Item	Description: Fire Protection and CCTV installation	Unit	QTY	Rate	Amount
	BILL NO. 1				
	PRELIMINARIES AND GENERAL				
	BUILDING AGREEMENT AND PRELIMINARIES				
	The JBCC Series 2000 Principal Building Agreement (July 2007 edition) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described.				
	The JBCC Series 2000 Preliminaries (May 2005 edition) prepared by the Joint Building Contract Committee shall be deemed to be incorporated in these bills of quantities.				
	Contractors are referred to the abovementioned documents for the full intent and meaning of each clause thereof.				
	These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents.				
	Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable".				
	PREAMBLES FOR TRADES				
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained.				
	Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles.				
	The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles.				
	PRICING OF PRELIMINARIES				
	For the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T).				
	SECTION A - PRINCIPAL BUILDING AGREEMENT				
	Definitions				
1	Clause 1.0 - Definitions and interpretation. F:..... V:..... T:.....	**Item**	**1**		R -
	Objective and preparations				
2	Clause 2.0 - Offer acceptance and performance obligations.F:..... V:..... T:.....	**Item**	**1**		R -

3	Clause 3.0 - Documents.Clause 3.0 is amended by:3.1. Is deleted in its entirety3.3.Is deleted and replaced by the following:Where the employer requires the contractor to waive his lien or right of continuing possession of the works as stated in the schedule, the contractor shall do so prior to taking possession of the works. The waiver shall be according to the JBCC Waiver of Contractors lien Form or such other form as stated in the schedule.The contractor shall simultaneously with the signing of every selected or domestic subcontract, deliver to the Principal Agent an undertaking and cession in respect of contractor's lien which shall mutatis mutandis conform to the JBCC Waiver of Contractors Lien form. F:..... V:..... T:.....	**Item**	**1**		R	-
4	Clause 4.0 - Design responsibility.4.1. Is amended by the addition of the following:Notwithstanding the provisions of clause 4.1 hereof, where the contractor undertakes the design responsibility of any aspect of the works, he shall, in accordance with the "Form of Indemnity" attached to this document, indemnify and hold free the employer and his agents from responsibility for any claim or proceeding whatsoever due to fault in the design, detailing, calculations, etc., to the extent undertaken by the contractor. In such instances and with regard to those aspects of the work as may be required.In respect of design responsibility undertaken by any nominated or selected subcontractor, such subcontractor shall similarly, indemnify and hold free the employer, his agents and the contractor from responsibility for any claim or proceeding whatsoever due to fault in the design, detailing, calculations, etc., to the extent undertaken by the subcontractor.F:..... V:..... T:.....	**Item**	**1**		R	-
5	Clause 5.0 - Employer's agents.5.3.2.Is amended by the addition of the following to the end thereof:- "The authority of the Principal Agent to issue Contract Instructions or to perform duties as may be required for the relevant aspects of the works is delegated to the other Agents as follows. The Principal Agent retain the right to vary these assignments as dictated by the project specific circumstances and agreed to by the Agent and the Employer :- 1. PRINCIPAL AGENTThe Project Manager is to manage, administer and monitor the contracts and processes, including the preparation and co-ordination of the procedures and documentation to facilitate practical completion of the works1.1.Arrange site handover to the contractor1.2.Establish construction documentation issue process 1.3.Agree and monitor issue and distribution of construction 1.4.documentation1.5.Instruct the contractor on behalf of the client to appoint subcontractors1.6.Conduct and record regular site meetings1.7.Monitor, review and approve the preparation of the construction programme by the contractor1.8.Regularly monitor performance of the contractor against the construction programme1.9.Adjudicate entitlements that arise from changes required to the construction programme1.10.Receive, co-ordinate and monitor approval of all contract documentation provided by contractor(s)1.11.Agree quality assurance procedures and monitor implementation thereof by the other consultants and the contractors1.12.Monitor preparation and auditing of the contractor's health and safety plan and approval thereof by the health and safety consultant1.13.Monitor preparation of the 1.14.management plan by the environmental consultant1.15.Establish procedures for monitoring scope and cost variations1.16.Monitor, review, approve and issue certificates1.17.Receive, review and adjudicate any contractual claim1.18.Monitor preparation of financial control reports by the other consultants1.19.Prepare and submit progress report1.20.Coordinate, monitor and issue practical completion lists and the certificate of practical completion1.21.Co-ordinate and monitor rectification of defects1.22.Manage procurement of operations and maintenance manuals, guarantees and warranties 1.23.Manage preparation of as-built drawings and documentation1.24.Manage procurement of outstanding statutory certificates.Monitor	**Item**	**1**		R	-
6	Clause 6.0 - Contractor's site representative.6.1.Is amended by the addition of the following: Refer to Section B Clause 4.1 for specific requirements. F:..... V:..... T:.....	**Item**	**1**		R	-

7	Clause 7.0 - Compliance with laws and regulations.7.2.The employer reserves the right to pay direct (i.e. not through the contractor) for all or any permanent connections to local or other authority services, for which provisional amounts have been included within the selected sub-contract bill / section hereof. In the event of the employer paying direct for these charges, the contractor will not be entitled to a ten percent (10%) mark-up in terms of Clause 32.4. All such provisional amounts included in the contract sum will be omitted.7.3. Health and Safety Specification - the contractor shall comply with the requirements of the Occupational Health & Safety Act (85/1993) and the February 2014 Construction Regulations. The employer will appoint an independent safety officer who will, in consultation with the contractor, draw up and agree the construction phase health and safety plan / specification. This health and safety specification will form an integral part of the principal contract document and will be copied to all subcontractors for inclusion, as modified, within their respective scope of works. 7.4."The Contractor acknowledges that the undertaking given in this clause constitutes an agreement in terms of Section 37 (20 of the OHSA Act and its regulations, whereby all responsibility for health and safety matters relating to the services performed under this agreement shall be the obligation of the Service Provider. The Contractor shall comply with all the laws and regulations which may be relevant to the services performed under this agreement, it being recorded that the presence of the Contractor's employees, representatives, authorised sub-contractors, machinery, plant equipment and vehicles at the employer's premises shall always be subject to the provisions of the OHS Act and of all other relevant legislation, codes of practice, directives, health and safety rules and security measures and will adhere to and obey all directives and instructions given by the employer in this regard".7.5.Environmental Impact Assessment Regulations - the contractor shall comply with Regulations 1182 and 1183, 1997.7.6.Broad Based Black Economic Empowerment (Department of Trade and Industry Notice 111 of 2005) - it is the expressed intention of the employer to ensure that the targets as stipulated in the Construction Sector Charter under Section 12 of the Broad Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003)	**Item**	**1**		R	-
8	Clause 8.0 - Works riskClause 8.2.3 The Contractor shall be liable for and pay the deductiblesF:..... V:..... T:.....	**Item**	**1**		R	-
9	Clause 9.0 - Warranties and Indemnities. F:..... V:..... T:.....	**Item**	**1**		R	-
10	Clause 10.0 - General insurances.10.1.4.The contractor shall effect, as a minimum, the following insurances:a) Insurance to comply with the provisions of the compensation for Occupational injuries and diseases Act 1993b) Contractors liability insurance as listed in the schedulec) All risk cover on all construction plant and allied equipment including site huts and temporary accommodation including plant and machinery hired, leased or loaned. The Employer"s interest is to be noted. Furthermore the contractor shall effect and maintain for the duration of the contract Motor Vehicle Liability Insuranced) Insurance in accordance with the Multilateral Motor Vehicle Accident fund no 93 of 1989 amendede) Balance of Third Party Motor Risk including passenger Liability.10.5.The Contractor shall be liable for and pay the policy deductibles in respect of the insurances arranged by the employer where an action or inaction by the contractor is the cause of the claim. F:..... V:..... T:.....	**Item**	**1**		R	-
11	Clause 11.0 - Special insurances.F:..... V:..... T:.....	**Item**	**1**		R	-
12	Clause 12.0 - Effecting insurances.12.3.Is amended by the addition of: The parties responsible for effecting the various insurances, shall complete the relevant sections of Annexure E - "Declaration of Insurance" attached.F:..... V:..... T:.....	**Item**	**1**		R	-
13	Clause 13.0 - Assignment.F:..... V:..... T:.....	**Item**	**1**		R	-
14	Clause 14.0 - Security 14.3 Is amended to read as follows: The Contractor shall provide security in the form of a variable construction guarantee in terms of Clause 14.4 as stated in the contract data. Such security shall be provided to the employer within twenty-one (21) calendar days of written acceptance of the Contractor"s tender. In the event that the value of the works (including adjustments done in terms of CPAP, if applicable) were to increase during the course of the contract by an amount of 15%, or more, of the contract sum, upon written request from the principal agent the contractor shall immediately arrange to have the construction guarantee "guaranteed sum" increased accordingly, the verified cost of which shall be added to the contract sum. This security is to have an expiry date at no earlier than six months after the final section Practical Completion date.F:..... V:..... T:.....	**Item**	**1**		R	-
	Execution					
15	Clause 15.0 - Preparation for and execution of the works. F:..... V:..... T:.....	**Item**	**1**		R	-

