

Yanfeng Extensions – Rev00

Tender No.
ASP/YANFENG/EXT/11/09/Z1A



Tender

**EXTENSION OF YANFENG MANUFACTURING FACILITY
IN ZONE 1A OF THE ELIDZ**

AT THE

EAST LONDON INDUSTRIAL DEVELOPMENT ZONE

**CONTRACT NO: ASP/YANFENG/EXT/11/09/Z1A
EXTENSION OF MANUFACTURING FACILITY IN
ZONE 1A OF THE ELIDZ**

ENVELOPE B: FINANCIAL PROPOSAL

East London IDZ
Contact person: A Mgwaza
Fax No: 086 605 0942
Email: anathi@elidz.co.za

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Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

PART C1: AGREEMENTS AND CONTRACT DATA

C1.1 CONTRACT DATA EC

C1.1: CONTRACT DATA – EMPLOYER

	<p>The Conditions of Contract are clauses 1 to 42 of the JBCC series 2000 Principal Building Agreement (Edition 5 of July 2007) prepared by the Joint Building Contracts Committee.</p> <p>Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors, Master Builders Association, South African Association of Consulting Engineers, South African Institute of Architects, Association of Construction Project Managers, Building Industries Federation South Africa, South African Property Owners Association or Specialist Engineering Contractors Committee.</p>
	<p>Definitions</p> <p>The definitions used in this document and the interpretation thereof are as listed in the Principal Building Agreement. The word or phrase of a definition is in bold text and shall bear the meaning assigned to it in the Principal Building Agreement. Where such word or phrase is not highlighted it shall bear the meaning consistent with the context of its use. The listed defined word or phrase does not qualify as a definition where information required to be stated in the contract data has not been provided.</p>
	<p>Provision of Contract Data</p> <p>Spaces requiring information must be filled in, shown as “not applicable” or deleted but not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided, the information should be annexed hereto and cross referenced to the applicable clause of the contract data.</p>
	<p>Reference Clauses</p> <p>Where relevant the Principal Building Agreement clause applicable to the required information is printed in italics under the Contract Data clause number ie. [27.4.2]</p>
1.0	CONTRACTING AND OTHER PARTIES
1.1 [1.2]	<p>Employer:</p> <p>East London Industrial Development Zone SOC Ltd</p> <p>Postal address:</p> <p>P O BOX 5458 Greenfields East London Tel: (043) 702 8200 Fax: (043) 7028251 Email: gary@elidz.co.za Tax/VAT registration No. 4900 213 598</p> <p>Physical address:</p> <p>Lower Chester Road Sunnyridge East London Code 5201</p>
1.2 [5.1]	<p>Principal Agent</p> <p>Newground Projects</p> <p>Physical address:</p> <p>17 St Andrews Road, Selborne East London Code 5201 Tel: 043 722 5864 Email: louis@newground.co.za</p>
1.3 [5.2]	<p>Agent (1)</p> <p>Osmond Lange Architects</p> <p>Agent's service:</p> <p>ARCHITECT</p>

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

	Physical address:	
	First Floor, Pilot Mill House, The Quarry, Selborne East London Tel: 043 721 0033 Fax: 043 721 0038 Email: xola@o-l.co.za Code 5200	
1.4 [5.2]	Agent (2)	
	Bisiwe van Niekerk Inc.	
	Agent's service:	
	QUANTITY SURVEYOR	
	Physical address:	
	The Ridge Office Park, 2nd Floor, 3 Berea Terrace, Berea, East London East London Code 5205 Tel: 043 - 721 1043/4 Email: darren@bisiwe.co.za	
1.5 [5.2]	Agent (3)	
	BVI Border (Pty) Ltd	
	Agent's service:	
	STRUCTURAL ENGINEERS	
	Physical address:	
	1st Floor, Esprit House, Triple Point, St Helena Road, Beacon Bay East London Code 5241 Tel: (043) 722 2738 Email: wernerdl@bvi.co.za	
1.6 [5.2]	Agent (4)	
	Evans Consulting	
	Agent's service:	
	ELECTRICAL ENGINEER	
	Physical address:	
	17 Surrey Road, Vincent East London Code 5247 Tel: 043 721 3192 Email: darryl@evansconsulting.co.za	
1.7 [5.2]	Agent (5)	
	Evans Consulting	
	Agent's service:	
	MECHANICAL ENGINEER	
	Physical address:	
	17 Surrey Road, Vincent East London Code 5247 Tel: 043 721 3192 Email: cedric@evansconsulting.co.za	
1.8 [5.2]	Agent (6)	
	To be appointed	
	Agent's service:	
	SHEQ Consultant	
	Physical address:	
1.12 [5.5]	Interest of principal agent or other agents in the project	No
1.12	The principal agent named in 1.3 is responsible for the preparation of the contract data schedule. Failure to complete the contract data schedule in full may result in the tender being disqualified.	

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

2	CONTRACT AND SITE INFORMATION			
2.1 [1.7]	The law applicable to this agreement shall be that of the		Republic of South Africa	
2.2 [1.1]	Works identification: The expansion of an existing manufacturing facility in Zone 1A of the ELIDZ			
2.3 [1.1]	Site description:		The site is in Zone1A of the EAST LONDON IDZ (Refer to Envelope A Volume 1 of 2: Technical Specification Part C4 Site Information for detail)	
2.4 [15.2.1]	Possession of the site is to be given on:		PROVISIONAL: 30 September 2020	
2.5 [15.3]	Period for the commencement of the works after the contractor takes possession of the site: (working days)			1
2.6 [15.4]	Completion of the works in sections is required			Yes
[28.0]	Number of sections			4
2.7 [3.3] [31.16.2]	Waiver of the contractor's lien or right of continuing possession is required			Yes
2.8 [16.1]	Defined restrictions to the site area. Where "yes" the specific requirements are described below or detailed in the contract documents:			No
2.9 [16.4]	Geotechnical investigation of the site has been undertaken. Where "yes" results are included in the contract documents.			No
2.10 [16.6]	Existing premises will be occupied. Where "yes" the specific requirements are described below or detailed in the contract documents			Yes
2.11 [16.7]	Provision of temporary services is required. Where "yes" the specific requirements are described below or detailed in the contract documents			Yes
2.11.1	Water	Option A	Contractor	his cost
		Option B	Employer	free of charge
		Option C	Employer	metered (contractor cost)
2.11.2	Electricity	Option A	Contractor	his cost
		Option B	Employer	free of charge
		Option C	Employer	metered (contractor cost)
2.11.3	Telecom	Option A	Contractor	his cost
		Option B	Employer	free of charge
		Option C	Employer	metered (contractor cost)
2.11.4	Ablutions	Option A	Contractor	his cost
		Option B	Employer	free of charge
2.12 [16.8]	Protection of existing trees and shrubs is required. Where "yes" the specific requirements are described below or detailed in the contract documents			No
3.0	INSURANCES AND SECURITIES			
3.1	Contract works insurance to be effected by the:		(Employer/ Contractor)	Employer
[10.1.1]	For the sum of		(amount)	Contract Sum + 18%

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

[12.6]	The contractor is responsible, in the case of storm, subsidence, landslip or collapse, earthquake or earth tremor, fire and lightning, theft/ malicious damage, for the deductible of		(amount)	R 25,000
	The contractor is responsible, in all other cases, for the deductible of		(amount)	R 10,000
3.2	Supplementary / Special insurance to be effected by		(Employer/ Contractor)	Employer
[10.1.2]	For the sum of		(amount)	Contract Sum + 18%
[11.1] [11.2] [11.3] [12.6]	The contractor is responsible for the deductible of 0.1% of the Contract Sum with a minimum of R2,500.00 and a maximum of R 25,000.00 per incident.			
3.3	Public liability insurance to be effected by		(Employer/ Contractor)	Joint Names
[10.1.3]	Spread of Fire for the Sum of		(amount)	R 250,000
	All other cases for the Sum of		(amount)	R20,000,000
[12.6]	The contractor is responsible, in the case of Damage to Underground Services, for the deductible of		(amount)	R 25,000
	The contractor is responsible, in the case of Third Party Damage, for the deductible of		(amount)	R 15,000
3.4	Support insurance to be effected by the			Employer
[11.1.1]	For the sum of		(amount)	NA
	With a deductible of		(amount)	NA
3.5	Special insurance to be effected by		(Employer/ Contractor)	NA
	Type			
	For the sum of		(amount)	NA
	With a deductible of		(amount)	NA
4.0	PRACTICAL COMPLETION DATES AND PENALTIES			
4.1	For the works as a whole		Date	Penalty Amount
[24.3.1] [30.1] [30.2] [30.3]	The date for practical completion and the penalty per calendar day		NA	NA
4.2	For the works in sections		Date	Penalty Amount
[24.3.1] [28.1]	The date for practical completion and the penalty per calendar day	Section 1	23 Dec 20	R 20,000
		Section 2	12 Jan 21	R 20,000
		Section 3	25 Feb 21	R 20,000
		Section 4	17 Mar 21	R 20,000
5.0	DOCUMENTS AND GENERAL			
5.1 [3.7]	No of Construction documents to be supplied to the contractor			3
5.2 [3.9]	The priced document may be used as a specification of materials and goods and work methods			No
5.3 [3.10]	The contractor shall provide a schedule of rates			No
5.4 [3.11]	Changes made to JBCC standard documents			Yes
		(Addendum No)	NA	

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

5.5 [3.11]	On acceptance of the tender the priced document is to be submitted within the stated working days	(No. of)	The priced document is to be submitted as part of the tender and returned as part of Envelope B: Financial Proposal
5.6 [22.2]	Work to be undertaken by direct contractors		Yes
5.7 [24.9]	On achievement of practical completion the contractor is to hand over manuals etc. related to the works as listed below:	Installation of operational equipment	
	(1) Electrical Installation	(2) Lifts	
	(3) Fire Detection Installation	(4) Air Conditioning Equipment Installation	
	(5) Sprinkler Installation	(6)	
5.8	Interim payment certificate to be issued by	(Date of Month)	25 th day of the month
6.0	CHANGES MADE TO THE STANDARD JBCC DOCUMENT		
	Note: All changes in detail must be listed below or provided in	(Addendum No)	NA
1.1	The definition of “ BILLS OF QUANTITIES ” is amended by replacing it with the following: BILLS OF QUANTITIES: The document drawn up in accordance with the Standard System of Measuring Building Work 1999 sixth Edition (Revised). The contractor shall have priced the document to reflect the contract sum.		
1.1	The definition of “ CONSTRUCTION PERIOD ” is amended by replacing it with the following: CONSTRUCTION PERIOD: means the period commencing on the date that possession of the site is given to the contractor and ending on the date of practical completion.		
1.1	The definition of “ WORKING DAYS ” is amended by replacing it with the following: WORKING DAYS: Twenty-four (24) hour days commencing at midnight (00:00) which excludes Sundays and statutory holidays.		
3.1	Clause 3.1 shall be amended as follows: Replace clause 3.1 with No clause		
3.3	Delete the following in the third line of clause 3.3 “of having received a payment guarantee from the employer [3.1]”		

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

7.2	<p>Add the following clause after clause 7.1:</p> <p>7.2 Without limiting the generality of the provisions of clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to Envelope A: Technical Proposal: Volume 1 of 2 C3.3 for a copy of the relevant specification and baseline risk assessment) and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price against this item for compliance with the Act and the Regulations and the provisions of the aforementioned health and safety specification.</p>
7.3	<p>Add the following clause after clause 7.2:</p> <p>7.3 Construction Environmental Management Plan (C4): The Construction Environmental Management Plan (CEMP) REV8 January 2016, incorporates specifications derived from recommendations in the Strategic Environmental Assessment (SEA), ELIDZ Rezoning Environmental Impact Assessment (EIA) and comments Report. Department of Economic Affairs, Environment and Tourism's Conditions of Approval for the rezoning EIA, together with specifications for good "environmental practice" for construction work. The purpose of the CEMP is to translate the recommendations of the SEA and the Rezoning EIA into a contractual environmental management plan which will be strictly applied during the construction of the works. A copy of the CEMP is attached (refer to Envelope A: Technical Proposal: Volume 1 of 2 C3.4 for a copy of the relevant specification) and tenderers are to familiarize themselves with the provisions contained therein and allow for compliance with the same.</p>
14.3.2	<p>Add the following to the end of clause 14.3.2:</p> <p>The expiry date for the security to be provided in terms of clause 14.3 and 14.4 shall be one hundred and eighty (180) calendar days after the date for practical completion for the work as a whole.</p> <p>Should the terms of the construction guarantee have an expiry date add the following clause after clause 5.2 on the JBCC Construction Guarantee form:</p> <p>5.3. The guarantor has failed to extend the guarantee when requested to do so by the Employer if the certificate of final complete in respect of the variable construction guarantee and certificate of practical completion in respect of the fixed construction guarantee under the contract has not been issued by the date, 30 calendar days prior to the expiry date of the construction guarantee, and that the construction guarantee is called up in terms of 5.0</p>
15.1.2	<p>Documents to be provided five (5) working days after the acceptance of the tender</p> <ul style="list-style-type: none"> • OHS Plan/File • Construction Guarantee • Construction Programme
18.0	<p>Add the following clause after clause 18.4.</p> <p>18.5 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.</p>

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

19.1	Amend clause 19.1 as follows: Delete "Where required in the priced document"
19.1.1	Amend clause 19.1.1 as follows: Substitute clause 19.1.1 with the following: The contractor will, throughout the entire contract period be responsible for the proper and adequate protection of all workers and visitors on the site from injury and damage resulting from the works and for the proper security of the site at all times. Furthermore, the contractor must allow for all necessary temporary hoardings, hoardings with gantries, fans, safety screens, barriers, access gates, covered gangways, walkways, overhead protection against falling objects and materials, security fences, etc. for the enclosure of the works and elements thereof for the protection of the public and others as required by prevailing BCMM bylaws, the Construction Regulations 2014 issued in terms of Occupational Health and Safety Act 1993, any other Laws and Regulations and/or demanded by his own site requirements. Allowance must furthermore be made for periodic adjustment of any enclosure or protection and for their eventual removal. Hoardings and Temporary Fencing prescribed by the Employer and have been measured in the Provisional Bills of Quantities. All other hoarding must be priced for under this clause in the Preliminaries Bill and no claims for additional hoardings and temporary fencing will be entertained. All site establishment, offices and storage of materials will be strictly limited to the area demarcated (See C3.1: Scope of Work, paragraph 1.5 Temporary works), which must be suitably fenced with 1,8m high 'Bonnox' fencing covered with shade cloth to the satisfaction of the principal agent. The contractor shall be responsible for keeping such areas in a clean, sanitary and orderly condition.
19.1.2	Add the following to the end of Clause 19.1.2: The office accommodation for meetings is to be adequately sized and equipped with a sound working table and chairs to accommodate at least thirty (10) people for site meetings. The room is to be well vented with air-conditioning and fitted with two large white boards and pin boards with markers and erasers. Two plug points to be provided within the room.
19.2	Amend the third sentence to clause 19.2 as follows: The contractor shall provide and erect a project notice board size 2.5m x 3.5m.
19.3	Add the following to the end of clause 19.3: The contractor shall re-instate/ rehabilitate the area used for site establishment (contractors yard area) as set out in Clause PS 6 of the CEMP Rev 8 January 2016 included in Part C3.4 in Envelope A: Volume 1 of 2 of these tender documents.
29.2.1	Clause 29.2.1 shall be amended as follows: Replace clause 29.2.1 with No clause
31.9	Amend by substituting seven (7) calendar days with thirty (30) calendar days.
34.10	Amend by substituting seven (7) calendar days with thirty (30) calendar days.

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

31.5.3	<p>The Contract is to be adjusted using CPAP indices. (Clause 32.13) [31.5.3]: Yes. Base month is SEPTEMBER 2020</p> <p>Where CPAP is applicable, the contract sum will be adjusted in accordance with the JBCC Contract Price Adjustment Provisions (CPAP) as set out in the CPAP Indices Application Manual for use with P0151 indices published by Statistics South Africa, dated 1 January 2013 and any amendments thereto:</p>	
	1)	Glass etc. measured in specialist section Metalwork, will be adjusted in terms of the index for that work group unless specifically stated otherwise in the Provisional Bills of Quantities
	2)	All electrical installations in buildings and power distribution systems shall be adjusted in terms of the index for Work Group 160 Electrical Installation. In case of uninterruptible power supplies, elevators, escalators and hoists, generating sets, motor-alternator sets and intercommunication systems shall be in accordance with Work Group 170
	3)	With reference to Work Group 190 a proportion of the value related preliminaries pro rata to the amount of work excluded from adjustment, shall be excluded from Contract Price Adjustment Provisions, if Option A has been selected for the adjustment of preliminaries
	4)	Further to clause 3.4.4 of the CPAP Indices Application Manual, the listing of additional items for exclusion by tenderers, will not be permitted
	5)	Where V results in a negative amount after application of the formula in clause 8.3 of the CPAP Indices Application Manual the factor of 0.55 shall be substituted by 1.45
31.16.2	The Employer will not be providing a payment guarantee for the waiver of the Contractor's lien or right of continuing possession of the site.	
7.0	DECLARATION BY THE PRINCIPAL AGENT	
	I, the principal agent named in 1.2 above, declare that the information provided above is provisional at the time of calling for tenders. Where necessary, should any of the above information need to be varied, tenderers will be forthwith informed thereof in writing	
		Principal Agent
		Date

C1.2 JBCC FORM OF GUARANTEE

PART C2: PRICING DATA

C2.1 PRICING INSTRUCTIONS

C2.1 Pricing Instructions

- 1 The Provisional Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work as amended published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised), 1999.
- 2 The agreement is based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 5, July 2007. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Provisional Bills of Quantities are recited.
- 3 It will be assumed that prices included in the Provisional Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).
- 4 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 5 Where any item is not relevant to this specific contract, such item is marked N/A (signifying "not applicable")
- 6 The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Bill No.1 (Preliminaries) of the Provisional Bills of Quantities.
- 7 The Provisional Bills of Quantities are not intended for the ordering of materials. Any ordering of materials, based on the Provisional Bills of Quantities, is at the Contractor's risk.

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

C2.2 PROVISIONAL BILLS OF QUANTITIES

(TO BE COMPLETED IN BLACK INK AND RETURNED)

Tenderer ____ Witness 1 ____ Witness 2 ____ Employer ____ Witness 1 ____ Witness 2 ____

PROVISIONAL BILLS OF QUANTITIES

FOR

**Extensions to Existing Yanfeng Manufacturing Facilities within Zone 1A of
the Automotive Suppliers Park of the East London Industrial Development
Zone for Yanfeng S.A. Automotive Interior Systems (Pty) Ltd**

FOR

East London IDZ

ARCHITECTS

Osmond Lange Architects
1st Floor Pilot Mill House
The Quarry, Selborne
East London
5201

Tel. 043 721 0033
Fax: 043 721 0033
e Mail: williamm@o-l.co.za

Principal Agent

Newground Projects
Tel. 043 722 5864
Fax: 086 520 6942
e Mail: louis@newground.co.za

Electrical & Mechanical Engineers

Evans Consulting Engineers cc
Tel. 043 721 3192
Fax: 043 721 1553
e Mail: cedric@evansconsulting.co.za

QUANTITY SURVEYORS

Bisiwe Van Niekerk Inc.
Quantity Surveyors & Project Managers
The Ridge Office Park, 2nd Floor
3 Berea Terrace
Berea
East London

Tel. 043 721 1043
Fax: 043 721 1239
e Mail: admin@bisiwe.co.za

Consulting Engineers

BVI Engineers
Tel. 043 722 2738
Fax: 043 747 7698
e Mail: WernerDL@bvi.co.za

SECTION NO 1

PRELIMINARIES

Amount

SECTION NO. 1**PRELIMINARIES****PRELIMINARIES****NOTES:****BUILDING AGREEMENT AND PRELIMINARIES**

The JBCC Series 2000 Principal Building Agreement (July 2007 Edition 5.0 Reprint 1) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described

The JBCC Principal Building Agreement Contract Data EC & CE form an integral part of this agreement.

The ASAQS Preliminaries (November 2007 Edition) published by the Association of South African Quantity Surveyors for use with the JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities, amended as hereinafter described.

Contractors are referred to the abovementioned documents for the full intent and meaning of each clause

The clauses in the abovementioned documents 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 agreement such item is marked N/A (signifying not applicable).

PREAMBLES FOR TRADES

The Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained.

Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the Model Preambles.

The contractor's prices for all items throughout these bills of quantities shall take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any Supplementary Preambles and/or specifications

STRUCTURE OF THIS PRELIMINARIES BILL

Section A : A recital of the headings of the individual clauses of the aforementioned JBCC Principal Building Agreement.

Section B : A recital of the headings of the individual clauses of the aforementioned Preliminaries document.

Carried To Section Summary

R

Section No. 1

Bill No. 1

Preliminaries

Amount

Section C : Any special clauses to meet the particular circumstances of the project.

PRICING OF PRELIMINARIES

Should the contractor select Option A in the contract data for the adjustment of preliminaries, the amounts entered against the relevant items in these preliminaries are 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

Item

F: V: T:

Objective and preparations

- 2 Clause 2.0 - Offer acceptance and performance obligations

Item

F: V: T:

- 3 Clause 3.0 - Documents

Note: Contractor is to take note that it is the responsibility of the Contractor to plot and print all paper copies of drawings that they require for the duration of the project. All printing costs are to be borne by the contractor.

Item

F: V: T:

- 4 Clause 4.0 - Design responsibility

Item

F: V: T:

- 5 Clause 5.0 - Employer's agents

Item

F: V: T:

- 6 Clause 6.0 - Contractor's site representative

Item

F: V: T:

- 7 Clause 7.0 - Compliance with laws and regulations

Health and Safety

Without limiting the generality of the provisions of clause 7.0, the contractor's attention is drawn to the provisions of Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to Volume 1 of 2 C3.2 for a copy of the relevant specification) and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [7.1]

The Contractor shall:

1. Comply with the health and safety specification for the works
2. Prepare and agree with the health and safety consultant the health and safety plan for the works
3. Co-operate with the health and safety consultant in all respects

Carried To Section Summary

R

Section No. 1

Bill No. 1

Preliminaries

		Amount
<p>4. Manage the compliance of all sub-contractors with the regulations and with the health and safety plan and specification</p> <p>5. Conform to the conditions contained in the Employers health and safety specification</p> <p>6. Comply with and manage the regulations and requirements regarding all the Covid-19 health and safety requirements</p> <p>Also see the Health & Safety items included under the Specific Preliminaries in Section C which the Contractor needs to ensure are priced and included into the Health & Safety provisions.</p> <p>Construction Environmental Management Plan (C3)</p> <p>The Construction Environmental Management Plan (CEMP) incorporates specifications derived from recommendations in the SEA, ELIDZ Rezoning Environmental Impact Assessment (EIA) and comments Report. Department of Economic Affairs, Environment and Tourism's Conditions of Approval for the rezoning EIA, together with specifications for good "environmental practice" for construction work.</p> <p>The purpose of the CEMP is to translate the recommendations of the SEA and the Rezoning EIA into a contractual environmental management plan which will be strictly applied during the construction of the works.</p> <p>A copy of the CEMP is attached (See 3.3 in Volume 1 of 2 of this document) and tenderers are to familiarize themselves with the provisions contained therein and allow for compliance with the same.</p>		
	F: V: T:	
8	Clause 8.0 - Works risk	Item
	F: V: T:	
9	Clause 9.0 - Indemnities	Item
	F: V: T:	
10	Clause 10.0 - Insurances	Item
	F: V: T:	
11	Clause 11.0 - Special Insurances	Item
	F: V: T:	
12	Clause 12.0 - Effecting Insurances	Item
	F: V: T:	
13	Clause 13.0 - Assignment	Item
	F: V: T:	
14	Clause 14.0 - Security	Item
	F: V: T:	
	<u>Execution</u>	
15	Clause 15.0 - Preparation for and execution of the works	Item
	F: V: T:	
16	Clause 16.0 - Site and access	Item
	F: V: T:	
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17	Clause 17.0 - Contract instructions F: V: T:	Item
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. F: V: T:	Item
19	Clause 19.0 - Temporary works and plant a) Site Enclosure The contractor will, throughout the entire contract period be responsible for the proper and adequate protection of all workers and visitors on the site from injury and damage resulting from the works and for the proper security of the site at all times. Furthermore, the contractor must allow for all necessary temporary hoardings, fans and walkways, overhead protection against falling objects and materials, security fences, etc. required by prevailing bylaws, the SHE Act and/or his own site requirements. Allowance must further more be made for periodic adjustment of any enclosure or protection and for their eventual removal. Other than the construction site itself, access is limited to the immediate area surrounding the works as enclosed by the entrance to the site. The limit of access and exist will be pointed out to the contractor by the Principal Agent at the pre-tender site inspection. b) Site Establishment All site establishment, offices and storage of materials will be strictly limited to an area outside the site across the existing tarred roadway, which must be suitably fenced with 1,8m high steel mesh fencing covered with shade cloth to the satisfaction of the principal agent. The contractor must also allow in his price for clearing this site of vegetable matter, shrubs, small trees, etc to make way for his sheds, offices, plant, etc. The contractor shall be responsible for keeping such areas in a clean, sanitary and orderly condition. The containers shall be removed by the contractor and the area made good at the completion of the contract. The tarred roadway between the construction site and the contractors yard is to be protected at all times and is to be cleaned on a regular basis. Any damage that may occur to this tarred roadway is to be made good by the contractor at his own expense. The contractor must also allow for a 5.00m wide temporary roadway from the tarred road to the construction site and is to be made up of suitable layerworks to accommodate any traffic that will be used on it. The contractor must also allow for clearing this area of any vegetable matter, shrubs, small trees, etc. This area to be left clean after construction has been completed. F: V: T:	Item
20	Clause 19.1.2 The contractor shall provide, maintain and remove on completion, the following accommodation. a) Meeting Room	
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	<p>The room is to be adequately sized and equipped with a sound working table and chairs to accommodate at least thirty (30) people for site meetings.</p> <p>The room is to be well vented and fitted with two large white boards with markers and erasers.</p> <p>b) Generally</p> <p>The access and the areas around the offices and toilets shall be surfaced with clean crushed stone. Furthermore, an adequate level parking area shall be provided also surfaced with clean crushed stone. Both areas shall be well drained, kept free of mud and maintained throughout the contract period.</p> <p>The contractor shall allow for the proper maintenance and regular cleaning of the all the above facilities during the contract period to ensure clean usable facilities at all times and shall clear away and make good on completion.</p> <p>Furthermore, it is a requirement that this compound as with the contractors site establishment facility should be fenced with a 1.8m high gumpole and steel mesh fence covered with shade cloth.</p>	
21	<p>F: V: T:</p> <p>Clause 20.0 - Nominated subcontractors</p> <p>Refer to the provisions on general attendance hereinafter</p> <p>F: V: T:</p>	Item
22	<p>Clause 21.0 - Selected subcontractors</p> <p>General attendance of n/s subcontractors for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n / s subcontractor for the execution of the relevant subcontract work</p> <p>F: V: T:</p>	Item
23	<p>Clause 22.0 - Employer's direct contractors</p> <p>F: V: T:</p>	Item
24	<p>Clause 23.0 - Contractor's domestic subcontractors</p> <p>F: V: T:</p>	Item
25	<p><u>Completion</u></p> <p>Clause 24.0 - Practical completion</p> <p>The contractor shall not receive any mark-up for overheads and profit on any omission of tenant installation work or tenant installation work by others. Claims of loss of profit shall not be entertained.</p> <p>F: V: T:</p>	Item
26	<p>Clause 25.0 - Works completion</p> <p>F: V: T:</p>	Item
27	<p>Clause 26.0 - Final completion</p> <p>F: V: T:</p>	Item
28	<p>Clause 27.0 - Latent defects liability period</p> <p>F: V: T:</p>	Item
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29	Clause 28.0 - Sectional completion F: V: T:	Item	
30	Clause 29.0 - Revision of date for practical completion The removal and replacement of materials and/or workmanship which do not conform to specification or drawing shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3) F: V: T:	Item	
31	Clause 30.0 - Penalty for late or non-completion F: V: T:	Item	
	<u>Payment</u>		
32	Clause 31.0 - Interim Payment The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable. F: V: T:	Item	
33	Clause 32.0 - Adjustment to the contract value Where prices are submitted by the contractor or n/s subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final payment certificate, it shall be in writing. F: V: T:	Item	
34	Clause 33.0 - Recovery of expense and loss F: V: T:	Item	
35	Clause 34.0 - Final account and final payment F: V: T:	Item	
36	Clause 35.0 - Payment to other parties F: V: T:	Item	
	<u>Cancellation</u>		
37	Clause 36.0 - Termination by employer - contractor's default F: V: T:	Item	
38	Clause 37.0 - Termination by employer - loss and damage F: V: T:	Item	
39	Clause 38.0 - Termination by contractor - employer's default F: V: T:	Item	
40	Clause 39.0 - Termination - cessation of the works F: V: T:	Item	
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<u>Dispute</u>		
41	Clause 40.0 - Settlement of disputes F: V: T:	Item
<u>Contract Agreement</u>		
42	Clause 41.0 - Post tender provisions The required post tender information shall be inserted in the post tender provisions after consultation with the contractor F: V: T:	Item
43	Clause 42.0 - Contractual agreement F: V: T:	Item
<u>SECTION B: PRELIMINARIES</u>		
<u>Definitions and Interpretation</u>		
44	Clause 1.0 - Definitions and interpretation F: V: T:	Item
<u>Documents</u>		
45	Clause 2.1 - Checking of documents F: V: T:	Item
46	Clause 2.2 - Provisional bills of quantities F: V: T:	Item
47	Clause 2.3 - Availability of construction information F: V: T:	Item
<u>Previous work and adjoining properties</u>		
48	Clause 3.1 - Previous work - dimensional accuracy F: V: T:	Item
49	Clause 3.2 - Previous work - defects F: V: T:	Item
50	Clause 3.3 - Inspection of adjoining properties F: V: T:	Item
<u>Samples, shop drawings and manufacturer's instructions</u>		
51	Clause 4.1 - Samples of materials F: V: T:	Item
52	Clause 4.2 - Workmanship samples F: V: T:	Item
53	Clause 4.3 - Shop drawings F: V: T:	Item
54	Clause 4.4 - Compliance with manufacturer's instructions F: V: T:	Item
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<u>Deposits and fees</u>		
55	Clause 5.1 - Deposits and fees F: V: T:	Item
<u>Temporary services</u>		
56	Clause 6.1 - Water F: V: T:	Item
57	Clause 6.2 - Electricity F: V: T:	Item
58	Clause 6.3 - Telecommunication facilities F: V: T:	Item
59	Clause 6.4 - Ablution facilities F: V: T:	Item
<u>Prime cost amounts</u>		
60	Clause 7.1 - Responsibility for prime cost amounts F: V: T:	Item
<u>Special attendance on n/s subcontractors</u>		
61	Clause 8.1 - Special attendance F: V: T:	Item
<u>General</u>		
62	Clause 9.1 - Protection of the works F: V: T:	Item
63	Clause 9.2 - Protection/isolation of existing/sectionally occupied works F: V: T:	Item
64	Clause 9.3 - Security of the works F: V: T:	Item
65	Clause 9.4 - Notice before covering work F: V: T:	Item
66	Clause 9.5 - Disturbance F: V: T:	Item
67	Clause 9.6 - Environmental disturbance F: V: T:	Item
68	Clause 9.7 - Works cleaning and clearing F: V: T:	Item
69	Clause 9.8 - Vermin F: V: T:	Item
70	Clause 9.9 - Overhand work F: V: T:	Item
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71	<p><u>Schedule of Variables</u></p> <p>Information necessary for making choices and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that either no details or specific requirements are available or that the clause is irrelevant for this specific contract.</p> <p>10.1 - Provisional Bills of Quantities [clause 2.2]</p> <p>The quantities are provisional - Yes</p> <p>10.2 - Availability of construction documentation [clause 2.3]</p> <p>Construction documentation is complete - No</p> <p>10.3 - Previous work - dimensional accuracy [clause 3.1] - No</p> <p>10.4 - Previous work - defects [clause 3.2] - No</p> <p>10.5 - Inspection of adjoining properties [clause 3.3] - Yes</p> <p>10.6 - Water [clause 7.2]</p> <p>Option A (by contractor) - Yes</p> <p>Option B (by employer - free of charge) - No</p> <p>Option C (by employer - metered) - No</p> <p>10.7 - Electricity [clause 7.3]</p> <p>Option A (by contractor) - Yes</p> <p>Option B (by employer - free of charge) - No</p> <p>Option C (by employer - metered) - No</p> <p>10.8 - Telecommunications (clause 7.4)</p> <p>Telephone - Yes</p> <p>Facsimile - Yes</p> <p>E-Mail - Yes</p> <p>10.9 - Ablution facilities [clause 7.5]</p> <p>Option A (by contractor) - Yes</p> <p>Option B (by employer) - No</p> <p>10.10 - Protection of the works [clause 9.1]</p> <p>10.11 - Protection/isolation of existing/sectionally occupied works [clause 9.2]</p> <p>Protection/isolation is required - Yes</p> <p>10.13 - Environmental disturbance [clause 9.6] - Yes</p> <p>F: V: T:</p>	Item	
	<p><u>SECTION C: SPECIFIC PRELIMINARIES</u></p>		
	<p><u>Specific Preliminaries :</u></p>		
72	<p>Site instructions</p>		
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73	<p>Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor</p> <p>F: V: T:</p> <p>Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>F: V: T:</p>	Item
	<p>Dayworks</p> <p>Where in the opinion of the quantity surveyor any extra work cannot properly be measured or valued, the contractor will be allowed daywork prices therefor calculated upon the costs defined hereunder together with the stated percentages. The total thus arrived at shall be the total amount recoverable by the contractor for performing such work.</p> <p>1. The cost to the contractor or sub-contractor of materials, being the net cost (at current market prices) actually paid for such materials after the deduction of cash discounts or if materials are supplied from the contractor's or sub-contractor's stock then the cost of such materials shall be based upon the current market price plus the cost of delivery to site; to which net cost 10 per cent thereof shall be added.</p> <p>2. The cost of labour to the contractor or sub-contractor, being all items of direct cost of labour actually remunerated to the workmen concerned which shall include the cost of all allowances in terms of the Industrial Conciliation Act (where applicable) or any other wage determination applying in the area or any other charge or expense which is normally binding as well as all statutory levies to education and training funds as may be applicable relating to the class of labour concerned at the time when and in the area where the daywork is executed: to which labour costs 75 per cent in respect of shopfitting, wall and floor tiling, mosaic work and electrical work, 60 per cent in respect of plumbing, plastering, joinery and stone masonry and 40 per cent in respect of painting and decorating, general builders work and any other trade not specified herein, shall be added.</p> <p>Hourly based rates for labour shall be the current market rates for labour based upon standard working hours and shall be applied in respect of the time spent by workers directly engaged on the particular dayworks including any operators operating mechanical plant and transport and erecting and dismantling other plant. If a claim is made that individual workmen have been paid wages and allowances in excess of the minimum legalised rates, then proof must be furnished that such workmen had been so paid prior to the commencement of the extra work referred to.</p> <p>Time lost due to inclement weather shall be excluded from the time charged.</p> <p>3. Other direct costs, being any related direct costs such as mechanical plant and transport, other than costs of material and labour shall be the net cost thereof to which net cost 10 per cent thereof shall be added.</p> <p>4. The rates for mechanical plant shall be commercial hire rates current at the time of executing the daywork and shall include fuel and insurance costs.</p>	Item
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	<p>Supporting vouchers reflecting the time spent and materials used each week shall be delivered for verification to the Quantity Surveyor not later than twenty one days after the end of the week concerned. Should the contractor fail to submit the vouchers within this time, the Quantity Surveyor shall determine a fair price for the work.</p> <p>F: V: T:</p>	Item
75	<p>Warranties for materials and workmanship</p> <p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract</p> <p>The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so.</p> <p>The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor.</p> <p>F: V: T:</p>	Item
76	<p>Co-operation of the contractor for cost management</p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget.</p> <p>The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors.</p> <p>F: V: T:</p>	Item
77	<p>Overloading</p> <p>The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense.</p> <p>F: V: T:</p>	Item
78	<p>Propping of floors below</p>	
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	<p>The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor.</p> <p>F: V: T:</p>	Item
79	<p>Testing of windows for watertightness</p> <p>Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means.</p> <p>F: V: T:</p>	Item
80	<p>Testing of flat roof waterproofing for watertightness</p> <p>Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept 'ponded' for at least forty (40) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing.</p> <p>F: V: T:</p>	Item
81	<p>Ingress of water</p> <p>It is the Contractors responsibility to prevent ingress of water into the buildings whilst all work is being completed, and damage arising out of the above will be made good at the Contractors expense.</p> <p>F: V: T:</p>	Item
82	<p>Proprietary branded products</p> <p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.</p> <p>F: V: T:</p>	Item
83	<p>As built drawings</p> <p>The position of construction breaks and the extend of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records.</p> <p>F: V: T:</p>	Item
84	<p>Removal and Making Good of Temporary Works, etc, on Completion</p> <p>The Contractor shall remove all (except where specifically stated otherwise) temporary Works, roads, services and the like used for this Contract and shall make good to the entire satisfaction of the Principal Agent any damage resulting therefrom.</p> <p>F: V: T:</p>	Item
85	<p>Making Good</p>	
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	<p>All materials and workmanship in building up, making good, etc., are to match existing and where new materials abutt existing, they are to be neatly jointed to same.</p>		
	<p>'Making good' existing work where disturbed or damaged shall mean the provision of the necessary new material to match existing and the necessary workmanship so that a complete restoration is achieved to the satisfaction of the Principal Agent.</p>		
	<p>'Making good' where abutting walls, etc., are removed, shall mean the provision of the necessary material and workmanship in filling the gaps to match surrounding finishes so that a complete and perfect surface, continuous with surrounding surfaces and matching of same, is obtained to the Principal Agent's satisfaction.</p>		
	<p>F: V: T:</p>		
86	Shop Drawings		
	<p>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 Sub-Contractor, manufacturer, supplier or distributor and which illustrate the specified portion of the work.</p>		
	<p>The Contractor shall ensure that all shop drawings required for the Works in terms of this Contract, all Selected/Nominated Sub-Contracts and/or any Principal Agent's instruction, are prepared and submitted timeously in accordance with the following procedure:</p>		
	<p>A) 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.</p>		
	<p>B) Shop drawings shall be submitted to the Principal Agent for approval at least two weeks prior to the date on which such approval is required in order to comply with the Contract Programme.</p>		
	<p>C) All submissions shall be prepared in accordance with the Contract drawings and specifications and/or any 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/or time implications.</p>		
	<p>Delays in approval of shop drawings due to non-compliance with drawings, specifications and/or Principal Agents instructions shall not constitute grounds for any claims for delay, extension of time and the like.</p>		
	<p>D) When the Principal Agent advises that shop drawings have been approved, the original transparencies of such drawings shall immediately be submitted to the Principal Agent so that the Principal Agents stamp of approval may be appended thereto. 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 also be furnished to the Works. No work shall be performed in accordance with drawings and/or catalogues not stamped with the Principal Agents approval.</p>		
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	<p>E) 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.</p> <p>F) The Principal Agents approval of shop drawings is limited to checking conformity with specification and shall not relieve the Contractor, Sub-Contractor or Supplier of his responsibility for design, erection or installation fit, nor does it vary his contractual or delictual obligations and liabilities.</p> <p>G) Should the Contractor, Sub-Contractor or Supplier be of the opinion that corrections to shop drawings made by the Principal Agent constitute a change to the scope of work, then he shall immediately advise the Principal Agent in writing of this, together with the cost and/or programme implications thereof, in order to obtain the Architects directive.</p> <p>H) One copy of the final approved set of 'Shop Drawings' is to be submitted to the Quantity Surveyors for purposes of valuation remeasurement.</p> <p>F: V: T:</p>	
87	<p>Scaffolding</p> <p>In accordance with the 6th Edition of the Standard System of Measurement, no special scaffolding has been measured. The Tenderer is advised to visit the site and to study the drawings to assess any special requirements he may deem necessary for the Works. The Tenderer is to price against this item in respect of any special scaffolding and temporary propping requirements for the Works.</p> <p>F: V: T:</p>	Item
88	<p>Media releases</p> <p>All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer</p> <p>The contractor together with his subcontractors shall not, without the prior written consent of the employer, cause any statement or advertisement to be printed, screened or aired by the media</p> <p>F: V: T:</p>	Item
89	<p>Occupational Health & Safety</p> <p>Preparation of the Contractor's site specific Health and Safety Plan & Risk Assessment</p> <p>F: V: T:</p>	Item
90	<p>Occupational Health & Safety</p> <p>Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations</p> <p>F: V: T:</p>	Item
91	<p>Occupational Health & Safety</p> <p>Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations</p> <p>F: V: T:</p>	Item
92	<p>Occupational Health & Safety</p>	
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	Provision of Personal Protective Equipment (PPE), as listed below:	
	(a) Reflective Vests	
	(b) Hard Hats	
	(c) Protective Foot Wear	
	(d) Earplugs	
	(e) Dust Masks	
	(f) Gloves	
	(g) Ear Defenders SABS approved	
	(h) Overalls	
	F: V: T:	
93	Occupational Health & Safety	Item
	Provision of a full time Construction Health and Safety Officer, SACPCMP Registered.	
	F: V: T:	
94	Occupational Health & Safety	Item
	Cost of Medical Certificates and Medical Surveillance - Initial (Baseline) Medical Examinations	
	F: V: T:	
95	Occupational Health & Safety	Item
	Cost of Medical Certificates and Medical Surveillance - Periodic and Exit Medical Examinations	
	F: V: T:	
96	Covid-19 Health and Safety Requirements	Item
	- Hazard identification and risk assessment specific to the COVID-19 Epidemic and other adjustments to ensure compliance for the assignment	
	- Signage - Covid-19 related	
	- Face Masks for COVID-19	
	- Covid 19 clearance certificate	
	- Medical graded face shields	
	- Non contact infrared thermometers	
	- Hand sanitiser and Cleaning and detergents for cleaning everyday	
	- Daily logbook and screening for COVID 19	
	- COVID 19 Waste bins	
	- Foot operated hand sanitizer	
	Any other requirements in terms of the COVID-19 health & safety requirements.	
	F: V: T:	
97	SMME'S	
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<p>The principal contractor shall comply with all the requirement of mandatory subcontracting of SMMEs for a minimum of 30% of their contract value (Including VAT) as stipulated under the SMME subcontracting requirements. The Principal Contractor shall on fulltime basis closely mentor, manage and supervise all SMMEs and shall manage, guide and assist each SMMEs in all aspects of management, execution and completion of his/her subcontract. This shall typically include the on-site productivity planning and management of materials, cost management, contract management, Health and Safety management, quality management, communication management and close-out documentation.</p> <p>Provision for pricing of compliance with the aforementioned is made under this clause and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.</p> <p>F: V: T:</p> <p>SUMMARY OF CATEGORIES</p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p>	Item	
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SECTION NO 2

