors Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage. off-cuts and joints. 50mm² aluminium conductor Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. Terminations of Down Conductors to Air Terminals Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc. 50mm² aluminium conductor to metal roof. No 4 Earthing Conductors Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints. 70mm² Green PVC insulated copper conductor Termination of Earthing Conductors to Down Conductors Carried forward Bill No. 2 PLATFORMS (PROVISIONAL) PRASA	LIGHTNING PROTECTION Down Conductors Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. Somm² aluminium conductor Air Terminal Conductors Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints. Terminations of Down Conductors to Air Terminals Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc. 50mm² aluminium conductor to metal roof. No 4 Earthing Conductors Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints. 70mm² Green PVC insulated copper conductor Termination of Earthing Conductors to Down Conductors Carried forward R Bill No. 2 PLATFORMS (PROVISIONAL) PRASA

	Brought forward			R	
	Termination of earth conductor to aluminium down conductor and earth electrodes including making off the ends, lugs, clamps, etc.				
4.2.35	50mm² Termination to 70mm² conductor	No	4		
	Earth Electrodes				
	Supply and installation of earth electrodes generally as specified in Clause A1.3.3.				
4.2.36	3,6m long earth electrodes	No	4		
	Termination of Earth Conductors to Earth Electrodes				
	Termination of Earth Conductors to Earth Electrodes including making off of ends, lugs, clamps, etc.				
4.2.37	70mm² Earth Conductor to Earth Electrode	No	4		
	General Earth Bonding				
4.2.38	Bonding of metal drainage down pipes and items.		Item		
	<u>Testing</u>				
	Supply and testing apparatus and testing in accordance with SANS Code.				
4.2.39	Testing of joint continuity		Item		
4.2.40	Testing of Lightning Protection System		Item		
4.2.41	Testing of Earthing Points		Item		
4.2.42	Soil Resistivity Test and Report		Item		
	Carried Forward to Sectional Summary: Bill No. 2 PLATFORMS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

Item No	Description		Quantity	Rate	Amount	
	SECTION NO. 4					
	BILL NO. 3					
	ELECTRICAL INSTALLATION (PROVISIONAL)					
	PUBLIC ABLUTIONS					
	DISTRIBUTION BOARDS					
	Supply, Installation and commissioning of the Distribution Board, including making off all wire connections (external wiring, conduit, armoured cable and terminations given elsewhere)					
	DB- T					
4.3.1	Supply	No	1			
4.3.2	Install	No	1			
	Security System					
	Installation of Camera System equipment as specified in Section E of the Detailed Specification.					
	360 Degree resolution					
4.3.3	Supply	No	2			
4.3.4	Install	No	2			
	CONDUITS					
	25mm Conduit					
4.3.5	Supply	m	25			
4.3.6	Install	m	25			
	Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R		

	Brought forward			R	
	CONDUIT BOXES & ENDS				
	Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit.				
	25mm Conduit				
4.3.7	Supply	No	15		
4.3.8	Install	No	15		
	CONDUIT ENDS				
	Terminate and connect one pair of conduit ends including lock nuts, bushes, etc. connecting into board tray, wiring channel etc. including cutting holes for conduit entries, but excluding conduit box.				
	25mm uPVC Conduit				
4.3.9	Supply	No	8		
4.3.10	Install	No	8		
	CONDUCTORS				
	Supply and installation of PVC insulated copper conductors drawn into conduit or wiring channel in groups of 2, 3, 4, etc. with the required colour coding, but excluding any wiring connections.				
	2,5 mm² PVC Conductors				
4.3.11	Supply	m	50		
4.3.12	Install	m	50		
	Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
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EARTH CONDUCTORS Supply and drawing into conduit PVC insulated				
Supply and drawing into conduit PVC insulated				
earth conductors, excluding any connections				
2.5 mm ² Conductors				
Supply	m	15		
Install	m	15		
LIGHT SWITCHES				
Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates.				
<u>16A 1 Lever</u>				
Supply	No	5		
Install	No	5		
16A 1 Lever 2 Way				
Supply	No	1		
Install	No	1		
<u>LUMINAIRES</u>				
Supply and Installation of the following luminaires, complete with lamps as specified in Part C				
Type C1				
Supply	No	27		
Install	No	27		
Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
	Install LIGHT SWITCHES Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates. 16A 1 Lever Supply Install 16A 1 Lever 2 Way Supply Install LUMINAIRES Supply and Installation of the following luminaires, complete with lamps as specified in Part C Type C1 Supply Install Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA	Supply m Install m LIGHT SWITCHES Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates. 16A 1 Lever Supply No Install No 16A 1 Lever 2 Way Supply No Install No LUMINAIRES Supply and Installation of the following luminaires, complete with lamps as specified in Part C Type C1 Supply No Install No Install No Install No	Supply m 15 Install m 15 LIGHT SWITCHES Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates. 16A 1 Lever Supply No 5 Install No 5 16A 1 Lever 2 Way Supply No 1 Install No 1 LUMINAIRES Supply and Installation of the following luminaires, complete with lamps as specified in Part C Type C1 Supply No 27 Install No 27 Install No 27 Install No 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA	Supply m 15 Install m 15 LIGHT SWITCHES Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates. 16A 1 Lever Supply No 5 Install No 5 16A 1 Lever 2 Way Supply No 1 Install No 1 LUMINAIRES Supply and Installation of the following luminaires, complete with lamps as specified in Part C Type C1 Supply No 27 Install No 27 Install No 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA

	Brought forward			R	
	Type J1				
4.3.21	Supply	No	14		
4.3.22	Install	No	14		
	DAYLIGHT SWITCHES / PHOTO-CELLS				
	Supply and installation of approved daylight switch.				
	Daylight Switch				
4.3.23	Supply	No	2		
4.3.24	Install	No	2		
	<u>ISOLATORS</u>				
	Supply, fitting and electrical connection of flush or surface mounted Metal Clad Isolators in either 100x100,100x50, round connections, but including cover plate.				
	30A DP Weather proof isolator for HVAC				
4.3.25	Supply	No	2		
4.3.26	Install	m	2		
	WEATHERPROOF BOXES				
	Supply and installation of a weatherproof york(200x200mm) box for isolators excluding conduit connections				
	200x200 york box				
4.3.27	Supply	No	2		
	APPLIANCE CONNECTIONS				
	Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Electrical connection of appliances supplied and installed by				
	Connect Airconditioners single				
4.3.28	Supply	No	2		
	LIGHTNING PROTECTION				
	<u>Down Conductors</u>				
	Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.				
4.3.29	50mm² aluminium conductor	m	11.2		
	Air Terminal Conductors				
4.3.30	Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.	m	11.2		
	Terminations of Down Conductors to Air				
4.3.31	Terminals Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc. 50mm² aluminium conductor to metal roof.	No	2		
	Earthing Conductors	110	_		
	<u>Larting Conductors</u>				
	Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints.				
4.3.32	70mm² Green PVC insulated copper conductor	m	11.2		
	Termination of Earthing Conductors to Down Conductors				
	Termination of earth conductor to aluminium down conductor and earth electrodes including making off the ends, lugs, clamps, etc.				
4.3.33	50mm² Termination to 70mm² conductor	No	2		
	Earth Electrodes				
	Supply and installation of earth electrodes generally as specified in Clause A1.3.3.				
4.3.34	3,6m long earth electrodes	No	2		
	Termination of Earth Conductors to Earth Electrodes				
	Termination of Earth Conductors to Earth Electrodes including making off of ends, lugs, clamps, etc.				
4.3.35	70mm² Earth Conductor to Earth Electrode	No	2		
	General Earth Bonding				
4.3.36	Bonding of metal drainage down pipes and items.		Item		
	<u>Testing</u>				
	Supply and testing apparatus and testing in accordance with SANS Code.				
4.3.37	Testing of joint continuity		Item		
4.3.38	Testing of Lightning Protection System		Item		
	Carried forward Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

	Brought forward		R	
4.3.39	Testing of Earthing Points	Item		
4.3.39		Item Item		
	Carried Forward to Sectional Summary: Bill No. 3 PUBLIC ABLUTIONS (PROVISIONAL)		R	
	PRASA Prepared By SIST Consortium			