16	Clause 16.0 - Site and access.In addition, the contractor shall be informed of any limitations or restrictions on working space, any restrictions imposed by existing buildings, any restrictions imposed by any authorities and any limitations on the availability of water, power and sewerage facilities.Access to the works shall be strictly confined to that permitted by the principal agent. The contractor shall be responsible for maintaining such access and reinstating same upon completion.The contractor shall supply One (1) notice boards to the design and specifications approved by the principal agent to be constructed at suitable positions allocated by the principal agentThe contractor shall provide in his/her site office suitable facilities in which the site meetings with the employer's agents could be conductedNo claims for extras arising from the contractor having failed to comply with this clause will be entertained. Protection of Trees "All existing trees and landscaping to be protected and maintained and returned to condition prior to commencement on site, at the end of phases.Existing Services "The survey of the existing services will be included in this contract and the contractor to take note when working in areas.Maintaining access and traffic flow to the entire site throughout the project. The Contractor is to provide Adequate facilities and sufficient personnel to ensure tenant"s direct fit-out contractors can attend safety inductions before they start work as and when required by the programme. Adequate toilet facilities are to be provided for tenant"s direct contractors that are a reasonable distance from the work area. The contractor is to provide skips for the use of the tenants and these skips are to be replaced on a daily basis or as required. The above provision are to be reviewed and agreed with the Principal Agent before implementation.F:..... V:..... T:.....	**Item**	**1**		R	-
17	Clause 17.0 - Contract instructions.17.1.21.Acceleration/Special measures17.1.22.Contractors resources, organisation and management of the contract17.6.Incorrect work due to the default of the Contractor shall be removed and made good at the contractor"s cost. Should any such work be accepted by the Principal Agent and should this work involve revision to other work or any other remedial work, then such work, including related professional fees shall be to the cost of the Contractor. Professional fees or other authorised charges in this case shall be payable by the Employer who may deduct same from amounts due or to become due to the Contractor.Inspection of the works by the Principal Agent and other agents are intended as a means of checking the interpretation of the work done and providing clarification and further information where required during the progress of the works. Such inspection shall not in any way relieve the Contractor of his responsibility for ensuring that the work is carried out satisfactorily in all respects, in accordance with the latest agreed programme and in accordance with the Agreement.17.7.Contract instructions issued on site are to be recorded by the principal agent or delegated agent via the following means :1.Contract instruction book to be issued by the contractor and which shall be maintained on site by the contractor. Copies of such contract instructions are to be issued (via email) to the principal agent, Principal Agent, quantity surveyor and the delegated agent responsible for issuing the contract instruction. Only contract instructions issued in such book shall be recognized.2.Electronic format as stipulated by the Principal Agent.17.8.Contract instructions to the Contractor and his sub-contractors will be issued only by the Principal Agent or his authorised agent and must be issued via the Contractor. Copies of all contract instructions issued shall be submitted to the Principal Agent, the Quantity Surveyor and the authorised agent within 48 hours of issue by the authorised agent issuing the Contract instructions. F:..... V:..... T:.....	**Item**	**1**		R	-
18	Clause 18.0 - Setting out of the works The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments.18.5.The contractor shall perform tolerance control checks regularly throughout the contract period and report on these at regular intervals to the principal agent in a format approved by the principal agent. Should the contractor fail to comply with this requirement to the satisfaction of the principal agent, progressively as the structure is constructed, the employer shall be entitled to commission a registered land surveyor to do so on the contractor"s behalf and at the contractor"s expense.18.6.The contractor shall provide general attendance and all reasonable assistance to the above mentioned or any other land surveyor who may be appointed by the employer"F:..... V:..... T:.....	**Item**	**1**		R	-
19	Clause 19.0 - Temporary works and plant F: ..... V:..... T:.....	**Item**	**1**		R	-

20	Clause 20.0 - Nominated subcontractors. 20.1.4.The Employer reserves the right to split subcontract work (nominated or selected) contained within tender documentation into more than a single subcontract for the execution of the specific work. Such appointment of one or more subcontract shall be at the Employer"s discretion and no claims whatsoever will be entertained due to any such reduction in scope of works due to multiple appointments.20.1.5.The nominated subcontract amounts allowed in these bills of quantities include work to be executed in accordance with employers, requirements. The contractor accepts that, such work may, at the principal agent"s discretion, be omitted from this contract and executed under separate direct contract/s. The contractor hereby accepts that he shall not be entitled to any profit mark-up on the omitted work and that no claim for loss of profit shall be entertained.20.6.Is deleted in its entirety and replaced with:Where the Contractor fails to provide proof of payment to the subcontractor within seven (7) working days following payment being received from the employer, the employer may instruct the principal agent to certify direct payment to the subcontractor and recover such amount from the contractor. Furthermore, the subcontractor proof of payment is to list the amounts recovered by the contractor from the subcontractor and advise on the reason for the recovery.F:..... V:..... T:.....	**Item**	**1**		R	-
21	Clause 21.0 - Selected subcontractors.21.1.5.Clause 21 is amended The Employer reserves the right to split subcontract work (nominated or selected) contained within tender documentation into more than a single subcontract for the execution of the specific work. Such appointment of one or more subcontract shall be at the Employer"s discretion and no claims whatsoever will be entertained due to any such reduction in scope of works due to multiple appointments.21.1.6.The selected subcontract amounts allowed in these bills of quantities include work to be executed in accordance with employers, requirements. The contractor accepts that, such work may, at the principal agent"s discretion, be omitted from this contract and executed under separate direct contract/s. The contractor hereby accepts that he shall not be entitled to any profit mark-up on the omitted work and that no claim for loss of profit shall be entertained.21.6.Is deleted in its entirety and replaced with:Where the Contractor fails to provide proof of payment to the subcontractor within seven (7) working days following payment being received from the employer, the employer may instruct the principal agent to certify direct payment to the subcontractor and recover such amount from the contractor. Furthermore, the subcontractor proof of payment is to list the amounts recovered by the contractor from the subcontractor and advise on the reason for the recovery.F:..... V:..... T:.....	**Item**	**1**		R	-
22	Clause 22.0 - Employer's direct contractors.22.6.There shall be no privity of contract between the contractor and a direct contractor appointed by the employer. 22.7.Refer to relevant clause in Section C"s F:..... V:..... T:.....	**Item**	**1**		R	-
23	Clause 23.0 - Contractor's domestic subcontractors. F:..... V:..... T:.....	**Item**	**1**		R	-
	Completion					
24	Clause 24.0 - Practical completion24.8. is amended by the addition of:Where the Contractor, in the opinion of the Principal Agent fails to bring the works or section thereof to practical completion the Employer may, notwithstanding the Contractor"s ongoing responsibilities, take possession of any such section and such possession by the Employer shall not be construed as the achievement of practical completion."Should such an instance arise, the principal agent will give notice to the contractor, in writing, that the employer is taking possession without practical completion having been achieved in order to minimize his exposure to any possible expense or loss.The Contractor"s responsibilities and liabilities shall remain in full force and effect until, in the principal agent"s opinion, the works are practically completed. Access by the Contractor to any such area in possession of Employer, prior to the Contractor"s achievement of practical completion.Notwithstanding the provisions of clause 24.8 above the contractor will remain liable to the Employer for penalties for non-completion until such a date as the works or sections of the works is brought to practical completion.24.11.After the issue of the certificate of practical completion entry to the Works to make good any minor defects shall be at such reasonable times as shall be agreed by the principal agent.24.12.The standard state of works to achieve practical completion will include, but not be restricted to:a) All electrical distribution boards supplying the works will be complete, labelled and commissioned with circuit diagrams in place. b) All HVAC plant serving the works shall be complete and commissioned and all operating and maintenance manuals will be available for handover. Where training of Employer"s staff is required this will have taken place.c) All wet services supply to the works to be complete and commissioned and all operating and maintenance manuals available for handover.d) All waste water reticulation, including lifting stations, serving the works to be complete and commissioned with operating and maintenance manuals available for handover.e) All work to be completed in accordance with drawings and specification and to the extent that it is not, must be able to be rectified without compromising the Employer"s beneficial use of the works.f) The works secure with all accesses locked. The Contractor shall account for and hand over to the building operator all	**Item**	**1**		R	-