FOAMING CELL ENCLOSURE

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>FOAMING CELL ENCLOSURE</u> <u>BILL NO. 1</u> <u>CEILINGS PARTITIONS AND ACCESS FLOORING</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> <u>Ceilings</u> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <u>Fixing</u> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as bolted, the bolts have been given elsewhere</p> <u>Steel components</u> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <u>Descriptions:</u> <p>Ceiling boards must be stacked on a level surface in a dry place on a timber platform. Boards must be carried on edge.</p> <p>Electrical light fittings, diffusers, panels, etc. generally are lay-in units of the same dimensions as the suspension grid described and allowance must be made accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof).</p>				
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	Unit	Quantity	Rate	Amount
2 'Gridnic' or equally approved ISOPHEN FM approved Class 1 fire rated, in accordance with FM approval 4880 & 4882, Polyphen Clean Room Foaming Cell Enclosure, supplied and installed complete by Specialist, size 30 800 x 18 800 x 7 100mm high overall, onto existing hardstand concrete floor internally, and consisting of 100mm 42kg/m3 Polyphen core insulation walls with 0.58mm Frost White Z-200 Zinc Substrate Chromodek finish and ceiling to full area at clear height of 6 000mm high consisting of 100mm 45kg/m3 Polyphen core insulation ceiling with 0.58mm Frost White Z-200 Zinc Substrate Chromodek 0.58mm galvanised cladding external finish, ceiling supported with 228m x steel ceiling truss supported from existing overhead steel structure, with 1000mm high balustrade wall all round above ceiling height. Enclosure to include 2 No 900x2060mm high purpose made aluminium Isopanel Personnel loading doors and aluminium frame with 450x450mm 6.38mm 'Solarvue HL' neutral NS clear safety glass viewing panel and 2 No 1200x1200mm high glazed safety glass viewing panels installed complete, and include openings for 4 No EFAFLEX High speed doors supplied and built in by others (elsewhere measured). Foaming Cell Enclosure supplied and erected complete including all flashings, trims and consumables in accordance with FM approval 4880 & 4882, and all in strict accordance with the manufacturers instructions and specifications.	Item			RATE ONLY
Carried to Collection				
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>FOAMING CELL ENCLOSURE</u> <u>BILL NO. 2</u> <u>IRONMONGERY</u> <u>PREAMBLES</u> The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities <u>SUPPLEMENTARY PREAMBLES</u> Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect. <u>Finishes to ironmongery:</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered : CH Chromium plated : SC Satin chromium plated : SE Silver enamelled : GE Grey enamelled : AS Anodised silver : AB Anodised bronze : AG Anodised gold : ABL Anodised black : PB Polished brass : PL Polished and lacquered : PT Epoxy coated. <u>Fixing:</u> Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs in brickwork or concrete. <u>IRONMONGERY, ETC.</u> <u>HINGES, BOLTS, ETC</u> <u>Dormakaba :</u> 1 DBB-SS-009 SS hinges secured to aluminium frame with 6.4mm countersunk pop rivets <u>LOCKS</u> <u>CISA :</u> 2 CISA 59050-10 97 push pad panic device fitted to inside; with CISA 43mm GGMK NP half cylinder fitted externally. 3 Master keyed under existing GGMK reference				
	No	6		
	No	2		
	No	2		
Carried to Collection			R	
Section No. 2 Bill No. 2 Ironmongery				

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	Unit	Quantity	Rate	Amount
<u>HANDLES</u>				
<u>CISA :</u>				
4 CISA push pad handle with external lever handle device with euro profile cylinder lock; CISA 07077 48 00 outside operation device in standard black finish.	No	2		
<u>PUSH PLATES AND KICK PLATES</u>				
<u>1.2mm Thick 430 Grade stainless steel plates countersunk screwed with ss screws and bevelled edges all round.</u>				
5 870 x 300mm High push plate	No	4		
6 870 x 300mm High kick plate	No	4		
<u>DOOR CLOSERS</u>				
<u>Dormakaba :</u>				
7 TS83 PA door closer with parallel arm bracket EN 3-6 parallel arm non-hold open door closer - adjustable strength	No	2		
<u>GENERAL SIGNAGE</u>				
<u>General Signage - PC Sum :</u>				
8 Allow the PC Amount of R 5 000.00 (Five Thousand Rand) for Supply and Installation of General Signage, to later detail and specification, complete, excluding Main Contractors waste and profit. (Contractor is to allow and include herewith for all necessary, waste, profit and attendance markup's, etc.)	Item			
Carried to Collection			R	
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>FOAMING CELL ENCLOSURE</u> <u>BILL NO. 3</u> <u>STRUCTURAL STEELWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Descriptions</u> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of columns and beams shall be deemed to include flat section base, top, bearer and connection plates</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>NOTE: All structural steelwork to be fabricated in accordance with SANS 14713 Part 2. Dimensions and levels to be verified on site prior to manufacture. Any discrepancies found during site measure to be reported to and resolved by the Engineer prior to manufacture. All structural steel elements must be inspected by the Engineer prior to transporting to site. All bolts must be grade 8.8 unless otherwise specified by the Engineer.</p> <p>All welds to be with E700XX electrodes, according to AWS or similar approved by the Engineer. All hot rolled structural steel members to be grade S355JR and plates to be grade 300WA. Purlins and girts to be pre-galvanised.</p>				
Carried to Collection			R	
Section No. 2 Bill No. 3 Structural Steelwork				

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	Unit	Quantity	Rate	Amount
<p>All structural steelwork inclusive of bolts, nuts, washers, plates, connections, etc., other than purlins & girts to be hot dipped galvanised in accordance with SANS 121 or ISO 1461. All hot dipped members to be drilled, cut, welded, etc., prior to galvanising. Prices to include for preparation of shop drawings for approval of the Engineer prior to manufacture. A minimum of 7 days must be allowed for checking of shop drawings. Prices to include for fabrication, cutting, drilling, bending, welding, etc., delivery to site, and hoisting up and erecting into position.</p> <p>Note: The following restrictions are applicable on ground floor slab during construction and erection of structural steel. 0-7 days: Concrete curing; no loading on ground floor slab permitted. 7-14 days: Light foot traffic permitted. 14-28 days: Light vehicles < 5 ton. 28+ days: Maximum gross crane load during construction = 25 ton (excludes lifting load). Crane outrigger base footings to be on double cross layer of 50 x 228mm timber spreader supports over an area of 1,00 x 1,00m or similar approved by the Engineer to avert damage to concrete ground floor slab. Only tyre cranes permitted on slab. Slab to be</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>HOT DIPPED GALVANISED STEEL COLUMNS AND BEAMS</u></p> <p><u>Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u></p>				
1	Tonnes	3.80		
<p><u>GALVANISED STEEL PURLINS, GIRTS, BRACING, ETC</u></p> <p><u>Purlins, girts, bracing, etc bolted to steel</u></p>				
2	Tonnes	3.57		
3	Tonnes	1.68		
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	Unit	Quantity	Rate	Amount
<u>SUNDRY GALVANISED STEELWORK</u>				
<u>Roller shutter door frame support</u>				
4 300 x 100mm x 46kg/m PFC channels welded together to form roller door framework for roller door size 3000 x 4000mm high (elsewhere measured).	Tonnes	3		
<u>BOLTS, FASTENERS, ETC</u>				
<u>Bolts</u>				
5 High tensile bolts (class 8.8)	Tonnes	0.20		
<u>Anchors</u>				
6 20mm Diameter chemical anchor bolt to concrete	No	32		
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 2</u> <u>FOAMING CELL ENCLOSURE</u> <u>BILL NO. 4</u> <u>METALWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Descriptions:</u> <p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <u>'EFAFLEX' ROLLER DOORS, ETC</u> <u>'EFAFLEX' or equally approved EFA-SRT ECO High Speed roller door with door leaf of flexible PVC (Colour: Blue) with transparent panel and with powder coated galvanised steel door frame, colour RAL 7016-Anthracite Grey, to manufacturers specifications, fixed to specialised insulated panels</u>				
1	No	1		
2	No	3		
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	Unit	Quantity	Rate	Amount
<u>GUARDRAILS, BOLLARDS, ETC.</u>				
<u>Galvanised mild steel Bollards, etc</u>				
Galvanised mild steel bollards 1000mm high overall consisting of 100mm diameter x 3,5mm thick galvanised mild steel posts, with cap welded on and with 190mm diameter x 10mm thick galvanised mild steel base plate, three times holed and fixed to concrete hard stand surface beds (elsewhere measured) by means of three (No.3) M16 x 170mm anchor bolts (elsewhere measured).	No	8		
<u>Bolts, etc.</u>				
M16 Expansion holding down bolt	No	24		
			R	
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SECTION NO 3

MEZZANINE WIP STORAGE

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 1</u> <u>ALTERATIONS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>View site</u> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <u>Explosives</u> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated</p> <u>General</u> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately 1km to store and handed over to the employer</p>				
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	Unit	Quantity	Rate	Amount
<p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described . Re-painting or re-varnishing is given separately</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)</p> <p><u>TEMPORARY BARRICADES, SCREENS, ETC</u></p> <p><u>Temporary barricades, screens, roofs, etc including removal</u></p>				
1 Shade net hoarding barrier 2400mm high with suitable timber or other approved framing, internally on existing concrete floor, including corners, ends, etc.	m	260		
2 Shade net hoarding barrier 2400mm high with suitable timber or other approved framing, externally on existing concrete hardstand, including corners, ends, etc.	m	40		
3 Extra for 4500mm wide x 2400mm high temporary double gate with shade net hoarding barrier 2400mm high with suitable timber or other approved framing, externally on existing concrete hardstand, including posts, hinges, chain, padlock, etc.	No	1		
4 Dust screen barrier average 10m high internally between existing concrete floor and underside roof sheeting, of suitable timber framing with 375 micron polyethylene sheeting stapled on one side, including corners, ends, etc.	m	60		
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	Unit	Quantity	Rate	Amount
<u>REMOVAL OF EXISTING WORK</u>				
<u>Breaking up and removing reinforced concrete, including cutting off and removing reinforcement</u>				
5 200mm Thick hardstand/surface beds	m ³	8		
6 Carefully break out concrete to area inside SS base plate footprint size approximately 250x250mm x 50mm deep, and spoil off site	Litres	500		
<u>CUTTING THROUGH FLOORS AND CEILINGS</u>				
<u>Cutting through:</u>				
7 Saw cut existing 200mm Thick minimum / 225mm Thick maximum reinforced concrete surface bed / hardstand prior to breaking out and including making good concrete all round (making good floor finishes elsewhere)	m	40		
8 Saw cut existing reinforced concrete surface bed / hardstand to minimum 50mm deep to form recess to accept Structural steel base plate approximate size 250x250mm and making good concrete all round (making good floor finishes elsewhere)	m	300		
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 2</u> <u>EARTHWORKS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>All Earthworks to be carried out in strict accordance with SANS 1200D</p> <u>Nature of ground</u> <p>The work is to be carried out on existing surface beds and roadways. Therefore the nature of the ground under the concrete is assumed to be well compacted fill material, therefore earth, but possibly interspersed with soft rock or hard rock</p> <u>Excavation for working space in rock</u> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as 'extra over' bulk excavation or trench and hole excavation as the case may be</p> <u>Carting away of excavated material</u> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <u>Filling</u> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material</p>				
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	Unit	Quantity	Rate	Amount
<u>Testing</u>				
Prices for filling are to include for all necessary density tests in accordance with SANS 1200D				
<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
<u>Excavation in earth not exceeding 2m deep</u>				
1 Bases to equipment hoists	m ³	40		
<u>Extra over excavations in earth for excavation in</u>				
2 Soft rock	m ³	10		
3 Hard rock	m ³	5		
<u>Extra over excavations in earth for breaking up and removing</u>				
4 Reinforced concrete bases	m ³	2		
<u>Extra over excavations in earth for</u>				
5 Restricted excavation by hand to trimming of excavations	m ³	8		
<u>Extra over all excavations for carting away</u>				
6 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m ³	71		
<u>Risk of collapse of excavations</u>				
7 Sides of trench and hole excavations not exceeding 1,5m deep	m ²	48		
<u>Keeping excavations free of water</u>				
8 Keeping excavations free of all water other than subterranean water	Item			
<u>FILLING ETC OTHER THAN BULK</u>				
<u>Earth filling using imported G5 gravel material supplied by the contractor, compacted in layers not exceeding 150mm thick to 98% Mod AASHTO density</u>				
9 Under floors, steps, pavings, etc as sub grade.	m ³	10		
<u>Earth filling using imported G5 gravel material supplied by the contractor, compacted in layers not exceeding 150mm thick to 98% Mod AASHTO density, including stabilizing with cement 150mm thick</u>				
10 Under floors, steps, pavings, etc as sub base	m ³	10		
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		Unit	Quantity	Rate	Amount
11	Extra over subbase course of natural gravel material for stabilisation with cement	Tonnes	3		
	<u>Compaction of surfaces</u>				
12	Compaction of ground surface under ramps, floors, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m ²	35		
	<u>Prescribed density tests on filling</u>				
13	Modified AASHTO Density tests	No	25		
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 3</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>All Concrete work to be carried out in strict accordance with SANS 1200G</p> <u>Cost of tests</u> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 Tests of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <u>Lightweight concrete</u> <p>Lightweight concrete shall have a density of 600kg/m³ for the top 50mm and 400kg/m³ for the remaining thickness. The minimum thickness at outlets, channels, etc. shall be 50mm</p> <u>Formwork</u> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as 'left in' or 'permanent'), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>				
<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3</p> <p>Bill No. 3</p> <p>Concrete, Formwork And Reinforcement</p>			R	

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	Unit	Quantity	Rate	Amount
Formwork to soffits of solid slabs etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described				
Formwork to soffits of slabs, beams, etc. shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks				
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>10MPa/19mm concrete</u>				
1 Mass concrete surface blinding to base excavations up to 75mm thick	m ³	2		
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>35MPa/19mm concrete</u>				
2 Bases and Pit Walls.	m ³	20		
<u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u>				
<u>35MPa/19mm concrete</u>				
3 Infill to column protectors	m ³	6		
<u>TEST CUBES</u>				
<u>Test cubes</u>				
4 Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	15		
<u>CONCRETE SUNDRIES</u>				
<u>Finishing top surfaces of concrete smooth with a power trowel float</u>				
5 Tops of bases and pit walls, etc	m ²	22		
<u>Specialist screed non-shrink grout</u>				
6 Supply and lay Sika Grout 212 non-shrink grout to base plate recess ensuring careful level control to leave a 30mm infill for epoxy overlay (elsewhere measured).	Litres	450		
Carried to Collection			R	
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		Unit	Quantity	Rate	Amount
7	Supply and lay Sikadur 43ZA to maximum 30mm thick to overlay over Sika Grout 212 infill (elsewhere) - colour grey to match floor.	Litres	300		
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>				
	<u>Smooth formwork to sides</u>				
8	Smooth vertical side shutters to edges of RC bases and pit walls	m ²	85		
	<u>MOVEMENT JOINTS ETC</u>				
	<u>Expansion joints with 10mm Sondor Jointex between vertical concrete surfaces:</u>				
9	Form vertical isolation joint (without toggle) including Sondor Jointex 10 x 200mm with 10 x 10mm tear off strip.	m	15		
	<u>Toggle construction joints through concrete including thick cement slurry to one face</u>				
10	Form 200mm vertical construction joint (with toggle).	m	15		
11	Form 200mm vertical construction joint (without toggle).	m	15		
	<u>Saw-cut joints</u>				
12	3 x 20mm Saw-cut joints in top of concrete	m	15		
	<u>REINFORCEMENT, ETC.</u>				
	<u>Mild and High tensile reinforcement to structural concrete work</u>				
13	Mild & High tensile reinforcing in various diameters to bases and pit walls.	Tonnes	5.00		
	<u>Galvanised mild steel angle to concrete</u>				
14	Supply and fix GMS 70x70x6mm equal angle with 80x6x100mm fishtail lugs @ 500mm centres cast into concrete edge of hoist step.	m	40		
	<u>Fabric reinforcement</u>				
15	Mesh Ref 311 fabric reinforcement in concrete surface beds, slabs, ramps, etc.	m ²	40		
Carried to Collection				R	
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 4</u> <u>WATERPROOFING</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Waterproofing:</u> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs</p> <p>Waterproofing is to be laid in strict accordance with the manufacturers Code of Practice and by an Approved Contractor.</p> <u>Preparation of substrata:</u> <p>Screeded roof surfaces shall be firm, dry and clean. Corners shall be coved or arris rounded. All surfaces to receive waterproofing are to be fully primed with a solvent based bitumen primer.</p> <p>Timber boarded roof surfaces shall be dry, clean and even. All internal angles are to receive a timber triangular fillet. Corners and edges shall be arris rounded.</p> <u>SEALING STRIPS, JOINT SEALANTS, ETC</u> <u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc.</u>				
1	m	15		
2	m	15		
Carried To Section Summary			R	
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 5</u> <u>CARPENTRY AND JOINERY</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Fixing</u> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as bolted, the bolts have been given elsewhere</p> <u>Sanding</u> <p>Due to the clean working environment of the factory, all sanding is to be done by means of sandless sanders to ensure as little dust as possible.</p> <u>AGV DECK AND ASSOCIATED WORKS</u> <u>Timber Decking</u> <p>Given that this mezzanine deck is to be used with sensitive electronic equipment the deck is to meet the FM2 surface regularity requirements as set out in TR34 Fourth Edition published 2016. Please note that the entire deck is defined as a free movement area with no defined isles or high tolerance alleys.</p>				
Carried to Collection			R	
Section No. 3 Bill No. 5 Carpentry And Joinery				

		Unit	Quantity	Rate	Amount
<u>Procure, cut to size, transport to site and erect new 27mm thick WISA-birch plywood timber decking to the following panel sizes. Product to be manufactured from birch veneers glued together in a cross bonded construction to meet a minimum strength in bending (fm II) of 34,8MPa; density of 18,4kg/m² and modulus of elasticity (Em II) of 9.607 MPa. Suggested contact to procure product Eugene Kriel of Wood and Timber Centre on 084 850 8550. Fastening, surface preparation, cut outs and overcoating measured separately.</u>					
1	2440L x 1220W fixed horizontally.	No	466		
2	2440L x 1120W fixed horizontally.	No	6		
3	2440L x 502W fixed horizontally.	No	13		
4	2312L x 1220W fixed horizontally.	No	25		
5	2312L x 502W fixed horizontally.	No	1		
6	2062L x 1220W fixed horizontally.	No	9		
7	1869L x 1220W fixed horizontally.	No	4		
8	1869L x 1120W fixed horizontally.	No	1		
9	2440L x 175W fixed vertically.	No	57		
10	2368L x 175W fixed vertically.	No	2		
11	2312L x 175W fixed vertically.	No	1		
12	2062L x 175W fixed vertically.	No	1		
13	1869L x 175W fixed vertically.	No	1		
14	1750L x 175W fixed vertically.	No	2		
15	1420L x 175W fixed vertically.	No	1		
16	1417L x 175W fixed vertically.	No	2		
17	1248L x 175W fixed vertically.	No	1		
18	1220L x 175W fixed vertically.	No	1		
19	1020L x 175W fixed vertically.	No	1		
20	769L x 175W fixed vertically.	No	2		
21	543L x 175W fixed vertically.	No	1		
22	250L x 175W fixed vertically.	No	1		
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		Unit	Quantity	Rate	Amount
	<u>Neatly form the following cut outs to the edges of 27mm thick birch plywood timber panels to accommodate required protrusions.</u>				
23	255L x 255W.	No	2		
24	255L x 236W.	No	1		
25	255L x 118W.	No	3		
26	1020L x 250W.	No	1		
	<u>SUNDRIES, ETC.</u>				
27	Carefully drill ø10mm x 10mm deep (depth to be very carefully controlled) hole at indicated positions on birch plywood panel to accept fastener.	No	25 306		
28	Carefully position birch plywood timber panel in place on Structural Steel support structure and fasten horizontally to steelwork using ø4,8mm x 45mm long Zap Wafer head self drilling screw or equally approved. Screw to be manufactured from case hardened C1022 steel coated with a minimum thickness of 25µm zinc + tin alloy suitable for use in ISO 9223 class 3 environments. Rate to also allow for pre-drilling of steel substrate material with a ø3,5mm pilot hole as the screw will not self drill the flange thickness. Suggested contact to procure product Hein Slabbert of Kare Industrial Suppliers on 072 597 9473.	No	24 626		
29	Carefully position birch plywood timber panel in place on Structural Steel support structure and fasten vertically to steelwork using ø4,8mm x 45mm long Zap Wafer head self drilling screw, or equally approved. Screw to be manufactured from case hardened C1022 steel coated with a minimum thickness of 25µm zinc + tin alloy suitable for use in ISO 9223 class 3 environments. Rate to also allow for pre-drilling of steel substrate material with a ø3,5mm pilot hole as the screw will not self drill the flange thickness. Suggested contact to procure product Hein Slabbert of Kare Industrial Suppliers on 072 597 9473.	No	680		
30	Cut ø10mm x 20mm deep timber plugs from Meranti hardwood using plugging tool. Glue meranti plugs into divot above fastener head using suitable wood glue and trim off and sand plugs flush with the birch plywood board.	No	25 306		
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		Unit	Quantity	Rate	Amount
31	Mechanically abrade horizontal surface of timber deck after all fixing is completed, using sandless sanders with a 100 grid abrasive paper to ensure all panel joints are flush and surface is ready to accept overcoat primer. Note that butting panels must be perfectly aligned with no vertical step or ridge allowed.	m ²	1 525		
32	Mechanically abrade vertical surface of timber deck after all fixing is completed, using sandless sanders with a 100 grid abrasive paper to ensure all panel joints are flush and surface is ready to accept overcoat primer. Note that butting panels must be perfectly aligned with no vertical step or ridge allowed.	m ²	29		
Carried to Collection					R
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 6</u> <u>IRONMONGERY</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Finishes to ironmongery:</u> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered : CH Chromium plated : SC Satin chromium plated : SE Silver enamelled : GE Grey enamelled : AS Anodised silver : AB Anodised bronze : AG Anodised gold : ABL Anodised black : PB Polished brass : PL Polished and lacquered : PT Epoxy coated.</p> <u>Fixing:</u> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs in brickwork or concrete.</p> <u>IRONMONGERY, ETC.</u> <u>GENERAL SIGNAGE</u> <u>General Signage - PC Sum :</u>				
1	Item			
Allow the PC Amount of R 5 000.00 (Five Thousand Rand) for Supply and Installation of General Signage, to later detail and specification, complete, excluding Main Contractors waste and profit. (Contractor is to allow and include herewith for all necessary, waste, profit and attendance markup's, etc.)				
Carried To Section Summary				R
Section No. 3 Bill No. 6 Ironmongery				

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>MEZZANINE WIP STORAGE</u> <u>BILL NO. 7</u> <u>STRUCTURAL STEELWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>All Structural Steelwork to be carried out in strict accordance with SANS 1200H</p> <u>Descriptions</u> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of columns and beams shall be deemed to include flat section base, top, bearer and connection plates</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>NOTE: All structural steelwork to be fabricated in accordance with SANS 14713 Part 2. Dimensions and levels to be verified on site prior to manufacture. Any discrepancies found during site measure to be reported to and resolved by the Engineer prior to manufacture. All structural steel elements must be inspected by the Engineer prior to transporting to site. All bolts must be grade 8.8 unless otherwise specified by the Engineer.</p> <p>All welds to be with E700XX electrodes, according to AWS or similar approved by the Engineer. All hot rolled structural steel members to be grade S355JR and plates to be grade 300WA. Purlins and girts to be pre-galvanised.</p>				
Carried to Collection			R	
Section No. 3 Bill No. 7 Structural Steelwork				