Item No	Description		Quantity	Rate	Amount	
	SECTION NO. 4					
	BILL NO. 4					
	ELECTRICAL INSTALLATION (PROVISIONAL)					
	ADMINISTRATION BUILDING AND STAFF PARKING					
	DISTRIBUTION BOARDS					
	Supply, Installation and commissioning of the Distribution Board, including making off all wire connections (external wiring, conduit, armoured cable and terminations given elsewhere)					
	DB-A					
4.4.1	Supply	No	1			
4.4.2	Install	No	1			
	Security System					
	Installation of Camera System equipment as specified in Section E of the Detailed Specification.					
	360 Degree resolution					
4.4.3	Supply	No	2			
4.4.4	Install	No	2			
	CABLE SLEEVES					
	110mm diameter rigid cable					
4.4.5	Supply	m	15			
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R		

	Brought forward			R	
4.4.6	Install	m	15		
	EXCAVATIONS				
4.4.7	In trenches for cables and sleeves	m3	15		
4.4.8	Extra over soft excavation intimediate	m3	15		
4.4.9	Extra over soft excavation hard rock	m3	15		
4.4.10	Backfilling of trenches	m3	15		
4.4.11	Side of trenches and holes excavation not exceeding 1,5m	m3	15		
	CONDUITS				
	25mm Conduit				
4.4.12	Supply	m	25		
4.4.13	Install	m	25		
	CONDUIT BOXES & ENDS				
	Terminate and connect one pair of conduit ends including supply and installation of 1, 2, 3 or 4 way box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit.				
	25mm Conduit				
4.4.14	Supply	No	15		
4.4.15	Install	No	15		
	CONDUIT ENDS				
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Terminate and connect one pair of conduit ends including lock nuts, bushes, etc. connecting into board tray, wiring channel etc. including cutting holes for conduit entries, but excluding conduit box.				
	25mm uPVC Conduit				
4.4.16	Supply	No	20		
4.4.17	Install	No	20		
	CONDUCTORS				
	Supply and installation of PVC insulated copper conductors drawn into conduit or wiring channel in groups of 2, 3, 4, etc. with the required colour coding, but excluding any wiring connections.				
	2,5 mm² PVC Conductors				
4.4.18	Supply	m	150		
4.4.19	Install	m	150		
	4 mm² PVC Conductors				
4.4.20	Supply	m	100		
4.4.21	Install	m	100		
	EARTH CONDUCTORS				
	Supply and drawing into conduit PVC insulated earth conductors, excluding any connections				
	2.5 mm² Conductors				
4.4.22	Supply	m	150		
4.4.23	Install	m	150		
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	4 mm² Conductors				
4.4.24	Supply	m	100		
4.4.25	Install	m	100		
	LIGHT SWITCHES				
	Supply, fitting and electrical connection of a flush or surface mounted 16A switch in 100 x 50 excluding box (for flush type) and conduit connections, but including cover plates.				
	16A 1 Lever				
4.4.26	Supply	No	2		
4.4.27	Install	No	2		
	<u>LUMINAIRES</u>				
	Supply and Installation of the following luminaires, complete with lamps as specified in Part C				
	Type A1				
4.4.28	Supply	No	4		
4.4.29	Install	No	4		
	Type J1				
4.4.30	Supply	No	7		
4.4.31	Install	No	7		
	DAYLIGHT SWITCHES / PHOTO-CELLS				
	Supply and installation of approved daylight switch.				
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Daylight Switch				
4.4.32	Supply	No	1		
4.4.33	Install	No	1		
	SOCKET OUTLETS				
	Supply, fitting and electrical connection of flush or surface mounted switched socket in either 100 x 100, 100 x 50, round box or wiring channel, excluding box (for flush type) and conduit connections, but including cover plate				
	16A Double SSO c/w coverplate				
4.4.34	Supply	No	4		
4.4.35	Install	No	4		
	WEATHERPROOF BOXES				
	Supply and installation of a weatherproof york(200x200mm) box for isolators excluding conduit connections				
	200x200 york box				
4.4.36	Supply	No	4		
	LIGHTNING PROTECTION				
	Down Conductors				
4.4.27	Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.		F. 6		
4.4.37	50mm² aluminium conductor	m	5.6		
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	Air Terminal Conductors				
4.4.38	Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.	m	5.6		
	Terminations of Down Conductors to Air Terminals				
	Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc.				
4.4.39	50mm² aluminium conductor to metal roof.	No	1		
	Earthing Conductors				
	Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints.				
4.4.40	70mm² Green PVC insulated copper conductor	m	5.6		
	Termination of Earthing Conductors to Down Conductors				
	Termination of earth conductor to aluminium down conductor and earth electrodes including making off the ends, lugs, clamps, etc.				
4.4.41	50mm² Termination to 70mm² conductor	No	1		
	Earth Electrodes				
	Supply and installation of earth electrodes generally as specified in Clause A1.3.3.				
4.4.42	3,6m long earth electrodes	No	1		
	Termination of Earth Conductors to Earth Electrodes				
	Carried forward Bill No. 4 SECURITY & CLEARNERS ACCOMMODATION PRASA Prepared By SIST Consortium			R	