25	Clause 25.0 - Works completion. 25.1.At the time of issuing the works completion list, the contractor shall within fourteen (14) calendar days of issuing thereof, submit and agree a works completion programme with the principal agent. The contractor shall complete the works completion list in terms of the agreed programme. Should the contractor fail to submit a works completion programme within fourteen (14) calendar days, the works completion period shall not exceed sixty (60) calendar days. Where the contractor fails to bring the works to works completion on the date stipulated in the works completion programme, the contractor shall be liable to the employer for the penalty per calendar day for non-completion of the works at a rate of twenty five percent (25%) of the rate stated in the schedule.F:..... V:..... T:.....	**Item**	**1**		R	-
26	Clause 26.0 - Final completion 26.7.Is amended by the addition of the following clause:The certificate of final completion will not be issued until such time as formal record of the cession of all guarantees, warranties and indemnities have been formally ceded by the contractor to the employer26.8.The contractor shall attend to defects during the defects liability period on a progressive basis, to the satisfaction of the principal agent, and will not be permitted to wait until the end of the defects liability period or until the amount of defects accumulates in order to attend to a comprehensive list of defectsF:..... V:..... T:.....	**Item**	**1**		R	-
27	Clause 27.0 - Latent defects liability period.F:..... V:..... T:.....	**Item**	**1**		R	-
28	Clause 28.0 - Sectional completion. F:..... V:..... T:.....	**Item**	**1**		R	-
29	Clause 29.0 - Revision of date for practical completion 29.1.1.Shall be amended by the addition of the following:29.1.7.Where the contractor submits a claim for the extension to the construction period in terms of clause 29.1.4 and such actions are applicable only to the contractor, his subcontractors and their employees and are as a result of failure by the contractor to follow proper labour procedures, then an extension to the construction period shall not be granted. 29.4.1.Is deleted and replaced with the following: "Give notice to the principal agent within ten (10) working days of such circumstance." The contractor shall furthermore stipulate as part of this notice, where applicable, when the issue of a contract instruction and/or construction information is required to prevent the potential delay from eventuating. A reasonable period in this regard is deemed to be not less (10) five working days. An information required schedule shall not be deemed valid notification in this regard.Failing any of the above, the contractor shall forfeit submitting any claims for a revision to the date of practical completion related to such circumstance.29.6.2.Is deleted and replaced with the following: The extent of the claim shall be quantified entirely on the basis of the cause and effect to the date of practical completion on the critical path of the programme. This will furthermore take into account effect of progress when the delay ceased as well all reasonable mitigation measures [29.4.2] in the form of, but not limited to rationalization of the critical path.Any cost implications relating to such mitigation, shall be dealt with in accordance with the provisions of the agreement. Failing any of the above, the contractor shall forfeit submitting any claims for a revision to the date of practical completion related to such circumstance.29.10.ACCELERATION29.10.1.Irrespective of whether or not the principal agent rules that the contractor is entitled to an extension of time or a revision of the date for practical completion, the principal agent shall nevertheless at any time, be entitled to instruct the contractor, in writing, to accelerate the progress of the remaining works, to ensure that the works are completed by the original date for practical completion or revised date as the case may be.The principal agent and contractor shall agree upon the additional measures deemed necessary to achieve such acceleration prior to the implementation thereof, including	**Item**	**1**		R	-
30	Clause 30.0 - Penalty for late or non-completionF:..... V:..... T:.....	**Item**	**1**		R	-
	Payment					
31	Clause 31.0 - Interim payment Clause 31.0 is amended by :-(i) Clause 31.9 is amended by the replacement of "seven (7) calendar days" with "thirty (30) calendar days" F:..... V:..... T:.....	**Item**	**1**		R	-

32	Adjustment to the Contract ValueClause 32.0 is amended by the following:Clause 32.2.4. is amended by the deletion of the words "but where the omission of such works varies the circumstances in which the remaining work is carried out, the value of the remaining work shall be determined by the method in terms of 32.2.2."Clause 32.0 is amended by the addition of the following clauses:"32.16 The Employer shall also have the right by notice via the Principal Agent to the Contractor to omit any work covered by provisional amount or prime cost items contained herein.The Contractor shall not be entitled to claim for any loss of mark-up or discount resultant from the omission of any provisional amount or prime cost items.32.17 The omission of work from the Agreement and the performance thereof either in terms of 32.16 and/or the performance of such work after the construction period in respect of the relevant portion of the work by direct contract by any person in terms of 32.16 shall not entitle the Contractor to any attendance, mark-up, compensation, consideration, loss or damage under this Agreement other than that contained in Clause 22.F:..... V:..... T:.....	**Item**	**1**		R	-
33	Clause 33.0 - Recovery of expense and loss.Sub-clause 33.2 shall be amended by the insertion of the words "without prejudice to any other rights that he may have", between the words "Employer" and "may".33.7.The employer may retain all monies owing to sub-contractor as pre-liquidated contractual damages in the event of the employer terminating the contract as a result of the contractor being placed under business rescue or in liquidation, whether provisionally or finally.F:..... V:..... T:.....	**Item**	**1**		R	-
34	Clause 34.0 - Final account and final payment. 34.10.The first sentence of Clause 34.10 shall be deleted and replaced with the following:-"The employer shall pay to the contractor the amount certified for payment in the final payment certificate within thirty (30) calendar days of the date of issue of the final payment certificate, subject to the contractor giving the employer a tax invoice for the amount due."34.15.Interest referred to in sub-clauses above shall be equal to prime rate at the time of the agreement F:..... V:..... T:.....	**Item**	**1**		R	-
35	Clause 35.0 - Payment to other parties.F:..... V:..... T:.....	**Item**	**1**		R	-
	Termination					
36	Clause 36.0 - Termination by employer - contractor's default.36.1.3.If the contractor is placed under business rescue or in liquidation, whether provisionally or finally.F:..... V:..... T:.....	**Item**	**1**		R	-
37	Clause 37.0 - Termination by employer - loss and damage.F:..... V:..... T:.....	**Item**	**1**		R	-
38	Clause 38.0 - Termination by contractor - employer's default.F:..... V:..... T:.....	**Item**	**1**		R	-
39	Clause 39.0 - Termination - cessation of the works. F:..... V:..... T:.....	**Item**	**1**		R	-
	Dispute					
40	Clause 40.0 - Settlement of disputes. F:..... V:..... T:.....	**Item**	**1**		R	-
	Contract agreement					
	SECTION B - PRELIMINARIES					
	Definitions and interpretation					
41	Clause 1.0 - Definitions and interpretation.F:..... V:..... T:.....	**Item**	**1**		R	-
	Documents					
42	Clause 2.1 - Checking of documents. F:..... V:..... T:.....	**Item**	**1**		R	-

43	Clause 2.2 - Provisional bills of quantities.Clause 2.2 is amended by the addition of the following:The provisional bills of quantities are not to be used for ordering purposes or as a specification for the worksThese provisional bills of quantities have been measured from architect"s and engineer"s drawings which are appended hereto. No claim whatsoever will be allowed in respect of errors in pricing due to brevity of descriptions of items in the provisional bills of quantities which are fully described when read in conjunction with the relevant specification.The quantities, classes and kinds of work set out in this document do not represent the final quantities, classes and kinds of work eventually required to be done. They are to be regarded as provisional only and not intended to indicate the final extent of the work. The entire contract works, when completed, will be re-measured by the quantity surveyor and/or relevant consultants, who shall determine the final quantities of and classes of work eventually executedThe rates contained in the priced bills of quantities shall apply irrespective of the final quantities, classes and kinds of work actually executed. No claims for extras, loss of profit, variation of rates or other similar claims will be entertained as a result of any variations whatsoever between the quantities of work set out in these bills of quantities and the quantities of work actually executed, nor as a result of any variation whatsoever between the contract sum and the final value of the worksAll prices 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 contract.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 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.F:..... V:..... T:.....	**Item**	**1**		R	-
44	Clause 2.3 - Availability of construction documentation.Is deleted and replaced by:Within 15 (fifteen) calendar days after being appointed to carry out the works, the Contractor shall submit a schedule of information required as well as a long lead procurement schedule for approval by the Principal Agent. The information schedule will indicate the dates upon which construction information is required based on the programme early start dates. The long lead procurement schedule shall indicate the dates upon which selected subcontractor packages per the provisional sum provisions contained in the BOQ are required to be let. These requirements are to be compiled using industry norm procurement lead in periods. Both of the above schedules shall not contain any requirements which are deemed to be unreasonable or premature by the Principal Agent.F:..... V:..... T:.....	**Item**	**1**		R	-
45	Clause 2.4 - Interests of agentsF:..... V:..... T:.....	**Item**	**1**		R	-
46	Clause 2.5 - Priced documentsIs deleted and replaced by: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 contract. 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 and shift work" hours as dictated by the specific requirements of this project and necessary in order to complete the project within the agreed construction period and shall provide such resources and work such overtime hours as necessary. Note that no work such as demolitions, chopping up of tiles, breaking down of walls or any other work which will generate a noise level that would inconvenience existing tenants during trading hours will be allowed whatsoever. The contractor should allow for this work to take place outside normal working hours as agreed with the Principal Agent. Costs for the execution of this work under these conditions shall be included within the Contract sum.F:..... V:..... T:.....	**Item**	**1**		R	-
47	Clause 2.6 - Tender submissionF:..... V:..... T:.....	**Item**	**1**		R	-
	The site					