	Unit	Quantity	Rate	Amount
<p>All structural steelwork inclusive of bolts, nuts, washers, plates, connections, etc., other than purlins & girts to be hot dipped galvanised in accordance with SANS 121 or ISO 1461All hot dipped members to be drilled, cut, welded, etc., prior to galvanising.Prices to include for preparation of shop drawings for approval of the Engineer prior to manufacture. A minimum of 7 days must be allowed for checking of shop drawings.Prices to include for fabrication, cutting, drilling, bending, welding, etc., delivery to site, and hoisting up and erecting into position.</p> <p>Note: The following restrictions are applicable on ground floor slab during construction and erection of structural steel.0-7 days: Concrete curing; no loading on ground floor slab permitted.7-14 days: Light foot traffic permitted.14-28 days: Light vehicles<5 ton.28+ days: Maximum gross crane load during construction = 25 ton (excludes lifting load). Crane outrigger base footings to be on double cross layer of 50 x 228mm timber spreader supports over and area of 1,00 x 1,00m or similar approved by the Engineer to avert damage to concrete ground floor slab. Only tyre cranes permitted on slab. Slab to be</p> <p><u>STRUCTURAL STEEL SUPPORT WORK TO PLATFORM</u></p> <p>Given that this mezzanine deck is to be used with sensitive electronic equipment the deck is to meet the FM2 surface regularity requirements as set out in TR34 Fourth Edition published 2016. Please note that the entire deck is defined as a free movement area with no defined isles or high tolerance alleys. In terms of SANS1200H degree of accuracy II will suffice except for the vertical deviation of all girders and floor joists. This is limited to 5,0mm maximum.</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>GALVANISED STEEL COLUMNS, BEAMS, PURLINS, GIRTS, BRACING, ETC</u></p> <p><u>All Steelwork:</u></p> <p>1 Supply, fabricate, galvanize and erect new hot rolled steelwork columns, girders, floor joists and related complete with all cleats, brackets, gussets and packs, complete.</p> <p><u>Surveying, testing, etc.</u></p> <p>2 Execute a vertical level tolerance check on all steelwork erected and submit this information as part of the compliance QA system prior to erection of decking. Check points to be a maximum of 3,0m apart.</p> <p>Carried to Collection</p> <p>Section No. 3 Bill No. 7 Structural Steelwork</p>				
	Tonnes	145.20		
	m²	1 525.00		
			R	

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		Unit	Quantity	Rate	Amount
<u>BOLTS, FASTENERS, ETC</u>					
<u>Bolted Connections</u>					
<u>Bolts G8,8 complete with washers etc. in diameters and lengths as follows:</u>					
3	M20 x 70mm	No	50		
4	M20 x 60mm	No	1 200		
5	M16 x 65mm	No	350		
6	M16 x 55mm	No	750		
7	M16 x 50mm	No	750		
8	M16 x 45mm	No	10		
9	M16 x 40mm	No	3 300		
10	M12 x 50mm	No	350		
11	M12 x 45mm	No	1 500		
12	Extra over above bolts for checking each fastener for tightness and marking nut onto adjoining steelwork with red felt marker.	No	8 260		
<u>HILTI HIT-HY 170 + HAS or equally approved, countersunk anchors into concrete in diameters:</u>					
13	M24 anchor bolt	No	104		
14	M20 anchor bolt	No	52		
15	M16 anchor bolt	No	52		
<u>HOT DIPPED GALVANISED STEEL BALUSTRADING, ETC</u>					
<u>Vertical Balustrade</u>					
<u>Manufacture, transport to site and erect purpose made vertical barrier screen to edge of deck, hot dip galvanized after fabrication. Rate to include for erection and joining together as follows:</u>					
16	473Lx473Wx795H purpose made L shaped balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 20,4kg.	No	12		
17	2312Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 34,8kg.	No	116		
Carried to Collection				R	
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		Unit	Quantity	Rate	Amount
18	1060Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 15,9kg.	No	2		
19	360Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 5,4kg.	No	4		
20	1700Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 25,6kg.	No	4		
21	1610Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 24,2kg.	No	2		
22	1360Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 20,5kg.	No	2		
23	2617Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 39,4kg.	No	2		
24	2447Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 37,3kg.	No	2		
25	1077Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 15,2kg.	No	2		
26	2500Lx795H purpose made straight balustrade constructed from angle frame with "Vitagrid Expanded Metal" 25-3R (SWM(20); LWM(60); w(3) & t(3) @ 6,2 kg/m ²). Total mass of panel galvanized = 15,2kg.	No	2		
<u>GALVANISED STEEL MINOR WORK</u>					
<u>Column protectors</u>					
27	410Wx410Bx1000L purpose made column protector constructed from 5mm plate. Unit made in two halves bolted together on site. Total mass of panel galvanized = 78kg.	No	17		
Carried to Collection				R	
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		Unit	Quantity	Rate	Amount
28	370Wx370Bx1000L purpose made column protector constructed from 5mm plate. Unit made in two halves bolted together on site. Total mass of panel galvanized = 65kg.	No	9		
Carried to Collection					
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<u>MEZZANINE WIP STORAGE</u>				
<u>BILL NO. 8</u>				
<u>PAINTWORK</u>				
<u>PREAMBLES</u>				
The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities				
<u>SUPPLEMENTARY PREAMBLES</u>				
Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.				
<u>PAINTWORK ETC TO NEW WORK</u>				
<u>ON NEW WOOD SURFACES</u>				
<u>Supply and apply polyurethane wearing coating system as follows:</u>				
1 Supply and apply Sondri MVT liquid epoxy resin primer or equally approved, to a minimum dry film thickness of 400µm (use a wet film gauge to record thickness). Since it is anticipated that the primer layer will be left uncoated for more than 16 hours, 300g/m ² of Stonehard 6223 or equally approved, coarse aggregate must be broadcasted into the wet Sondri MVT to promote adhesion of the subsequent coating systems.	m ²	1 554		
2 Supply and apply Stonechem 441, or equally approved, polyurea-polyurethane hybrid high abrasion resistant wearing coating system to a minimum thickness of 1,5mm.	m ²	1 554		
3 Supply and apply Stonecor 341, or equally approved, aliphatic polyurethane UV stable first coat, sealer coat to a minimum thickness of 100µm (use a wet film gauge to record thickness).	m ²	1 554		
4 Supply and apply Stonecor 341, or equally approved, aliphatic polyurethane UV stable second coat, sealer coat to a minimum thickness of 100µm (use a wet film gauge to record thickness).	m ²	1 554		
Carried to Collection			R	
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Paintwork				

		Unit	Quantity	Rate	Amount
5	Extra over above items to supply and lay 150mm wide geofabric (Prostruct 599, or equally approved) over birch plywood panel joints (only internal joints not edges). Geofabric membrane to be embedded in Stonechem 441 layer.	m	1 805		
6	Extra over second stable coat to supply and broadcast Stonehard 6223, or equally approved, aggregate at a rate of 2kg/m ² into the first sealer coat to improve abrasion resistance of the system.	m ²	1 525		
7	Execute a compliance survey on the completed mezzanine timber deck after the coating system has cured, and submit report on such to confirm compliance with FM2 free movement surface regularity specification according to TR34 - 4th edition 2016.	m ²	1 525		
				R	
Section No. 3 Bill No. 8 Paintwork					

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u> <u>W206 EXPORT CUN DISPATCH AREA</u> <u>BILL NO. 1</u> <u>ALTERATIONS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>View site</u> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <u>Explosives</u> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated</p> <u>General</u> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately 1km to store and handed over to the employer</p>				
Carried to Collection			R	
Section No. 4 Bill No. 1 Alterations				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described . Re-painting or re-varnishing is given separately</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)</p> <p><u>REMOVAL OF EXISTING WORK</u></p> <p><u>Taking out/off and removing sundry metalwork</u></p>				
1 Existing barrier rail, mounted to side cladding, including brackets, and making good to holes in existing cladding where brackets removed.	m	25		
2 Existing steel loading platform on concrete floor, approximate size 1520 x 5200mm long x 950mm high, including making good to floors and walls where platform removed.	No	2		
3 Existing Steel staircase on concrete floor, comprising four steps, approximate size 1100 x 1200mm wide overall on plan and rising 950mm, including all supports, balustrades, etc., including making good to floors and walls where stairs removed.	No	1		
Carried to Collection			R	
Section No. 4 Bill No. 1 Alterations				

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Yanfeng Alt & Add - Elidz - Principal Contract
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u> <u>W206 EXPORT CUN DISPATCH AREA</u> <u>BILL NO. 3</u> <u>STRUCTURAL STEELWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Descriptions</u> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of columns and beams shall be deemed to include flat section base, top, bearer and connection plates</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>NOTE: All structural steelwork to be fabricated in accordance with SANS 14713 Part 2. Dimensions and levels to be verified on site prior to manufacture. Any discrepancies found during site measure to be reported to and resolved by the Engineer prior to manufacture. All structural steel elements must be inspected by the Engineer prior to transporting to site. All bolts must be grade 8.8 unless otherwise specified by the Engineer.</p> <p>All welds to be with E700XX electrodes, according to AWS or similar approved by the Engineer. All hot rolled structural steel members to be grade S355JR and plates to be grade 300WA. Purlins and girts to be pre-galvanised.</p>				
Carried to Collection			R	
Section No. 4 Bill No. 3 Structural Steelwork				

	Unit	Quantity	Rate	Amount
<p>All structural steelwork inclusive of bolts, nuts, washers, plates, connections, etc., other than purlins & girts to be hot dipped galvanised in accordance with SANS 121 or ISO 1461. All hot dipped members to be drilled, cut, welded, etc., prior to galvanising. Prices to include for preparation of shop drawings for approval of the Engineer prior to manufacture. A minimum of 7 days must be allowed for checking of shop drawings. Prices to include for fabrication, cutting, drilling, bending, welding, etc., delivery to site, and hoisting up and erecting into position.</p> <p>Note: The following restrictions are applicable on ground floor slab during construction and erection of structural steel. 0-7 days: Concrete curing; no loading on ground floor slab permitted. 7-14 days: Light foot traffic permitted. 14-28 days: Light vehicles < 5 ton. 28+ days: Maximum gross crane load during construction = 25 ton (excludes lifting load). Crane outrigger base footings to be on double cross layer of 50 x 228mm timber spreader supports over an area of 1,00 x 1,00m or similar approved by the Engineer to avert damage to concrete ground floor slab. Only tyre cranes permitted on slab. Slab to be</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>HOT DIPPED GALVANISED STEEL COLUMNS AND BEAMS</u></p> <p><u>Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u></p>				
1	Tonnes	0.78		
<p>152 x 152mm x 23kg/m H-section columns including 250x250x10mm base plate with 4 no holes for M16 holding down anchors.</p>				
2	Tonnes	0.24		
<p>Provisional allowance of 152 x 152mm x 23kg/m H-section columns including 250x250x10mm base plate with 4 no holes for M16 holding down anchors, for support to dockleveler.</p> <p><u>Welded beams in single lengths with flat bearer and connection plates, bolted to steel</u></p>				
3	Tonnes	2.63		
<p>254 x 146mm x 37kg/m I-section beams</p>				
4	Tonnes	1.95		
<p>IPE 180 x 91 x 19 I-section beams</p>				
5	Tonnes	0.51		
<p>Provisional allowance for IPE 180 x 91 x 19 I-section beams, for support for dockleveler.</p>				
Carried to Collection			R	
Section No. 4 Bill No. 3 Structural Steelwork				

	Unit	Quantity	Rate	Amount
<u>GALVANISED STEEL PURLINS, GIRTS, BRACING, ETC</u>				
<u>Purlins and girts, bolted to steel</u>				
150 x 75 x 20 x 2,5mm Thick cold-formed lipped channels in girts bolted to steel at equal centres, to receive weldmesh fencing (elsewhere measured).	Tonnes	0.45		
<u>BOLTS, FASTENERS, ETC</u>				
<u>Bolts</u>				
High tensile bolts (class 8.8)	Tonnes	0.25		
<u>Anchors</u>				
M16 chemical anchor bolts to existing concrete	No	64		
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Structural Steelwork				

SECTION NO. 4
W206 EXPORT CUN DISPATCH AREA
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Bill No. 3
Structural Steelwork

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u>				
<u>W206 EXPORT CUN DISPATCH AREA</u>				
<u>BILL NO. 4</u>				
<u>METALWORK</u>				
<u>PREAMBLES</u>				
The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities				
<u>SUPPLEMENTARY PREAMBLES</u>				
Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.				
<u>Descriptions:</u>				
Descriptions of bolts shall be deemed to include nuts and washers.				
Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.				
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.				
<u>GALVANISED STEEL FLOORS AND HANDRAILS</u>				
<u>The following in galvanised welded platform floors, ramps and handrailings :</u>				
1 6mm Vastap galvanised mild steel chequer plate in suitable widths and lengths fixed to steel frames in storage platform.	m ²	109		
2 6mm Vastap galvanised mild steel chequer plate in suitable widths and lengths fixed to steel frames in dockleveler platform and ramp.	m ²	10		
3 M12 Gr 8.8 Masonry bolts	No	64		
4 M12 Gr 8.8 bolts	No	150		
5 'Mentis' type or equally approved 1m high galvanised mild steel inter-link welded handrail system MT90 tubular stanchions 42.9mm outside diameter at 1m - 1,5m centres with ball type connections for top and bottom/middle continuous handrails and bottom rails (elsewhere measured), including 10mm baseplate bolted to steel stringer beams.	Kg	26		
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Metalwork				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

		Unit	Quantity	Rate	Amount
6	'Mentis' type or equally approved galvanised mild steel inter-link welded continuous top and middle/bottom tubular handrails 34.1mm outside diameter and 2.5mm thick to suit MT90 stanchions with ball type connections (elsewhere measured).	Kg	26		
7	Extra for 90 degree 500mm long straight closure end.	No	2		
8	Extra for angle closure bend.	No	2		
<u>GALVANISED STEEL CAT LADDERS</u>					
<u>Welded cat ladder 450mm wide and 1000mm high overall to side of steel platform:</u>					
9	Approved galvanised steel cat ladder 450mm wide x 1000mm high, fixed to side of steel platform, complete.	No	1		
<u>HOT DIPPED GALVANISED STEEL GATES, SCREENS, ETC</u>					
<u>Welded screens to steel structure :</u>					
10	50 x 50 x 3.15mm Hot dipped galvanised welded mesh covering in approximately 2700mm high panels spot welded to steel frames.	m ²	65		
Carried to Collection				R	
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Metalwork					

SECTION NO. 4
W206 EXPORT CUN DISPATCH AREA
BILL NO. 4
METALWORK
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SECTION NO 5

W206 DISPATCH/W205 RECEIVING AREA **CONVERSION**

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 5</u> <u>W206 DISPATCH/W205 RECEIVING AREA</u> <u>CONVERSION</u> <u>BILL NO. 1</u> <u>ALTERATIONS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>View site</u> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <u>Explosives</u> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated</p> <u>General</u> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide , erect and remove when directed , any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately 1km to store and handed over to the employer</p>				
Carried to Collection			R	
Section No. 5 Bill No. 1 Alterations				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described . Re-painting or re-varnishing is given separately</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)</p> <p><u>REMOVAL OF EXISTING WORK</u></p> <p><u>Breaking up and removing reinforced concrete, including cutting off and removing reinforcement</u></p>				
1	Upstand beams/ bund wall on concrete surface beds	m ³	1	
2	Portion of 200mm Thick surface bed in external hardstand for new bund wall foundations	m ²	4	
3	200mm Thick surface beds in hardstand	m ²	117	
<p><u>Taking out and removing doors, windows, etc, including thresholds, sills, etc (building up openings and making good finishes elsewhere)</u></p>				
4	Timber single escape door and frame 900 x 2100mm high overall from steel framework and cladding.	No	1	
<p><u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u></p>				
5	Aluminium BR7 side cladding sheeting from steel girts, including cutting sheeting if necessary at required height.	m ²	6	
Carried to Collection			R	
Section No. 5 Bill No. 1 Alterations				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

		Unit	Quantity	Rate	Amount
6	Carfully take down existing lean-to roof structure/canopy complete, approximately 12m x 3.60m overall on plan, consisting of aluminium sheeting roof covering and steel purlins and beams, and hand to ELIDZ stores, including making good to holes in existing side cladding to match existing where steel canopy removed.	No	1		
	<u>Taking out/off and removing sundry metalwork</u>				
7	Galvanised steel side sheeting rail/girt channel, unbolted or cut and removed from existing steel structures.	m	3		
8	Existing dock leveller to concrete surface beds approximate size 2500 x 3000mm including breaking out dock leveller and preparing surface bed for concrete infill, etc.	No	2		
	<u>CUTTING THROUGH FLOORS AND CEILINGS</u>				
	<u>Cutting through:</u>				
9	Saw cut existing 200mm thick reinforced concrete surface bed hardstand for new foundations, (making good concrete and foundation concrete elsewhere measured).	m	30		
	<u>MAKING GOOD OF FINISHES ETC</u>				
	<u>Making good untinted granolithic</u>				
10	Floors where 230mm concrete upstand bund walls removed, including 4,5mm Sika Floor 21N Purcem Polyurethane floor coating, all to match existing.	m	1		
11	Floors in patches on new concrete where dock leveller removed, including 4,5mm Sika Floor 21N Purcem Polyurethane floor coating, all to match existing.	m ²	16		
Carried to Collection				R	
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Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 5</u> <u>W206 DISPATCH/W205 RECEIVING AREA</u> <u>CONVERSION</u> <u>BILL NO. 2</u> <u>EARTHWORKS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <p>All earthworks to be carried out in strict accordance with SANS 1200D</p> <u>Nature of ground</u> <p>The work is to be carried out on existing surface beds and roadways. Therefore the nature of the ground under the concrete is assumed to be well compacted fill material, therefore earth, but possibly interspersed with soft rock or hard rock</p> <u>Excavation for working space in rock</u> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as 'extra over' bulk excavation or trench and hole excavation as the case may be</p> <u>Carting away of excavated material</u> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <u>Filling</u> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material</p>				
Carried to Collection Section No. 5 Bill No. 2 Earthworks			R	

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>Testing</u>				
Prices for filling are to include for all necessary density tests in accordance with SABS 1200D				
<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
<u>Excavation in earth not exceeding 2m deep</u>				
1 Reduced levels under floors	m ³	23		
2 Trenches	m ³	4		
3 Thickening under surface beds etc	m ³	1		
<u>Extra over excavations in earth for excavation in</u>				
4 Soft rock	m ³	3		
5 Hard rock	m ³	1		
<u>Extra over excavations in earth for breaking up and removing</u>				
6 Reinforced concrete	m ³	1		
<u>Extra over all excavations for carting away</u>				
7 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m ³	26		
<u>Risk of collapse of excavations</u>				
8 Sides of trench and hole excavations not exceeding 1,5m deep	m ²	19		
<u>Keeping excavations free of water</u>				
9 Keeping excavations free of all water other than subterranean water	Item			
<u>FILLING ETC OTHER THAN BULK</u>				
<u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 98% Mod AASHTO density</u>				
10 Backfilling to trenches, holes, etc	m ³	2		
<u>Earth filling using imported G5 material supplied by the contractor, compacted in layers not exceeding 150mm thick to 98% Mod AASHTO density</u>				
11 Under floors, steps, pavings, etc ontop of existing concrete surface beds for raised floor slab.	m ³	18		
<u>Coarse river sand filling supplied by the contractor</u>				
12 Under floors, steps, pavings, etc ontop of existing concrete surface beds for raised floor slab.	m ³	6		
Carried to Collection			R	
Section No. 5				
Bill No. 2				
Earthworks				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

		Unit	Quantity	Rate	Amount
	<u>Compaction of surfaces</u>				
13	Compaction of ground surface under ramps, floors, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m ²	117		
	<u>Prescribed density tests on filling</u>				
14	Modified AASHTO Density tests	No	10		
	<u>SOIL POISONING</u>				
	<u>Soil insecticide in accordance with SANS 5859</u>				
15	To bottoms and sides of trenches etc	m ²	24		
16	Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming	m ²	117		
Carried to Collection				R	
Section No. 5					
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Earthworks					

SECTION NO. 5
W206 DISPATCH/W205 RECEIVING AREA CONVERSION
BILL NO. 2
EARTHWORKS
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Bill No. 2
Earthworks

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p> <p>Formwork to soffits of solid slabs etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc. shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks</p> <p><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></p> <p><u>30MPa/19mm concrete</u></p> <p>1 Strip footings. m³ 1</p> <p>2 Surface beds cast in patches at new strip footings m³ 1</p> <p><u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u></p> <p><u>30MPa/19mm concrete</u></p> <p>3 Surface beds cast in patches to fill dock levellers elsewhere removed. m³ 5</p> <p>4 Bund walls m³ 1</p> <p><u>35MPa/19mm concrete with and including washed sand and Fibrin fibres at 910g/m³ of concrete</u></p> <p>5 Surface beds cast in panels on waterproofing m³ 23</p> <p>6 In 300x300mm Thickening to surface beds on waterproofing m³ 1</p> <p><u>TEST CUBES</u></p> <p><u>Test cubes</u></p> <p>7 Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) No 10</p>				
Carried to Collection			R	
Section No. 5 Bill No. 3 Concrete, Formwork And Reinforcement				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>CONCRETE SUNDRIES</u>				
<u>Finishing top surfaces of concrete smooth with a wood float</u>				
8	m ²	1		
9	m ²	3		
<u>Finishing top surfaces of concrete smooth with a power float to FM3 finish</u>				
10	m ²	117		
<u>Extra over power floating for applying Sikafloor Curehard transparent floor hardener including any grinding to concrete floors all applied in strict accordance with the manufacturers instructions</u>				
11	m ²	117		
<u>Protection of power floated floors:</u>				
12	m ²	117		
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
<u>Rough formwork to sides</u>				
13	m	5		
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>				
<u>Smooth formwork to sides</u>				
14	m ²	14		
<u>Boxing in smooth formwork to form</u>				
15	m	15		
<u>MOVEMENT JOINTS ETC</u>				
<u>Expansion joints with 10mm Impregnated softboard between horizontal concrete and brick/concrete surfaces:</u>				
16	m	35		
<u>Saw-cut joints</u>				
17	m	40		
Carried to Collection			R	
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Concrete, Formwork And Reinforcement				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

		Unit	Quantity	Rate	Amount
	<u>Joggle construction joints through concrete including thick cement slurry to one face</u>				
18	Surface beds not exceeding 300mm thick	m	40		
	<u>REINFORCEMENT, ETC.</u>				
	<u>Mild steel reinforcement to structural concrete work</u>				
19	10mm Diameter bars	Tonnes	0.06		
	<u>High tensile steel reinforcement to structural concrete work</u>				
20	10mm Diameter bars	Tonnes	0.06		
21	12mm Diameter bars	Tonnes	0.06		
22	16mm Diameter bars	Tonnes	0.06		
	<u>High tensile steel dowel bars</u>				
23	Y12mm Diameter dowel bar 500mm long at 300mm centres with one end embedded 150mm deep in side of concrete bund wall and other end drilled and embedded and chemically anchored 250mm deep into existing concrete bund wall including forming hole, etc.	No	12		
	<u>Fabric reinforcement</u>				
24	Mesh Ref 193 fabric reinforcement in concrete surface beds, etc.	m ²	18		
25	Mesh Ref 395 fabric reinforcement in concrete surface beds, slabs, ramps, etc.	m ²	117		
Carried to Collection				R	
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Concrete, Formwork And Reinforcement					

SECTION NO. 5

W206 DISPATCH/W205 RECEIVING AREA CONVERSION

BILL NO. 3

CONCRETE, FORMWORK AND REINFORCEMENT

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Concrete, Formwork And Reinforcement

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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 5</u> <u>W206 DISPATCH/W205 RECEIVING AREA</u> <u>CONVERSION</u> <u>BILL NO. 4</u> <u>WATERPROOFING</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Waterproofing:</u> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs</p> <p>Waterproofing is to be laid in strict accordance with the manufacturers Code of Practice and by an Approved Contractor.</p> <u>Preparation of substrata:</u> <p>Screeded roof surfaces shall be firm, dry and clean. Corners shall be coved or arris rounded. All surfaces to receive waterproofing are to be fully primed with a solvent based bitumen primer.</p> <p>Timber boarded roof surfaces shall be dry, clean and even. All internal angles are to receive a timber triangular fillet. Corners and edges shall be arris rounded.</p> <u>DAMPPROOFING OF WALLS AND FLOORS</u> <u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u>				
1				
Under surface beds	m ²	132		
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Waterproofing				

	Unit	Quantity	Rate	Amount
<u>SEALING STRIPS, JOINT SEALANTS, ETC</u>				
<u>Sikadur 42ZA or equally approved epoxy sealant in filling to the saw cut joints in strict accordance with the manufacturers instructions</u>				
8 x 40mm In saw cut joints in floors	m	40		
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc.</u>				
10 x 10mm In expansion joints in floors, aprons,etc, including raking out expansion joint filler as necessary	m	35		
			R	
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	Unit	Quantity	Rate	Amount
<u>0,8mm Thick ' Hulamin 3004 Aluminium ZIP-TEK 420' Aluminium sheeting and accessories in single lengths with Stucco embossed PVDF finish (Colour Metallic Silver) on external face and standard backing coat on internal face and accessories concealed fixed to steel purlins or rails, with 'Zip-Tek' Aluminium Halts fixed with stainless steel self-tapping screws in strict accordance with the Manufacturers instructions:</u>				
1 Roof covering with pitch not exceeding 50 degrees including bitumen impregnated sealer strips at laps	m ²	252		
2 Gable flashing 462mm girth	m	11		
3 Gutter flashing 462mm girth	m	24		
4 Headwall flashing 500mm girth	m	24		
5 Sidewall flashing 500mm girth	m	11		
6 Cover/counter flashing 500mm girth	m	35		
7 Broad flute serrated closer including polybutton	m	48		
<u>0,8mm Thick 'Hulamin Aluminium BR7' Aluminium Sheeting And Accessories In Single Lengths With Stucco Embossed PVDF Colourtech Finish (Colour Metallic Silver) On External Face And Standard Backing Coat On Internal Face And Accessories Concealed Fixed To Steel Purlins Or Rails, With 'Ziptech' Aluminium Halts Fixed With Stainless Steel Self Tapping Screws In Strict Accordance With The Manufacturer's Instructions:</u>				
Note Side cladding fixed with broad flute facing out.				
8 Side cladding including bitumen impregnated sealer strips to side laps and 'Cladseal 300' tape to cladding rails at approximatley 1600mm centres	m ²	134		
9 Side cladding including bitumen impregnated sealer strips to side laps and 'Cladseal 300' tape to cladding rails at approximatley 1600mm centres, in patching where existing sheet removed (elsewhere).	m ²	6		
10 Closure piece 375mm girth	m	61		
11 Drip flashing 275mm girth	m	35		
12 Corner flashing 300mm girth	m	6		
13 Corner/jamb flashing 462mm girth	m	22		
14 Cap flashing 770mm girth	m	29		
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		Unit	Quantity	Rate	Amount
15	Broad flute serrated closer including polybutton	m	35		
	<u>Sundries:</u>				
16	3mm Aluminium top hat	m	35		
17	Cut and fit side cladding around steel I-beam	No	5		
18	38 x 38 x 3mm Aluminium angle	m	4		
19	76 x 76 x 3mm Aluminium angle	m	44		
	<u>MODEK OPAL 50 POLYCARBONATE SHEETING</u>				
	<u>1.2mm Thick Modek Opal 50 translucent Polycarbonate sheeting to suit BR7(IBR) Profile, fixed to steel purlins or rails in single lengths to suit high wind areas all in strict accordance with the manufacturers instructions and specifications.</u>				
20	Side cladding including sealing side laps with 8 x 5mm butyl seal.	m ²	44		
	<u>ROOF AND WALL INSULATION</u>				
	<u>'Isover Factorylite' or equally approved non combustible light weight fibreglass insulation faced on one side with white metalised foil laid taut over purlins at approximately 1.00m centres and fixed concurrent with roof covering including PVC coated galvanised steel straining wires where required all in strict accordance with the manufacturers instructions</u>				
21	50mm Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with including PVC coated steel straining wires and double-sided tape at edges where required all in strict accordance with the manufacturers instructions	m ²	252		
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Roof Coverings					

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	Unit	Quantity	Rate	Amount
<u>FRAMED FRAMES ETC</u>				
<u>Wrought red meranti</u>				
70 x 108mm Rebated frame bolted/hilti fixed to steelwork, 3 times per vertical style and pelleted thereafter all to Architects approval.	m	5		
<u>BEADS, ARCHITRAVES, ETC</u>				
<u>Wrought red meranti</u>				
19mm Quadrant beads	m	10		
44 x 70mm Rebated, splayed and grooved weather boards fixed to bottom edge of door	m	1		
Carried to Collection			R	
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Carpentry And Joinery				

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CARPENTRY AND JOINERY
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 5</u> <u>W206 DISPATCH/W205 RECEIVING AREA</u> <u>CONVERSION</u> <u>BILL NO. 8</u> <u>STRUCTURAL STEELWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Descriptions</u> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of columns and beams shall be deemed to include flat section base, top, bearer and connection plates</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>NOTE: All structural steelwork to be fabricated in accordance with SANS 14713 Part 2. Dimensions and levels to be verified on site prior to manufacture. Any discrepancies found during site measure to be reported to and resolved by the Engineer prior to manufacture. All structural steel elements must be inspected by the Engineer prior to transporting to site. All bolts must be grade 8.8 unless otherwise specified by the Engineer.</p> <p>All welds to be with E700XX electrodes, according to AWS or similar approved by the Engineer. All hot rolled structural steel members to be grade S355JR and plates to be grade 300WA. Purlins and girts to be pre-galvanised.</p>				
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Section No. 5 Bill No. 8 Structural Steelwork				

	Unit	Quantity	Rate	Amount
<p>All structural steelwork inclusive of bolts, nuts, washers, plates, connections, etc., other than purlins & girts to be hot dipped galvanised in accordance with SANS 121 or ISO 1461. All hot dipped members to be drilled, cut, welded, etc., prior to galvanising. Prices to include for preparation of shop drawings for approval of the Engineer prior to manufacture. A minimum of 7 days must be allowed for checking of shop drawings. Prices to include for fabrication, cutting, drilling, bending, welding, etc., delivery to site, and hoisting up and erecting into position.</p> <p>Note: The following restrictions are applicable on ground floor slab during construction and erection of structural steel. 0-7 days: Concrete curing; no loading on ground floor slab permitted. 7-14 days: Light foot traffic permitted. 14-28 days: Light vehicles < 5 ton. 28+ days: Maximum gross crane load during construction = 25 ton (excludes lifting load). Crane outrigger base footings to be on double cross layer of 50 x 228mm timber spreader supports over an area of 1,00 x 1,00m or similar approved by the Engineer to avert damage to concrete ground floor slab. Only tyre cranes permitted on slab. Slab to be</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>HOT DIPPED GALVANISED STEEL COLUMNS AND BEAMS</u></p> <p><u>Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u></p>				
1	Tonnes	1.19		
<p><u>Welded beams in single lengths with flat bearer and connection plates, bolted to steel</u></p>				
2	Tonnes	1.64		
<p><u>GALVANISED STEEL PURLINS, GIRTS, BRACING, ETC</u></p> <p><u>Purlins and girts, bolted to steel</u></p>				
3	Tonnes	1.06		
4	Tonnes	1.38		
5	Tonnes	0.46		
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Structural Steelwork

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	Unit	Quantity	Rate	Amount
<u>GUARDRAILS, BOLLARDS, ETC.</u>				
<u>'Armco' Barrier Guardrails, etc or equally approved:</u>				
3	Guardrail 900mm high overall consisting of 200mm diameter creosote treated timber posts spaced at 3810mm centres and fixed to concrete hard stands. surface beds (elsewhere measured) by means of 219mm diameter x 10mm thick galvanised steel tube with M16 x 250mm Armco or equally approved through bolt, two (No.2) 10mm diameter weepholes and 359 x 359 x 10mm thick base plate bolted to existing concrete hardstands by means of four (No.4) M16 x 170mm diameter anchor bolts. Guardrail comprising W-shaped galvanised steel guardrail with pre-drilled bolt holes fixed to poles with and including 16mm diameter x 330mm long high yield Armco or equally approved stress bolt on and including 360 x 115 x 115mm CCA treated pine spacer block, complete including all necessary concrete core drilling etc.			
	m	17		
4	Extra over for bullnose to Armco barriers.			
	No	4		
<u>Galvanised mild steel Bollards, etc</u>				
5	Galvanised mild steel bollards 1000mm high overall consisting of 100mm diameter x 3,5mm thick galvanised mild steel posts, with cap welded on and with 190mm diameter x 10mm thick galvanised mild steel base plate, three times holed and fixed to concrete hard stand surface beds (elsewhere measured) by means of three (No.3) M16 x 170mm anchor bolts (elsewhere measured).			
	No	4		
<u>Bolts, etc.</u>				
6	M16 Expansion holding down bolt			
	No	36		
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Metalwork				

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<u>SECTION NO. 5</u> <u>W206 DISPATCH/W205 RECEIVING AREA</u> <u>CONVERSION</u> <u>BILL NO. 10</u> <u>PLASTERING</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Preparation of surfaces to receive screeds, plaster, etc.:</u> <p>Surfaces shall be dry and clean, free of dust, sand, grit and flaking particles, laitance and loose matter, contaminants such as oil, grease, etc. All free standing water to be removed prior to application. Absorbent surfaces to be thoroughly pre-soaked in fresh water. Oil, grease, animal fats, etc. to be removed with suitable approved product and to be applied in strict accordance with the manufacturer's instructions. All concrete surfaces to receive plaster must first be prepared and receive an approved keying/bonding agent or a thick cement slurry coating prior to plastering.</p> <u>INTERNAL PLASTER</u> <u>Cement plaster on concrete:</u>				
1	m ²	5		
2	m ²	1		
<u>EXTERNAL PLASTER</u> <u>Cement plaster on concrete:</u>				
3	m ²	5		
4	m ²	1		
Carried to Collection			R	
Section No. 5 Bill No. 10 Plastering				