	Brought forward		R	
	Termination of Earth Conductors to Earth Electrodes including making off of ends, lugs, clamps, etc.			
4.4.43	70mm² Earth Conductor to Earth Electrode No	1		
	General Earth Bonding			
4.4.44	Bonding of metal drainage down pipes and items.	Item		
	<u>Testing</u>			
	Supply and testing apparatus and testing in accordance with SANS Code.			
4.4.45	Testing of joint continuity	Item		
4.4.46	Testing of Lightning Protection System	Item		
4.4.47	Testing of Earthing Points	Item		
4.4.48	Soil Resistivity Test and Report	Item		
	Carried Forward to Sectional Summary: Bill No. 4		R	
	SECURITY & CLEARNERS ACCOMMODATION PRASA			
	Prepared By SIST Consortium			

Item No	Description	Quantity	Rate	Amount
	SECTION NO. 4			
	BILL NO. 5			
	ELECTRICAL INSTALLATION (PROVISIONAL)			
	EXTERNAL WORKS			
	PREAMBLES			
	Refer to the attached Specifications for the Electrical Installation. The Tenderer must at all times read the Bills of Quantities in conjuction with the specification and drawings prior to pricing this section. Items 1-4 below applies to the entire electrical installation for the school.			
	GUARANTEE AND MAINTENANCE			
4.5.1	Guarantee and maintenance for the complete installation of Electrical Installation including fittings, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover.	ltem		
	TESTING			
4.5.2	Allow for testing, balancing and commissioning the whole of the electrical installation as laid down in the specification and for re-testing as may be required after the making good of all defective work to the satisfaction of the Department and the Engineer.	ltem		
	AS-BUILT DRAWINGS			
4.5.3	Provision for the drawings showing all site cable routes, conduit routes, draw boxes and positions of outlets, etc.	Item		
	CERTIFICATE OF COMPLIANCE			
4.5.4	Provision for the Certificate of Compliance to be issued on completion of the project.	Item		
	Carried forward Bill No. 5		R	
	EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			

	Brought forward			R	
	LABELLING AND MARKING	l			
4.5.5	Allow for marking and labelling of all equipment, cables etc.		Item		
	Provisional Sum				
4.5.6	Allow for a Connection with the Back-up Generator of 100KVA		Item		347 050.00
4.5.7	Add for profit upon above, if required.			%	
4.5.8	Add for attendance upon above, if required.			%	
	New Kiosk				
	Supply and Installation and commissioning of the Kiosk, including making off all wire connections (external wiring, conduit, armoured cable and terminations given elsewhere).				
4.5.9	Supply	No	1		
4.5.10	Install	No	1		
	Copper Cables - (External Works) Provisional Quantities				
	Supply, delivery and laying of PVC/ECC/SWA/PVC copper cables as specified, excluding terminations and cable supports. Lengths given shall be taken as measured lengths to cable runs from terminal to terminal and rates quoted shall include for off-cuts				
	70 mm² 4 core PVC/SWA/PVC ECC Cable				
4.5.11	Supply	m	100		
4.5.12	Install	m	100		
	Carried forward Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