48	Clause 3.1 - Define works area. Site establishment area will be limited to an area agreed with the Principal Agent with the loading and height restrictions. The contractor should price for all hoardings, gates, security, etc. The site shall not be used for any purpose other than that of carrying out the works. The works shall comprise the area of the building site and the Contractor shall acquaint himself by personal examination of all matters and restrictions which may influence the execution of this contract such as concurrent earthworks, piling, lateral support and services installation operations F: ..... V:..... T:	**Item**	**1**		R	-
49	Clause 3.2 - Geotechnical investigation. F:..... V:..... T:.....	**Item**	**1**		R	-
50	Clause 3.3 - Inspection of the site.Shall be amended by the addition of the following:In addition, the contractor shall acquaint himself with any limitations or restrictions on working space, any restrictions imposed by existing buildings adjoining the site, any restrictions imposed by any authorities and any limitations on the availability of water, power and sewerage facilities. Access to the works shall be strictly confined to that permitted by the principal agent. The contractor shall be solely responsible for maintaining such access and reinstating same upon completion.The Contractor shall allow hereunder for any additional measures he may require for the execution of the works.F:..... V:..... T:.....	**Item**	**1**		R	-
51	Clause 3.4 - Existing premises occupiedF:..... V:..... T:.....	**Item**	**1**		R	-
52	Clause 3.5 - Previous work - dimensional accuracyF:..... V:..... T:.....	**Item**	**1**		R	-
53	Clause 3.6 - Previous work - defectsF:..... V:..... T:.....	**Item**	**1**		R	-
54	Clause 3.7 - Services - knownReasonable care must be taken in carrying out the works, but all damage to existing services resulting in loss to the employer and tenants will be dealt with on a case by case basis. F:..... V:..... T:.....	**Item**	**1**		R	-
55	Clause 3.8 - Services - unknown F:..... V:..... T:.....	**Item**	**1**		R	-
56	Clause 3.9 - Protection of trees. F:..... V:..... T:.....	**Item**	**1**		R	-
57	Clause 3.10 - Articles of value. F:..... V:..... T:.....	**Item**	**1**		R	-
58	Clause 3.11 - Inspection of adjoining properties. F:..... V:..... T:.....	**Item**	**1**		R	-
	Management of contract					
59	Clause 4.1 - Management of the works.Clause B4.1 shall be deemed to be amended by the addition of the following: 1.1.1."The Contractor shall to the satisfaction of the Principal Agent provide, in addition to the Foreman, the services of an experienced and competent Construction Manager and Site Agent supported by a management team who shall, inter-alia be responsible for all activities of the Contractor and all Subcontractors and in particular:a) Programmingb) Schedulingc) Reportingd) Production of shop drawings and samplee) Procurement and expeditingf) Liaison and co-ordinating of constructiong) Service co-ordination of the mechanical, electrical, specialist electronic and plumbing installationsh) Implementation, management and reporting on the Quality Management System.i) Commissioning, instruction, handover and follow-upj) Monitoring and reporting on building activities taking place off-site.The names and CV"s of the Contractor"s site management team shall be submitted to the Principal Agent prior to commencement on site and, after agreement of the contractor"s project organogram, no changes shall be made nor shall any member of the said team be removed from the site while remaining in the employ of the Contractor without express written approval from the Principal Agent.The personnel provided in terms of item B4.1.1 (g) above shall:a) Have adequate experience in mechanical, electrical and plumbing in this size and nature of constructionb) Be responsible to organize and minute selected sub-contractor (MEP) meetingsc) Be responsible for on site co-ordination of the various MEP servicesd) Be responsible for the interface of the various services e.g. BMS and electrical/mechanical, fire systems and lifts, fire systems and access control systemse) Be responsible for coordinating the pre-commissioning of all equipment in their individual capacitiesf) Be responsible for coordinating the integrated testing of the various MEP services as well as interfacing and testing of these services to items such as lifts and escalators, electronic security services, BMS and life safety installations.F:..... V:..... T:	**Item**	**1**		R	-

60	Clause 4.2 - Programme of the works. Clause B4.2 is deleted in its entirety and replaced with the following:Immediately on award of the contract and prior to commencement on site, the contractor, in conjunction with the principal agent, shall agree the working programme covering the first month of the construction period. Within 15 working days following the commencement of the construction period, the contractor shall prepare and draw up for the principal agent's approval, a working programme for the balance of the works in accordance with the dates given herein, for possession, sectional completion and practical completion and shall be in sufficient details to enable the principal agent to monitor the progress of the works.Notwithstanding that the programme has been drawn up in conjunction with the Principal Agent, the Contractor shall be responsible at all times for maintaining the accuracy, validity and reasonableness of the programme, and the implementation thereof in a format acceptable to the Principal Agent. The contractor shall have at its disposal staff with the experience, technical ability and expertise to ensure that the programming is realistic on a real time basis.The programme shall be compiled based on the critical path method of programming and the critical activities are to be clearly highlighted. It shall be compiled in such a way that logic is not constrained by resource limitations unless specifically agreed otherwise by the Principal Agent.The programme calendar will be based on a 5 day work week. Government Gazette Public Holidays as well Contractors annual holiday periods (as per SAFSEC guidelines noted in the Contract Data) will be the only permitted non workdays to be included in the programme calendar.Documentation will not be available in complete detail at the commencement stage. However the contractor, in consultation with the principal agent, shall plan the works on provisional information, to an agreed level of detail relating to the level of detailed information available.The quantities contained in this document are provisional and shall be utilized as a guide only for the drawing up of the programme. Where assumptions are made in regard to programming aspects, such assumptions shall be agreed by the contractor and the principal agent, and suitably recorded in the programme.Approval of the programme or a revision thereof at any stage by the Principal Agent is an approval in	**Item**	**1**		R	-
61	Clause 4.3 - Progress meetings. Is amended by the addition of:Fortnightly Progress Meetings will be held at the discretion of the Principal Agent. The contractor will be required to table a progress report 48 hours prior to this meeting taking place for review and comment by the Principal Agent. The contents of the progress report will include but not be limited to:Progress reported according to the approved programme. Request for information close out status. Information issue status report reported according to the approved information schedule. Procurement status report reported according to the approved long lead schedule. Long lead procurement status tracking. Current Health and Safety statistics.Shop drawing approval status tracking.Tracking close out of quality inspection reports from all consultants. A fortnightly photographic record is to be provided by the contractor, recording the state of progress of the works. Copies of each photograph annotated with the location and date, are to be made available to the employer via the principal agent.F:..... V:..... T:.....	**Item**	**1**		R	-
62	Clause 4.4 - Technical meetings. F:..... V:..... T:.....	**Item**	**1**		R	-
63	Clause 4.5 - Labour and plant records. F:..... V:..... T:.....	**Item**	**1**		R	-
	Samples, shop drawings and manufactures instructions					
64	Clause 5.1 - Samples of materials. F:..... V:..... T:.....	**Item**	**1**		R	-
65	Clause 5.2 - Workmanship samples. It is envisaged that mock-ups shall be extensively used to define the accepted standards of workmanship and materials to be used. The contractor shall also prepare and maintain a register of all mock-ups indicating numbers, date, bill of quantities and specification reference, approval and relevant documents.F:..... V:..... T:.....	**Item**	**1**		R	-

66	Clause 5.3 - Shop drawings. The term "shop drawings" shall mean drawings, layout drawings, diagrams, Illustrations, schedules, performance charts, brochures, operating manuals and other data which are prepared by the contractor or any subcontractor, manufacturer, supplier or distributor and which illustrate manufacturing details and methods of execution of the work.The contractor shall ensure that all shop drawings required for the works in terms of this Contract, all sub-contracts and / or any principal agents instruction, are prepared and submitted timeously in accordance with the following procedure:Three prints of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules shall be submitted to the principal agent for approval. Such work shall not be carried out until such approval has been given.Shop drawings shall be submitted to the principal agent for approval and the contractor is to allow the principal agent a reasonable check period (minimum one week) from the date of receipt of shop drawings, before returning the drawings to the contractor in accordance with the works programme.All submissions shall be prepared in accordance with the contract drawings and specifications and/or principal agents instructions and any deviation shall be specifically highlighted in writing, with a detailed explanation of the reason for such deviation, together with any cost and time implications. Delays in approval of shop drawings due to non-compliance with drawings, specifications and / or principal agents instructions, shall not constitute ground for any claims for delay, extension of time and the like.When the principal agent advises that shop drawings have been approved, the original drawings will be stamped by the principal agent, or any other appropriate way of approving drawings will be used. Thereafter, four prints of the approved shop drawings, setting out drawings and schedules shall be furnished to the principal agent. As many prints of the approved shop drawings and schedules as required, shall all be furnished to the works. No work shall be performed in accordance with drawings and/or catalogues not approved by the principal agent.The contractor, sub-contractor or supplier, as the case may be, shall be responsible for ensuring that all dimensions affecting shop drawings conform to the dimensions of built work.The principal agent"s approval of shop drawings is	**Item**	**1**		R	-
67	Clause 5.4 - Compliance with manufacturer's instruction. F:..... V:..... T:.....	**Item**	**1**		R	-
	Temporary works and plant					
68	Clause 6.1 - Deposits and fees. F:..... V:..... T:.....	**Item**	**1**		R	-
69	Clause 6.2 - Enclosure of the works. The size of the builder"s yard will be determined by the requirements of the Contractor and need to be agreed to by the contractor.Should any amendments to the scope of work require a variation to the fence as described above it will be re-measured in accordance with the items measured in the Provisional Bills of Quantities.Hoarding is allowed only to operating areas other hoarding to all areas to be provided by contractor, on all levels where works occur and priced in accordance to the requirements. The Contractor shall ensure that all fences and hoardings are maintained in accordance with the requirements of the local authorities and notify the Principal Agent immediately should it not comply. All fences and hoardings to be maintained to an acceptable standard to the principal agent"s approval.No accommodation will be permitted on the site whatsoever. F: ..... V:..... T:	**Item**	**1**		R	-
70	Clause 6.3 - Advertising. Clause B6.3 shall be deemed to be amended by the addition of the following: All rights of publication of articles in the media, together with any advertising relating to, or in any way connected with this project shall vest in the Employer. The Contractor together with his Subcontractors shall not, without the written consent of the Employer, cause any statement or advertisement to be printed, screened or aired by the media. All rights of publication of articles in the media, together with any advertising relating to, or in any way connected with this project shall vest in the Employer. The Contractor together with his Subcontractors shall not, without the written consent of the Employer, cause any statement or advertisement to be printed, screened or aired by the mediaF:..... V:..... T:.....	**Item**	**1**		R	-
71	Clause 6.4 - Plant, equipment, sheds and offices. F:..... V: ..... T:	**Item**	**1**		R	-
72	Clause 6.5 - Main notice boardF: ..... V:..... T:.....	**Item**	**1**		R	-
73	Clause 6.6 - Subcontractors notice boards. F:..... V:..... T:.....	**Item**	**1**		R	-
	Temporary services					
74	Clause 7.1 - Location. F:..... V:..... T:.....	**Item**	**1**		R	-
75	Clause 7.2 - Water. F:..... V:..... T:.....	**Item**	**1**		R	-
76	Clause 7.3 - Electricity. F: ..... V:..... T:	**Item**	**1**		R	-