Yanfeng Alt & Add - Elidz - Principal Contract
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	Unit	Quantity	Rate	Amount
<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>				
<u>Dividing strips</u>				
5 3 x 57mm Flat section brass dividing strips between different floor finishes at external doors.(Provisional)	m	1		
<u>Edge strips</u>				
6 Mentex Plaster Stop galvanised steel edge strips fixed to brickwork or concrete	m	13		
<u>Corner protectors</u>				
7 Mentex Angle Bead galvanised steel corner protectors fixed to brickwork or concrete	m	13		
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Section No. 5 Bill No. 11 Plumbing And Drainage				

Yanfeng Alt & Add - Elidz - Principal Contract
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	Unit	Quantity	Rate	Amount
<u>Laying, backfilling, bedding, etc of pipes:</u> Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions. Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches). Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding.				
<u>RAINWATER DISPOSAL</u> <u>Fibreglass Gutters And Geberit Pluvia Rainwater System - PC Sum :</u>				
1	Item			
Allow the PC Amount of R 100 000.00 (One Hundred Thousand Rand) for Supply and Installation of Fibreglass Gutters And Geberit Pluvia Rainwater System or equally approved, including downpipes, all to later detail and specification, complete, excluding Main Contractors waste and profit. (Contractor is to allow and include herewith for all necessary, waste, profit and attendance markup's, etc.)				
<u>STORMWATER DRAINAGE</u> <u>Sumps, catchpits, inspection chambers, etc including concrete kerbs or precast concrete cover slabs (gratings and covers elsewhere)</u>				
2	No	1		
Existing stormwater catchpit size 600 x 600mm x 1m deep internally, to be raised by approximately 250mm to new finished floor level, including alterations, removing slab and grating and raising side walls, including modifying existing grating in new position to suit new concrete floor slab, complete.				
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1	m ²	6		
2	m ²	6		
<u>ON WOOD SURFACES</u> <u>Prepare Surface And Apply One Coat Primer On:</u>				
3	m	5		
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		Unit	Quantity	Rate	Amount
	<u>Prepare Surface and Apply One Coat Primer And Two Coats Dulux Pearlglow Paint on:</u>				
4	Doors	m ²	4		
5	Door frames	m ²	2		
	<u>ON NEW METAL SURFACES</u>				
	<u>One coat self etching primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint, on galvanised steel</u>				
6	Rails, bars, pipes, etc exceeding 300mm girth	m	4		
	<u>SIGNWRITING</u>				
	<u>Etching primer and two coats reflective road marking paint on existing concrete surfaces</u>				
7	Line 100mm wide in floor chevron demarcations	m	60		
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Paintwork					

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SECTION NO 6

NEW ACCESS DOOR TO TUGGER ROUTE

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<u>SECTION NO. 6</u> <u>NEW ACCESS DOOR TO TUGGER ROUTE</u> <u>BILL NO. 1</u> <u>ALTERATIONS</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>View site</u> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <u>Explosives</u> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated</p> <u>General</u> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide , erect and remove when directed , any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately 1km to store and handed over to the employer</p>				
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Section No. 6 Bill No. 1 Alterations				

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 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)</p> <p><u>REMOVAL OF EXISTING WORK</u></p> <p><u>Breaking up and removing reinforced concrete, including cutting off and removing reinforcement</u></p>				
1 Upstand beams/ bund wall on concrete surface beds	m ³	1		
<p><u>Taking out/off and removing sundry metalwork</u></p>				
2 Galvanised steel column bracing rail/girt channel, unbolted or cut and removed from existing steel structures.	m	15		
<p><u>Relocate existing electrical and fire conduits, including cutting off as necessary, holderbats and making good wall finishes (making good paintwork elsewhere)</u></p>				
3 Electrical & fire conduits, re-routed around door openings	m	30		
Carried to Collection			R	
Section No. 6 Bill No. 1 Alterations				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>MAKING GOOD OF FINISHES ETC</u>				
<u>Making good untinted granolithic</u>				
4 Floors where 230mm concrete upstand bund walls removed, including 4,5mm Sika Floor 21N Purcem Polyurethane floor coating, all to match existing.	m	4		
<u>Making good internal cement plaster</u>				
5 Walls in patches to reveals in narrow widths.	m ²	5		
<u>OPENINGS THROUGH EXISTING WALLS ETC</u>				
<u>Breaking out for and forming openings through brick walls for new doors and frames, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with 20 MPa concrete thresholds with steel trowelled finish (new doors and frames and making good paintwork elsewhere)</u>				
6 Opening for new fire door and frame 900 x 2100mm high overall through one brick wall.	No	1		
7 Opening for new roller shutter doors with steel frames 3000 x 3500mm high overall through one brick wall.	No	1		
Carried to Collection			R	
Section No. 6				
Bill No. 1				
Alterations				

Amount

COLLECTION

121

R

122

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 6</u> <u>NEW ACCESS DOOR TO TUGGER ROUTE</u> <u>BILL NO. 2</u> <u>WATERPROOFING</u> <u>PREAMBLES</u> The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities <u>SUPPLEMENTARY PREAMBLES</u> Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect. <u>SEALING STRIPS, JOINT SEALANTS, ETC</u> <u>Water based acrylic sealing compound</u>				
1	m	30		
10 x 10mm In joints between frames and plastered walls.				
Carried To Section Summary				R
Section No. 6				
Bill No. 2				
Waterproofing				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 6</u> <u>NEW ACCESS DOOR TO TUGGER ROUTE</u> <u>BILL NO. 3</u> <u>CARPENTRY AND JOINERY</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Fixing</u> <p>Items described as 'nailed' shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as 'bolted', the bolts have been given elsewhere</p> <u>General:</u> <p>All factory doors are to be pre-treated with a linseed oil based transit stabilizing sealer.</p> <u>TIMBER DOORS, WINDOWS, ETC</u> <u>Fire doors</u> <p>Fire doors are to be in accordance with SANS 1253</p> <p>Fire doors are to be labeled indicating manufacturers name, fire rating, reference no and year of manufacture.</p> <p>Test report including a door with a viewing panel is to be provided.</p>				
1	No	1		
Carried To Section Summary			R	
Section No. 6 Bill No. 3 Carpentry And Joinery				

[illegible]

SECTION NO. 6
NEW ACCESS DOOR TO TUGGER ROUTE
BILL NO. 4
IRONMONGERY
COLLECTION

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Amount

Carried To Section Summary

R

Section No. 6
Bill No. 4
Ironmongery

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 6</u> <u>NEW ACCESS DOOR TO TUGGER ROUTE</u> <u>BILL NO. 5</u> <u>METALWORK</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>Descriptions:</u> <p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <u>GALVANISED STEEL ROLLER SHUTTERS, ETC</u> <u>Re-installation of galvanised steel roller shutters, uplifted from ELIDZ Stores, serviced by Specialist and handed to Contractor for installation, fixed to steel framework structure, all as per manufacturers specifications:</u>				
1	No	1		
Existing EFAFLEX EFA-SRT Premium high speed roller door size 3000 x 3500mm high, with opening speed of 2m/s max and closing speed 0.75m/s, uplifted from ELIDZ stores, including framework, electrical connection, servicing by specialist and all safety beams, commissioned and set up and built into new position, complete.				
Carried to Collection			R	
Section No. 6				
Bill No. 5				
Metalwork				

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>'Xpanda' or equally approved Class C automated galvanised slatted roller shutter door and galvanised mild steel U-channel to door opening reveals & head, in accordance with SANS 1253:2016, all to manufacturers specifications to suit roller shutter door, fixed with lugs to brickwork or concrete</u>				
2	No	1		
Class C automated fire resistant slatted roller shutter door for 3000 x 3500mm high opening, integrated into existing building fire alarm system by specialist, including battery back-up, supplied and installed complete. - See Door Schedule Type IF				
<u>GUARDRAILS, BOLLARDS, ETC.</u>				
<u>Galvanised mild steel Bollards, etc</u>				
3	No	4		
Galvanised mild steel bollards 1000mm high overall consisting of 100mm diameter x 3,5mm thick galvanised mild steel posts, with cap welded on and with 190mm diameter x 10mm thick galvanised mild steel base plate, three times holed and fixed to concrete hard stand surface beds (elsewhere measured) by means of three (No.3) M16 x 170mm anchor bolts (elsewhere measured).				
<u>Bolts, etc.</u>				
4	No	12		
M16 Expansion holding down bolt				
<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>				
<u>Edge strips</u>				
5	m	26		
Mentex Plaster Stop galvanised steel edge strips fixed to brickwork or concrete				
<u>Corner protectors</u>				
6	m	26		
Mentex Angle Bead galvanised steel corner protectors fixed to brickwork or concrete				
Carried to Collection			R	
Section No. 6 Bill No. 5 Metalwork				

SECTION NO. 6
NEW ACCESS DOOR TO TUGGER ROUTE
BILL NO. 5
METALWORK
COLLECTION

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Carried To Section Summary

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Section No. 6
Bill No. 5
Metalwork

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 6</u> <u>NEW ACCESS DOOR TO TUGGER ROUTE</u> <u>BILL NO. 6</u> <u>PAINTWORK</u> <u>PREAMBLES</u> The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities <u>SUPPLEMENTARY PREAMBLES</u> Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect. <u>Paint:</u> All work to be executed in strict accordance with the Manufacturers specifications and instructions. Primers and first coats may be thinned in accordance with the paint specifications of the various paints to aid the absorption of the paint. All surfaces must be sound, clean and have a moisture content of less than 8% for walls generally and 3% for slabs/screeds etc. Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with a Merit' plaster primer thinned 10% with turpentine. <u>PAINTWORK ETC TO NEW WORK</u> <u>ON NEW INTERNAL FLOATED PLASTER SURFACES</u> <u>Prepare surfaces and remove all loose material, apply one coat Plascon Plaster Primer (UC56) filler coat, sand lightly and apply two coats 'Plascon Wall and All (WAA 1) Pure Acrylic' paint :</u> 1 Internal plastered walls m ² 10 <u>ON WOOD SURFACES</u> <u>Prepare Surface and Apply One Coat Primer And Two Coats Dulux Pearl glo Paint on:</u> 2 Doors m ² 4 <div>Carried to Collection</div> <div>R</div> <div>Section No. 6</div> <div>Bill No. 6</div> <div>Paintwork</div>				
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Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>ON NEW METAL SURFACES</u>				
<u>One coat self etching primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint, on galvanised steel</u>				
3 Door frames	m ²	3		
4 Rails, bars, pipes, etc exceeding 300mm girth	m	4		
<u>ON EXISTING INTERNAL FLOATED PLASTER SURFACES</u>				
<u>Prepare surfaces and apply Two coats 'Plascon Wall and All' (WAA 1) Pure Acrylic paint</u>				
5 Existing Internal Walls	m ²	50		
<u>SIGNWRITING</u>				
<u>Etching primer and two coats reflective road marking paint on existing concrete surfaces</u>				
6 Line 100mm wide in floor chevron demarcations	m	35		
Carried to Collection			R	
Section No. 6				
Bill No. 6				
Paintwork				

SECTION NO. 6
NEW ACCESS DOOR TO TUGGER ROUTE
BILL NO. 6
PAINTWORK
COLLECTION

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Amount

Carried To Section Summary

R

Section No. 6
Bill No. 6
Paintwork

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

			Amount
<u>SECTION NO. 6</u>			
<u>NEW ACCESS DOOR TO TUGGER ROUTE</u>			
<u>SECTION SUMMARY</u>			
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2	WATERPROOFING	123	
3	CARPENTRY AND JOINERY	124	
4	IRONMONGERY	127	
5	METALWORK	130	
6	PAINTWORK	133	
Carried to Final Summary			
Section No. 6			
SECTION SUMMARY			

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SECTION NO 7

ELECTRICAL WORKS - FROM PART A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 7</u> <u>ELECTRICAL WORKS - FROM PART A</u> <u>BILL NO. 1</u> <u>ELECTRICAL INSTALLATION</u> <u>ELECTRICAL INSTALLATION (PROVISIONAL) - SEE PART A</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>ELECTRICAL INSTALLATION (PROVISIONAL)</u> <p>The work in this Bill is to be priced as per the separate Electrical Installation Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below.</p> <u>Electrical Installation : See Separate Document - Part A</u>				
1	Item			
		Carried to Final Summary		
Section No. 7			R	
Bill No. 1				
Electrical Installation				

SECTION NO 8

MECHANICAL WORKS - FROM PART B

SECTION NO. 8**MECHANICAL WORKS - FROM PART B****BILL NO. 1****AIR-CONDITIONING AND VENTILATION
INSTALLATION****MECHANICAL WORKS (PROVISIONAL) - SEE PART
B****PREAMBLES**

The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities

SUPPLEMENTARY PREAMBLES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.

**AIR-CONDITIONING AND VENTILATION
INSTALLATION (PROVISIONAL)**

The work in this Bill is to be priced as per the separate Air-Conditioning and Ventilation Installation Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below.

**Air-Conditioning and Ventilation Installation : See
Separate Mechanical Works Document - Part B**

- 1 Air-Conditioning and Ventilation Installation works total value of works for all sections, fully inclusive of all Main Contractors mark-up's, etc, but Excluding Vat, totalled and brought forward from separate document - Part B.

Item

Carried To Section Summary

Section No. 8

Bill No. 1

Air-conditioning And Ventilation Installation

R

Yanfeng Alt & Add - Elidz - Principal Contract
 ASP/YANFENG/EXT/11/09/Z1A

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 8</u> <u>MECHANICAL WORKS - FROM PART B</u> <u>BILL NO. 2</u> <u>EARLY WARNING DETECTION AND ALARM INSTALLATION</u> <u>MECHANICAL WORKS (PROVISIONAL) - SEE PART B</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>EARLY WARNING DETECTION AND ALARM INSTALLATION (PROVISIONAL)</u> <p>The work in this Bill is to be priced as per the separate Early Warning Detection and Alarm Installation Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below.</p> <u>Early Warning Detection and Alarm Installation : See Separate Mechanical Works Document - Part B</u>				
1	Item			
Early Warning Detection and Alarm Installation works total value of works for all sections, fully inclusive of all Main Contractors mark-up's, etc, but Excluding Vat, totalled and brought forward from separate document - Part B.				
Carried To Section Summary				R
Section No. 8 Bill No. 2 Early Warning Detection And Alarm Installation				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 8</u> <u>MECHANICAL WORKS - FROM PART B</u> <u>BILL NO. 3</u> <u>FIRE PROTECTION INSTALLATION</u> <u>MECHANICAL WORKS (PROVISIONAL) - SEE PART B</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>FIRE PROTECTION INSTALLATION (PROVISIONAL)</u> <p>The work in this Bill is to be priced as per the separate Fire Protection Installation Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below.</p> <u>Fire Protection Installation : See Separate Mechanical Works Document - Part B</u>				
1	Item			
Fire Protection Installation works total value of works for all sections, fully inclusive of all Main Contractors mark-up's, etc, but Excluding Vat, totalled and brought forward from separate document - Part B.				
Carried To Section Summary				R
Section No. 8				
Bill No. 3				
Fire Protection Installation				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 8</u> <u>MECHANICAL WORKS - FROM PART B</u> <u>BILL NO. 4</u> <u>GOODS HOISTS (LIFTS AND DOCK LEVELLERS)</u> <u>MECHANICAL WORKS (PROVISIONAL) - SEE PART B</u> <u>PREAMBLES</u> The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities <u>SUPPLEMENTARY PREAMBLES</u> Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect. <u>GOODS HOISTS (LIFTS AND DOCK LEVELLERS)</u> The work in this Bill is to be priced as per the separate Goods Hoists (Lifts and Dock Levellers) Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below. <u>Goods Hoists (Lifts and Dock Levellers) : See Separate Mechanical Works Document - Part B</u>				
1	Item			
Goods Hoists (Lifts and Dock Levellers) works total value of works for all sections, fully inclusive of all Main Contractors mark-up's, etc, but Excluding Vat, totalled and brought forward from separate document - Part B.				
Carried To Section Summary				R
Section No. 8 Bill No. 4 Goods Hoists (lifts And Dock Levellers)				

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 8</u> <u>MECHANICAL WORKS - FROM PART B</u> <u>BILL NO. 5</u> <u>STATUTORY SIGNAGE</u> <u>MECHANICAL WORKS (PROVISIONAL) - SEE PART B</u> <u>PREAMBLES</u> <p>The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p> <u>STATUTORY SIGNAGE (PROVISIONAL)</u> <p>The work in this Bill is to be priced as per the separate Statutory Signage Bills of Quantities Document with reference to the relevant project specifications and the total value of the works (Excluding Vat) for all sections is to be transferred to the item in this Bill item below.</p> <u>Statutory Signage : See Separate Mechanical Works Document - Part B</u>				
1	Item			
Statutory Signage works total value of works for all sections, fully inclusive of all Main Contractors mark-up's, etc, but Excluding Vat, totalled and brought forward from separate document - Part B.				
Carried To Section Summary				R
Section No. 8 Bill No. 5 Statutory Signage				

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			Amount
<u>SECTION NO. 8</u>			
<u>MECHANICAL WORKS - FROM PART B</u>			
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1	AIR-CONDITIONING AND VENTILATION INSTALLATION	136	
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4	GOODS HOISTS (LIFTS AND DOCK LEVELLERS)	139	
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SECTION NO 9

PROVISIONAL SUMS AND ALLOWANCES

Amount

SECTION NO. 9**PROVISIONAL SUMS AND ALLOWANCES****PROVISIONAL SUMS AND ALLOWANCES****PREAMBLES**

The Tenderer is referred to the relevant Clause in the separate document Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors and the Supplementary Preambles which are incorporated in these Bills of Quantities

General

Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant building agreement/building contract and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances

Prime cost amounts and provisional sums are net. Prime cost amounts shall include for delivery to site of all articles concerned. Provisional sums are for material and equipment supplied and installed complete by firms of specialists.

The tenderer's attention is drawn to the fact that all Provisional Sums stated are nett and do not include builder's discount.

Profit on Nominated/Selected Subcontractors

Where stated, the contractor may allow for profit if required

General Attendance on Nominated/Selected Subcontractors

The item 'attendance' which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors the contractor's duties as described in clause 12.2 of the JBCC N/S Subcontract Agreement

Builder's Work

Builder's work in connection with specialist services is given elsewhere in these bills of quantities

PROVISIONAL SUMS AND ALLOWANCES**Budgetary Allowances**

The following budgetary allowances are for work to be executed by the Contractor and paid for in terms of the Conditions of Contract (work is to be remeasured at Bill rates where-ever possible).

- 1 Provide the budgetary allowance of R225 000-00 (Two Hundred and Twenty Five Thousand Rand) for the Relocation of Taxi Drop Off Point, including Roadworks and Parking and New Staircase from road level to Reception Entrance, all to later specifications and details.

Item 225 000 00

Carried To Section Summary

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Section No. 9

Bill No. 1

Provisional Sums And Allowances

CONTRACT PRICE ADJUSTMENT PROVISIONS (CPAP) / ESCALATION

Contract Price Adjustment Provisions (CPAP) / Escalation :

2 NOTE: The Contractor is to note that CPAP does not apply to this contract and that the prices tendered are to be fixed, and all provisions for Escalation for the project must be made by the Contractor and included in the rates/prices at the time of tender and that no claims whatsoever for Escalation Costs to the Contract will be entertained.

Amount

Item

0 00

Carried To Section Summary

R

Section No. 9
Bill No. 1
Provisional Sums And Allowances

SECTION NO. 9
PROVISIONAL SUMS AND ALLOWANCES
SECTION SUMMARY

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Brought forward from page		143	
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Section No. 9			
SECTION SUMMARY			

FINAL SUMMARY

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3	MEZZANINE WIP STORAGE	61	
4	W206 EXPORT CUN DISPATCH AREA	73	
5	W206 DISPATCH/W205 RECEIVING AREA CONVERSION	118	
6	NEW ACCESS DOOR TO TUGGER ROUTE	134	
7	ELECTRICAL WORKS - FROM PART A	135	
8	MECHANICAL WORKS - FROM PART B	141	
9	PROVISIONAL SUMS AND ALLOWANCES	144	
	ADD: CONTINGENCY ALLOWANCE		
	Allow the Amount of R200 000.00 (Two Hundred Thousand Rands) for Contingencies, to be used by the Principal Agent and approved by the Client, in terms of the Principal Building Agreement.		200 000 00
	SubTotal excluding Value Added Tax		
	ADD VAT @ 15%:		
	Carried to Tender	R	
	FINAL SUMMARY		

PART A

ELECTRICAL WORKS

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-					
	Other fixed cost items not detailed above	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Electrical Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Bulk Services & Existing Services

				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Existing Services					
2.1	Bulk Services					
2.1.1	Allow for the electrical connection onto the existing main low voltage panel, including all necessary control and protection switchgear	sum	1.00			
2.2	Removal of Existing Installation					
2.2.1	Allow for the removal of the redundant portion of the existing electrical engineering services installation and the handing over thereof to the Client, for their safe-keeping	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution					
3.1	Cable Ladder Supply, delivery and installation of cable ladder, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable ladder with 800 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.1	Cable Ladder	m				Rate Only
3.1.2	Horizontal Bend	no.				Rate Only
3.1.3	Internal / External Bend	no.				Rate Only
3.1.4	Horizontal Tee	no.				Rate Only
3.1.5	4-way Crossover	no.				Rate Only
3.1.6	Splice	no.				Rate Only
3.1.7	Width Reducing Splice	no.				Rate Only
3.1.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
	Heavy duty, hot-dipped galvanised cable ladder with 450 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.9	Cable Ladder	m				Rate Only
3.1.10	Horizontal Bend	no.				Rate Only
3.1.11	Internal / External Bend	no.				Rate Only
3.1.12	Horizontal Tee	no.				Rate Only
3.1.13	4-way Crossover	no.				Rate Only
3.1.14	Splice	no.				Rate Only
3.1.15	Width Reducing Splice	no.				Rate Only
3.1.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.2	Cable Tray Supply, delivery and installation of cable tray, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable tray, 304 mm wide x 2 mm thick, with trapeze brackets					
3.2.1	Cable Tray	m				Rate Only
3.2.2	Horizontal Bend	no.				Rate Only
3.2.3	Internal / External Bend	no.				Rate Only
3.2.4	Horizontal Tee	no.				Rate Only
3.2.5	4-way Crossover	no.				Rate Only
3.2.6	Splice	no.				Rate Only
3.2.7	Width Reducing Splice	no.				Rate Only
3.2.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.2	Cable Tray (continued)					
	Medium duty, hot-dipped galvanised cable tray, 50 mm wide x 1.6 mm thick, with trapeze brackets					
3.2.9	Cable Tray	m	200.00			
3.2.10	Horizontal Bend	no.	13.00			
3.2.11	Internal / External Bend	no.	13.00			
3.2.12	Horizontal Tee	no.	13.00			
3.2.13	4-way Crossover	no.				Rate Only
3.2.14	Splice	no.	67.00			
3.2.15	Width Reducing Splice	no.				Rate Only
3.2.16	Support / Suspension / Trapeze Bracket	no.	200.00			
3.3	Low Voltage (600 / 1000 V) Cables					
	Supply, delivery and installation of PVC PVC SWA ECC PVC type cables, with stranded copper conductors and earth continuity conductors (Installation rate to include for installation in wireways, trays, ducts, trenches, etc. and for the provision of flameproof labels) (excavations measured elsewhere)					
3.3.1	240 mm² x 1 core XLPE insulated PVC sheathed	m				Rate Only
3.3.2	120 mm² x 4 core	m				Rate Only
3.3.3	95 mm² x 4 core	m				Rate Only
3.3.4	70 mm² x 4 core	m				Rate Only
3.3.5	50 mm² x 4 core	m				Rate Only
3.3.6	35 mm² x 4 core	m	220.00			
3.3.7	25 mm² x 4 core	m				Rate Only
3.3.8	10 mm² x 4 core	m				Rate Only
3.3.9	6 mm² x 4 core	m				Rate Only
3.3.10	10 mm² x 2 core	m				Rate Only
3.4	Low Voltage (600 / 1 000 V) Cable Terminations					
	Supply, delivery and installation of cable terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
3.4.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.4.2	120 mm² x 4 core	no.				Rate Only
3.4.3	95 mm² x 4 core	no.				Rate Only
3.4.4	70 mm² x 4 core	no.				Rate Only
3.4.5	50 mm² x 4 core	no.				Rate Only
3.4.6	35 mm² x 4 core	no.	2.00			
3.4.7	25 mm² x 4 core	no.				Rate Only
3.4.8	10 mm² x 4 core	no.				Rate Only
3.4.9	6 mm² x 4 core	no.				Rate Only
3.4.10	10 mm² x 2 core	no.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.5	Low Voltage (600 / 1 000 V) Cable Joints Supply, delivery and installation of cable joints, including all joint capsules, lugs, shrouds, insulating materials and compounds, etc.					
3.5.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.5.2	120 mm² x 4 core	no.				Rate Only
3.5.3	95 mm² x 4 core	no.				Rate Only
3.5.4	70 mm² x 4 core	no.				Rate Only
3.5.5	50 mm² x 4 core	no.				Rate Only
3.5.6	35 mm² x 4 core	no.				Rate Only
3.5.7	25 mm² x 4 core	no.				Rate Only
3.5.8	10 mm² x 4 core	no.				Rate Only
3.5.9	6 mm² x 4 core	no.				Rate Only
3.6	Low Voltage Earthing					
3.6.1	Allow for bonding of the electrical installation	sum	1.00			
3.6.2	Supply and installation of 500 x 25 x 5 mm earth bar, mounted to brickwork / concrete by three off post insulators with suitable rawl bolts, with 10 off 8 mm holes for cable terminations	sum	3.00			
3.7	Earth Spikes Supply, delivery and installation of earth spikes including all fastening materials, lugs, etc.					
3.7.1	1 800 mm x 16 mm diameter	no.				Rate Only
3.7.2	1 200 mm x 16 mm diameter	no.				Rate Only
3.8	Electrical Distribution Boards Allow a provisional sum for the supply, delivery to site, installation of flush mounted unit, incl. fixing goods & lockable hinged doors, as specified in Project Specification and depicted on single line diagrams					
3.8.1	Sub-electrical distribution board	no.		85 000.00	10 625.00	Rate Only
3.8.2	Sub-electrical distribution board	no.	1.00	12 500.00	1 562.50	14 062.50
3.8.3	Sub-electrical distribution board	no.		6 850.00	856.25	Rate Only
3.8.4	Allow for a "profit and attendance" mark-up on Item 3.8.1-3	%	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment					
4.1	Telephone / Data Distribution Boards Supply, delivery and installation of flush mounted telephone / data distribution board, including all fixing goods, architrave, lockable hinged doors and soft timber backing board					
4.1.1	1000 mm x 800 mm 200 mm	no.				Rate Only
4.1.2	800 mm x 800 mm 150 mm	no.				Rate Only
4.1.3	450 mm x 450 mm 150 mm	no.	1.00			
4.2	Draw Trays Supply, delivery and installation of draw trays, complete with knockouts and covers					
4.2.1	150 mm x 150 mm x 50 mm	no.	1.00			
4.3	Ancillary Low Voltage Electrical Equipment Supply, delivery and installation of ancillary equipment					
4.3.1	10 ampere photoelectric daylight switch	no.	1.00			
4.4	Light Switches and Occupancy Sensors Supply, delivery and installation of light switches and occupancy sensors, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.4.1	One lever, one way switch	no.				Rate Only
4.4.2	One lever, two way switch	no.				Rate Only
4.4.3	Two lever, one way switch	no.				Rate Only
4.4.4	Three lever, one way switch	no.				Rate Only
4.4.5	Four lever, one way switch	no.	3.00			
4.4.6	One lever, one way switch, with dimmer control	no.				Rate Only
4.4.7	Occupancy sensor, with passive infra-red and microwave motion sensing capabilities, suitable for mounting at 5 m height and with a minimum range of 10 metres	no.				Rate Only
4.5	Luminaires					
4.4.1	Allow a provisional sum for the supply and delivery of luminaires	sum	1.00	160 600.00		160 600.00
4.4.2	Allow for a "profit and attendance" mark-up on Item 4.4.1	%	1.00			
4.4.3	Allow for obtaining suitable luminaires from the respective Luminaire Suppliers and for presenting same to the Consulting Electrical Engineers and / or Principal Architect for approval	%	1.00			
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.5	Luminaires (continued)					
	Allow for the installation of luminaires, either fixed to round conduit boxes cast into brickwork or conduit boxes supported to ceiling / roof structure or mounted in recessed ceiling grid, including all fixing materials and terminations (all conduit, conduit accessories and conductors measured elsewhere)					
4.4.4	Surface, open channel fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.5	Surface, diffused fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.	44.00			
4.4.6	Recessed fluorescent (1200 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.7	Recessed fluorescent (600 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.8	Surface bulkhead to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.9	Recessed downlighter (75 mm diameter to 250 mm diameter cut-out) to finished ceiling	no.				Rate Only
4.4.10	Surface spotlight to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.11	Suspended pendant, with maximum 3 m suspension from exposed trusses / finished ceiling	no.				Rate Only
4.4.12	Surface floodlight, secured to / suspended from exposed trusses / finished ceiling	no.				Rate Only
4.4.13	Uplighter, approximately 700 mm deep, excluding concrete plinth	no.				Rate Only
4.4.14	Bollard, maximum 1.5 m high, excluding concrete plinth	no.				Rate Only
4.4.15	Streetlight luminaire, maximum 4.5 m high, including concrete plinth	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets					
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within or onto ceiling voids, dry-walling, timber, brickwork and / or concrete structures					
4.6.1	5 ampere, three pin, un-switched (white)	no.				Rate Only
4.6.2	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.3	16 ampere, double, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.4	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.5	16 ampere, double, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.6	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.	20.00			
4.6.7	16 ampere, double, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.8	16 ampere, single, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.9	16 ampere, double, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.10	16 ampere, single, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.11	16 ampere, double, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.12	16 ampere, single, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.13	16 ampere, double, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.14	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.15	16 ampere, double, euro, round earth pin, single pole (white)	no.	28.00			
4.6.16	16 ampere, double, combo three pin / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.17	16 ampere, double, combo three pin / euro / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.18	16 ampere, double, combo three pin / USB, round earth pin, single pole (white)	no.				Rate Only
4.6.19	16 ampere, single, four pin with round earth pin, single pole (white)	no.				Rate Only
4.6.20	16 ampere, single, five pin with round earth pin, single pole (white)	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets (continued)					
4.6.21	16 ampere, single, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
4.6.22	16 ampere, double, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within power skirting, power poles, flush floor ducting and / or under-screed ducting					
4.6.23	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.24	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.25	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.26	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.27	16 ampere, single, USB, single pole (white)	no.				Rate Only
4.6.28	16 ampere, switch (white / red / blue)	no.				Rate Only
4.7	Accessories					
	Supply, delivery and installation of accessories to suit module grid plate type blank covers					
4.7.1	Removable plug	no.				Rate Only
4.7.2	Television aerial socket	no.				Rate Only
4.7.3	8 way 8 contact data socket (CAT 5), with shutter	no.				Rate Only
4.7.4	6 way 4 contact telephone socket, with shutter	no.				Rate Only
4.8	Sockets (plug-tops)					
	Supply, delivery and installation of sockets					
4.8.1	5 ampere, three pin with round earth pin	no.				Rate Only
4.8.2	16 ampere, three pin with round earth pin	no.				Rate Only
4.8.3	16 ampere, three pin with 0 degree shaved earth pin	no.				Rate Only
4.8.4	16 ampere, three pin, with 45 degree shaved earth pin	no.	2.00			
4.8.5	16 ampere, four pin with round earth pin	no.				Rate Only
4.8.6	16 ampere, five pin with round earth pin	no.				Rate Only
4.9	Earth Leakage Units					
	Supply, delivery and installation of moulded case earth leakage units, including wiring to busbars					
4.9.1	SA15A, single pole, 5 kA, 30 mA, 60A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.10	Moulded Case Circuit Breakers Supply, delivery and installation of moulded case circuit breakers, including wiring to busbars / main circuit breaker					
4.10.1	Single pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.2	Single pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.3	Single pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.4	Single pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.5	Single pole & neutral, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.6	Single pole & neutral, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.7	Single pole & neutral, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.8	Single pole & neutral, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.9	Single pole & neutral, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.10	Single pole & neutral, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.11	Double pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.12	Double pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.13	Double pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.14	Double pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.15	Double pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.16	Double pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.17	Triple pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.18	Triple pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.19	Triple pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.20	Triple pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.21	Triple pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.22	Triple pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.23	Triple pole, 5 kA, Curve 1, 40 - 60 A	no.				Rate Only
4.10.24	Triple pole, 5 kA, Curve 2, 40 - 60 A	no.				Rate Only
4.10.25	Triple pole, 5 kA, Curve 1, 80 - 100 A	no.				Rate Only
4.10.26	Triple pole, 5 kA, Curve 2, 80 - 100 A	no.	1.00			
4.10.27	Triple pole, 5 kA, Curve 2, 125 - 150 A	no.				Rate Only
4.10.28	Triple pole, 5 kA, Curve 1, 125 - 150 A	no.				Rate Only
4.11	Moulded Case Switch Disconnectors Supply, delivery and installation of moulded case switch disconnectors, including wiring to busbars					
4.11.1	Single pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.2	Single pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.3	Single pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.4	Double pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.5	Double pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.6	Double pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.7	Triple pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.8	Triple pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.9	Triple pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.10	Triple pole, 5 kA, 150 - 200 A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.12	Switched Isolators Supply, delivery and installation of isolators, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.12.1	30 A, single pole & neutral & earth	no.	4.00			Rate Only
4.12.2	45 A, single pole & neutral & earth	no.				
4.12.3	60 A, single pole & neutral & earth (equipment)	no.				Rate Only
4.12.4	60 A, triple pole & neutral & earth (equipment) Supply, delivery and installation of switched interlock type isolators, excluding outlet boxes, but including base and "male" and "female" adaptors	no.	2.00			
4.12.5	16 A, triple pole & neutral & earth (equipment)	no.	3.00			
4.12.6	32 A, triple pole & neutral & earth (equipment)	no.	3.00			
4.12.7	63 A, triple pole & neutral & earth (equipment)	no.	3.00			
4.12.8	80 A, triple pole & neutral & earth (equipment)	no.	2.00			
4.12.9	100 A, triple pole & neutral & earth (equipment)	no.	1.00			
4.13	PVC SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.13.1	20 mm diameter conduit	m	720.00			
4.13.2	25 mm diameter conduit	m	988.00			
4.13.3	32 mm diameter conduit	m	452.00			
4.13.4	50 mm diameter conduit	m	60.00			
4.13.5	20 mm diameter conduit, flexible	m	72.00			
4.13.6	25 mm diameter conduit, flexible	m	99.00			
4.14	PVC SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.14.1	50 mm diameter conduit box for 20 mm conduit	no.	110.00			
4.14.2	50 mm diameter conduit extension box for 20 mm	no.	44.00			
4.14.3	50 mm diameter conduit box for 25 mm conduit	no.	91.00			
4.14.4	100 mm x 50 mm x 50 mm conduit box	no.	3.00			
4.14.5	100 mm x 100 mm x 50 mm conduit box	no.	66.00			
4.14.6	Blank standard cover for 50 mm diameter conduit box	no.	110.00			
4.14.7	Blank over-sized cover for 50 mm diameter conduit box	no.	11.00			
4.14.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.14.9	Blank cover for 100 mm x 100 mm conduit box	no.	7.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only
4.15	Galvanised SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.15.1	20 mm diameter conduit	m	7.00			
4.15.2	25 mm diameter conduit	m	10.00			
4.15.3	32 mm diameter conduit	m	5.00			
4.15.4	50 mm diameter conduit	m	1.00			
4.15.5	Extra over for painting conduit (colour to be specified)	m	1.00			
4.16	Galvanised SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.16.1	100 mm x 50 mm x 50 mm conduit box	no.	3.00			
4.16.2	100 mm x 100 mm x 50 mm conduit box	no.	66.00			
4.16.3	50 mm diameter conduit box for 20 mm conduit	no.	1.00			
4.16.4	50 mm diameter conduit box for 25 mm conduit	no.	1.00			
4.16.5	2.5 m x 20 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	12.00			
4.16.6	Blank cover for 100 mm x 50 mm conduit box	no.	7.00			
4.16.7	Blank cover for 100 mm x 100 mm conduit box	no.				
4.17	Insulated Wiring Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.1	2.5 mm², for use as conductors	m	2 116.00			
4.17.2	4.0 mm², for use as conductors	m	576.00			
4.17.3	6.0 mm², for use as conductors	m	800.00			
4.17.4	10.0 mm², for use as conductors	m	400.00			
4.17.5	2.5 mm², for use as earth	m	1 346.00			
4.17.6	4 mm², for use as earth	m	400.00			
4.17.7	6 mm², for use as earth	m	200.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.17	Insulated Wiring (continued)					
	Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.8	16.0 mm², for use as conductors	m				Rate Only
4.17.9	24.0 mm², for use as conductors	m				Rate Only
4.17.10	34.0 mm², for use as conductors	m				Rate Only
4.17.11	50.0 mm², for use as conductors	m				Rate Only
4.17.12	70.0 mm², for use as conductors	m				Rate Only
4.17.13	94.0 mm², for use as conductors	m				Rate Only
4.17.14	10 mm², for use as earth	m				Rate Only
4.17.15	16 mm², for use as earth	m				Rate Only
4.17.16	25 mm², for use as earth	m				Rate Only
4.17.17	35 mm², for use as earth	m				Rate Only
4.17.18	50 mm², for use as earth	m				Rate Only
4.17.19	70 mm², for use as earth	m				Rate Only
	Supply, delivery and installation of conductor terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
4.17.20	10 - 25 mm² conductor / earth	m	12.00			
4.17.21	35 - 70 mm² conductor / earth	m	1.00			
4.17.22	95 mm² conductor / earth	m	1.00			
	Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare earth-continuity-conductor between them, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka twin and earth) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.17.23	2 x 2.5 mm² conductors and 1.5 mm² earth	m	21.00			
4.17.24	2 x 4.0 mm² conductors and 1.5 mm² earth	m	6.00			
4.17.25	2 x 6.0 mm² conductors and 2.5 mm² earth	m	8.00			
4.17.26	2 x 10.0 mm² conductors and 4.0 mm² earth	m	4.00			
4.17.27	3 x 2.5 mm² conductor and 1.5 mm² earth	m	11.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.18	Insulated and Screened Wiring Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium / polyethylene laminate, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka Surfex) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.18.1	2 x 2.5 mm² conductors and 1.5 mm² earth	m	212.00			
4.18.2	2 x 4.0 mm² conductors and 1.5 mm² earth	m	6.00			
4.18.3	2 x 6.0 mm² conductors and 2.5 mm² earth	m	8.00			
4.18.4	3 x 2.5 mm² conductors and 1.5 mm² earth	m	106.00			
4.18.5	3 x 4.0 mm² conductors and 1.5 mm² earth	m	3.00			
4.18.6	3 x 6.0 mm² conductors and 2.5 mm² earth	m	4.00			
4.18.7	4 x 2.5 mm² conductors and 1.5 mm² earth	m	53.00			
4.18.8	4 x 4.0 mm² conductors and 1.5 mm² earth	m	1.50			
4.18.9	4 x 6.0 mm² conductors and 2.5 mm² earth	m	2.00			
4.19	Under-screed Ducting Supply, delivery and installation of under screed ducting, as specified in Project Specification (outlets measured elsewhere)					
4.19.1	Duct (profile of 220 mm x 35 mm)	m				Rate Only
4.19.2	Drawbox (profile of 300 mm x 300 mm x 65 mm)	no.				Rate Only
4.19.3	External splice	no.				Rate Only
4.19.4	Internal splice	no.				Rate Only
4.19.5	Under screed outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
4.19.6	Conduit / access floor outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.20	Flush floor Ducting Supply, delivery and installation of flush floor ducting, as specified in Project Specification (outlets measured elsewhere)					
4.20.1	Duct (profile of 150 mm x 31 mm)	m				Rate Only
4.20.2	Drawbox (profile of 250 mm x 250 mm x 65 mm)	no.				Rate Only
4.20.3	External splice	no.				Rate Only
4.20.4	Internal splice	no.				Rate Only
4.20.5	Power skirting connector	no.				Rate Only
4.20.6	Pedestal conduit outlet box	no.				Rate Only
4.20.7	Two-way pedestal	no.				Rate Only
4.20.8	Three-way pedestal	no.				Rate Only
4.20.9	Four-way pedestal	no.				Rate Only
4.21	Power Skirting Supply, delivery and installation of powerskirting (195 mm x 50 mm profile), including all necessary rigid and flexible covers, partitions, internal dividers, joint covers, accessory frames, cable retaining brackets, internal / external angles, T-junctions, fixing brackets, etc., as required (rate per metre) (outlets measured elsewhere)	m				Rate Only
4.22	Wiring Duct and Accessories Supply, delivery and installation of galvanised wiring duct, including all fixing materials and covers 127 mm x 76.2 mm x 1.0 mm					
4.22.1	Duct, complete with PVC cover	m				Rate Only
4.22.2	Pre-Galvanised cover	no.				Rate Only
4.22.3	Splice (internal)	no.				Rate Only
4.22.4	End cap	no.				Rate Only
4.22.5	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.6	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.7	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.8	4-way Crossover, radiused and cover	no.				Rate Only
4.22.9	DB outlet, radiused and cover	no.				Rate Only
4.22.10	Hangers	no.				Rate Only
4.22.11	Wiring Retainer	no.				Rate Only
4.22.12	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only
4.22	Wiring Duct and Accessories (continued)					
	76 mm x 76.2 mm x 1.0 mm					
4.22.13	Duct, complete with PVC cover	m	550.00			
4.22.14	Pre-Galvanised cover	no.				
4.22.15	Splice (internal)	no.	183.00			
4.22.16	End cap	no.	55.00			
4.22.17	90 degree radiused int / ext. elbow and cover	no.	46.00			
4.22.18	90 degree radiused horizontal elbow and cover	no.	9.00			
4.22.19	Horizontal Tee, radiused and cover	no.	23.00			
4.22.20	4-way Crossover, radiused and cover	no.	7.00			
4.22.21	DB outlet, radiused and cover	no.	2.00			
4.22.22	Hangers	no.	275.00			
4.22.23	Wiring Retainer	no.	1 650.00			
4.22.24	Extra over for painting wiring duct (colour to be specified)	m	28.00			
4.23	Wiring Mesh and Accessories					
	Supply, delivery and installation of galvanised wiring mesh, including all fixing materials					
	150 mm x 50 mm					
4.23.1	Wiring Mesh	m				
4.23.2	Horizontal Bend	no.				
4.23.3	Internal / External Bend	no.				
4.23.4	Horizontal Tee	no.				
4.23.5	4-way Crossover	no.				
4.23.6	Splice	no.				
4.23.7	Holding Down Bracket, including fasteners	no.				
4.24	Wall mounted infrared heater					
	Supply, delivery and installation of Techni lamp infrared zone, 2000 W heater, as specified in Project Specification (outlets measured elsewhere)					
4.24.1	Wall mounted infrared heater	no.				
4.25	Polyester Draw-tape					
4.25.1	2 mm² draw-tape	m				
4.26	Miscellaneous					
	Provide electrical connection to the following equipment (materials measured elsewhere)					
4.26.1	Single phase equipment	no.	4.00			
4.26.2	Three phase equipment	no.	14.00			
	Allow a provisional sum for the following miscellaneous items, namely :					
4.26.4	Relays for Automated Doors / Status Panels	no.	3.00			
Total for Schedule carried forward to Summary				R		