		Brought forward		R	
	16 mm² 4 core PVC/SWA/PVC ECC Ca	<u>ble</u>			
4.5.13	Supply	m	400		
4.5.14	Install	m	400		
	10 mm² 2 core PVC/SWA/PVC ECC Ca	<u>ble</u>			
4.5.15	Supply	m	300		
4.5.16	Install	m	300		
	Cable Terminations				
	Including the supply and fitting of gland, shroud, making off the cable the gland to gland plates, switchge equipment including final connection tails with lugs onto board terminal including earth in ECC cable	e and fitting ear or ions of cable			
	70 mm² 4 core PVC/SWA/PVC ECC Ca	<u>ble</u>			
4.5.17	Supply	No	2		
4.5.18	Install	No	2		
	10 mm² 2 core PVC/SWA/PVC ECC Ca	<u>ble</u>			
4.5.19	Supply	No	55		
4.5.20	Install	No	55		
	16 mm² 4 core PVC/SWA/PVC ECC Ca	ble			
4.5.21	Supply	No	25		
4.5.22	Install	No	25		
	Cable Sleeves				
	Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried forward		R	

	Brought forward			R	
	Supply and Installation of Cable Sleeves as specified, in trenches or cast in concrete, excluding trenching or backfilling.				
	110mm Ø Rigid Cable Sleeve				
4.5.23	Supply	No	20		
4.5.24	Install	No	20		
	75mm Ø Rigid Cable Sleeve				
	EXCAVATIONS				
	CPAP WORK GROUP NO 104 UNLESS OTHERWISE STATED				
	Excavations other than bulk in soft excavation not exceeding 2m deep for:				
	Allowance is to be made for the installation of cable markers and warning sheets				
4.5.25	In trenches for cables and sleeves	m3	750		
	Filling obtained from excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO dencity				
4.5.26	Backfilling of trenches	m3	750		
	Risk of collapse of excavations other than bulk				
4.5.27	Sides of trenches and hole excavations not exceeding 1.5m deep	m3	750		
	<u>Manholes</u>				
	Supply and installation of manholes as shown on the drawings. Refer to Clause B6				
4.5.28	600 x 600mm Concrete Manholes	No	2		
	Carried forward			R	
	Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium				

	Brought forward			R	
	Cable Markers				
	Allow to supply and install cable markers				
4.5.29	PVC warning marking tape	m	750		
	<u>Luminaires</u>				
	Supply and install and electrically connecting the following luminaires, complete with lamps. Refer to Clause C2 of Part 3.				
	<u>Type P1.1</u>				
4.5.30	Supply	No	20		
4.5.31	Install	No	20		
	7m Pole				
4.5.32	Supply	No	20		
4.5.33	Install	No	20		
	Daylight Switch				
	Supply and installation of approved daylight switch.				
	Daylight Switch				
4.5.34	Supply	No	4		
4.5.35	Install	No	4		
	Loud speaker at a train station				
4.5.36	Supply	No	4		
4.5.37	Install	No	4		
	LIGHTNING PROTECTION				
	Carried forward Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
	<u>Down Conductors</u>				
	Supply and fixing on surface in an approved manner of aluminium conductor as specified in Clause A1.3.1 including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.				
4.5.38	50mm² aluminium conductor	m	15.0		
	Air Terminal Conductors				
4.5.39	Supply and fixing on surface in an approved manner of 50mm² aluminium conductor including all fixing accessories, such as insulating sleeves and stand-off brackets, but not including terminations. Rates quoted shall allow for wastage, off-cuts and joints.	m	15.0		
	Terminations of Down Conductors to Air Terminals				
	Termination of aluminium conductor to metal roof as specified in Clause A1.4 including lugs and making off of the ends etc.				
4.5.40	50mm² aluminium conductor to metal roof.	No	4		
	Earthing Conductors				
	Supply and laying in the ground and in conduits of copper earth wire as specified in Clause A1.5 excluding terminations. Rates quoted shall allow for wastage, off-cut and joints.				
4.5.41	70mm² Green PVC insulated copper conductor	m	12.0		
	Termination of Earthing Conductors to Down Conductors				
	Termination of earth conductor to aluminium down conductor and earth electrodes including making off the ends, lugs, clamps, etc.				
4.5.42	50mm² Termination to 70mm² conductor	No	4		
	Carried forward Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward		R	
	Earth Electrodes			
	Supply and installation of earth electrodes generally as specified in Clause A1.3.3.			
4.5.43	3,6m long earth electrodes	4		
	Termination of Earth Conductors to Earth Electrodes			
	Termination of Earth Conductors to Earth Electrodes including making off of ends, lugs, clamps, etc.			
4.5.44	70mm² Earth Conductor to Earth Electrode No.	4		
	General Earth Bonding			
4.5.45	Bonding of metal drainage down pipes and items.	Item		
	<u>Testing</u>			
	Supply and testing apparatus and testing in accordance with SANS Code.			
4.5.46	Testing of joint continuity	Item		
4.5.47	Testing of Lightning Protection System	Item		
4.5.48	Testing of Earthing Points	Item		
4.5.49	Soil Resistivity Test and Report	Item		
	Carried Forward to Sectional Summary: Bill No. 5 EXTERNAL WORKS (PROVISIONAL) PRASA Prepared By SIST Consortium		R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