77	Clause 7.4 - Telecommunication equipment. F:..... V:..... T:.....	**Item**	**1**		R	-
78	Clause 7.5 - Ablution facilities. Is amended with the addition of: "Construction workers will not be allowed to use the ablution facilities in the existing buildings"F:..... V:..... T:.....	**Item**	**1**		R	-
	Prime cost amounts					
79	Clause 8.1 - Responsibility for prime cost amounts F:..... V:..... T:.....	**Item**	**1**		R	-
	Attendance on n/s subcontractors					
80	Clause 9.1 - General attendance. F:..... V:..... T:.....	**Item**	**1**		R	-
81	Clause 9.2 - Special attendance. F:..... V:..... T:.....	**Item**	**1**		R	-
82	Clause 9.3 - Commissioning - fuel, water and power. Clause 9.3 shall be deemed to be omitted and replaced by the following: 9.3.1. The contractor and/or subcontractor shall commission and test the entire installation at his own expense, including provision of all test equipment. 9.3.2. 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.9.3.3. Where applicable, commissioning, testing and building tuning shall be in accordance with CIBSE commissioning requirements9.3.4. The Contractor shall not be responsible for electricity consumption within tenant areas after such areas have been handed over in terms of Early Occupation or Beneficial Occupation.F:..... V:..... T:.....	**Item**	**1**		R	-
	Financial aspect					
83	Clause 10.1 - Statutory taxes duties and levies. F:..... V:..... T:.....	**Item**	**1**		R	-
84	Clause 10.2 - Payment of preliminaries. F:..... V:..... T:.....	**Item**	**1**		R	-
85	Clause 10.3 - Adjustment of preliminaries. F:..... V:..... T:.....	**Item**	**1**		R	-
86	Clause 10.4 - Payment certificate cash flow. F:..... V:..... T:.....	**Item**	**1**		R	-
	General					
87	Clause 11.1 - Protection of the works. The contractor shall provide for the protection of all work for which a certificate of practical completion has not yet been issued and which is liable to be damaged from any cause, which protection shall, inter alia, include:The protection of the works from inclement weather, exposure to the sun and the removal of water from whatever source from the works (keeping excavations free of water separately measured)The provision and maintenance of all necessary temporary protection of finished and/or existing work liable to be damaged during the progress of the works by properly covering up, isolating, etc., as required.The contractor shall be responsible for any damage which may occur and shall make good at his own expense.The contractor shall not be entitled under any circumstances whatsoever to make use of lifts, hoists or escalators after their installation and commissioning.F:..... V:..... T:.....	**Item**	**1**		R	-
88	Clause 11.2 - Protection / isolation of existing / sectionally occupied works. F:..... V:..... T:.....	**Item**	**1**		R	-
89	Clause 11.3 - Security of the works. F:..... V:..... T:.....	**Item**	**1**		R	-
90	Clause 11.4 - Notice before covering of the works. F:..... V:..... T:.....	**Item**	**1**		R	-

91	Clause 11.5 - Disturbance. The Contractor shall execute the whole of the works with a minimum of disturbance to adjoining premises, and the occupants of those premises to the satisfaction of the Principal Agent and to comply with all regulations:a)There is no guarantee given or implied that the Contractor will be permitted to utilize any of the plant he proposes to use in the construction of the worksb)The Contractor shall take all necessary measures to minimize noise. Such measures shall include inter alia, the use of "silent" compressorsc)The Contractor shall take all necessary measures to ensure that minimum dust emanates from the works as set out in the Environmental Management Plan. In this regard, the Contractor shall allow opposite this item for watering the works and any stockpiles of material on site, whenever necessary, in order to keep dust down Should the Contractor be of the opinion that watering only is not adequate, then the Contractor shall, at his own expense, use any other methods which he may deem necessaryd)All work is to be carried out in such a manner as to cause no unacceptable and unreasonable noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic, as set out in the Environmental Management Plan. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the contract period or contract sume)The Contractor is deemed to have accepted full responsibility for his own blasting operations that may be carried out, should blasting be permitted. The Contractor shall take all necessary precautions for the safety of all persons, buildings, etc., and is to observe all conditions set forth in government and Local Authorities regulations in connection with the use of explosives and pay all costs and fees in connection therewithf)The Contractor is to adhere to all instruction of the engineer in regard to blasting procedures but regardless of such instructions the Contractor shall be solely responsible for any damage arising from blasting. All blasting is to be done by a licensed blaster. The Contractor shall indemnify the employer against any claims for damages to persons or property on or near the site from any cause whatsoever arising out of the use of explosives. No claims for any extras whatsoever will be entertained should the Contractor be prohibited by any authority whatsoever from	**Item**	**1**		R	-
92	Clause 11.6 - Environmental disturbance.F:..... V:..... T:.....	**Item**	**1**		R	-
93	Clause 11.7 - Works cleaning and clearing. F:..... V:..... T:.....	**Item**	**1**		R	-
94	Clause 11.8 - Vermin. F:..... V:..... T:.....	**Item**	**1**		R	-
95	Clause 11.9 - Overhand work. F:..... V:..... T:.....	**Item**	**1**		R	-
96	Clause 11.10 - Instruction manuals and guarantees.Clause B11.10 shall be deleted in its entirety and replaced with: The Contractor shall obtain and hand over to the Principal Agent on practical completion any operating and maintenance instruction manuals data or instructions required by the Principal Agent or provided by manufacturers, suppliers or Subcontractor.The guarantees shall state that workmanship, materials and installations are guaranteed for a specified period of twelve months reckoned from the date of handover of the installation to the building operator 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.The expiry of the twelve month 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 contractor 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.F:..... V:..... T:.....	**Item**	**1**		R	-
97	Clause 11.11 - As built information.Clause B11.11 shall be deemed to be amended by the addition of the following: The Contractor shall ensure that at the end of the Project the following drawings and information are submitted to the Principal Agent:- Water Reticulation Layout "Showing the position of the pipe runs, geyser locations, stopcock locations and all other relevant information. Fire Services Reticulation Layouts "Showing the position of the pipe runs, stopcock locations, valve locations and all other relevant information. Plumbing and Drainage Layout "Showing the positions of main pipe runs, vent pipes, inspection/access eyes, manhole positions and all other relevant information. Electrical Layouts "Showing the position of cable trays and all other relevant information. Air-conditioning Layouts "Showing the position of the main duct runs and all other relevant information.In addition, copies of the Structural Engineer"s drawings showing the positions of construction breaks and the extent of individual concrete pours are to be maintained for record purposes and are to be submitted to the Principal Agent and 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 Works Completion Certificate. F:..... V:..... T:.....	**Item**	**1**		R	-