Schedule 5 : Provisional Sums and Contingency Sums

Schedule 5 : Provisional Sums and Contingency Sums				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
5	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
5.1	Provisional Sums					
5.1.1	Electricity Service Connections Allow a provisional sum for the :					
5.1.1.1	Provision of a temporary electricity service connection to the Construction Site for use by all Contracting Parties	sum	1.00	12 500.00		12 500.00
5.1.1.2	Allow for a "profit and attendance" mark-up on Item 5.1.1.1	%	1.00			
5.1.2	Lightning Protection System Allow a provisional sum for the provision of the lightning protection services, to be carried out by a Specialist Sub-contractor					
5.1.2.1	Lightning Protection System	sum	1.00	10 000.00		10 000.00
5.1.2.2	Allow for a "profit and attendance" mark-up on Item 5.1.2.1	%	1.00			
5.1.3	Specialist Earthing System Allow a provisional sum for the provision of the specialist earthing services, to be carried out by a Specialist Sub-contractor					
5.1.3.1	Specialist Earthing System	sum				Rate Only
5.1.3.2	Allow for a "profit and attendance" mark-up on Item 5.1.3.1	%				Rate Only
5.2	Contingency Sum					
5.2.1	Contingency Sum					
5.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	4 000.00		4 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

(Factory Mezzanine)		
Item	Description	Electrical
1	Preliminary & General Items	
2	Existing Services	
3	Low Voltage Reticulation and Distribution	
4	Electrical Equipment	
5	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 96)		

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Electrical Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Bulk Services & Existing Services

Schedule 2 : Bulk Services & Existing Services				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Existing Services					
2.1	Bulk Services					
2.1.1	Allow for the electrical connection onto the existing main low voltage panel, including all necessary control and protection switchgear	sum				Rate Only
2.2	Removal of Existing Installation					
2.2.1	Allow for the removal of the redundant portion of the existing electrical engineering services installation and the handing over thereof to the Client, for their safe-keeping	sum				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution					
3.1	Cable Ladder Supply, delivery and installation of cable ladder, complete with all fastening materials Heavy duty, hot-dipped galvanised cable ladder with 800 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.1	Cable Ladder	m				Rate Only
3.1.2	Horizontal Bend	no.				Rate Only
3.1.3	Internal / External Bend	no.				Rate Only
3.1.4	Horizontal Tee	no.				Rate Only
3.1.5	4-way Crossover	no.				Rate Only
3.1.6	Splice	no.				Rate Only
3.1.7	Width Reducing Splice	no.				Rate Only
3.1.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
	Heavy duty, hot-dipped galvanised cable ladder with 450 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.9	Cable Ladder	m				Rate Only
3.1.10	Horizontal Bend	no.				Rate Only
3.1.11	Internal / External Bend	no.				Rate Only
3.1.12	Horizontal Tee	no.				Rate Only
3.1.13	4-way Crossover	no.				Rate Only
3.1.14	Splice	no.				Rate Only
3.1.15	Width Reducing Splice	no.				Rate Only
3.1.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.2	Cable Tray Supply, delivery and installation of cable tray, complete with all fastening materials Heavy duty, hot-dipped galvanised cable tray, 304 mm wide x 2 mm thick, with trapeze brackets					
3.2.1	Cable Tray	m				Rate Only
3.2.2	Horizontal Bend	no.				Rate Only
3.2.3	Internal / External Bend	no.				Rate Only
3.2.4	Horizontal Tee	no.				Rate Only
3.2.5	4-way Crossover	no.				Rate Only
3.2.6	Splice	no.				Rate Only
3.2.7	Width Reducing Splice	no.				Rate Only
3.2.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.2	Cable Tray (continued)					
	Medium duty, hot-dipped galvanised cable tray, 50 mm wide x 1.6 mm thick, with trapeze brackets					
3.2.9	Cable Tray	m	175.00			
3.2.10	Horizontal Bend	no.	12.00			
3.2.11	Internal / External Bend	no.	12.00			
3.2.12	Horizontal Tee	no.	12.00			
3.2.13	4-way Crossover	no.				Rate Only
3.2.14	Splice	no.	58.00			
3.2.15	Width Reducing Splice	no.				Rate Only
3.2.16	Support / Suspension / Trapeze Bracket	no.	175.00			
3.3	Low Voltage (600 / 1000 V) Cables					
	Supply, delivery and installation of PVC PVC SWA ECC PVC type cables, with stranded copper conductors and earth continuity conductors (Installation rate to include for installation in wireways, trays, ducts, trenches, etc. and for the provision of flameproof labels) (excavations measured elsewhere)					
3.3.1	240 mm² x 1 core XLPE insulated PVC sheathed	m				Rate Only
3.3.2	120 mm² x 4 core	m				Rate Only
3.3.3	95 mm² x 4 core	m				Rate Only
3.3.4	70 mm² x 4 core	m				Rate Only
3.3.5	50 mm² x 4 core	m				Rate Only
3.3.6	35 mm² x 4 core	m				Rate Only
3.3.7	25 mm² x 4 core	m	175.00			
3.3.8	10 mm² x 4 core	m				Rate Only
3.3.9	6 mm² x 4 core	m				Rate Only
3.3.10	10 mm² x 2 core	m				Rate Only
3.4	Low Voltage (600 / 1 000 V) Cable Terminations					
	Supply, delivery and installation of cable terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
3.4.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.4.2	120 mm² x 4 core	no.				Rate Only
3.4.3	95 mm² x 4 core	no.				Rate Only
3.4.4	70 mm² x 4 core	no.				Rate Only
3.4.5	50 mm² x 4 core	no.				Rate Only
3.4.6	35 mm² x 4 core	no.				Rate Only
3.4.7	25 mm² x 4 core	no.	2.00			
3.4.8	10 mm² x 4 core	no.				Rate Only
3.4.9	6 mm² x 4 core	no.				Rate Only
3.4.10	10 mm² x 2 core	no.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.5	Low Voltage (600 / 1 000 V) Cable Joints Supply, delivery and installation of cable joints, including all joint capsules, lugs, shrouds, insulating materials and compounds, etc.					
3.5.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.5.2	120 mm² x 4 core	no.				Rate Only
3.5.3	95 mm² x 4 core	no.				Rate Only
3.5.4	70 mm² x 4 core	no.				Rate Only
3.5.5	50 mm² x 4 core	no.				Rate Only
3.5.6	35 mm² x 4 core	no.				Rate Only
3.5.7	25 mm² x 4 core	no.				Rate Only
3.5.8	10 mm² x 4 core	no.				Rate Only
3.5.9	6 mm² x 4 core	no.				Rate Only
3.6	Low Voltage Earthing					
3.6.1	Allow for bonding of the electrical installation	sum	1.00			
3.6.2	Supply and installation of 500 x 25 x 5 mm earth bar, mounted to brickwork / concrete by three off post insulators with suitable rawl bolts, with 10 off 8 mm holes for cable terminations	sum	3.00			
3.7	Earth Spikes Supply, delivery and installation of earth spikes including all fastening materials, lugs, etc.					
3.7.1	1 800 mm x 16 mm diameter	no.				Rate Only
3.7.2	1 200 mm x 16 mm diameter	no.				Rate Only
3.8	Electrical Distribution Boards Allow a provisional sum for the supply, delivery to site, installation of flush mounted unit, incl. fixing goods & lockable hinged doors, as specified in Project Specification and depicted on single line diagrams					
3.8.1	Sub-electrical distribution board	no.		85 000.00	10 625.00	Rate Only
3.8.2	Sub-electrical distribution board	no.	1.00	12 500.00	1 562.50	14 062.50
3.8.3	Sub-electrical distribution board	no.		6 850.00	856.25	Rate Only
3.8.4	Allow for a "profit and attendance" mark-up on Item 3.8.1-3	%				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment					
4.1	Telephone / Data Distribution Boards Supply, delivery and installation of flush mounted telephone / data distribution board, including all fixing goods, architrave, lockable hinged doors and soft timber backing board					
4.1.1	1000 mm x 800 mm 200 mm	no.				Rate Only
4.1.2	800 mm x 800 mm 150 mm	no.				Rate Only
4.1.3	450 mm x 450 mm 150 mm	no.				Rate Only
4.2	Draw Trays Supply, delivery and installation of draw trays, complete with knockouts and covers					
4.2.1	150 mm x 150 mm x 50 mm	no.	1.00			
4.3	Ancillary Low Voltage Electrical Equipment Supply, delivery and installation of ancillary equipment					
4.3.1	10 ampere photoelectric daylight switch	no.				Rate Only
4.4	Light Switches and Occupancy Sensors Supply, delivery and installation of light switches and occupancy sensors, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.4.1	One lever, one way switch	no.				Rate Only
4.4.2	One lever, two way switch	no.	2.00			
4.4.3	Two lever, one way switch	no.				Rate Only
4.4.4	Three lever, one way switch	no.				Rate Only
4.4.5	Four lever, one way switch	no.				Rate Only
4.4.6	One lever, one way switch, with dimmer control	no.				Rate Only
4.4.7	Occupancy sensor, with passive infra-red and microwave motion sensing capabilities, suitable for mounting at 5 m height and with a minimum range of 10 metres	no.				Rate Only
4.5	Luminaires					
4.4.1	Allow a provisional sum for the supply and delivery of luminaires	sum	1.00	109 500.00		109 500.00
4.4.2	Allow for a "profit and attendance" mark-up on Item 4.4.1	%	1.00			
4.4.3	Allow for obtaining suitable luminaires from the respective Luminaire Suppliers and for presenting same to the Consulting Electrical Engineers and / or Principal Architect for approval	%	1.00			
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.5	Luminaires (continued)					
	Allow for the installation of luminaires, either fixed to round conduit boxes cast into brickwork or conduit boxes supported to ceiling / roof structure or mounted in recessed ceiling grid, including all fixing materials and terminations (all conduit, conduit accessories and conductors measured elsewhere)					
4.4.4	Surface, open channel fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.5	Surface, diffused fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.	30.00			
4.4.6	Recessed fluorescent (1200 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.7	Recessed fluorescent (600 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.8	Surface bulkhead to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.9	Recessed downlighter (75 mm diameter to 250 mm diameter cut-out) to finished ceiling	no.				Rate Only
4.4.10	Surface spotlight to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.11	Suspended pendant, with maximum 3 m suspension from exposed trusses / finished ceiling	no.				Rate Only
4.4.12	Surface floodlight, secured to / suspended from exposed trusses / finished ceiling	no.				Rate Only
4.4.13	Uplighter, approximately 700 mm deep, excluding concrete plinth	no.				Rate Only
4.4.14	Bollard, maximum 1.5 m high, excluding concrete plinth	no.				Rate Only
4.4.15	Streetlight luminaire, maximum 4.5 m high, including concrete plinth	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within or onto ceiling voids, dry-walling, timber, brickwork and / or concrete structures					
4.6.1	5 ampere, three pin, un-switched (white)	no.				Rate Only
4.6.2	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.3	16 ampere, double, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.4	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.5	16 ampere, double, three pin, 0 degree shaved earth pin, single pole (red)	no.	7.00			
4.6.6	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.7	16 ampere, double, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.8	16 ampere, single, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.9	16 ampere, double, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.10	16 ampere, single, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.11	16 ampere, double, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.12	16 ampere, single, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.13	16 ampere, double, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.14	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.15	16 ampere, double, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.16	16 ampere, double, combo three pin / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.17	16 ampere, double, combo three pin / euro / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.18	16 ampere, double, combo three pin / USB, round earth pin, single pole (white)	no.				Rate Only
4.6.19	16 ampere, single, four pin with round earth pin, single pole (white)	no.				Rate Only
4.6.20	16 ampere, single, five pin with round earth pin, single pole (white)	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets (continued)					
4.6.21	16 ampere, single, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
4.6.22	16 ampere, double, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within power skirting, power poles, flush floor ducting and / or under-screed ducting					
4.6.23	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.24	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.25	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.26	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.27	16 ampere, single, USB, single pole (white)	no.				Rate Only
4.6.28	16 ampere, switch (white / red / blue)	no.				Rate Only
4.7	Accessories					
	Supply, delivery and installation of accessories to suit module grid plate type blank covers					
4.7.1	Removable plug	no.				Rate Only
4.7.2	Television aerial socket	no.				Rate Only
4.7.3	8 way 8 contact data socket (CAT 5), with shutter	no.				Rate Only
4.7.4	6 way 4 contact telephone socket, with shutter	no.				Rate Only
4.8	Sockets (plug-tops)					
	Supply, delivery and installation of sockets					
4.8.1	5 ampere, three pin with round earth pin	no.				Rate Only
4.8.2	16 ampere, three pin with round earth pin	no.				Rate Only
4.8.3	16 ampere, three pin with 0 degree shaved earth pin	no.	1.00			
4.8.4	16 ampere, three pin, with 45 degree shaved earth pin	no.				Rate Only
4.8.5	16 ampere, four pin with round earth pin	no.				Rate Only
4.8.6	16 ampere, five pin with round earth pin	no.				Rate Only
4.9	Earth Leakage Units					
	Supply, delivery and installation of moulded case earth leakage units, including wiring to busbars					
4.9.1	SA15A, single pole, 5 kA, 30 mA, 60A	no.	2.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.10	Moulded Case Circuit Breakers Supply, delivery and installation of moulded case circuit breakers, including wiring to busbars / main circuit breaker					
4.10.1	Single pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.2	Single pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.3	Single pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.4	Single pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.5	Single pole & neutral, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.6	Single pole & neutral, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.7	Single pole & neutral, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.8	Single pole & neutral, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.9	Single pole & neutral, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.10	Single pole & neutral, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.11	Double pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.12	Double pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.13	Double pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.14	Double pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.15	Double pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.16	Double pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.17	Triple pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.18	Triple pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.19	Triple pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.20	Triple pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.21	Triple pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.22	Triple pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.23	Triple pole, 5 kA, Curve 1, 40 - 60 A	no.				Rate Only
4.10.24	Triple pole, 5 kA, Curve 2, 40 - 60 A	no.				Rate Only
4.10.25	Triple pole, 5 kA, Curve 1, 80 - 100 A	no.	1.00			
4.10.26	Triple pole, 5 kA, Curve 2, 80 - 100 A	no.				Rate Only
4.10.27	Triple pole, 5 kA, Curve 2, 125 - 150 A	no.				Rate Only
4.10.28	Triple pole, 5 kA, Curve 1, 125 - 150 A	no.				Rate Only
4.11	Moulded Case Switch Disconnectors Supply, delivery and installation of moulded case switch disconnectors, including wiring to busbars					
4.11.1	Single pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.2	Single pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.3	Single pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.4	Double pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.5	Double pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.6	Double pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.7	Triple pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.8	Triple pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.9	Triple pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.10	Triple pole, 5 kA, 150 - 200 A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.12	Switched Isolators Supply, delivery and installation of isolators, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.12.1	30 A, single pole & neutral & earth	no.				Rate Only
4.12.2	45 A, single pole & neutral & earth	no.				Rate Only
4.12.3	60 A, single pole & neutral & earth (equipment)	no.				Rate Only
4.12.4	60 A, triple pole & neutral & earth (equipment)	no.				Rate Only
	Supply, delivery and installation of switched interlock type isolators, excluding outlet boxes, but including base and "male" and "female" adaptors					
4.12.5	16 A, triple pole & neutral & earth (equipment)	no.	2.00			
4.12.6	32 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.7	63 A, triple pole & neutral & earth (equipment)	no.	4.00			
4.12.8	80 A, triple pole & neutral & earth (equipment)	no.	2.00			
4.12.9	100 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.13	PVC SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.13.1	20 mm diameter conduit	m	480.00			
4.13.2	25 mm diameter conduit	m	133.00			
4.13.3	32 mm diameter conduit	m	60.00			
4.13.4	50 mm diameter conduit	m	40.00			
4.13.5	20 mm diameter conduit, flexible	m	48.00			
4.13.6	25 mm diameter conduit, flexible	m	13.00			
4.14	PVC SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.14.1	50 mm diameter conduit box for 20 mm conduit	no.	74.00			
4.14.2	50 mm diameter conduit extension box for 20 mm	no.	30.00			
4.14.3	50 mm diameter conduit box for 25 mm conduit	no.	12.00			
4.14.4	100 mm x 50 mm x 50 mm conduit box	no.	2.00			
4.14.5	100 mm x 100 mm x 50 mm conduit box	no.	15.00			
4.14.6	Blank standard cover for 50 mm diameter conduit box	no.	74.00			
4.14.7	Blank over-sized cover for 50 mm diameter conduit box	no.	7.00			
4.14.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.14.9	Blank cover for 100 mm x 100 mm conduit box	no.	2.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)			Amount Brought Forward		
4.15	Galvanised SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.15.1	20 mm diameter conduit	m	24.00			
4.15.2	25 mm diameter conduit	m	7.00			
4.15.3	32 mm diameter conduit	m	3.00			
4.15.4	50 mm diameter conduit	m	2.00			
4.15.5	Extra over for painting conduit (colour to be specified)	m	2.00			
4.16	Galvanised SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.16.1	100 mm x 50 mm x 50 mm conduit box	no.	2.00			
4.16.2	100 mm x 100 mm x 50 mm conduit box	no.	15.00			
4.16.3	50 mm diameter conduit box for 20 mm conduit	no.	2.00			
4.16.4	50 mm diameter conduit box for 25 mm conduit	no.	1.00			
4.16.5	2.5 m x 20 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	12.00			
4.16.6	Blank cover for 100 mm x 50 mm conduit box	no.	2.00			
4.16.7	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
4.17	Insulated Wiring Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.1	2.5 mm ² , for use as conductors	m	888.00			
4.17.2	4.0 mm ² , for use as conductors	m	144.00			
4.17.3	6.0 mm ² , for use as conductors	m	640.00			
4.17.4	10.0 mm ² , for use as conductors	m	400.00			
4.17.5	2.5 mm ² , for use as earth	m	516.00			
4.17.6	4 mm ² , for use as earth	m	320.00			
4.17.7	6 mm ² , for use as earth	m	200.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.17	Insulated Wiring (continued)					
	Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.8	16.0 mm², for use as conductors	m				Rate Only
4.17.9	24.0 mm², for use as conductors	m				Rate Only
4.17.10	34.0 mm², for use as conductors	m				Rate Only
4.17.11	50.0 mm², for use as conductors	m				Rate Only
4.17.12	70.0 mm², for use as conductors	m				Rate Only
4.17.13	94.0 mm², for use as conductors	m				Rate Only
4.17.14	10 mm², for use as earth	m				Rate Only
4.17.15	16 mm², for use as earth	m				Rate Only
4.17.16	25 mm², for use as earth	m				Rate Only
4.17.17	35 mm², for use as earth	m				Rate Only
4.17.18	50 mm², for use as earth	m				Rate Only
4.17.19	70 mm², for use as earth	m				Rate Only
	Supply, delivery and installation of conductor terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
4.17.20	10 - 25 mm² conductor / earth	m	8.00			
4.17.21	35 - 70 mm² conductor / earth	m				Rate Only
4.17.22	95 mm² conductor / earth	m				Rate Only
	Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare earth-continuity-conductor between them, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka twin and earth) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.17.23	2 x 2.5 mm² conductors and 1.5 mm² earth	m	9.00			
4.17.24	2 x 4.0 mm² conductors and 1.5 mm² earth	m	1.00			
4.17.25	2 x 6.0 mm² conductors and 2.5 mm² earth	m	6.00			
4.17.26	2 x 10.0 mm² conductors and 4.0 mm² earth	m	4.00			
4.17.27	3 x 2.5 mm² conductor and 1.5 mm² earth	m	5.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.18	Insulated and Screened Wiring Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium / polyethylene laminate, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka Surfex) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.18.1	2 x 2.5 mm² conductors and 1.5 mm² earth	m	666.00			
4.18.2	2 x 4.0 mm² conductors and 1.5 mm² earth	m	224.00			
4.18.3	2 x 6.0 mm² conductors and 2.5 mm² earth	m	320.00			
4.18.4	3 x 2.5 mm² conductors and 1.5 mm² earth	m	333.00			
4.18.5	3 x 4.0 mm² conductors and 1.5 mm² earth	m	112.00			
4.18.6	3 x 6.0 mm² conductors and 2.5 mm² earth	m	160.00			
4.18.7	4 x 2.5 mm² conductors and 1.5 mm² earth	m	166.50			
4.18.8	4 x 4.0 mm² conductors and 1.5 mm² earth	m	56.00			
4.18.9	4 x 6.0 mm² conductors and 2.5 mm² earth	m	80.00			
4.19	Under-screed Ducting Supply, delivery and installation of under screed ducting, as specified in Project Specification (outlets measured elsewhere)					
4.19.1	Duct (profile of 220 mm x 35 mm)	m				Rate Only
4.19.2	Drawbox (profile of 300 mm x 300 mm x 65 mm)	no.				Rate Only
4.19.3	External splice	no.				Rate Only
4.19.4	Internal splice	no.				Rate Only
4.19.5	Under screed outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
4.19.6	Conduit / access floor outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.20	Flush floor Ducting Supply, delivery and installation of flush floor ducting, as specified in Project Specification (outlets measured elsewhere)					
4.20.1	Duct (profile of 150 mm x 31 mm)	m				Rate Only
4.20.2	Drawbox (profile of 250 mm x 250 mm x 65 mm)	no.				Rate Only
4.20.3	External splice	no.				Rate Only
4.20.4	Internal splice	no.				Rate Only
4.20.5	Power skirting connector	no.				Rate Only
4.20.6	Pedestal conduit outlet box	no.				Rate Only
4.20.7	Two-way pedestal	no.				Rate Only
4.20.8	Three-way pedestal	no.				Rate Only
4.20.9	Four-way pedestal	no.				Rate Only
4.21	Power Skirting Supply, delivery and installation of powerskirting (195 mm x 50 mm profile), including all necessary rigid and flexible covers, partitions, internal dividers, joint covers, accessory frames, cable retaining brackets, internal / external angles, T-junctions, fixing brackets, etc., as required (rate per metre) (outlets measured elsewhere)	m				Rate Only
4.22	Wiring Duct and Accessories Supply, delivery and installation of galvanised wiring duct, including all fixing materials and covers 127 mm x 76.2 mm x 1.0 mm					
4.22.1	Duct, complete with PVC cover	m				Rate Only
4.22.2	Pre-Galvanised cover	no.				Rate Only
4.22.3	Splice (internal)	no.				Rate Only
4.22.4	End cap	no.				Rate Only
4.22.5	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.6	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.7	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.8	4-way Crossover, radiused and cover	no.				Rate Only
4.22.9	DB outlet, radiused and cover	no.				Rate Only
4.22.10	Hangers	no.				Rate Only
4.22.11	Wiring Retainer	no.				Rate Only
4.22.12	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only
4.22	Wiring Duct and Accessories (continued)					
	76 mm x 76.2 mm x 1.0 mm					
4.22.13	Duct, complete with PVC cover	m	120.00			
4.22.14	Pre-Galvanised cover	no.				
4.22.15	Splice (internal)	no.	40.00			
4.22.16	End cap	no.	12.00			
4.22.17	90 degree radiused int / ext. elbow and cover	no.	10.00			
4.22.18	90 degree radiused horizontal elbow and cover	no.	2.00			
4.22.19	Horizontal Tee, radiused and cover	no.	5.00			
4.22.20	4-way Crossover, radiused and cover	no.	2.00			
4.22.21	DB outlet, radiused and cover	no.	1.00			
4.22.22	Hangers	no.	60.00			
4.22.23	Wiring Retainer	no.	360.00			
4.22.24	Extra over for painting wiring duct (colour to be specified)	m	6.00			
4.23	Wiring Mesh and Accessories					
	Supply, delivery and installation of galvanised wiring mesh, including all fixing materials					
	150 mm x 50 mm					
4.23.1	Wiring Mesh	m				
4.23.2	Horizontal Bend	no.				
4.23.3	Internal / External Bend	no.				
4.23.4	Horizontal Tee	no.				
4.23.5	4-way Crossover	no.				
4.23.6	Splice	no.				
4.23.7	Holding Down Bracket, including fasteners	no.				
4.24	Wall mounted infrared heater					
	Supply, delivery and installation of Techni lamp infrared zone, 2000 W heater, as specified in Project Specification (outlets measured elsewhere)					
4.24.1	Wall mounted infrared heater	no.				
4.25	Polyester Draw-tape					
4.25.1	2 mm² draw-tape	m				
4.26	Miscellaneous					
	Provide electrical connection to the following equipment (materials measured elsewhere)					
4.26.1	Single phase equipment	no.				
4.26.2	Three phase equipment	no.	8.00			
	Allow a provisional sum for the following miscellaneous items, namely :					
4.26.4	Relays for Automated Doors / Status Panels	no.	4.00			
Total for Schedule carried forward to Summary					R	