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4.5	EXTERNAL WORKS (PROVISIONAL)	130		
	Carried to Final Summary PRASA Prepared By SIST Consortium		R	

Description		Quantity	Rate	Amount
SECTION NO. 5				
BILL NO. 1				
AIR CONDITIONING AND VENTILATION INSTALLATION (PROVISIONAL)				
EXISTING TICKET OFFICE				
AIR CONDITIONING				
Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes.				
Air Conditioning Indoor Unit and Outdoor Units.				
Split Inverter Type.				
Ticket Sales Booth Five(5) off: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories.				
Supply	No	5		
Intsall	No	5		
Ticket Office 1: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories.				
Supply	No	1		
Install	No	1		
Office-2: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories.				
Supply	No	1		
Install	No	1		
Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA Prepared By SIST Consortium			R	
	SECTION NO. 5 BILL NO. 1 AIR CONDITIONING AND VENTILATION INSTALLATION (PROVISIONAL) EXISTING TICKET OFFICE AIR CONDITIONING Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes. Air Conditioning Indoor Unit and Outdoor Units. Split Inverter Type. Ticket Sales Booth Five(5) off: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories. Supply Intsall Ticket Office 1: 5.3kW Cooling Capacity and 5.3kW Heating Celling Cassette Inverter type Split Unit, complete with controls and accessories. Supply Install Office-2: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories. Supply Install Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA	SECTION NO. 5 BILL NO. 1 AIR CONDITIONING AND VENTILATION INSTALLATION (PROVISIONAL) EXISTING TICKET OFFICE AIR CONDITIONING Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes. Air Conditioning Indoor Unit and Outdoor Units. Split Inverter Type. Ticket Sales Booth Five(5) off: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories. Supply No Intsall No Ticket Office 1: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories. Supply No Install No Office-2: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories. Supply No Install No Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA	SECTION NO. 5 BILL NO. 1 AIR CONDITIONING AND VENTILATION INSTALLATION (PROVISIONAL) EXISTING TICKET OFFICE AIR CONDITIONING Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes. Air Conditioning Indoor Unit and Outdoor Units. Split Inverter Type. Ticket Sales Booth Five(5) off: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories. Supply No 5 Ticket Office 1: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories. Supply No 1 Install No 1 Office-2: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories. Supply No 1 Install No 1 Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA	SECTION NO. 5 BILL NO. 1 AIR CONDITIONING AND VENTILATION INSTALLATION (PROVISIONAL) EXISTING TICKET OFFICE AIR CONDITIONING Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes. Air Conditioning Indoor Unit and Outdoor Units. Split Inverter Type. Ticket Sales Booth Five(5) off: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories. Supply No 5 Ticket Office 1: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories. Supply No 1 Office-2: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories. Supply No 1 Install No 1 Carried forward R Bill No. 1 HVAC (PROVISIONAL) PRASA