98	Clause 11.12 - Tenant installation.Clause 11.12 shall be deleted in its entirety and is replaced with: 11.12.1. Tenant Scope Requirements - By Others:These Bills of Quantities includes measured work or budgetary allowance to be executed in accordance with "tenants" requirements"The contractor accepts that, depending upon leasing progress, such work, other than where tenants requirements are known in time to reasonably enable the contractor to complete such work within the construction period or such extended period as may be allowed under clause A29 may, at the principal agent"s discretion, be omitted from his contract and executed under separate contract/s. In such case, the contractor shall allow access to the handed over areas of the works to allow such separate contractor to proceed with such work prior to handed-over and/or expiry of the defects liability period.The contractor hereby accepts that he shall not receive any profit mark-up on the omitted work and that no claim for loss of profit shall be entertained.F:..... V:..... T:.....	**Item**	**1**		R	-
	SECTION C - ADDITIONAL PRELIMINARIES					
99	1. CONTRACTOR TO BE RESPONSIBLEThe contractor acknowledges that the principal objective of his appointment is his expert knowledge in the execution of the scope of work of this contract. The contractor shall therefore be solely responsible for all aspects of the construction of the works including but not limited to quality, safety, management, resourcing, programming and co-ordination of sequencing of work all as required for the type of project described within the time limits and quality standards specifiedF:..... V:..... T:.....	**Item**	**1**		R	-
100	2. COST OF CLAIMSAll 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 ContractorF:..... V:..... T:.....	**Item**	**1**		R	-
101	3. DIRECT CONTRACTORSThe Employer and the tenants shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors" to execute any special or other works whether contained in this Contract or not, concurrently with the work being executed under this Contract. In addition, the Employer and the tenants shall have the right to send on to the Works any furniture, furnishings, curtaining, carpeting and fittings and have same installed by his own employees or by Direct Contractors. The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors" but shall nevertheless allow these Direct Contractors and the Employer" employees to have access to the Works, allocate reasonable space in the building for the storage of their materials, tools and equipment.Without in any way detracting from the generality of the above, Contractors are advised that the following works will be carried out by the Employer or tenants and/or their direct Contractors and the value of such work is not included in this Contract:FurnitureEquipmentPABX systems, telephones and cell phonesComputers, CCTV and IT installationsSignageParking control equipmentThe contractor should allow for early occupation for the installation of these facilities, specifically computer room(s), to enable the direct contractors to finish their respective installations on or before practical / sectional completion. A detailed schedule indicating the anticipated early occupation dates for the various items shall be agreed between the contractor and the principal agentF:..... V:..... T:..... ..	**Item**	**1**		R	-
102	4. CONFIDENTIALITYThe contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings wherever necessary. Such information shall not be used in any way except in connection with the execution of the worksNo information regarding this project shall be published or disclosed without the prior written consent of the employer F:..... V:..... T:.....	**Item**	**1**		R	-
103	5. QUALITY MANAGEMENTTESTS AND INSPECTIONS PRIOR TO DELIVERY All specialist plant and equipment, subject to the principal agent"s sole discretion, is subject to acceptance tests, which shall be arranged in the premises of the subcontractor / supplier within 10 days of notification that such plant or equipment is available for testing. The subcontractor shall inform the Contractor in writing, indicating the exact dates for these acceptance tests during the course of the last month of manufacture of such plant or equipment.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.F:..... V:..... T:.....	**Item**	**1**		R	-

104	6. STANDARD CONTRACT HANDOVER PROCEDUREWithout derogating from the provisions of Clauses A24, 25 and 26, the contractor shall comply with the Contract Handover Procedure as instructed by the principal agent as set out below:Before Consultants will react to a request to attend to inspections, the following procedures needs to be followed:(Applicable to defects lists, practical completion, as well as any re-inspections)All incorrect work instructions (A17) issued in regard to a specific area must be signed off. Proof must be provided that the Contractor compiled a defects list themselves and that the senior person in charge checked these lists and signed them off.Areas must be cleaned out properly and no workmen will be allowed on floors during inspections.F:..... V:..... T:.....	**Item**	**1**		R	-
105	7. ROYALTIES, PATENT RIGHTS AND FEESThe contractor shall indemnify the employer 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 specificationAll 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 employer 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 there from. The employer 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 employer such reasonable security as shall from time to time be required by the employer, to cover the amount ascertained or agreed or estimated, as the case may be, or any compensation, damage, expenses and costs for which the employer may become liable in respect of such infringement as aforesaid. The employer 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.F:..... V:..... T:.....	**Item**	**1**		R	-
106	8. GREEN STAR BUILDING RATINGNot Applicable.F:..... V:..... T:.....	**Item**	**1**		R	-
107	9. OVERLOADINGThe contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works, e.g. 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 agent"Bs 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**		R	-
108	10. SECURITY AT COMPLETIONAt 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 itemized schedule to be signed by the principal agent as receipt.F:..... V:..... T:.....	**Item**	**1**		R	-

109	11. TESTS AND INSPECTIONS PRIOR TO COMPLETIONAll specialist plant and equipment, is subject to acceptance tests, which shall be arranged in the works of the contractor and/or subcontractors and/or supplier within 10 days of notification that such plant or equipment is available for testing. The contractor and/or subcontractor and/or supplier 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:Appoint a specialist inspection organisation to witness such tests at his expense on behalf of the principal agent or his representatives.OR accept the contractor and/or subcontractor"s and/or supplier"s 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 contractor and/or subcontractor and/or supplier 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 contractor and/or subcontractor responsible for the commissioning of the equipment. The principal agent"s representative shall also be present.The contractor and/or subcontractor and/or supplier 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 agent shall be afforded access at all reasonable times to such part of the works on site or at the Contractor and/or subcontractor"s and/or supplier"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 contractor and/or 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 Contractor and/or subcontractor and/or	**Item**	**1**		R	-
110	12. ACCESS TO SITE AND MAINTENANCE OF ROADSThe contractor is to be ensure that all municipal roads which border the site used by the contractor are kept clean and clear of all obstructions during the duration of the Contract and any damages which may occur as a result of the building operations, deliveries, etc will be rectified by the contractor on completion.F:..... V:..... T:.....	**Item**	**1**		R	-
111	13. QUALITY CONTROL AND QUALITY ASSURANCEThe contractor shall be required to provide suitably qualified and experienced staff capable of executing the work to the required standard and quality.Definitions:The following definitions are applicable:1 Quality Policy: The overall intentions and direction of an organisation as regards quality.2 Quality System: The organisational structures, responsibilities, procedures, processes and resources for implementing quality policy.3 Quality Control: The operational techniques and activities that are used to fulfil requirements of quality.4 Quality Assurance: All those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.Generally:The contractor shall submit his quality policy and comprehensive quality system proposals prior to appointment and within one week of being requested by the principal agent to do so. The quality system shall be drawn up to meet the requirements set out herein and incorporating all additional requirements and controls the contractor considers necessary for effective quality control and assurance of products and service. The contractor shall provide dedicated and experience staff capable for implementing the proposed quality system.The principal agent shall comment on the quality system within two weeks of receipt of same for the contractor outlining additions or amendment considered necessary for acceptance of the quality systems. The contractor shall meet with the principal agent and amend the contents of the quality systems according to the principal agent"s comments. Amendments to the system shall be made within one week of the principal agent"s comments. Upon final acceptance of the quality system, it shall form a quality manual which shall, inter alia, contain the following:1. Quality policy, 2. Organisational goals and structures,3. Internal audit plan incorporating resources, documentation, procedures and processes, etc. 4. Record keeping,5. Reports: format and content,6. Follow up actions and audit finding,7. Testing: including outside testing by CSIR, SABS, PCI and others,8. Measurement control,9. Non-conformance: identification, review, corrective action, prevention of recurrence, etc.The acceptance of the quality system by the principal agent does not supersede or negate any other quality control conditions	**Item**	**1**		R	-
112	14. COMMISSIONING AND TESTINGThe contractor and/or 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.F:..... V:..... T:.....	**Item**	**1**		R	-
113	15. MEDIA RELEASES, ADVERTISING, ETCAll rights of publication of articles in the media, together with any advertising relating to, or in any way connected with this project, shall vest with the employer.The contractor together with his subcontractors shall not, without the written consent of the employer, cause any statement or advertisement to be printed, screened or aired by the media.F:..... V:..... T:.....	**Item**	**1**		R	-

114	16. SITE INSTRUCTIONSContract Instructions issued on site are to be recorded by the pincipal agent in a Site Instruction Book which will be issued by the principal agent and which shall be maintained on site. Only site Instructions issued in such book shall be recognized.F:..... V:..... T:.....	**Item**	**1**		R	-
115	17. CONDEMNED WORK. 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.The contractor shall also bear the expense of making good any other work damaged or destroyed by such removal or replacement.F:..... V:..... T:.....	**Item**	**1**		R	-
116	18. PHOTOGRAPHIC RECORDA two weekly photographic record is to be provided by the contractor, recording the state of progress of the works. Copies of each photograph annotated with the location and date, are to be made available to the employer via the principal agent.F:..... V:..... T:.....	**Item**	**1**		R	-
117	19. OCCUPATIONAL HEALTH AND SAFETY The contractor shall· Provide the necessary skilled and competent management to supervise and monitor compliance with the requirements of the Occupational Health and Safety Act of 1993 Construction Regulations.· Comply with the Health and Safety Specification for the works.· Agree with the Health and Safety Consultant the Health and Safety Plan for the Works.· Co-operate with the Health and Safety Consultant in all respects.· Manage the compliance of all Sub-Contractors with the Regulations, and with the Health and Safety Plan and Specification.F:..... V:..... T:.....	**Item**	**1**		R	-
118	20. DUST CONTROL: The contract will be executed in close proximity to existing tenanted buildings. The Contractor shall take all necessary precautions and measures to ensure the acceptable control of all dust associated with the Works within reasonable acceptance of the Principal Agent. These controls will include for all necessary watering down for the duration of the contract.F:..... V:..... T:.....	**Item**	**1**		R	-
119	21. SITE CLEANINGThe contractor is responsible for keeping the works clean and neat at all times. The contractor should further remove all excess rubble, packaging and the like at their own cost. F:..... V:..... T:	**Item**	**1**		R	-
120	22. INFORMAL TRADINGThe Contractor shall not permit any form of informal trading to occur at the entrance to or on the external perimeter of the site.F:..... V:..... T:.....	**Item**	**1**		R	-
121	23. GENERAL The Contractor shall be liable to provide all special scaffolding and access equipment for the full execution of the works with the exception of Nominated or Selected Subcontractors F:..... V:..... T:.....	**Item**	**1**		R	-
	SUMMARY OF CATEGORIES					
	Category : Fixed R..... Category : Value R..... Category : Time R.....					