Schedule 5 : Provisional Sums and Contingency Sums

Schedule 5 : Provisional Sums and Contingency Sums				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
5	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
5.1	Provisional Sums					
5.1.1	Electricity Service Connections Allow a provisional sum for the :					
5.1.1.1	Provision of a temporary electricity service connection to the Construction Site for use by all Contracting Parties	sum	1.00	12 500.00		12 500.00
5.1.1.2	Allow for a "profit and attendance" mark-up on Item 5.1.1.1	%	1.00			
5.1.2	Lightning Protection System Allow a provisional sum for the provision of the lightning protection services, to be carried out by a Specialist Sub-contractor					
5.1.2.1	Lightning Protection System	sum		10 000.00		Rate Only
5.1.2.2	Allow for a "profit and attendance" mark-up on Item 5.1.2.1	%				Rate Only
5.1.3	Specialist Earthing System Allow a provisional sum for the provision of the specialist earthing services, to be carried out by a Specialist Sub-contractor					
5.1.3.1	Specialist Earthing System	sum				Rate Only
5.1.3.2	Allow for a "profit and attendance" mark-up on Item 5.1.3.1	%				Rate Only
5.2	Contingency Sum					
5.2.1	Contingency Sum					
5.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	2 000.00		2 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

(Foam Cell Enclosure)		
Item	Description	Electrical
1	Preliminary & General Items	
2	Existing Services	
3	Low Voltage Reticulation and Distribution	
4	Electrical Equipment	
5	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 96)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Electrical Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Bulk Services & Existing Services

Schedule 2 : Bulk Services & Existing Services				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Existing Services					
2.1	Bulk Services					
2.1.1	Allow for the electrical connection onto the existing main low voltage panel, including all necessary control and protection switchgear	sum				Rate Only
2.2	Removal of Existing Installation					
2.2.1	Allow for the removal of the redundant portion of the existing electrical engineering services installation and the handing over thereof to the Client, for their safe-keeping	sum				Rate Only

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution					
3.1	Cable Ladder Supply, delivery and installation of cable ladder, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable ladder with 800 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.1	Cable Ladder	m				Rate Only
3.1.2	Horizontal Bend	no.				Rate Only
3.1.3	Internal / External Bend	no.				Rate Only
3.1.4	Horizontal Tee	no.				Rate Only
3.1.5	4-way Crossover	no.				Rate Only
3.1.6	Splice	no.				Rate Only
3.1.7	Width Reducing Splice	no.				Rate Only
3.1.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
	Heavy duty, hot-dipped galvanised cable ladder with 450 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.9	Cable Ladder	m				Rate Only
3.1.10	Horizontal Bend	no.				Rate Only
3.1.11	Internal / External Bend	no.				Rate Only
3.1.12	Horizontal Tee	no.				Rate Only
3.1.13	4-way Crossover	no.				Rate Only
3.1.14	Splice	no.				Rate Only
3.1.15	Width Reducing Splice	no.				Rate Only
3.1.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.2	Cable Tray Supply, delivery and installation of cable tray, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable tray, 304 mm wide x 2 mm thick, with trapeze brackets					
3.2.1	Cable Tray	m				Rate Only
3.2.2	Horizontal Bend	no.				Rate Only
3.2.3	Internal / External Bend	no.				Rate Only
3.2.4	Horizontal Tee	no.				Rate Only
3.2.5	4-way Crossover	no.				Rate Only
3.2.6	Splice	no.				Rate Only
3.2.7	Width Reducing Splice	no.				Rate Only
3.2.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.2	Cable Tray (continued)					
	Medium duty, hot-dipped galvanised cable tray, 50 mm wide x 1.6 mm thick, with trapeze brackets					
3.2.9	Cable Tray	m	185.00			
3.2.10	Horizontal Bend	no.	12.00			
3.2.11	Internal / External Bend	no.	12.00			
3.2.12	Horizontal Tee	no.	12.00			
3.2.13	4-way Crossover	no.				Rate Only
3.2.14	Splice	no.	62.00			
3.2.15	Width Reducing Splice	no.				Rate Only
3.2.16	Support / Suspension / Trapeze Bracket	no.	185.00			
3.3	Low Voltage (600 / 1000 V) Cables					
	Supply, delivery and installation of PVC PVC SWA ECC PVC type cables, with stranded copper conductors and earth continuity conductors (Installation rate to include for installation in wireways, trays, ducts, trenches, etc. and for the provision of flameproof labels) (excavations measured elsewhere)					
3.3.1	240 mm² x 1 core XLPE insulated PVC sheathed	m				Rate Only
3.3.2	120 mm² x 4 core	m				Rate Only
3.3.3	95 mm² x 4 core	m				Rate Only
3.3.4	70 mm² x 4 core	m				Rate Only
3.3.5	50 mm² x 4 core	m				Rate Only
3.3.6	35 mm² x 4 core	m				Rate Only
3.3.7	25 mm² x 4 core	m				Rate Only
3.3.8	10 mm² x 4 core	m	185.00			
3.3.9	6 mm² x 4 core	m				Rate Only
3.3.10	10 mm² x 2 core	m				Rate Only
3.4	Low Voltage (600 / 1 000 V) Cable Terminations					
	Supply, delivery and installation of cable terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
3.4.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.4.2	120 mm² x 4 core	no.				Rate Only
3.4.3	95 mm² x 4 core	no.				Rate Only
3.4.4	70 mm² x 4 core	no.				Rate Only
3.4.5	50 mm² x 4 core	no.				Rate Only
3.4.6	35 mm² x 4 core	no.				Rate Only
3.4.7	25 mm² x 4 core	no.				Rate Only
3.4.8	10 mm² x 4 core	no.	2.00			
3.4.9	6 mm² x 4 core	no.				Rate Only
3.4.10	10 mm² x 2 core	no.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.5	Low Voltage (600 / 1 000 V) Cable Joints Supply, delivery and installation of cable joints, including all joint capsules, lugs, shrouds, insulating materials and compounds, etc.					
3.5.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.5.2	120 mm² x 4 core	no.				Rate Only
3.5.3	95 mm² x 4 core	no.				Rate Only
3.5.4	70 mm² x 4 core	no.				Rate Only
3.5.5	50 mm² x 4 core	no.				Rate Only
3.5.6	35 mm² x 4 core	no.				Rate Only
3.5.7	25 mm² x 4 core	no.				Rate Only
3.5.8	10 mm² x 4 core	no.				Rate Only
3.5.9	6 mm² x 4 core	no.				Rate Only
3.6	Low Voltage Earthing					
3.6.1	Allow for bonding of the electrical installation	sum	1.00			
3.6.2	Supply and installation of 500 x 25 x 5 mm earth bar, mounted to brickwork / concrete by three off post insulators with suitable rawl bolts, with 10 off 8 mm holes for cable terminations	sum	1.00			
3.7	Earth Spikes Supply, delivery and installation of earth spikes including all fastening materials, lugs, etc.					
3.7.1	1 800 mm x 16 mm diameter	no.				Rate Only
3.7.2	1 200 mm x 16 mm diameter	no.				Rate Only
3.8	Electrical Distribution Boards Allow a provisional sum for the supply, delivery to site, installation of flush mounted unit, incl. fixing goods & lockable hinged doors, as specified in Project Specification and depicted on single line diagrams					
3.8.1	Sub-electrical distribution board	no.		85 000.00	10 625.00	Rate Only
3.8.2	Sub-electrical distribution board	no.		12 500.00	1 562.50	Rate Only
3.8.3	Sub-electrical distribution board	no.	1.00	6 850.00	856.25	7 706.25
3.8.4	Allow for a "profit and attendance" mark-up on Item 3.8.1-3	%	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment					
4.1	Telephone / Data Distribution Boards Supply, delivery and installation of flush mounted telephone / data distribution board, including all fixing goods, architrave, lockable hinged doors and soft timber backing board					
4.1.1	1000 mm x 800 mm 200 mm	no.				Rate Only
4.1.2	800 mm x 800 mm 150 mm	no.				Rate Only
4.1.3	450 mm x 450 mm 150 mm	no.				Rate Only
4.2	Draw Trays Supply, delivery and installation of draw trays, complete with knockouts and covers					
4.2.1	150 mm x 150 mm x 50 mm	no.	1.00			
4.3	Ancillary Low Voltage Electrical Equipment Supply, delivery and installation of ancillary equipment					
4.3.1	10 ampere photoelectric daylight switch	no.	1.00			
4.4	Light Switches and Occupancy Sensors Supply, delivery and installation of light switches and occupancy sensors, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.4.1	One lever, one way switch	no.	1.00			
4.4.2	One lever, two way switch	no.				Rate Only
4.4.3	Two lever, one way switch	no.				Rate Only
4.4.4	Three lever, one way switch	no.				Rate Only
4.4.5	Four lever, one way switch	no.				Rate Only
4.4.6	One lever, one way switch, with dimmer control	no.				Rate Only
4.4.7	Occupancy sensor, with passive infra-red and microwave motion sensing capabilities, suitable for mounting at 5 m height and with a minimum range of 10 metres	no.				Rate Only
4.5	Luminaires					
4.4.1	Allow a provisional sum for the supply and delivery of luminaires	sum	1.00	33 700.00		33 700.00
4.4.2	Allow for a "profit and attendance" mark-up on Item 4.4.1	%	1.00			
4.4.3	Allow for obtaining suitable luminaires from the respective Luminaire Suppliers and for presenting same to the Consulting Electrical Engineers and / or Principal Architect for approval	%	1.00			
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)			Amount Brought Forward		
4.5	Luminaires (continued)					
	Allow for the installation of luminaires, either fixed to round conduit boxes cast into brickwork or conduit boxes supported to ceiling / roof structure or mounted in recessed ceiling grid, including all fixing materials and terminations (all conduit, conduit accessories and conductors measured elsewhere)					
4.4.4	Surface, open channel fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.5	Surface, diffused fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.	6.00			
4.4.6	Recessed fluorescent (1200 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.7	Recessed fluorescent (600 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.8	Surface bulkhead to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.9	Recessed downlighter (75 mm diameter to 250 mm diameter cut-out) to finished ceiling	no.				Rate Only
4.4.10	Surface spotlight to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.11	Suspended pendant, with maximum 3 m suspension from exposed trusses / finished ceiling	no.				Rate Only
4.4.12	Surface floodlight, secured to / suspended from exposed trusses / finished ceiling	no.	2.00			
4.4.13	Uplighter, approximately 700 mm deep, excluding concrete plinth	no.				Rate Only
4.4.14	Bollard, maximum 1.5 m high, excluding concrete plinth	no.				Rate Only
4.4.15	Streetlight luminaire, maximum 4.5 m high, including concrete plinth	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets					
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within or onto ceiling voids, dry-walling, timber, brickwork and / or concrete structures					
4.6.1	5 ampere, three pin, un-switched (white)	no.				Rate Only
4.6.2	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.3	16 ampere, double, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.4	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.5	16 ampere, double, three pin, 0 degree shaved earth pin, single pole (red)	no.	4.00			
4.6.6	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.7	16 ampere, double, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.8	16 ampere, single, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.9	16 ampere, double, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.10	16 ampere, single, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.11	16 ampere, double, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.12	16 ampere, single, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.13	16 ampere, double, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.14	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.15	16 ampere, double, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.16	16 ampere, double, combo three pin / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.17	16 ampere, double, combo three pin / euro / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.18	16 ampere, double, combo three pin / USB, round earth pin, single pole (white)	no.				Rate Only
4.6.19	16 ampere, single, four pin with round earth pin, single pole (white)	no.				Rate Only
4.6.20	16 ampere, single, five pin with round earth pin, single pole (white)	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets (continued)					
4.6.21	16 ampere, single, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
4.6.22	16 ampere, double, three pin, round earth pin, single pole, industrial (white)	no.	4.00			
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within power skirting, power poles, flush floor ducting and / or under-screed ducting					
4.6.23	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.24	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.25	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.26	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.27	16 ampere, single, USB, single pole (white)	no.				Rate Only
4.6.28	16 ampere, switch (white / red / blue)	no.				Rate Only
4.7	Accessories					
	Supply, delivery and installation of accessories to suit module grid plate type blank covers					
4.7.1	Removable plug	no.				Rate Only
4.7.2	Television aerial socket	no.				Rate Only
4.7.3	8 way 8 contact data socket (CAT 5), with shutter	no.	3.00			
4.7.4	6 way 4 contact telephone socket, with shutter	no.				Rate Only
4.8	Sockets (plug-tops)					
	Supply, delivery and installation of sockets					
4.8.1	5 ampere, three pin with round earth pin	no.				Rate Only
4.8.2	16 ampere, three pin with round earth pin	no.	1.00			
4.8.3	16 ampere, three pin with 0 degree shaved earth pin	no.	1.00			
4.8.4	16 ampere, three pin, with 45 degree shaved earth pin	no.				Rate Only
4.8.5	16 ampere, four pin with round earth pin	no.				Rate Only
4.8.6	16 ampere, five pin with round earth pin	no.				Rate Only
4.9	Earth Leakage Units					
	Supply, delivery and installation of moulded case earth leakage units, including wiring to busbars					
4.9.1	SA15A, single pole, 5 kA, 30 mA, 60A	no.	2.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.10	Moulded Case Circuit Breakers Supply, delivery and installation of moulded case circuit breakers, including wiring to busbars / main circuit breaker					
4.10.1	Single pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.2	Single pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.3	Single pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.4	Single pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.5	Single pole & neutral, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.6	Single pole & neutral, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.7	Single pole & neutral, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.8	Single pole & neutral, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.9	Single pole & neutral, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.10	Single pole & neutral, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.11	Double pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.12	Double pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.13	Double pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.14	Double pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.15	Double pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.16	Double pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.17	Triple pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.18	Triple pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.19	Triple pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.20	Triple pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.21	Triple pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.22	Triple pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.23	Triple pole, 5 kA, Curve 1, 40 - 60 A	no.				Rate Only
4.10.24	Triple pole, 5 kA, Curve 2, 40 - 60 A	no.				Rate Only
4.10.25	Triple pole, 5 kA, Curve 1, 80 - 100 A	no.	1.00			
4.10.26	Triple pole, 5 kA, Curve 2, 80 - 100 A	no.				Rate Only
4.10.27	Triple pole, 5 kA, Curve 2, 125 - 150 A	no.				Rate Only
4.10.28	Triple pole, 5 kA, Curve 1, 125 - 150 A	no.				Rate Only
4.11	Moulded Case Switch Disconnectors Supply, delivery and installation of moulded case switch disconnectors, including wiring to busbars					
4.11.1	Single pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.2	Single pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.3	Single pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.4	Double pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.5	Double pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.6	Double pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.7	Triple pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.8	Triple pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.9	Triple pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.10	Triple pole, 5 kA, 150 - 200 A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.12	Switched Isolators Supply, delivery and installation of isolators, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.12.1	30 A, single pole & neutral & earth	no.				Rate Only
4.12.2	45 A, single pole & neutral & earth	no.				Rate Only
4.12.3	60 A, single pole & neutral & earth (equipment)	no.				Rate Only
4.12.4	60 A, triple pole & neutral & earth (equipment)	no.				Rate Only
	Supply, delivery and installation of switched interlock type isolators, excluding outlet boxes, but including base and "male" and "female" adaptors					
4.12.5	16 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.6	32 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.7	63 A, triple pole & neutral & earth (equipment)	no.	2.00			
4.12.8	80 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.9	100 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.13	PVC SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.13.1	20 mm diameter conduit	m	125.00			
4.13.2	25 mm diameter conduit	m	209.00			
4.13.3	32 mm diameter conduit	m	20.00			
4.13.4	50 mm diameter conduit	m				Rate Only
4.13.5	20 mm diameter conduit, flexible	m	13.00			
4.13.6	25 mm diameter conduit, flexible	m	21.00			
4.14	PVC SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.14.1	50 mm diameter conduit box for 20 mm conduit	no.	20.00			
4.14.2	50 mm diameter conduit extension box for 20 mm	no.	8.00			
4.14.3	50 mm diameter conduit box for 25 mm conduit	no.	19.00			
4.14.4	100 mm x 50 mm x 50 mm conduit box	no.	1.00			
4.14.5	100 mm x 100 mm x 50 mm conduit box	no.	13.00			
4.14.6	Blank standard cover for 50 mm diameter conduit box	no.	20.00			
4.14.7	Blank over-sized cover for 50 mm diameter conduit box	no.	2.00			
4.14.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.14.9	Blank cover for 100 mm x 100 mm conduit box	no.	1.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only
4.15	Galvanised SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.15.1	20 mm diameter conduit	m	6.00			
4.15.2	25 mm diameter conduit	m	10.00			
4.15.3	32 mm diameter conduit	m	1.00			
4.15.4	50 mm diameter conduit	m				
4.15.5	Extra over for painting conduit (colour to be specified)	m	1.00			Rate Only
4.16	Galvanised SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.16.1	100 mm x 50 mm x 50 mm conduit box	no.	1.00			
4.16.2	100 mm x 100 mm x 50 mm conduit box	no.	13.00			
4.16.3	50 mm diameter conduit box for 20 mm conduit	no.	1.00			
4.16.4	50 mm diameter conduit box for 25 mm conduit	no.	1.00			
4.16.5	2.5 m x 20 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	12.00			
4.16.6	Blank cover for 100 mm x 50 mm conduit box	no.	1.00			
4.16.7	Blank cover for 100 mm x 100 mm conduit box	no.				
4.17	Insulated Wiring Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.1	2.5 mm², for use as conductors	m	320.00			Rate Only
4.17.2	4.0 mm², for use as conductors	m				
4.17.3	6.0 mm², for use as conductors	m	320.00			Rate Only
4.17.4	10.0 mm², for use as conductors	m				
4.17.5	2.5 mm², for use as earth	m	160.00			Rate Only
4.17.6	4 mm², for use as earth	m	160.00			
4.17.7	6 mm², for use as earth	m				
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.17	Insulated Wiring (continued)					
	Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.8	16.0 mm², for use as conductors	m				Rate Only
4.17.9	24.0 mm², for use as conductors	m				Rate Only
4.17.10	34.0 mm², for use as conductors	m				Rate Only
4.17.11	50.0 mm², for use as conductors	m				Rate Only
4.17.12	70.0 mm², for use as conductors	m				Rate Only
4.17.13	94.0 mm², for use as conductors	m				Rate Only
4.17.14	10 mm², for use as earth	m				Rate Only
4.17.15	16 mm², for use as earth	m				Rate Only
4.17.16	25 mm², for use as earth	m				Rate Only
4.17.17	35 mm², for use as earth	m				Rate Only
4.17.18	50 mm², for use as earth	m				Rate Only
4.17.19	70 mm², for use as earth	m				Rate Only
	Supply, delivery and installation of conductor terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
4.17.20	10 - 25 mm² conductor / earth	m				Rate Only
4.17.21	35 - 70 mm² conductor / earth	m				Rate Only
4.17.22	95 mm² conductor / earth	m				Rate Only
	Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare earth-continuity-conductor between them, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka twin and earth) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.17.23	2 x 2.5 mm² conductors and 1.5 mm² earth	m	3.00			
4.17.24	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.17.25	2 x 6.0 mm² conductors and 2.5 mm² earth	m	3.00			
4.17.26	2 x 10.0 mm² conductors and 4.0 mm² earth	m				Rate Only
4.17.27	3 x 2.5 mm² conductor and 1.5 mm² earth	m	2.00			
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.18	Insulated and Screened Wiring Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium / polyethylene laminate, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka Surfex) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.18.1	2 x 2.5 mm² conductors and 1.5 mm² earth	m	252.00			
4.18.2	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.3	2 x 6.0 mm² conductors and 2.5 mm² earth	m	160.00			
4.18.4	3 x 2.5 mm² conductors and 1.5 mm² earth	m	126.00			
4.18.5	3 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.6	3 x 6.0 mm² conductors and 2.5 mm² earth	m	80.00			
4.18.7	4 x 2.5 mm² conductors and 1.5 mm² earth	m	63.00			
4.18.8	4 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.9	4 x 6.0 mm² conductors and 2.5 mm² earth	m	40.00			
4.19	Under-screed Ducting Supply, delivery and installation of under screed ducting, as specified in Project Specification (outlets measured elsewhere)					
4.19.1	Duct (profile of 220 mm x 35 mm)	m				Rate Only
4.19.2	Drawbox (profile of 300 mm x 300 mm x 65 mm)	no.				Rate Only
4.19.3	External splice	no.				Rate Only
4.19.4	Internal splice	no.				Rate Only
4.19.5	Under screed outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
4.19.6	Conduit / access floor outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.20	Flush floor Ducting Supply, delivery and installation of flush floor ducting, as specified in Project Specification (outlets measured elsewhere)					
4.20.1	Duct (profile of 150 mm x 31 mm)	m				Rate Only
4.20.2	Drawbox (profile of 250 mm x 250 mm x 65 mm)	no.				Rate Only
4.20.3	External splice	no.				Rate Only
4.20.4	Internal splice	no.				Rate Only
4.20.5	Power skirting connector	no.				Rate Only
4.20.6	Pedestal conduit outlet box	no.				Rate Only
4.20.7	Two-way pedestal	no.				Rate Only
4.20.8	Three-way pedestal	no.				Rate Only
4.20.9	Four-way pedestal	no.				Rate Only
4.21	Power Skirting Supply, delivery and installation of powerskirting (195 mm x 50 mm profile), including all necessary rigid and flexible covers, partitions, internal dividers, joint covers, accessory frames, cable retaining brackets, internal / external angles, T-junctions, fixing brackets, etc., as required (rate per metre) (outlets measured elsewhere)	m				Rate Only
4.22	Wiring Duct and Accessories Supply, delivery and installation of galvanised wiring duct, including all fixing materials and covers 127 mm x 76.2 mm x 1.0 mm					
4.22.1	Duct, complete with PVC cover	m				Rate Only
4.22.2	Pre-Galvanised cover	no.				Rate Only
4.22.3	Splice (internal)	no.				Rate Only
4.22.4	End cap	no.				Rate Only
4.22.5	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.6	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.7	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.8	4-way Crossover, radiused and cover	no.				Rate Only
4.22.9	DB outlet, radiused and cover	no.				Rate Only
4.22.10	Hangers	no.				Rate Only
4.22.11	Wiring Retainer	no.				Rate Only
4.22.12	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.22	Wiring Duct and Accessories (continued)					
	76 mm x 76.2 mm x 1.0 mm					
4.22.13	Duct, complete with PVC cover	m	48.00			Rate Only
4.22.14	Pre-Galvanised cover	no.				
4.22.15	Splice (internal)	no.	16.00			
4.22.16	End cap	no.	5.00			
4.22.17	90 degree radiused int / ext. elbow and cover	no.	4.00			
4.22.18	90 degree radiused horizontal elbow and cover	no.	1.00			
4.22.19	Horizontal Tee, radiused and cover	no.	2.00			
4.22.20	4-way Crossover, radiused and cover	no.	1.00			
4.22.21	DB outlet, radiused and cover	no.				Rate Only
4.22.22	Hangers	no.	24.00			
4.22.23	Wiring Retainer	no.	144.00			
4.22.24	Extra over for painting wiring duct (colour to be specified)	m	2.00			
4.23	Wiring Mesh and Accessories					
	Supply, delivery and installation of galvanised wiring mesh, including all fixing materials					
	150 mm x 50 mm					
4.23.1	Wiring Mesh	m				Rate Only
4.23.2	Horizontal Bend	no.				Rate Only
4.23.3	Internal / External Bend	no.				Rate Only
4.23.4	Horizontal Tee	no.				Rate Only
4.23.5	4-way Crossover	no.				Rate Only
4.23.6	Splice	no.				Rate Only
4.23.7	Holding Down Bracket, including fasteners	no.				Rate Only
4.24	Wall mounted infrared heater					
	Supply, delivery and installation of Techni lamp infrared zone, 2000 W heater, as specified in Project Specification (outlets measured elsewhere)					
4.24.1	Wall mounted infrared heater	no.				Rate Only
4.25	Polyester Draw-tape					
4.25.1	2 mm² draw-tape	m	36.00			
4.26	Miscellaneous					
	Provide electrical connection to the following equipment (materials measured elsewhere)					
4.26.1	Single phase equipment	no.				Rate Only
4.26.2	Three phase equipment	no.	2.00			
	Allow a provisional sum for the following miscellaneous items, namely :					
4.26.4	Relays for Automated Doors / Status Panels	no.	2.00			
Total for Schedule carried forward to Summary					R	

Schedule 5 : Provisional Sums and Contingency Sums

Schedule 5 : Provisional Sums and Contingency Sums				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
5	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
5.1	Provisional Sums					
5.1.1	Electricity Service Connections Allow a provisional sum for the :					
5.1.1.1	Provision of a temporary electricity service connection to the Construction Site for use by all Contracting Parties	sum		12 500.00		Rate Only
5.1.1.2	Allow for a "profit and attendance" mark-up on Item 5.1.1.1	%				Rate Only
5.1.2	Lightning Protection System Allow a provisional sum for the provision of the lightning protection services, to be carried out by a Specialist Sub-contractor					
5.1.2.1	Lightning Protection System	sum	1.00	5 000.00		5 000.00
5.1.2.2	Allow for a "profit and attendance" mark-up on Item 5.1.2.1	%	1.00			
5.1.3	Specialist Earthing System Allow a provisional sum for the provision of the specialist earthing services, to be carried out by a Specialist Sub-contractor					
5.1.3.1	Specialist Earthing System	sum				Rate Only
5.1.3.2	Allow for a "profit and attendance" mark-up on Item 5.1.3.1	%				Rate Only
5.2	Contingency Sum					
5.2.1	Contingency Sum					
5.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

(Dispatch W206)		
Item	Description	Electrical
1	Preliminary & General Items	
2	Existing Services	
3	Low Voltage Reticulation and Distribution	
4	Electrical Equipment	
5	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 96)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Electrical Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Bulk Services & Existing Services