	Brought forward			R	
	Office 3: 2.5kW Cooling Capacity and 2.8kW Heating Capacity High Wall Inverter type Split Unit, complete with controls and accessories.				
5.1.7	Supply	No	1		
5.1.8	Install	No	1		
	Open Plan Office: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories.				
5.1.9	Supply	No	1		
5.1.10	Install	No	1		
	Office 4: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories.				
5.1.11	Supply	No	1		
5.1.12	Install	No	1		
	Office 5: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories.				
5.1.13	Supply	No	1		
5.1.14	Install	No	1		
	Board Room 1: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories.				
5.1.15	Supply	No	1		
5.1.16	Install	No	1		
	Office 6: 2.5kW Cooling Capacity and 2.8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories.				
5.1.17	Supply	No	2		
	Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R	
5.1.18	Install	No	2		
	Board Room 2: 5.3kW Cooling Capacity and 5.3kW Heating Ceiling Cassette Inverter type Split Unit, complete with controls and accessories.				
5.1.19	Supply	No	2		
5.1.20	Install	No	2		
	EXISTING RELAY(CONTROLS) BUILDING				
	AIR CONDITIONING				
	Split Inverter Type Air Conditioning Pricing shall include Refrigerant Pipes.				
	Air Conditioning Indoor Unit and Outdoor Units.				
	Split Inverter Type.				
	7.1kW Cooling Capacity and 8kW Heating Highwall Inverter type Split Unit, complete with controls and accessories.				
5.1.21	Supply	No	2		
5.1.22	Install	No	2		
	Condensate Drain Pipes, & Condensate Pipes				
	Highwall Split Unit Condensate drain Pump at 1500mm Head.				
5.1.23	Supply	No	20		
5.1.24	Install	No	20		
5.1.25	Supply and install 32mm diameter condensate pipe	m	115		
5.1.26	Supply and install 25mm diameter condensate pipe	m	135		
	Carried forward Bill No. 1 HVAC (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

		Brought forward		R	
	Electrical Work				
5.1.27	Electrical Work Electrical installation and wirin and outdoor air conditioning urisolator switch and Thermostal Indoor Units	nits including local starter/	Item		
	Bill No. 1 HVAC (PROVISIONAL) PRASA Prepared By SIST Consortium	Carried to Final Summary		R	

Item No	Description	Quantity	Rate	Amount
	SECTION NO. 6			
	BILL NO. 1			
	CONVENTIONAL FIRE PROTECTION SYSTEM			
	FIRE FIGHTING EQUIPMENT (PROVISIONAL)			
	All rates supplied in this bill of quantities shall be deemed to include scaffolding to any height and fixing piping up to roof height.			
	FIRE HYDRANTS			
6.1.1	Supply and install Right Angle Tamperproof Hydrant with 100mm Storz Outlet and 100mm Female BSP Inlet. Spindle Square: - 16mm (SABS1128) (Installation downstream of water meter connection).	1		
6.1.2	Supply and install 100mm FxF (Female x Female) Full Bore BSP Brass Ball Valve No	1		
6.1.3	Supply and install Cast Iron Wafer Check Valve with Ductile Iron or 316 Stainless Steel. Double Doors and EPDM Seal. This valve assembly downstream of the suction hydrant to be encased in a 600mm x 480mm medium grade cast iron manhole with frame for for access for maintenance.	3		
6.1.4	Supply and install 100mm Two-Port Booster with 65mm Brass Booster Connectors, Pressure Gauge with 100mm T/16 Inlet encased in a steel cover with front open. Pressure gauge Dial to read up to 2500kPa. No	1		
6.1.5	Supply and install 80mm x 65mm Cast Iron Right Angle Tamperproof Hydrant with Single Lug. Instantaneous Outlet and 80mm Male BSP Inlet. Hand wheel type hydrants are not acceptable. No	4		
	Carried forward Bill No. 1 FIRE FIGHTING EQUIPMENT (PROVISIONAL) PRASA Prepared By SIST Consortium		R	