	BILL NO: 2- FIRE PROTECTION AND DETECTION SYSTEM				
	Note: All equipment and installations shall comply with SANS 10400 Part T requirements and any other relevant SANS standards.				
	FIRE HYDRANTS				
122	Supply fire right angle type hydrant valve (FH1) c/w handwheel to SANS 1128-1 requirements	**No**	**4**		R -
123	Install fire hydrant valve (FH1) to SANS 543 and SANS 10105-2 requirements	**No**	**4**		R -
124	Supply and install blank cap for hydrant outlet.	**No**	**2**		R -
125	Supply and install identifiable cupboard suitable for fire hydrant hose.	**No**	**4**		R -
126	Supply fire hose (30m) for hydrant c/w couplings and 16mm nozzle to SANS 1128-1 requirements	**No**	**4**		R -
	FIRE HOSE REELS				
127	Supply fire hose reel (FHR) c/w 30m hose to SANS 543 requirements	**No**	**2**		R -
128	Install fire hose reel (FHR) c/w inlet stop valve to SANS 10105-2 and SANS 10400-W requirements	**No**	**2**		R -
	PORTABLE FIRE EXTINGUISHERS				
129	Supply and install 9L portable Foam fire extinguishers (FE1) as shown	**No**	**10**		R -
	MOBILE FIRE EXTINGUISHERS				
130	Supply 50L foam mobile trolley fire extinguisher (MFE1) as shown	**No**	**3**		R -
131	**TWIN BOOSTER CONNECTION**				
132	Supply and install twin booster connection (TBC1) as shown.	**No**	**2**		R -
	PIPING AND VALVES				
133	Supply, install and paint Ø160mm black mild steel piping to twin booster as shown. Include Victaulic connections and pipe brackets as shown to SANS 1186-1	**m**	**45**		R -
134	Supply, install and paint Ø110mm black mild steel piping to fire hydrant as shown. Include Victaulic connections and pipe brackets as shown to SANS 1186-1	**m**	**110**		R -
135	Supply, install and paint Ø65mm black mild steel piping to foam system as shown. Include Victaulic connections and pipe brackets as shown to SANS 1186-1	**m**	**25**		R -
136	Supply, install and paint Ø40mm black mild steel piping to foam pourers as shown. Include Victaulic connections and pipe brackets as shown to SANS 1186-1	**m**	**72**		R -
137	Supply, install and paint Ø32mm black mild steel piping to fire hose reel as shown. Include Victaulic connections and pipe brackets as shown to SANS 1186-1	**m**	**36**		R -

138	Supply, install stainless steel piping to foam storage tank as per manufacturers recommendations. Include al necessary connections, bends, fittings, strainers, check valves, shut-off valves and pipe brackets to SANS 1186-1	**Item**	**1**		R	-
	SYMBOLIC SAFETY SIGNS/MARKINGS AND SIGNPOSTING					
	All Photo Luminescent markings and signposts to meet SANS 10400- Part T and SANS 1876 3-5 requirements. All signs to be 290mm/sign and framed					
139	Supply and install escape route sign - left (E1) as shown.	**No**	**2**		R	-
140	Supply and install escape route sign - right (E2) as shown.	**No**	**4**		R	-
141	Supply and install exit sign (E6) as shown.	**No**	**3**		R	-
142	Supply and install fire exit keep clear sign (E45) as shown.	**No**	**4**		R	-
143	Supply and install fire hydrant, fire hose reel & extinguisher sign (F1) as shown.	**No**	**2**		R	-
144	Supply and install fire extinguisher sign (F13) as shown.	**No**	**5**		R	-
145	Supply and install fire hose reel sign (F14) as shown.	**No**	**2**		R	-
146	Supply and install fire hydrant sign (F15) as shown.	**No**	**4**		R	-
147	Supply and install no open flame sign (F26) as shown.	**No**	**2**		R	-
148	Supply and install flammable liquids, no smoking sign (F46) as shown.	**No**	**2**		R	-
149	Supply and install booster connection sign (F49) as shown.	**No**	**2**		R	-
150	Supply and installfire trolley sign (FB14) as shown.	**No**	**3**		R	-
151	Supply and install escape route sign - left (E1) as shown.	**No**	**2**		R	-
152	Supply and install escape route sign - right (E2) as shown.	**No**	**4**		R	-
	PROVISIONAL SUMS					
153	Allow PC sum for supply and install smoke detection, MCP's, cabling and Fire panel	**No**	**1**	**R320,000.00**	**R**	**320,000.00**
	Mark Up on PC Sum	**%**				
	BILL NO: 3 - SECUTITY SYSTEM INSTALATIONS					
	HUB No 1					
154	Network Video Recorder - 16 CH, 4K NVR, with decoding for preview and playback, compatible to HDMI/VGA video output for enhanced storag3e reliability	**No**	**1**		R	-
155	HDD, Surveilance Harddrive - 10TB, 3.5", with , 6GB/s, internal harddrive	**No**	**1**		R	-
156	Water-proof Junction Box >Neat & Integrated design >Material: Aluminum & SECC > HDBW domes	**No**	**12**		R	-
157	Network Video Camera with CMOS technology, complete with all standard features	**No**	**12**		R	-
158	Wall mount cabinet, type 9U, CP Black with 2x uprights, 2x glands + Screws x 450 DEEP complete with 100mm, 9U, Collar, and 2 x 330mm Front mounted Tray as well as ventilation fan	**No**	**1**		R	-

159	RSA 6 way 16A 19' rack mount ZA Plug 3pin	**No**	**1**		R	-
160	All accessories required for above switch and cabinet	**No**	**1**		R	-
161	Managable commercial Switch 16 PoE 10/20, 2 port GB, RJ45, 2 port GB, SFP, 190 W	**No**	**1**		R	-
162	Single mode double fiber; LC port; 1310nm sending, and 1310nm receiving; Transmission distance up to 20 km;	**No**	**2**		R	-
163	Power Supply Unit to suit above equipment complete with suitable size battery	**No**	**7**		R	-
164	Communication cable type Cat 6 UTP, solid copper	**m**	**600**		R	-
165	Mylar Cable, 4 core, 2 pair, 0.5 including connectors	**m**	**300**		R	-
166	Connector - RJ45 for CAT5/5e/CAT6 Cable	**No**	**40**		R	-
167	Connector Boot - RJ45 Grey	**No**	**40**		R	-
168	Bosal 25mm conduit, saddles, bends and couplings per meter.	**m**	**200**		R	-
169	Installation of all equipment, including focussing of cameras	**No**	**1**		R	-
170	Allow for Consumables for the above	**No**	**1**		R	-
171	Install Access Control Per Reader	**No**	**7**		R	-
172	Install Access Control Mag Lock	**No**	**7**		R	-
	HUB No 2					
173	Network Video Recorder - 16 CH, 4K NVR, with decoding for preview and playback, compatible to HDMI/VGA video output for enhanced storag3e reliability	**No**	**1**		R	-
174	HDD, Surveilance Harddrive - 10TB, 3.5", with SATA, 6GB/s, internal harddrive	**No**	**1**		R	-
175	Water-proof Junction Box >Neat & Integrated design >Material: Aluminum & SECC > HDBW domes.	**No**	**10**		R	-
176	Network Video Camera with CMOS technology, complete with all standard features	**No**	**10**		R	-
177	Wall mount cabinet, type 9U, CP Black with 2x uprights, 2x glands + Screws x 450 DEEP complete with 100mm, 9U, Collar, and 2 x 330mm Front mounted Tray as well as ventilation fan	**No**	**1**		R	-
178	RSA 6 way 16A 19' rack mount ZA Plug 3pin	**No**	**1**		R	-
179	All accessories required for above switch and cabinet	**No**	**1**		R	-
180	Managable commercial switch 16 PoE 10/20, 2 port GB, RJ45, 2 port GB, SFP, 190 W	**No**	**1**		R	-
181	Single mode double fiber; LC port; 1310nm sending, and 1310nm receiving; Transmission distance up to 20 km;	**No**	**2**		R	-
182	Power Supply Unit to suit above equipment complete with suitable size battery	**No**	**1**		R	-
183	Magnetic type Door Lock, similar or equal to: Maglock SP1200 Lbs 12/24 VDC fitted with LED and mounting bracket	**No**	**2**		R	-
184	Communication cable type Cat 6 UTP, solid copper	**No**	**400**		R	-
185	Mylar Cable, 4 core, 2 pair, 0.5 including connectors	**No**	**100**		R	-
186	Connector - RJ45 for CAT5/5e/CAT6 Cable	**No**	**20**		R	-
187	Connector Boot - RJ45 Grey	**No**	**20**		R	-
188	Bosal 25mm conduit, saddles, bends and couplings	**m**	**100**		R	-
189	Installation of all equipment, including focussing of cameras	**No**	**1**		R	-
190	Allow for Consumables for the above	**No**	**1**		R	-