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
2	Existing Services					
2.1	Bulk Services					
2.1.1	Allow for the electrical connection onto the existing main low voltage panel, including all necessary control and protection switchgear	sum				Rate Only
2.2	Removal of Existing Installation					
2.2.1	Allow for the removal of the redundant portion of the existing electrical engineering services installation and the handing over thereof to the Client, for their safe-keeping	sum				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution					
3.1	Cable Ladder Supply, delivery and installation of cable ladder, complete with all fastening materials Heavy duty, hot-dipped galvanised cable ladder with 800 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.1	Cable Ladder	m				Rate Only
3.1.2	Horizontal Bend	no.				Rate Only
3.1.3	Internal / External Bend	no.				Rate Only
3.1.4	Horizontal Tee	no.				Rate Only
3.1.5	4-way Crossover	no.				Rate Only
3.1.6	Splice	no.				Rate Only
3.1.7	Width Reducing Splice	no.				Rate Only
3.1.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
	Heavy duty, hot-dipped galvanised cable ladder with 450 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.9	Cable Ladder	m				Rate Only
3.1.10	Horizontal Bend	no.				Rate Only
3.1.11	Internal / External Bend	no.				Rate Only
3.1.12	Horizontal Tee	no.				Rate Only
3.1.13	4-way Crossover	no.				Rate Only
3.1.14	Splice	no.				Rate Only
3.1.15	Width Reducing Splice	no.				Rate Only
3.1.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.2	Cable Tray Supply, delivery and installation of cable tray, complete with all fastening materials Heavy duty, hot-dipped galvanised cable tray, 304 mm wide x 2 mm thick, with trapeze brackets					
3.2.1	Cable Tray	m				Rate Only
3.2.2	Horizontal Bend	no.				Rate Only
3.2.3	Internal / External Bend	no.				Rate Only
3.2.4	Horizontal Tee	no.				Rate Only
3.2.5	4-way Crossover	no.				Rate Only
3.2.6	Splice	no.				Rate Only
3.2.7	Width Reducing Splice	no.				Rate Only
3.2.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.2	Cable Tray (continued)					
	Medium duty, hot-dipped galvanised cable tray, 50 mm wide x 1.6 mm thick, with trapeze brackets					
3.2.9	Cable Tray	m	120.00			
3.2.10	Horizontal Bend	no.	8.00			
3.2.11	Internal / External Bend	no.	8.00			
3.2.12	Horizontal Tee	no.	8.00			
3.2.13	4-way Crossover	no.				Rate Only
3.2.14	Splice	no.	40.00			
3.2.15	Width Reducing Splice	no.				Rate Only
3.2.16	Support / Suspension / Trapeze Bracket	no.	120.00			
3.3	Low Voltage (600 / 1000 V) Cables					
	Supply, delivery and installation of PVC PVC SWA ECC PVC type cables, with stranded copper conductors and earth continuity conductors (Installation rate to include for installation in wireways, trays, ducts, trenches, etc. and for the provision of flameproof labels) (excavations measured elsewhere)					
3.3.1	240 mm² x 1 core XLPE insulated PVC sheathed	m				Rate Only
3.3.2	120 mm² x 4 core	m				Rate Only
3.3.3	95 mm² x 4 core	m				Rate Only
3.3.4	70 mm² x 4 core	m				Rate Only
3.3.5	50 mm² x 4 core	m				Rate Only
3.3.6	35 mm² x 4 core	m	145.00			
3.3.7	25 mm² x 4 core	m				Rate Only
3.3.8	10 mm² x 4 core	m				Rate Only
3.3.9	6 mm² x 4 core	m				Rate Only
3.3.10	10 mm² x 2 core	m				Rate Only
3.4	Low Voltage (600 / 1 000 V) Cable Terminations					
	Supply, delivery and installation of cable terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
3.4.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.4.2	120 mm² x 4 core	no.				Rate Only
3.4.3	95 mm² x 4 core	no.				Rate Only
3.4.4	70 mm² x 4 core	no.				Rate Only
3.4.5	50 mm² x 4 core	no.				Rate Only
3.4.6	35 mm² x 4 core	no.	2.00			
3.4.7	25 mm² x 4 core	no.				Rate Only
3.4.8	10 mm² x 4 core	no.				Rate Only
3.4.9	6 mm² x 4 core	no.				Rate Only
3.4.10	10 mm² x 2 core	no.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.5	Low Voltage (600 / 1 000 V) Cable Joints Supply, delivery and installation of cable joints, including all joint capsules, lugs, shrouds, insulating materials and compounds, etc.					
3.5.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.5.2	120 mm² x 4 core	no.				Rate Only
3.5.3	95 mm² x 4 core	no.				Rate Only
3.5.4	70 mm² x 4 core	no.				Rate Only
3.5.5	50 mm² x 4 core	no.				Rate Only
3.5.6	35 mm² x 4 core	no.				Rate Only
3.5.7	25 mm² x 4 core	no.				Rate Only
3.5.8	10 mm² x 4 core	no.				Rate Only
3.5.9	6 mm² x 4 core	no.				Rate Only
3.6	Low Voltage Earthing					
3.6.1	Allow for bonding of the electrical installation	sum	1.00			
3.6.2	Supply and installation of 500 x 25 x 5 mm earth bar, mounted to brickwork / concrete by three off post insulators with suitable rawl bolts, with 10 off 8 mm holes for cable terminations	sum	3.00			
3.7	Earth Spikes Supply, delivery and installation of earth spikes including all fastening materials, lugs, etc.					
3.7.1	1 800 mm x 16 mm diameter	no.				Rate Only
3.7.2	1 200 mm x 16 mm diameter	no.				Rate Only
3.8	Electrical Distribution Boards Allow a provisional sum for the supply, delivery to site, installation of flush mounted unit, incl. fixing goods & lockable hinged doors, as specified in Project Specification and depicted on single line diagrams					
3.8.1	Sub-electrical distribution board	no.		85 000.00	10 625.00	Rate Only
3.8.2	Sub-electrical distribution board	no.	1.00	12 500.00	1 562.50	14 062.50
3.8.3	Sub-electrical distribution board	no.		6 850.00	856.25	Rate Only
3.8.4	Allow for a "profit and attendance" mark-up on Item 3.8.1-3	%	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment					
4.1	Telephone / Data Distribution Boards					
	Supply, delivery and installation of flush mounted telephone / data distribution board, including all fixing goods, architrave, lockable hinged doors and soft timber backing board					
4.1.1	1000 mm x 800 mm 200 mm	no.				Rate Only
4.1.2	800 mm x 800 mm 150 mm	no.				Rate Only
4.1.3	450 mm x 450 mm 150 mm	no.				Rate Only
4.2	Draw Trays					
	Supply, delivery and installation of draw trays, complete with knockouts and covers					
4.2.1	150 mm x 150 mm x 50 mm	no.	1.00			
4.3	Ancillary Low Voltage Electrical Equipment					
	Supply, delivery and installation of ancillary equipment					
4.3.1	10 ampere photoelectric daylight switch	no.				Rate Only
4.4	Light Switches and Occupancy Sensors					
	Supply, delivery and installation of light switches and occupancy sensors, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.4.1	One lever, one way switch	no.	1.00			
4.4.2	One lever, two way switch	no.				Rate Only
4.4.3	Two lever, one way switch	no.				Rate Only
4.4.4	Three lever, one way switch	no.				Rate Only
4.4.5	Four lever, one way switch	no.				Rate Only
4.4.6	One lever, one way switch, with dimmer control	no.				Rate Only
4.4.7	Occupancy sensor, with passive infra-red and microwave motion sensing capabilities, suitable for mounting at 5 m height and with a minimum range of 10 metres	no.				Rate Only
4.5	Luminaires					
4.4.1	Allow a provisional sum for the supply and delivery of luminaires	sum	1.00	44 220.00		44 220.00
4.4.2	Allow for a "profit and attendance" mark-up on Item 4.4.1	%	1.00			
4.4.3	Allow for obtaining suitable luminaires from the respective Luminaire Suppliers and for presenting same to the Consulting Electrical Engineers and / or Principal Architect for approval	%	1.00			
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.5	Luminaires (continued)					
	Allow for the installation of luminaires, either fixed to round conduit boxes cast into brickwork or conduit boxes supported to ceiling / roof structure or mounted in recessed ceiling grid, including all fixing materials and terminations (all conduit, conduit accessories and conductors measured elsewhere)					
4.4.4	Surface, open channel fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.5	Surface, diffused fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.	12.00			
4.4.6	Recessed fluorescent (1200 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.7	Recessed fluorescent (600 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.8	Surface bulkhead to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.9	Recessed downlighter (75 mm diameter to 250 mm diameter cut-out) to finished ceiling	no.				Rate Only
4.4.10	Surface spotlight to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.11	Suspended pendant, with maximum 3 m suspension from exposed trusses / finished ceiling	no.				Rate Only
4.4.12	Surface floodlight, secured to / suspended from exposed trusses / finished ceiling	no.				Rate Only
4.4.13	Uplighter, approximately 700 mm deep, excluding concrete plinth	no.				Rate Only
4.4.14	Bollard, maximum 1.5 m high, excluding concrete plinth	no.				Rate Only
4.4.15	Streetlight luminaire, maximum 4.5 m high, including concrete plinth	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets					
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within or onto ceiling voids, dry-walling, timber, brickwork and / or concrete structures					
4.6.1	5 ampere, three pin, un-switched (white)	no.				Rate Only
4.6.2	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.3	16 ampere, double, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.4	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.	4.00			
4.6.5	16 ampere, double, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.6	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.7	16 ampere, double, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.8	16 ampere, single, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.9	16 ampere, double, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.10	16 ampere, single, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.11	16 ampere, double, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.12	16 ampere, single, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.13	16 ampere, double, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.14	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.15	16 ampere, double, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.16	16 ampere, double, combo three pin / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.17	16 ampere, double, combo three pin / euro / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.18	16 ampere, double, combo three pin / USB, round earth pin, single pole (white)	no.				Rate Only
4.6.19	16 ampere, single, four pin with round earth pin, single pole (white)	no.				Rate Only
4.6.20	16 ampere, single, five pin with round earth pin, single pole (white)	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets (continued)					
4.6.21	16 ampere, single, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
4.6.22	16 ampere, double, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within power skirting, power poles, flush floor ducting and / or under-screed ducting					
4.6.23	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.24	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.25	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.26	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.27	16 ampere, single, USB, single pole (white)	no.				Rate Only
4.6.28	16 ampere, switch (white / red / blue)	no.				Rate Only
4.7	Accessories					
	Supply, delivery and installation of accessories to suit module grid plate type blank covers					
4.7.1	Removable plug	no.				Rate Only
4.7.2	Television aerial socket	no.				Rate Only
4.7.3	8 way 8 contact data socket (CAT 5), with shutter	no.	3.00			
4.7.4	6 way 4 contact telephone socket, with shutter	no.				Rate Only
4.8	Sockets (plug-tops)					
	Supply, delivery and installation of sockets					
4.8.1	5 ampere, three pin with round earth pin	no.				Rate Only
4.8.2	16 ampere, three pin with round earth pin	no.				Rate Only
4.8.3	16 ampere, three pin with 0 degree shaved earth pin	no.				Rate Only
4.8.4	16 ampere, three pin, with 45 degree shaved earth pin	no.				Rate Only
4.8.5	16 ampere, four pin with round earth pin	no.				Rate Only
4.8.6	16 ampere, five pin with round earth pin	no.				Rate Only
4.9	Earth Leakage Units					
	Supply, delivery and installation of moulded case earth leakage units, including wiring to busbars					
4.9.1	SA15A, single pole, 5 kA, 30 mA, 60A	no.	2.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.10	Moulded Case Circuit Breakers Supply, delivery and installation of moulded case circuit breakers, including wiring to busbars / main circuit breaker					
4.10.1	Single pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.2	Single pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.3	Single pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.4	Single pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.5	Single pole & neutral, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.6	Single pole & neutral, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.7	Single pole & neutral, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.8	Single pole & neutral, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.9	Single pole & neutral, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.10	Single pole & neutral, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.11	Double pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.12	Double pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.13	Double pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.14	Double pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.15	Double pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.16	Double pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.17	Triple pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.18	Triple pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.19	Triple pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.20	Triple pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.21	Triple pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.22	Triple pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.23	Triple pole, 5 kA, Curve 1, 40 - 60 A	no.				Rate Only
4.10.24	Triple pole, 5 kA, Curve 2, 40 - 60 A	no.				Rate Only
4.10.25	Triple pole, 5 kA, Curve 1, 80 - 100 A	no.				Rate Only
4.10.26	Triple pole, 5 kA, Curve 2, 80 - 100 A	no.				Rate Only
4.10.27	Triple pole, 5 kA, Curve 2, 125 - 150 A	no.	1.00			
4.10.28	Triple pole, 5 kA, Curve 1, 125 - 150 A	no.				Rate Only
4.11	Moulded Case Switch Disconnectors Supply, delivery and installation of moulded case switch disconnectors, including wiring to busbars					
4.11.1	Single pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.2	Single pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.3	Single pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.4	Double pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.5	Double pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.6	Double pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.7	Triple pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.8	Triple pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.9	Triple pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.10	Triple pole, 5 kA, 150 - 200 A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.12	Switched Isolators Supply, delivery and installation of isolators, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.12.1	30 A, single pole & neutral & earth	no.				Rate Only
4.12.2	45 A, single pole & neutral & earth	no.				Rate Only
4.12.3	60 A, single pole & neutral & earth (equipment)	no.				Rate Only
4.12.4	60 A, triple pole & neutral & earth (equipment)	no.				Rate Only
	Supply, delivery and installation of switched interlock type isolators, excluding outlet boxes, but including base and "male" and "female" adaptors					
4.12.5	16 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.6	32 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.7	63 A, triple pole & neutral & earth (equipment)	no.	1.00			
4.12.8	80 A, triple pole & neutral & earth (equipment)	no.	5.00			
4.12.9	100 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.13	PVC SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.13.1	20 mm diameter conduit	m	163.00			
4.13.2	25 mm diameter conduit	m	133.00			
4.13.3	32 mm diameter conduit	m	10.00			
4.13.4	50 mm diameter conduit	m	100.00			
4.13.5	20 mm diameter conduit, flexible	m	16.00			
4.13.6	25 mm diameter conduit, flexible	m	13.00			
4.14	PVC SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.14.1	50 mm diameter conduit box for 20 mm conduit	no.	27.00			
4.14.2	50 mm diameter conduit extension box for 20 mm	no.	12.00			
4.14.3	50 mm diameter conduit box for 25 mm conduit	no.	12.00			
4.14.4	100 mm x 50 mm x 50 mm conduit box	no.	1.00			
4.14.5	100 mm x 100 mm x 50 mm conduit box	no.	13.00			
4.14.6	Blank standard cover for 50 mm diameter conduit box	no.	27.00			
4.14.7	Blank over-sized cover for 50 mm diameter conduit box	no.	3.00			
4.14.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.14.9	Blank cover for 100 mm x 100 mm conduit box	no.	1.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only
4.15	Galvanised SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.15.1	20 mm diameter conduit	m	8.00			
4.15.2	25 mm diameter conduit	m	7.00			
4.15.3	32 mm diameter conduit	m	1.00			
4.15.4	50 mm diameter conduit	m	5.00			
4.15.5	Extra over for painting conduit (colour to be specified)	m	1.00			
4.16	Galvanised SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.16.1	100 mm x 50 mm x 50 mm conduit box	no.	1.00			
4.16.2	100 mm x 100 mm x 50 mm conduit box	no.	13.00			
4.16.3	50 mm diameter conduit box for 20 mm conduit	no.	1.00			
4.16.4	50 mm diameter conduit box for 25 mm conduit	no.	1.00			
4.16.5	2.5 m x 20 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	12.00			
4.16.6	Blank cover for 100 mm x 50 mm conduit box	no.	1.00			
4.16.7	Blank cover for 100 mm x 100 mm conduit box	no.				
4.17	Insulated Wiring Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.1	2.5 mm², for use as conductors	m	320.00			
4.17.2	4.0 mm², for use as conductors	m			Rate Only	
4.17.3	6.0 mm², for use as conductors	m	160.00			
4.17.4	10.0 mm², for use as conductors	m	1 000.00			
4.17.5	2.5 mm², for use as earth	m	160.00			
4.17.6	4 mm², for use as earth	m	80.00			
4.17.7	6 mm², for use as earth	m	500.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.17	Insulated Wiring (continued)					
	Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.8	16.0 mm², for use as conductors	m				Rate Only
4.17.9	24.0 mm², for use as conductors	m				Rate Only
4.17.10	34.0 mm², for use as conductors	m				Rate Only
4.17.11	50.0 mm², for use as conductors	m				Rate Only
4.17.12	70.0 mm², for use as conductors	m				Rate Only
4.17.13	94.0 mm², for use as conductors	m				Rate Only
4.17.14	10 mm², for use as earth	m				Rate Only
4.17.15	16 mm², for use as earth	m				Rate Only
4.17.16	25 mm², for use as earth	m				Rate Only
4.17.17	35 mm², for use as earth	m				Rate Only
4.17.18	50 mm², for use as earth	m				Rate Only
4.17.19	70 mm², for use as earth	m				Rate Only
	Supply, delivery and installation of conductor terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
4.17.20	10 - 25 mm² conductor / earth	m	20.00			
4.17.21	35 - 70 mm² conductor / earth	m	1.00			
4.17.22	95 mm² conductor / earth	m	1.00			
	Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare earth-continuity-conductor between them, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka twin and earth) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.17.23	2 x 2.5 mm² conductors and 1.5 mm² earth	m	3.00			
4.17.24	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.17.25	2 x 6.0 mm² conductors and 2.5 mm² earth	m	2.00			
4.17.26	2 x 10.0 mm² conductors and 4.0 mm² earth	m	10.00			
4.17.27	3 x 2.5 mm² conductor and 1.5 mm² earth	m	2.00			
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.18	Insulated and Screened Wiring Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium / polyethylene laminate, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka Surfex) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.18.1	2 x 2.5 mm² conductors and 1.5 mm² earth	m	306.00			
4.18.2	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.3	2 x 6.0 mm² conductors and 2.5 mm² earth	m	80.00			
4.18.4	3 x 2.5 mm² conductors and 1.5 mm² earth	m	153.00			
4.18.5	3 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.6	3 x 6.0 mm² conductors and 2.5 mm² earth	m	40.00			
4.18.7	4 x 2.5 mm² conductors and 1.5 mm² earth	m	76.50			
4.18.8	4 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.9	4 x 6.0 mm² conductors and 2.5 mm² earth	m	20.00			
4.19	Under-screed Ducting Supply, delivery and installation of under screed ducting, as specified in Project Specification (outlets measured elsewhere)					
4.19.1	Duct (profile of 220 mm x 35 mm)	m				Rate Only
4.19.2	Drawbox (profile of 300 mm x 300 mm x 65 mm)	no.				Rate Only
4.19.3	External splice	no.				Rate Only
4.19.4	Internal splice	no.				Rate Only
4.19.5	Under screed outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
4.19.6	Conduit / access floor outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.20	Flush floor Ducting Supply, delivery and installation of flush floor ducting, as specified in Project Specification (outlets measured elsewhere)					
4.20.1	Duct (profile of 150 mm x 31 mm)	m				Rate Only
4.20.2	Drawbox (profile of 250 mm x 250 mm x 65 mm)	no.				Rate Only
4.20.3	External splice	no.				Rate Only
4.20.4	Internal splice	no.				Rate Only
4.20.5	Power skirting connector	no.				Rate Only
4.20.6	Pedestal conduit outlet box	no.				Rate Only
4.20.7	Two-way pedestal	no.				Rate Only
4.20.8	Three-way pedestal	no.				Rate Only
4.20.9	Four-way pedestal	no.				Rate Only
4.21	Power Skirting					
4.21.1	Supply, delivery and installation of powerskirting (195 mm x 50 mm profile), including all necessary rigid and flexible covers, partitions, internal dividers, joint covers, accessory frames, cable retaining brackets, internal / external angles, T-junctions, fixing brackets, etc., as required (rate per metre) (outlets measured elsewhere)	m				Rate Only
4.22	Wiring Duct and Accessories Supply, delivery and installation of galvanised wiring duct, including all fixing materials and covers					
	127 mm x 76.2 mm x 1.0 mm					
4.22.1	Duct, complete with PVC cover	m				Rate Only
4.22.2	Pre-Galvanised cover	no.				Rate Only
4.22.3	Splice (internal)	no.				Rate Only
4.22.4	End cap	no.				Rate Only
4.22.5	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.6	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.7	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.8	4-way Crossover, radiused and cover	no.				Rate Only
4.22.9	DB outlet, radiused and cover	no.				Rate Only
4.22.10	Hangers	no.				Rate Only
4.22.11	Wiring Retainer	no.				Rate Only
4.22.12	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
4	Electrical Equipment (continued)	Amount Brought Forward				Rate Only	
4.22	Wiring Duct and Accessories (continued)						
	76 mm x 76.2 mm x 1.0 mm						
4.22.13	Duct, complete with PVC cover	m	72.00				
4.22.14	Pre-Galvanised cover	no.					
4.22.15	Splice (internal)	no.	24.00				
4.22.16	End cap	no.	7.00				
4.22.17	90 degree radiused int / ext. elbow and cover	no.	6.00				
4.22.18	90 degree radiused horizontal elbow and cover	no.	1.00				
4.22.19	Horizontal Tee, radiused and cover	no.	3.00				
4.22.20	4-way Crossover, radiused and cover	no.	1.00				
4.22.21	DB outlet, radiused and cover	no.				Rate Only	
4.22.22	Hangers	no.	36.00				
4.22.23	Wiring Retainer	no.	216.00				
4.22.24	Extra over for painting wiring duct (colour to be specified)	m	4.00				
4.23	Wiring Mesh and Accessories						
	Supply, delivery and installation of galvanised wiring mesh, including all fixing materials						
	150 mm x 50 mm						
4.23.1	Wiring Mesh	m					Rate Only
4.23.2	Horizontal Bend	no.					Rate Only
4.23.3	Internal / External Bend	no.					Rate Only
4.23.4	Horizontal Tee	no.				Rate Only	
4.23.5	4-way Crossover	no.				Rate Only	
4.23.6	Splice	no.				Rate Only	
4.23.7	Holding Down Bracket, including fasteners	no.				Rate Only	
4.24	Wall mounted infrared heater					Rate Only	
	Supply, delivery and installation of Techni lamp infrared zone, 2000 W heater, as specified in Project Specification (outlets measured elsewhere)						
4.24.1	Wall mounted infrared heater	no.					
4.25	Polyester Draw-tape						
4.25.1	2 mm² draw-tape	m	36.00				
4.26	Miscellaneous						
	Provide electrical connection to the following equipment (materials measured elsewhere)						
4.26.1	Single phase equipment	no.					Rate Only
4.26.2	Three phase equipment	no.	6.00				
	Allow a provisional sum for the following miscellaneous items, namely :						
4.26.4	Relays for Automated Doors / Status Panels	no.	4.00				
Total for Schedule carried forward to Summary						R	

Schedule 5 : Provisional Sums and Contingency Sums

Schedule 5 : Provisional Sums and Contingency Sums				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
5	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
5.1	Provisional Sums					
5.1.1	Electricity Service Connections Allow a provisional sum for the :					
5.1.1.1	Provision of a temporary electricity service connection to the Construction Site for use by all Contracting Parties	sum		12 500.00		Rate Only
5.1.1.2	Allow for a "profit and attendance" mark-up on Item 5.1.1.1	%				Rate Only
5.1.2	Lightning Protection System Allow a provisional sum for the provision of the lightning protection services, to be carried out by a Specialist Sub-contractor					
5.1.2.1	Lightning Protection System	sum		5 000.00		Rate Only
5.1.2.2	Allow for a "profit and attendance" mark-up on Item 5.1.2.1	%				Rate Only
5.1.3	Specialist Earthing System Allow a provisional sum for the provision of the specialist earthing services, to be carried out by a Specialist Sub-contractor					
5.1.3.1	Specialist Earthing System	sum				Rate Only
5.1.3.2	Allow for a "profit and attendance" mark-up on Item 5.1.3.1	%				Rate Only
5.2	Contingency Sum					
5.2.1	Contingency Sum					
5.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00			
Total for Schedule carried forward to Summary					R	

Summary Page

(Dispatch CUN)		
Item	Description	Electrical
1	Preliminary & General Items	
2	Existing Services	
3	Low Voltage Reticulation and Distribution	
4	Electrical Equipment	
5	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 96)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Electrical			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Electrical Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Rate Only

Schedule 2 : Bulk Services & Existing Services

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
2	Existing Services					
2.1	Bulk Services					
2.1.1	Allow for the electrical connection onto the existing main low voltage panel, including all necessary control and protection switchgear	sum				Rate Only
2.2	Removal of Existing Installation					
2.2.1	Allow for the removal of the redundant portion of the existing electrical engineering services installation and the handing over thereof to the Client, for their safe-keeping	sum				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Item	Description	Unit	Qty	Electrical		
				Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution					
3.1	Cable Ladder Supply, delivery and installation of cable ladder, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable ladder with 800 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.1	Cable Ladder	m				Rate Only
3.1.2	Horizontal Bend	no.				Rate Only
3.1.3	Internal / External Bend	no.				Rate Only
3.1.4	Horizontal Tee	no.				Rate Only
3.1.5	4-way Crossover	no.				Rate Only
3.1.6	Splice	no.				Rate Only
3.1.7	Width Reducing Splice	no.				Rate Only
3.1.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
	Heavy duty, hot-dipped galvanised cable ladder with 450 mm wide x 2 mm thick cross rung, 76 mm high x 2 mm thick side rail, rung spacing of 300 mm, with trapeze brackets					
3.1.9	Cable Ladder	m				Rate Only
3.1.10	Horizontal Bend	no.				Rate Only
3.1.11	Internal / External Bend	no.				Rate Only
3.1.12	Horizontal Tee	no.				Rate Only
3.1.13	4-way Crossover	no.				Rate Only
3.1.14	Splice	no.				Rate Only
3.1.15	Width Reducing Splice	no.				Rate Only
3.1.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.2	Cable Tray Supply, delivery and installation of cable tray, complete with all fastening materials					
	Heavy duty, hot-dipped galvanised cable tray, 304 mm wide x 2 mm thick, with trapeze brackets					
3.2.1	Cable Tray	m				Rate Only
3.2.2	Horizontal Bend	no.				Rate Only
3.2.3	Internal / External Bend	no.				Rate Only
3.2.4	Horizontal Tee	no.				Rate Only
3.2.5	4-way Crossover	no.				Rate Only
3.2.6	Splice	no.				Rate Only
3.2.7	Width Reducing Splice	no.				Rate Only
3.2.8	Support / Suspension / Trapeze Bracket	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.2	Cable Tray (continued)					
	Medium duty, hot-dipped galvanised cable tray, 304 mm wide x 1.6 mm thick, with trapeze brackets					
3.2.9	Cable Tray	m				Rate Only
3.2.10	Horizontal Bend	no.				Rate Only
3.2.11	Internal / External Bend	no.				Rate Only
3.2.12	Horizontal Tee	no.				Rate Only
3.2.13	4-way Crossover	no.				Rate Only
3.2.14	Splice	no.				Rate Only
3.2.15	Width Reducing Splice	no.				Rate Only
3.2.16	Support / Suspension / Trapeze Bracket	no.				Rate Only
3.3	Low Voltage (600 / 1000 V) Cables					
	Supply, delivery and installation of PVC PVC SWA ECC PVC type cables, with stranded copper conductors and earth continuity conductors (Installation rate to include for installation in wireways, trays, ducts, trenches, etc. and for the provision of flameproof labels) (excavations measured elsewhere)					
3.3.1	240 mm² x 1 core XLPE insulated PVC sheathed	m				Rate Only
3.3.2	120 mm² x 4 core	m				Rate Only
3.3.3	95 mm² x 4 core	m				Rate Only
3.3.4	70 mm² x 4 core	m				Rate Only
3.3.5	50 mm² x 4 core	m				Rate Only
3.3.6	35 mm² x 4 core	m				Rate Only
3.3.7	25 mm² x 4 core	m				Rate Only
3.3.8	10 mm² x 4 core	m				Rate Only
3.3.9	6 mm² x 4 core	m	110.00			
3.3.10	10 mm² x 2 core	m				Rate Only
3.4	Low Voltage (600 / 1 000 V) Cable Terminations					
	Supply, delivery and installation of cable terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
3.4.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.4.2	120 mm² x 4 core	no.				Rate Only
3.4.3	95 mm² x 4 core	no.				Rate Only
3.4.4	70 mm² x 4 core	no.				Rate Only
3.4.5	50 mm² x 4 core	no.				Rate Only
3.4.6	35 mm² x 4 core	no.				Rate Only
3.4.7	25 mm² x 4 core	no.				Rate Only
3.4.8	10 mm² x 4 core	no.				Rate Only
3.4.9	6 mm² x 4 core	no.	4.00			
3.4.10	10 mm² x 2 core	no.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Low Voltage Reticulation and Distribution

Schedule 3 : Low Voltage Reticulation and Distribution				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Low Voltage Reticulation and Distribution (continued)	Amount Brought Forward				
3.5	Low Voltage (600 / 1 000 V) Cable Joints Supply, delivery and installation of cable joints, including all joint capsules, lugs, shrouds, insulating materials and compounds, etc.					
3.5.1	240 mm² x 1 core XLPE insulated PVC sheathed	no.				Rate Only
3.5.2	120 mm² x 4 core	no.				Rate Only
3.5.3	95 mm² x 4 core	no.				Rate Only
3.5.4	70 mm² x 4 core	no.				Rate Only
3.5.5	50 mm² x 4 core	no.				Rate Only
3.5.6	35 mm² x 4 core	no.				Rate Only
3.5.7	25 mm² x 4 core	no.				Rate Only
3.5.8	10 mm² x 4 core	no.				Rate Only
3.5.9	6 mm² x 4 core	no.				Rate Only
3.6	Low Voltage Earthing					
3.6.1	Allow for bonding of the electrical installation	sum	1.00			
3.6.2	Supply and installation of 500 x 25 x 5 mm earth bar, mounted to brickwork / concrete by three off post insulators with suitable rawl bolts, with 10 off 8 mm holes for cable terminations	sum				Rate Only
3.7	Earth Spikes Supply, delivery and installation of earth spikes including all fastening materials, lugs, etc.					
3.7.1	1 800 mm x 16 mm diameter	no.				Rate Only
3.7.2	1 200 mm x 16 mm diameter	no.				Rate Only
3.8	Electrical Distribution Boards Allow a provisional sum for the supply, delivery to site, installation of flush mounted unit, incl. fixing goods & lockable hinged doors, as specified in Project Specification and depicted on single line diagrams					
3.8.1	Sub-electrical distribution board	no.		85 000.00	10 625.00	Rate Only
3.8.2	Sub-electrical distribution board	no.		12 500.00	1 562.50	Rate Only
3.8.3	Sub-electrical distribution board	no.		6 850.00	856.25	Rate Only
3.8.4	Allow for a "profit and attendance" mark-up on Item 3.8.1-3	%				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 4 : Electrical Equipment

				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment					
4.1	Telephone / Data Distribution Boards					
	Supply, delivery and installation of flush mounted telephone / data distribution board, including all fixing goods, architrave, lockable hinged doors and soft timber backing board					
4.1.1	1000 mm x 800 mm 200 mm	no.				Rate Only
4.1.2	800 mm x 800 mm 150 mm	no.				Rate Only
4.1.3	450 mm x 450 mm 150 mm	no.				Rate Only
4.2	Draw Trays					
	Supply, delivery and installation of draw trays, complete with knockouts and covers					
4.2.1	150 mm x 150 mm x 50 mm	no.				Rate Only
4.3	Ancillary Low Voltage Electrical Equipment					
	Supply, delivery and installation of ancillary equipment					
4.3.1	10 ampere photoelectric daylight switch	no.				Rate Only
4.4	Light Switches and Occupancy Sensors					
	Supply, delivery and installation of light switches and occupancy sensors, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.4.1	One lever, one way switch	no.				Rate Only
4.4.2	One lever, two way switch	no.				Rate Only
4.4.3	Two lever, one way switch	no.				Rate Only
4.4.4	Three lever, one way switch	no.				Rate Only
4.4.5	Four lever, one way switch	no.				Rate Only
4.4.6	One lever, one way switch, with dimmer control	no.				Rate Only
4.4.7	Occupancy sensor, with passive infra-red and microwave motion sensing capabilities, suitable for mounting at 5 m height and with a minimum range of 10 metres	no.				Rate Only
4.5	Luminaires					
4.4.1	Allow a provisional sum for the supply and delivery of luminaires	sum		289 870.00		Rate Only
4.4.2	Allow for a "profit and attendance" mark-up on Item 4.4.1	%				Rate Only
4.4.3	Allow for obtaining suitable luminaires from the respective Luminaire Suppliers and for presenting same to the Consulting Electrical Engineers and / or Principal Architect for approval	%				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.5	Luminaires (continued)					
	Allow for the installation of luminaires, either fixed to round conduit boxes cast into brickwork or conduit boxes supported to ceiling / roof structure or mounted in recessed ceiling grid, including all fixing materials and terminations (all conduit, conduit accessories and conductors measured elsewhere)					
4.4.4	Surface, open channel fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.5	Surface, diffused fluorescent to concrete roof slab / finished ceiling / brick wall / trunking	no.				Rate Only
4.4.6	Recessed fluorescent (1200 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.7	Recessed fluorescent (600 mm x 600 mm) into suspended ceiling	no.				Rate Only
4.4.8	Surface bulkhead to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.9	Recessed downlighter (75 mm diameter to 250 mm diameter cut-out) to finished ceiling	no.				Rate Only
4.4.10	Surface spotlight to concrete roof slab / finished ceiling / brick wall / drywall	no.				Rate Only
4.4.11	Suspended pendant, with maximum 3 m suspension from exposed trusses / finished ceiling	no.				Rate Only
4.4.12	Surface floodlight, secured to / suspended from exposed trusses / finished ceiling	no.				Rate Only
4.4.13	Uplighter, approximately 700 mm deep, excluding concrete plinth	no.				Rate Only
4.4.14	Bollard, maximum 1.5 m high, excluding concrete plinth	no.				Rate Only
4.4.15	Streetlight luminaire, maximum 4.5 m high, including concrete plinth	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within or onto ceiling voids, dry-walling, timber, brickwork and / or concrete structures					
4.6.1	5 ampere, three pin, un-switched (white)	no.				Rate Only
4.6.2	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.3	16 ampere, double, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.4	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.5	16 ampere, double, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.6	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.7	16 ampere, double, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.8	16 ampere, single, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.9	16 ampere, double, three pin, round earth pin, double pole (white)	no.				Rate Only
4.6.10	16 ampere, single, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.11	16 ampere, double, three pin, 0 degree shaved earth pin, double pole (red)	no.				Rate Only
4.6.12	16 ampere, single, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.13	16 ampere, double, three pin, -45 degree shaved earth pin, double pole (blue)	no.				Rate Only
4.6.14	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.15	16 ampere, double, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.16	16 ampere, double, combo three pin / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.17	16 ampere, double, combo three pin / euro / euro, round earth pin, single pole (white)	no.				Rate Only
4.6.18	16 ampere, double, combo three pin / USB, round earth pin, single pole (white)	no.				Rate Only
4.6.19	16 ampere, single, four pin with round earth pin, single pole (white)	no.				Rate Only
4.6.20	16 ampere, single, five pin with round earth pin, single pole (white)	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.6	Socket Outlets (continued)					
4.6.21	16 ampere, single, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
4.6.22	16 ampere, double, three pin, round earth pin, single pole, industrial (white)	no.				Rate Only
	Supply, delivery and installation of socket outlets, excluding conduit outlet boxes, but including covers and surrounds, for fitment within power skirting, power poles, flush floor ducting and / or under-screed ducting					
4.6.23	16 ampere, single, three pin, round earth pin, single pole (white)	no.				Rate Only
4.6.24	16 ampere, single, three pin, 0 degree shaved earth pin, single pole (red)	no.				Rate Only
4.6.25	16 ampere, single, three pin, -45 degree shaved earth pin, single pole (blue)	no.				Rate Only
4.6.26	16 ampere, single, euro, round earth pin, single pole (white)	no.				Rate Only
4.6.27	16 ampere, single, USB, single pole (white)	no.				Rate Only
4.6.28	16 ampere, switch (white / red / blue)	no.				Rate Only
4.7	Accessories					
	Supply, delivery and installation of accessories to suit module grid plate type blank covers					
4.7.1	Removable plug	no.				Rate Only
4.7.2	Television aerial socket	no.				Rate Only
4.7.3	8 way 8 contact data socket (CAT 5), with shutter	no.				Rate Only
4.7.4	6 way 4 contact telephone socket, with shutter	no.				Rate Only
4.8	Sockets (plug-tops)					
	Supply, delivery and installation of sockets					
4.8.1	5 ampere, three pin with round earth pin	no.				Rate Only
4.8.2	16 ampere, three pin with round earth pin	no.				Rate Only
4.8.3	16 ampere, three pin with 0 degree shaved earth pin	no.				Rate Only
4.8.4	16 ampere, three pin, with 45 degree shaved earth pin	no.				Rate Only
4.8.5	16 ampere, four pin with round earth pin	no.				Rate Only
4.8.6	16 ampere, five pin with round earth pin	no.				Rate Only
4.9	Earth Leakage Units					
	Supply, delivery and installation of moulded case earth leakage units, including wiring to busbars					
4.9.1	SA15A, single pole, 5 kA, 30 mA, 60A	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.10	Moulded Case Circuit Breakers Supply, delivery and installation of moulded case circuit breakers, including wiring to busbars / main circuit breaker					
4.10.1	Single pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.2	Single pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.3	Single pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.4	Single pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.5	Single pole & neutral, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.6	Single pole & neutral, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.7	Single pole & neutral, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.8	Single pole & neutral, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.9	Single pole & neutral, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.10	Single pole & neutral, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.11	Double pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.12	Double pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.13	Double pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.14	Double pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.15	Double pole, 5 kA, Curve 1, 25 - 30 A	no.				Rate Only
4.10.16	Double pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.17	Triple pole, 5 kA, Curve 1, 0 - 10 A	no.				Rate Only
4.10.18	Triple pole, 5 kA, Curve 2, 0 - 10 A	no.				Rate Only
4.10.19	Triple pole, 5 kA, Curve 1, 15 - 20 A	no.				Rate Only
4.10.20	Triple pole, 5 kA, Curve 2, 15 - 20 A	no.				Rate Only
4.10.21	Triple pole, 5 kA, Curve 1, 25 - 30 A	no.	2.00			
4.10.22	Triple pole, 5 kA, Curve 2, 25 - 30 A	no.				Rate Only
4.10.23	Triple pole, 5 kA, Curve 1, 40 - 60 A	no.				Rate Only
4.10.24	Triple pole, 5 kA, Curve 2, 40 - 60 A	no.				Rate Only
4.10.25	Triple pole, 5 kA, Curve 1, 80 - 100 A	no.				Rate Only
4.10.26	Triple pole, 5 kA, Curve 2, 80 - 100 A	no.				Rate Only
4.10.27	Triple pole, 5 kA, Curve 2, 125 - 150 A	no.				Rate Only
4.10.28	Triple pole, 5 kA, Curve 1, 125 - 150 A	no.				Rate Only
4.11	Moulded Case Switch Disconnectors Supply, delivery and installation of moulded case switch disconnectors, including wiring to busbars					
4.11.1	Single pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.2	Single pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.3	Single pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.4	Double pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.5	Double pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.6	Double pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.7	Triple pole, 5 kA, 0 - 30 A	no.				Rate Only
4.11.8	Triple pole, 5 kA, 40 - 60 A	no.				Rate Only
4.11.9	Triple pole, 5 kA, 80 - 125 A	no.				Rate Only
4.11.10	Triple pole, 5 kA, 150 - 200 A	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.12	Switched Isolators Supply, delivery and installation of isolators, excluding outlet boxes, but including covers and surrounds, mounted to outlet boxes					
4.12.1	30 A, single pole & neutral & earth	no.				Rate Only
4.12.2	45 A, single pole & neutral & earth	no.				Rate Only
4.12.3	60 A, single pole & neutral & earth (equipment)	no.				Rate Only
4.12.4	60 A, triple pole & neutral & earth (equipment)	no.				Rate Only
	Supply, delivery and installation of switched interlock type isolators, excluding outlet boxes, but including base and "male" and "female" adaptors					
4.12.5	16 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.6	32 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.7	63 A, triple pole & neutral & earth (equipment)	no.	2.00			
4.12.8	80 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.12.9	100 A, triple pole & neutral & earth (equipment)	no.				Rate Only
4.13	PVC SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.13.1	20 mm diameter conduit	m				Rate Only
4.13.2	25 mm diameter conduit	m				Rate Only
4.13.3	32 mm diameter conduit	m	120.00			
4.13.4	50 mm diameter conduit	m				Rate Only
4.13.5	20 mm diameter conduit, flexible	m				Rate Only
4.13.6	25 mm diameter conduit, flexible	m				Rate Only
4.14	PVC SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.14.1	50 mm diameter conduit box for 20 mm conduit	no.				Rate Only
4.14.2	50 mm diameter conduit extension box for 20 mm	no.				Rate Only
4.14.3	50 mm diameter conduit box for 25 mm conduit	no.				Rate Only
4.14.4	100 mm x 50 mm x 50 mm conduit box	no.				Rate Only
4.14.5	100 mm x 100 mm x 50 mm conduit box	no.	2.00			
4.14.6	Blank standard cover for 50 mm diameter conduit box	no.				Rate Only
4.14.7	Blank over-sized cover for 50 mm diameter conduit box	no.				Rate Only
4.14.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.14.9	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.15	Galvanised SANS Approved Conduit Supply, delivery and installation of conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, saddles, etc.					
4.15.1	20 mm diameter conduit	m				Rate Only
4.15.2	25 mm diameter conduit	m				Rate Only
4.15.3	32 mm diameter conduit	m	6.00			
4.15.4	50 mm diameter conduit	m				Rate Only
4.15.5	Extra over for painting conduit (colour to be specified)	m				Rate Only
4.16	Galvanised SANS Approved Conduit Accessories Supply, delivery and installation of conduit accessories on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, mounting screws, cover screws, etc.					
4.16.1	100 mm x 50 mm x 50 mm conduit box	no.				Rate Only
4.16.2	100 mm x 100 mm x 50 mm conduit box	no.	2.00			
4.16.3	50 mm diameter conduit box for 20 mm conduit	no.				Rate Only
4.16.4	50 mm diameter conduit box for 25 mm conduit	no.				Rate Only
4.16.5	2.5 m x 20 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	12.00			
4.16.6	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
4.16.7	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
4.17	Insulated Wiring Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.1	2.5 mm², for use as conductors	m				Rate Only
4.17.2	4.0 mm², for use as conductors	m				Rate Only
4.17.3	6.0 mm², for use as conductors	m				Rate Only
4.17.4	10.0 mm², for use as conductors	m				Rate Only
4.17.5	2.5 mm², for use as earth	m				Rate Only
4.17.6	4 mm², for use as earth	m				Rate Only
4.17.7	6 mm², for use as earth	m				Rate Only
Total for Schedule carried forward to Summary						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.17	Insulated Wiring (continued)					
	Supply, delivery and installation of high conductivity, annealed stranded copper conductors, insulated with general purpose grade PVC in plain (blue, black, yellow / green, white and red) colours, with a voltage rating of 600 / 1000 V (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) within conduit and / or specified wireways					
4.17.8	16.0 mm², for use as conductors	m				Rate Only
4.17.9	24.0 mm², for use as conductors	m				Rate Only
4.17.10	34.0 mm², for use as conductors	m				Rate Only
4.17.11	50.0 mm², for use as conductors	m				Rate Only
4.17.12	70.0 mm², for use as conductors	m				Rate Only
4.17.13	94.0 mm², for use as conductors	m				Rate Only
4.17.14	10 mm², for use as earth	m				Rate Only
4.17.15	16 mm², for use as earth	m				Rate Only
4.17.16	25 mm², for use as earth	m				Rate Only
4.17.17	35 mm², for use as earth	m				Rate Only
4.17.18	50 mm², for use as earth	m				Rate Only
4.17.19	70 mm², for use as earth	m				Rate Only
	Supply, delivery and installation of conductor terminations, including all fastening materials, glands, shrouds, lugs, insulating materials, etc.					
4.17.20	10 - 25 mm² conductor / earth	m				Rate Only
4.17.21	35 - 70 mm² conductor / earth	m				Rate Only
4.17.22	95 mm² conductor / earth	m				Rate Only
	Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare earth-continuity-conductor between them, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka twin and earth) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.17.23	2 x 2.5 mm² conductors and 1.5 mm² earth	m				Rate Only
4.17.24	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.17.25	2 x 6.0 mm² conductors and 2.5 mm² earth	m				Rate Only
4.17.26	2 x 10.0 mm² conductors and 4.0 mm² earth	m				Rate Only
4.17.27	3 x 2.5 mm² conductor and 1.5 mm² earth	m				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.18	Insulated and Screened Wiring Supply, delivery and installation of high conductivity, stranded or solid copper conductors, insulated with general purpose grade PVC, laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium / polyethylene laminate, with a outer UV-stabilised PVC sheath (either white or black), with a voltage rating of 300 / 500 V (aka Surfex) (all manufactured in accordance with SANS 1411 Part 1, SANS 1411 Part 2 and SANS 1507-3) drawn into wireways, fixed surface or beneath plaster, including necessary glands					
4.18.1	2 x 2.5 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.2	2 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.3	2 x 6.0 mm² conductors and 2.5 mm² earth	m				Rate Only
4.18.4	3 x 2.5 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.5	3 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.6	3 x 6.0 mm² conductors and 2.5 mm² earth	m				Rate Only
4.18.7	4 x 2.5 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.8	4 x 4.0 mm² conductors and 1.5 mm² earth	m				Rate Only
4.18.9	4 x 6.0 mm² conductors and 2.5 mm² earth	m				Rate Only
4.19	Under-screed Ducting Supply, delivery and installation of under screed ducting, as specified in Project Specification (outlets measured elsewhere)					
4.19.1	Duct (profile of 220 mm x 35 mm)	m				Rate Only
4.19.2	Drawbox (profile of 300 mm x 300 mm x 65 mm)	no.				Rate Only
4.19.3	External splice	no.				Rate Only
4.19.4	Internal splice	no.				Rate Only
4.19.5	Under screed outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
4.19.6	Conduit / access floor outlet kit, including concrete ingress prevention plate, 3 universal modular outlet plates, plastic carpet frame and lid	no.				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.20	Flush floor Ducting Supply, delivery and installation of flush floor ducting, as specified in Project Specification (outlets measured elsewhere)					
4.20.1	Duct (profile of 150 mm x 31 mm)	m				Rate Only
4.20.2	Drawbox (profile of 250 mm x 250 mm x 65 mm)	no.				Rate Only
4.20.3	External splice	no.				Rate Only
4.20.4	Internal splice	no.				Rate Only
4.20.5	Power skirting connector	no.				Rate Only
4.20.6	Pedestal conduit outlet box	no.				Rate Only
4.20.7	Two-way pedestal	no.				Rate Only
4.20.8	Three-way pedestal	no.				Rate Only
4.20.9	Four-way pedestal	no.				Rate Only
4.21	Power Skirting Supply, delivery and installation of powerskirting (195 mm x 50 mm profile), including all necessary rigid and flexible covers, partitions, internal dividers, joint covers, accessory frames, cable retaining brackets, internal / external angles, T-junctions, fixing brackets, etc., as required (rate per metre) (outlets measured elsewhere)	m				Rate Only
4.22	Wiring Duct and Accessories Supply, delivery and installation of galvanised wiring duct, including all fixing materials and covers 127 mm x 76.2 mm x 1.0 mm					
4.22.1	Duct, complete with PVC cover	m				Rate Only
4.22.2	Pre-Galvanised cover	no.				Rate Only
4.22.3	Splice (internal)	no.				Rate Only
4.22.4	End cap	no.				Rate Only
4.22.5	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.6	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.7	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.8	4-way Crossover, radiused and cover	no.				Rate Only
4.22.9	DB outlet, radiused and cover	no.				Rate Only
4.22.10	Hangers	no.				Rate Only
4.22.11	Wiring Retainer	no.				Rate Only
4.22.12	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
Total for Schedule carried forward						R