	Brought forward			R	
	HOSE REEL				
6.1.6	Supply and install 30 Metre Hose Reel complete with 25mm Chromium plated Shut-off valve, Aluminium Nozzle, Hose Guide and angle iron fixing bracket.	m	5		
	FIRE EXTINGUISHER				
6.1.7	Supply and install 4.5kg Dry Chemical Powder (DCP) Type portable fire extinguisher complete with steel mounting bracket and 100mm W x 600mm L polished & varnished Meranti Hardwood Backing board plugged in wall behind.	No	7		
6.1.8	Supply and install 5kg Carbon dioxide (CO2) Type portable fire extinguisher complete with steel mounting bracket and 100mm W x 600mm L polished & varnished Meranti Hardwood Backing board plugged in wall behind.	No	3		
	SIGNAGE				
6.1.9	ABS signage in accordance with SANS 1186 for external twin fire booster connection incorporating the pictographs in the standard 290mm x 290mm module size fixed on a purpose made triangular steel support such that the sign is visible from the two sides along the road. The mounting height to be ±2000mm above finished ground level.	No	3		
6.1.10	Photoluminescent signage and warning notices in accordance with SANS 1186 Parts 1 & 5 incorporating the pictographs in the standard 190mm x 190mm module size encased in Aluminium metal frames with chamfered edges mechanically and securely fixed to walls or roof slabs or ceiling hung in stainless steel chain or wire. Strictly NO double sided tape or silicone sealing of statutory signage is allowed. Signs shall be a single sign along its width and not multiple individual				
	signs.	No	28		
	Carried forward Bill No. 1 FIRE FIGHTING EQUIPMENT (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

	Brought forward			R
6.1.11	ABS signage in accordance with SANS 1186 for external raised fire hydrants incorporating the pictographs in the standard 290mm x 290mm module size fixed on a purpose made triangular steel support such that the sign is visible from the two sides along the viewing two sides. The mounting height to be ±2000mm above finished ground level.	No	4	
	EXTERNAL FIRE PIPING RETICULATION - BELOW GROUND (BY OTHERS)			
	High Pressure HDPE Type IV PE 80 Class 16 pipes to SANS 4427:2008 used in conjunction with electro fusion and buttweld fittings or compression fittings or Victaulic Takstubs suitable for belowground applications for the conveyance of potable water in reticulation systems in which continuous temperatures in excess of 25°C are not encountered.			
	All piping rates supplied shall include couplings, bends, tees, sockets, pipe supports, anchors, along the running length, wrap (denso or similar),backfilling and compaction.			
6.1.12	Ø110mm High pressure pipe laid in ground not exceeding 1000mm deep.	m	522	
5.1.13	Ø110mm HDPE to 100mm Galvanised steel pipe connector	No	12	
5.1.14	Ø50mm High pressure pipe laid in ground not exceeding 1000mm deep.	m	16	
	Carried forward Bill No. 1 FIRE FIGHTING EQUIPMENT (PROVISIONAL) PRASA Prepared By SIST Consortium			R

	Brought forward			R	
	INTERNAL FIRE PIPING RETICULATION				
	All above-ground firewater pipes shall be Medium Grade Galvanised Steel to SANS 62-1:2013 for nominal sizes from 25mm up to and including 150mm. All pipes and fittings shall be installed strictly in accordance with the manufacturer's specifications, and recommendations. Pipes shall be colour coded in accordance with the requirements of SANS 10140 Identification Colour Markings - Part 3: 2017 Contents of Pipelines or similar approved in close liaison with with the Fire Engineer.				
	Medium Grade Steel Pipes				
6.1.15	100mm diameter pipes	m	22		
6.1.16	100mm 90 deg elbow, SANS 509	No	12		
6.1.17	100mm 45 deg elbow, SANS 509	No	8		
6.1.18	100mm x 100mm x 80mm Tee, SANS 509	No	5		
6.1.19	80mm diameter pipes	m	16		
6.1.20	80mm 90 deg elbow, SANS 509	No	6		
6.1.21	32mm diameter pipes	m	82		
6.1.22	32mm 90 deg elbow, SANS 509	No	28		
6.1.23	32mm x 32mm x 32mm Tee, SANS 509	No	26		
6.1.24	32mm to 25mm reducer	No	22		
6.1.25	25mm diameter pipes	m	76		
6.1.26	25mm 90 deg elbow, SANS 509	No	22		
6.1.27	25mm 45 deg elbow, SANS 509	No	8		
	Carried to Final Summary Bill No. 1 FIRE FIGHTING EQUIPMENT (PROVISIONAL) PRASA Prepared By SIST Consortium			R	

BIRCHLEIGH TRAIN STATION PRASA - CORRIDOR 2A UPGRADES TO EXISTING TRAIN STATION - PHASE 1

	FINAL SUMMARY			
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	VALUE ADDED TAX		R	
	TOTAL		R	
	Carried to Form of Tender		R	
	PRASA Prepared By SIST Consortium			