191	Consumables	**No**	**1**		R	-
	Fuel Tank - Hub No 2					
192	Network Video Recorder - 16 CH, 4K NVR, with decoding for preview and playback, compatible to HDMI/VGA video output for enhanced storag3e reliability	**No**	**1**		R	-
193	HDD, Surveilance Harddrive - similar or equal to Seagate Skywalk type, 10TB, 3.5", with SATA, 6GB/s, internal harddrive	**No**	**1**		R	-
194	Water-proof Junction Box >Neat & Integrated design >Material: Aluminum & SECC > HDBW domes.	**No**	**6**		R	-
195	Network Video Camera with CMOS technology - complete with all standard features	**No**	**6**		R	-
196	Orange M.Steel Enclosure 800 x 600 x 260 - IP65	**No**	**1**		R	-
197	Switch Unmanaged Hard 8-port PoE 10/100 96W + 1 Port 10/100 UL + SFP	**No**	**1**		R	-
198	Power Supply Unit 48V, 240W, PSU for NW1 12-19	**No**	**1**		R	-
199	Single mode double fiber; LC port; 1310nm sending, and 1310nm receiving; Transmission distance up to 20 km;	**No**	**2**		R	-
200	PSU - 3 Amp Power Store 13.6VDC for 7AH Battery	**No**	**1**		R	-
201	BATT - 12V 7AH Securi-Prod SLA F1 4.8mm	**No**	**1**		R	-
202	Magnet type door lock similar or equal to : Maglock SP1200lbs (544Kg) 12/24VDC & LED complete with mounting bracket	**No**	**1**		R	-
203	Cat 6 UTP Cable Solid Copper per metre (min 100m)	**No**	**1**		R	-
204	Connector - RJ45 for CAT5/5e/CAT6 Cable	**No**	**350**		R	-
205	Connector Boot - RJ45 Grey	**No**	**20**		R	-
206	Bosal 25mm conduit, saddles, bends and couplings per meter.	**No**	**20**		R	-
207	Installation of all equipment, including focussing of cameras	**No**	**150**		R	-
208	Allow for Consumables for the above	**No**	**5**		R	-
209						
	Supply and install complete with concrete base, +4m, Galvanized Pole, Camera fittings, 100 x 100 drop down with base	**No**	**5**		R	-
210						
	Control Room					
211						
	Supply and Install a suitable computor unit for the monitoring, control and data storage of the Security System. The computor must comply and must be equal or similar to the following specifications: Processor - Intel Core I7 11700K - Number of Cores - 8 - Number of Threads - 16 - Base Frequency - 3.8 GHz - Cache - 16 MB Intel Smart Cache - Bus Speed - 8 GT/s - TDP - 65 W Memory Specifications - Max Memory Size - 128 GB - Memory Types - DDR4-2666 - Max Number of Memory Channels - 2 - Max Memory Bandwidth - 45.8 GB/s Software - Latest Microsoft Windows - State of the art package to drive security requirements	**No**	**1**		R	-
212						
213	50" Class A6 Series LED 4K UHD Smart Google Screen	**No**	**1**		R	-

214	Flat/Curved TV 3 Movement Wall Mount 65": BRA3300B	**No**	**1**		R	-
215	Green Connection 10 Meter HDMI Cable Version 1.4	**No**	**1**		R	-
216	CABLE USB 5M EXTENSION	**No**	**1**		R	-
217	12U CP black wall mount cabinet 2x uprights 2x glands + Screws 450 DEEP	**No**	**1**		R	-
218	12U COLLAR 200MM	**No**	**1**		R	-
219	Network management switch, 24-Port PoE Gigabit Managed Switch. · Layer 2 network management PoE switch· Support IEEE802.3af, IEEE802.3at standard· Network Redundancy: STP/RSTP/MSTP· Support IPv4/IPv6, and DHCP· Network management based on SNMP· Configuration: Web, Telnet, CLI Command· QoS (IEEE802.1p/1Q), CoS/ToS to Increase Determinism· Enhanced Network Security with IEEE802.1X, SNMP v1/v2c/v3, HTTPS, and SSH/SSL· Large data cache(4M), real-time transmission· MAC auto study and aging, MAC address list capacity is 8K	**No**	**1**		R	-
	DSS Professional V8 access control channel base package includes 16 door licenses and is a prerequisite for access control channel expansion. Note: For access control devices with video channels, the video channel license is required.	**No**	**1**		R	-
220						
	DSS Professional V8 video surveillance base package includes 16 video channels and is a prerequisite for video channel expansion.Supported: live view, playback, video wall, map, event center, deepxplore, maintenance center, etc.	**No**	**1**		R	-
221						
	Video channel expansion license, one video channel license for DSS Professional V8.Prerequisite: Video surveillance base package.	**No**	**4**		R	-
222						
	Install server	**No**	**1**		R	-
223						
	Install cable per point	**No**	**2**		R	-
224						
	Install cabinets	**No**	**1**		R	-
225						
	Consumables	**No**	**1**		R	-
226						
	Install software	**No**	**1**		R	-
227						
	Training	**No**	**1**		R	-
228						
	Commissioning	**No**	**1**		R	-
229						
	Project Documentation including: Site Layouts (working drawings / building plans to be supplied by client), SHE file (safety, health and environment), Site commissioning, hand over documentation.	**No**	**1**		R	-
230						
231	**Pipeline Cameras**					

232	4 MP 1/1.8" CMOS image sensor, low luminance, and high definition image.Outputs max. 4 MP (2688×1520)@30 fps.H.265 codec, high compression rate, ultra-low bit rate.Built-in warm illuminator, and the max. illumination distance is 30m.ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.Intelligent monitoring: Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); abandoned object, missing object, loitering detection, people gathering, parking detection, heat map and face detection.Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card,Built-in Mic.12 VDC/PoE power supply.Supports ePoE, IP67, and IK10.Supports SMD 3.0	**No**	**4**		R -
233	Unmanaged Hard 8-port PoE 10/100 96W +1 Port 10/100 UL + 1 SFP	**No**	**1**		R -
234	48V 240W PSU for NW112-19	**No**	**1**		R -
235	Steel cage for vandalism	**No**	**4**		R -
236	Bosal 25mm conduit, saddles, bends and couplings per meter.	**No**	**250**		R -
237	Cat 6 UTP Cable Solid Copper per metre (min 100m)	**No**	**250**		R -
238	Connector - RJ45 for CAT5/5e/CAT6 Cable	**No**	**10**		R -
239	Connector Boot - RJ45 Grey	**No**	**10**		R -
240	Consumables	**No**	**1**		R -
241	Install camera and focus	**No**	**3**		R -
242	Install cable per point	**No**	**3**		R -
243	Install cabinets	**No**	**1**		R -
	BILL NO: 4: PROVISIONAL SUMS				
244	Supply and install new 1MVA Perskin Genset Control Panel	**PC**	**1**	R 460,000.00	**R 460,000.00**
245	Mark Up on PC Sum	**%**			
246	Provision to supply and install fuel lines from Bulk Diesel Tank to Generators complete with level Control Pumping system	**PC**	**1**	R 250,000.00	**R 250,000.00**
247	Mark Up on PC Sum	**%**			
248	Allowance for Bulk diesel filling	**PC**	**1**	R 300,000.00	**R 300,000.00**
249	Mark Up on PC Sum	**%**			
249	Provisional amount the supply and installation of alluminium bus bar between ATS units and Main DB	**PC**	**1**	R 1,100,000.00	**R 1,100,000.00**
250	Mark Up on PC Sum	**%**			
251	Provisional amount for supply and installation of communication cables for the monitoring systems, complete with wire ducting	**PC**	**1**	R 250,000.00	**R 250,000.00**
252	Mark Up on PC Sum	**%**			
253	Provisional amount for design, installation and commissioning of a control system for standby plant	**PC**		R 210,000.00	**R 210,000.00**
254	Mark Up on PC Sum	**%**			
255	Provisonal amount for design,installation and commissioning of a monitoring system for the standby plant	**PC**	**1**	R 380,000.00	**R 380,000.00**
256	Mark Up on PC Sum	**%**			

	BILL NO: 6: SYSTEM TESTING AND COMMISSIONING				
257	**DRAWINGS**				
258	Provide one set of detailed "As-Built" installation drawings for the approval of the consulting Engineer.	**Item**	**1**		R -
259	**Test and Commissioing**				
260	The Tenderer shall allow for whatever cost he may consider necessary for testing and commissioing the complete installation in the presence of the consulting engineer	**Item**	**1**		R -
261	Maintenance and Support - Year 1	**Item**	**1**		
				Subtotal	
				Contingencies @ 5%	
				Add VAT @ 15%	
				Total Amount	**R**