Schedule 4 : Electrical Equipment

Schedule 4 : Electrical Equipment				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Electrical Equipment (continued)	Amount Brought Forward				
4.22	Wiring Duct and Accessories (continued)					
	76 mm x 76.2 mm x 1.0 mm					
4.22.13	Duct, complete with PVC cover	m				Rate Only
4.22.14	Pre-Galvanised cover	no.				Rate Only
4.22.15	Splice (internal)	no.				Rate Only
4.22.16	End cap	no.				Rate Only
4.22.17	90 degree radiused int / ext. elbow and cover	no.				Rate Only
4.22.18	90 degree radiused horizontal elbow and cover	no.				Rate Only
4.22.19	Horizontal Tee, radiused and cover	no.				Rate Only
4.22.20	4-way Crossover, radiused and cover	no.				Rate Only
4.22.21	DB outlet, radiused and cover	no.				Rate Only
4.22.22	Hangers	no.				Rate Only
4.22.23	Wiring Retainer	no.				Rate Only
4.22.24	Extra over for painting wiring duct (colour to be specified)	m				Rate Only
4.23	Wiring Mesh and Accessories					
	Supply, delivery and installation of galvanised wiring mesh, including all fixing materials					
	150 mm x 50 mm					
4.23.1	Wiring Mesh	m				Rate Only
4.23.2	Horizontal Bend	no.				Rate Only
4.23.3	Internal / External Bend	no.				Rate Only
4.23.4	Horizontal Tee	no.				Rate Only
4.23.5	4-way Crossover	no.				Rate Only
4.23.6	Splice	no.				Rate Only
4.23.7	Holding Down Bracket, including fasteners	no.				Rate Only
4.24	Wall mounted infrared heater					
	Supply, delivery and installation of Techni lamp infrared zone, 2000 W heater, as specified in Project Specification (outlets measured elsewhere)					
4.24.1	Wall mounted infrared heater	no.				Rate Only
4.25	Polyester Draw-tape					
4.25.1	2 mm² draw-tape	m				Rate Only
4.26	Miscellaneous					
	Provide electrical connection to the following equipment (materials measured elsewhere)					
4.26.1	Single phase equipment	no.				Rate Only
4.26.2	Three phase equipment	no.	2.00			
	Allow a provisional sum for the following miscellaneous items, namely :					
4.26.4	Relays for Automated Doors / Status Panels	no.				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 5 : Provisional Sums and Contingency Sums

Schedule 5 : Provisional Sums and Contingency Sums				Electrical		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
5	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
5.1	Provisional Sums					
5.1.1	Electricity Service Connections Allow a provisional sum for the :					
5.1.1.1	Provision of a temporary electricity service connection to the Construction Site for use by all Contracting Parties	sum		12 500.00		Rate Only
5.1.1.2	Allow for a "profit and attendance" mark-up on Item 5.1.1.1	%				Rate Only
5.1.2	Lightning Protection System Allow a provisional sum for the provision of the lightning protection services, to be carried out by a Specialist Sub-contractor					
5.1.2.1	Lightning Protection System	sum		1 500.00		Rate Only
5.1.2.2	Allow for a "profit and attendance" mark-up on Item 5.1.2.1	%				Rate Only
5.1.3	Specialist Earthing System Allow a provisional sum for the provision of the specialist earthing services, to be carried out by a Specialist Sub-contractor					
5.1.3.1	Specialist Earthing System	sum				Rate Only
5.1.3.2	Allow for a "profit and attendance" mark-up on Item 5.1.3.1	%				Rate Only
5.2	Contingency Sum					
5.2.1	Contingency Sum					
5.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00			
Total for Schedule carried forward to Summary					R	

Summary Page

(Tugger Route)		
Item	Description	Electrical
1	Preliminary & General Items	
2	Existing Services	
3	Low Voltage Reticulation and Distribution	
4	Electrical Equipment	
5	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 96)		

Description	(Factory Mezzanine)	(Foam Cell Enclosure)	(Dispatch W206)	(Dispatch CUN)	(Tugger Route)	Accumulative Values
Preliminary & General Items						
Existing Services						
Low Voltage Reticulation and Distribution						
Electrical Equipment						
Provisional Sums and Contingency Sums						
Sub-totals						
Nett Value carried forward to Part A of Final Summary						

PART B

MECHANICAL WORKS

AIR-CONDITIONING & VENTILATION INSTALLATION

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Air-conditioning & Ventilation		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Air-conditioning & Ventilation			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the AC&V Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Air-conditioning Installation

				Air-conditioning & Ventilation		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Air-conditioning Installation <i>The schedule shall be read with the drawings and project specifications of the tender document. The price submitted in this schedule will deem all installations to be priced for completed and operational installations</i>					
	The air conditioning split units listed below must include for a drain from each unit fed to a suitable drain nearby. The drain shall have a fall of not less than 1:100 and be adequately supported as per SABS specifications. All refrigerant pipework run in ceiling void to be in galvanised tray or galvanised tray with cover and painted to Architects colour when routed externally.					
2.1	AHU-1					
2.1.1	MAXAIR 98 kW Air-handling unit supplying 11750 l/s of air (Model MAH C VRV) including primary and secondary filters and magnihelic gauges over filters <i>Contact: Air Options (Pty) Ltd (Mr. C. Yorke) 021 905 2000</i>	no	1.00			
2.1.2	Supply air ducting external to the building to be galvanised sheet metal with 50 mm polystyrene insulation, flame retardant and vapour seal and clad with galvanised sheet metal, waterproofed at all joints	sum	1.00			
2.1.3	Supply air internal ducting, inclusive of round, square and triangular ducting to be gsm externally wrapped in 25 mm foil faced fibre glass. All joints to be well sealed	sum	1.00			
2.1.4	Return air ducting external to the building to be galvanised sheet metal with 50 mm polystyrene insulation, flame retardant and vapour seal and clad with galvanised sheet metal, waterproofed at all joints including 350 x 300 mm fresh air cowl	sum	1.00			
2.1.5	Return air internal ducting to be gsm externally wrapped in 25 mm foil faced fibre glass. All joints to be well sealed	sum	1.00			
2.1.6	1200 mm long Clean seal type sound attenuator for Ø1200 for supply air ducting	no	1.00			
2.1.7	1200 mm long Clean seal type sound attenuator for Ø900 for return air ducting	no	1.00			
2.1.8	Supply air diffuser, High Volume Ø630 Trox VDL or similar	no	18.00			
2.1.9	Aluminium return air louver 600 x 600 mm	no	10.00			
2.1.10	Secondary bag filters (replacement set)	no	1.00			
2.1.11	Allow for servicing during "defects liability period"	no	1.00			
Total for Schedule carried forward					R	

Schedule 2 : Air-conditioning Installation

				Air-conditioning & Ventilation		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Air-conditioning Installation			Amount Brought Forward		
2.1.12	Daikin VRV IV heat pump outdoor unit RXYQ18U including Bluchem	no	4.00			
2.1.13	Expansion valve kit EKEXV400	no	4.00			
2.1.14	Control Box EKEQFCBA	no	4.00			
2.1.15	KHRQ22M75T	no	2.00			
2.1.16	BRP2A81-WIRE	no	2.00			
2.1.17	Wired Control for the VRV System	no	2.00			
2.2	Bluchem Protection					
2.2.1	Bluchem VRV Condenser	no	4.00			
2.3	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
2.3.1	20 mm diameter conduit	m	5.00			
2.3.2	25 mm diameter conduit	m	100.00			
2.3.3	32 mm diameter conduit	m	3.00			
2.3.4	50 mm diameter conduit	m	1.00			
2.3.5	20 mm diameter conduit, flexible	m				Rate Only
2.3.6	25 mm diameter conduit, flexible	m	5.00			
2.4	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
2.4.1	50 mm diameter conduit box for 20 mm conduit	no.				Rate Only
2.4.2	50 mm diameter conduit extension box for 20 mm	no.				Rate Only
2.4.3	50 mm diameter conduit box for 25 mm conduit	no.	9.00			
2.4.4	100 mm x 50 mm x 50 mm conduit box	no.	3.00			
2.4.5	100 mm x 100 mm x 50 mm conduit box	no.				Rate Only
2.4.6	Blank standard cover for 50 mm diameter conduit box	no.				Rate Only
2.4.7	Blank over-sized cover for 50 mm diameter conduit box	no.				Rate Only
2.4.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
2.4.9	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Ventilation Installation

Schedule 3 : Ventilation Installation				Air-conditioning & Ventilation		
				Rates		Nett Amount
				Supply	Install	
3	Ventilation Installation					
3.1	EAF-1 & EAF-2					
3.1.1	Ø630 (10 blade or similar) fan extracting 3734 l/s at a static pressure 300 Pa including one off 1.5 D sound attenuators for a quiet running system, with plenum box including washable filters	no	2.00			
3.1.2	Galvanised uninsulated circular sheet metal ducting, inclusive of branch ducting and flexible ducting	sum	2.00			
3.1.3	2000 mm x 1200 mm extraction canopy including galvanized bird mesh type grating / grille	no	2.00			
3.1.4	Corrosion resistance cowl including bird mesh including soaker sheets and black flashing	sum	2.00			
3.2	Control Foam Cell Enclosure Supply and install MCC system control panel. The control panel will comprise an IP55 Mild Steel enclosure with an orange powder coated finish. The control panel will have the following indication equipment for each fan; Power ON indicator. The control panel will be fitted with manual selector switches. The fans to switched off / close in the event of a fire via a fire signal from the fire detection and sprinkler					
3.2.1	Control Panel (CP)	no	2.00			
3.3	EAF-3					
3.3.1	Ø630 (10 blade or similar) fan extracting 1634 l/s at a static pressure 250 Pa including one off 1.5 D sound attenuators for a quiet running system, with plenum box including washable filters	no				Rate Only
3.3.2	Galvanised uninsulated circular sheet metal ducting, inclusive of branch ducting and flexible ducting	sum				Rate Only
3.3.3	5700 mm x 1200 mmm extraction canopy including bird mesh type grating / grille	no				Rate Only
3.3.4	Corrosion resistance cowl including bird mesh including soaker sheets and black flashing	sum				Rate Only
3.4	Control CUN Dispatch Supply and install MCC system control panel. The control panel will comprise an IP55 Mild Steel enclosure with an orange powder coated finish. The control panel will have the following indication equipment for each fan; Power ON indicator. The control panel will be fitted with manual selector switches. The fans to switched off / close in the event of a fire via a fire signal from the fire detection and sprinkler					
Total for Schedule carried forward					R	

Schedule 3 : Ventilation Installation

				Air-conditioning & Ventilation		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Ventilation Installation			Amount Brought Forward		
3..4.1	Control Panel (CP)	no				Rate Only
3.5	Provisional Sum					
3.5.1	Allow a provisional sum for any additional waterproofing / backflashing, necessary fixings, fasteners and installation consumables etc. to complete the installation and ensure a weather proof installation on completion (per louver through sheeting)	sum	1.00			
3.6	Galvanised SANS Approved Conduit and					
	Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
3.6.1	20 mm diameter conduit	m	2.00			
3.6.2	25 mm diameter conduit	m	40.00			
3.6.3	32 mm diameter conduit	m	1.00			
3.6.4	50 mm diameter conduit	m				Rate Only
3.6.5	20 mm diameter conduit, flexible	m				Rate Only
3.6.6	25 mm diameter conduit, flexible	m	2.00			
3.7	Galvanised SANS Approved Conduit and					
	Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
3.7.1	50 mm diameter conduit box for 20 mm conduit	no.				Rate Only
3.7.2	50 mm diameter conduit extension box for 20 mm	no.				Rate Only
3.7.3	50 mm diameter conduit box for 25 mm conduit	no.	4.00			
3.7.4	100 mm x 50 mm x 50 mm conduit box	no.	2.00			
3.7.5	100 mm x 100 mm x 50 mm conduit box	no.				Rate Only
3.7.6	Blank standard cover for 50 mm diameter conduit box	no.				Rate Only
3.7.7	Blank over-sized cover for 50 mm diameter conduit box	no.				Rate Only
3.7.9	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
3.7.10	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 4 : Provisional Sums and Contingency Sums

				Air-conditioning & Ventilation		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	AHU Plinth					
4.1.1.1	Allow a provisional sum for the construction of a plinth for the AHU positioned external to the AHU Plinth	sum	1.00	20 000.00		20 000.00
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	10 000.00		10 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

(Foam Cell Enclosure)		
Item	Description	Air-conditioning & Ventilation
1	Preliminary & General Items	
2	Air-conditioning Installation	
3	Ventilation Installation	
4	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 17)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Air-conditioning & Ventilation		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Air-conditioning & Ventilation			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the AC&V Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Air-conditioning Installation

Air-conditioning & Ventilation

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Air-conditioning Installation <i>The schedule shall be read with the drawings and project specifications of the tender document. The price submitted in this schedule will deem all installations to be priced for completed and operational installations</i>					
	The air conditioning split units listed below must include for a drain from each unit fed to a suitable drain nearby. The drain shall have a fall of not less than 1:100 and be adequately supported as per SABS specifications. All refrigerant pipework run in ceiling void to be in galvanised tray or galvanised tray with cover and painted to Architects colour when routed externally.					
2.1	AHU-1					
2.1.1	MAXAIR 98 kW Air-handling unit supplying 11750 l/s of air (Model MAH C VRV) including primary and secondary filters and magnihelic gauges over filters <i>Contact: Air Options (Pty) Ltd (Mr. C. Yorke) 021 905 2000</i>	no				Rate Only
2.1.2	Supply air ducting external to the building to be galvanised sheet metal with 50 mm polystyrene insulation, flame retardant and vapour seal and clad with galvanised sheet metal, waterproofed at all joints	sum				Rate Only
2.1.3	Supply air internal ducting, inclusive of round, square and triangular ducting to be gsm externally wrapped in 25 mm foil faced fibre glass. All joints to be well sealed	sum				Rate Only
2.1.4	Return air ducting external to the building to be galvanised sheet metal with 50 mm polystyrene insulation, flame retardant and vapour seal and clad with galvanised sheet metal, waterproofed at all joints including 350 x 300 mm fresh air cowl	sum				Rate Only
2.1.5	Return air internal ducting to be gsm externally wrapped in 25 mm foil faced fibre glass. All joints to be well sealed	sum				Rate Only
2.1.6	1200 mm long Clean seal type sound attenuator for Ø1200 for supply air ducting	no				Rate Only
2.1.7	1200 mm long Clean seal type sound attenuator for Ø900 for return air ducting	no				Rate Only
2.1.8	Supply air diffuser, High Volume Ø630 Trox VDL or similar	no				Rate Only
2.1.9	Aluminium return air louver 600 x 600 mm	no				Rate Only
2.1.10	Secondary bag filters (replacement set)	no				Rate Only
2.1.11	Allow for servicing during "defects liability period"	no				Rate Only
Total for Schedule carried forward					R	

Schedule 2 : Air-conditioning Installation

Air-conditioning & Ventilation

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Air-conditioning Installation	Amount Brought Forward				
2.1.12	Daikin VRV IV heat pump outdoor unit RXYQ18U including Bluchem	no				Rate Only
2.1.13	Expansion valve kit EKEXV400	no				Rate Only
2.1.14	Control Box EKEQFCBA	no				Rate Only
2.1.15	KHRQ22M75T	no				Rate Only
2.1.16	BRP2A81-WIRE	no				Rate Only
2.1.17	Wired Control for the VRV System	no				Rate Only
2.2	Bluchem Protection					
2.2.1	Bluchem VRV Condenser	no				Rate Only
2.3	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
2.3.1	20 mm diameter conduit	m				Rate Only
2.3.2	25 mm diameter conduit	m				Rate Only
2.3.3	32 mm diameter conduit	m				Rate Only
2.3.4	50 mm diameter conduit	m				Rate Only
2.3.5	20 mm diameter conduit, flexible	m				Rate Only
2.3.6	25 mm diameter conduit, flexible	m				Rate Only
2.4	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
2.4.1	50 mm diameter conduit box for 20 mm conduit	no.				Rate Only
2.4.2	50 mm diameter conduit extension box for 20 mm	no.				Rate Only
2.4.3	50 mm diameter conduit box for 25 mm conduit	no.				Rate Only
2.4.4	100 mm x 50 mm x 50 mm conduit box	no.				Rate Only
2.4.5	100 mm x 100 mm x 50 mm conduit box	no.				Rate Only
2.4.6	Blank standard cover for 50 mm diameter conduit box	no.				Rate Only
2.4.7	Blank over-sized cover for 50 mm diameter conduit box	no.				Rate Only
2.4.8	Blank cover for 100 mm x 50 mm conduit box	no.				Rate Only
2.4.9	Blank cover for 100 mm x 100 mm conduit box	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Ventilation Installation

Air-conditioning & Ventilation

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Ventilation Installation					
3.1	EAF-1 & EAF-2					
3.1.1	Ø630 (10 blade or similar) fan extracting 3734 l/s at a static pressure 300 Pa including one off 1.5 D sound attenuators for a quiet running system, with plenum box including washable filters	no				Rate Only
3.1.2	Galvanised uninsulated circular sheet metal ducting, inclusive of branch ducting and flexible ducting	sum				Rate Only
3.1.3	2000 mm x 1200 mm extraction canopy including galvanized bird mesh type grating / grille	no				Rate Only
3.1.4	Corrosion resistance cowl including bird mesh including soaker sheets and black flashing	sum				Rate Only
3.2	Control Foam Cell Enclosure Supply and install MCC system control panel. The control panel will comprise an IP55 Mild Steel enclosure with an orange powder coated finish. The control panel will have the following indication equipment for each fan; Power ON indicator. The control panel will be fitted with manual selector switches. The fans to switched off / close in the event of a fire via a fire signal from the fire detection and sprinkler					
3.2.1	Control Panel (CP)	no				Rate Only
3.3	EAF-3					
3.3.1	Ø630 (10 blade or similar) fan extracting 1634 l/s at a static pressure 250 Pa including one off 1.5 D sound attenuators for a quiet running system, with plenum box including washable filters	no	1.00			
3.3.2	Galvanised uninsulated circular sheet metal ducting, inclusive of branch ducting and flexible ducting	sum	1.00			
3.3.3	5700 mm x 1200 mmm extraction canopy including bird mesh type grating / grille	no	1.00			
3.3.4	Corrosion resistance cowl including bird mesh including soaker sheets and black flashing	sum	1.00			
3.4	Control CUN Dispatch Supply and install MCC system control panel. The control panel will comprise an IP55 Mild Steel enclosure with an orange powder coated finish. The control panel will have the following indication equipment for each fan; Power ON indicator. The control panel will be fitted with manual selector switches. The fans to switched off / close in the event of a fire via a fire signal from the fire detection and sprinkler					
Total for Schedule carried forward						R

Schedule 3 : Ventilation Installation

Air-conditioning & Ventilation

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Ventilation Installation	Amount Brought Forward				Rate Only
3..4.1	Control Panel (CP)	no	1.00			
3.5	Provisional Sum					
3.5.1	Allow a provisional sum for any additional waterproofing / backflashing, necessary fixings, fasteners and installation consumables etc. to complete the installation and ensure a weather proof installation on completion (per louver through sheeting)	sum				
3.6	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
3.6.1	20 mm diameter conduit	m	1.00			
3.6.2	25 mm diameter conduit	m	20.00			
3.6.3	32 mm diameter conduit	m	1.00			
3.6.4	50 mm diameter conduit	m			Rate Only	
3.6.5	20 mm diameter conduit, flexible	m			Rate Only	
3.6.6	25 mm diameter conduit, flexible	m	1.00			
3.7	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of orange powder-coated conduit / trunking on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, end caps, hangers, covers, etc.					
3.7.1	50 mm diameter conduit box for 20 mm conduit	no.			Rate Only	
3.7.2	50 mm diameter conduit extension box for 20 mm	no.			Rate Only	
3.7.3	50 mm diameter conduit box for 25 mm conduit	no.	2.00			
3.7.4	100 mm x 50 mm x 50 mm conduit box	no.	1.00			
3.7.5	100 mm x 100 mm x 50 mm conduit box	no.			Rate Only	
3.7.6	Blank standard cover for 50 mm diameter conduit box	no.			Rate Only	
3.7.7	Blank over-sized cover for 50 mm diameter conduit box	no.			Rate Only	
3.7.9	Blank cover for 100 mm x 50 mm conduit box	no.			Rate Only	
3.7.10	Blank cover for 100 mm x 100 mm conduit box	no.			Rate Only	
Total for Schedule carried forward					R	

Schedule 4 : Provisional Sums and Contingency Sums

				Air-conditioning & Ventilation		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	AHU Plinth					
4.1.1.1	Allow a provisional sum for the construction of a plinth for the AHU positioned external to the AHU Plinth	sum		20 000.00		Rate Only
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

(Dispatch CUN)		
Item	Description	Air-conditioning & Ventilation
1	Preliminary & General Items	
2	Air-conditioning Installation	
3	Ventilation Installation	
4	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 17)		

EARLY WARNING DETECTION & ALARM INSTALLATION

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Early Warning Detection and Alarm		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)			Amount Brought Forward		
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Detection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				Rate Only
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary						R

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System					
2.1	Control Panel					
2.1.1	Analogue addressable 4 loop control panel capable of supporting a maximum of addressable sensors, equipped to receive radio signals from remote panels, have a liquid crystal display of more than 150 characters, complete with 28 Amp battery backup and battery charging unit, ability to carry out automatic "self testing" at regular intervals and report, and all fully compliant with BS5839 and EN54.	no.				Rate Only
2.1.2	As above, but as a "slave panel"	no.				Rate Only
2.1.3	Interface to existing fire detection panel	no.	1.00			
2.2	Line Isolators					
2.2.1	Line Isolators	no.				Rate Only
2.3	Detection Devices					
	Ceiling-mounted, smoke sensitive and heat sensitive, addressable type detection devices, complete with plug-in type mounting base and indication light emitting diode (LED)					
2.3.1	Analogue, optical, smoke, addressable detection	no.	10.00			
2.3.2	Analogue, thermal, addressable detection device	no.				Rate Only
2.3.3	Analogue, beam, addressable detection 100 m	no.				Rate Only
2.3.4	Reposition existing thermal, detection device	no.				Rate Only
2.4	Fire-rated Cable					
2.4.1	Fire-rated PH120 type 1 mm ² cable (installed into galvanised conduit which shall be supplied and installed by appointed Mechanical Sub-contractor, complete with galvanised draw-wire)	m	480.00			
2.5	Remote LED Devices					
2.5.1	Remote LED devices to suit above detection devices	no.				Rate Only
2.6	Sounders (Sirens)					
2.6.1	Ceiling-mount addressable sounder (siren) mounted on the same base as the detector including the detector	no.	8.00			
2.7	Strobe Warning Lights					
2.7.1	Ceiling mounted strobe warning light with shallow base, red lens, supervision facilities for short and open circuits, flash energy of 0.5 joule and IP65 rating, suitable for 24 Volt operation	no.	8.00			
Total for Schedule carried forward					R	

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System (continued)			Amount Brought Forward		
2.8	Break-glass Units (Call Units)					
2.8.1	Surface-mounted, break-glass unit, complete with glass front, suitable clip-on type transparent lift-flap and seal and normally-open type contacts rated at 5 A with glass front which shall require firm pressure / impact to be broken and shall be fitted with transparent plastic film, to prevent injury to person activating call, labelled "FIRE Break Glass Press Here" with a directional arrow on the face, fitted with a test probe, to enable on-site testing without breaking glass front	no.	8.00			
2.9	Fire Suppression System (Server Room)					
2.9.1	Electrically-fused, thermally-activated, self-contained, aerosol-generating fire suppression system for fitment into areas, compete with detection devices, interface units, gas control unit, gas status unit etc.	sum				Rate Only
2.10	Addressable Line Interface Unit					
2.10.1	Addressable Line Interface Unit	no.	3.00			
2.11	Addressable Line Relay Unit					
2.11.1	Addressable Line Relay Unit	no.	3.00			
2.12	Magnetic Double Door Release Unit					
2.12.1	Sequential Magnetic Double Door Release Unit complete release push button and door closers	no.				Rate Only
2.12.2	Power supplies for magnetic door release units	no.				Rate Only
2.13	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of yellow powder-coated conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, etc.					
2.13.1		m	160.00			
2.13.2	25 mm diameter conduit	no.	47.00			
2.13.3	50 mm diameter conduit box for 25 mm conduit	no.	8.00			
2.13.4	75 mm x 75 mm x 50 mm conduit box					
	2.5 m x 25 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	16.00			
2.13.5	Extra over for painting conduit (colour to be specified) (accessories inclusive in measurement)	m	4.00			
Total for Schedule carried forward to Summary						R

Schedule 3 : Provisional Sums and Contingency Sums

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00	2 500.00		2 500.00
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	3 500.00

Summary Page

(Factory Mezzanine)		
Item	Description	Early Warning Detection and Alarm
1	Preliminary & General Items	
2	Early Warning Detection and Alarm System	
3	Provisional Sums and Contingency Sums	3 500.00
Sub-total carried forward to Summary (Page 31)		

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

				Early Warning Detection and Alarm		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)			Amount Brought Forward		
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Detection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				Rate Only
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary						R

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System					
2.1	Control Panel					
2.1.1	Analogue addressable 1 loop control panel capable of supporting a maximum of 127 addressable sensors, equipped to receive radio signals from remote panels, have a liquid crystal display of more than 150 characters, complete with 28 Amp battery backup and battery charging unit, ability to carry out automatic "self testing" at regular intervals and report, and all fully compliant with BS5839 and EN54.	no.				Rate Only
2.1.2	As above, but as a "slave panel"	no.				Rate Only
2.1.3	Interface to existing fire detection panel	no.	1.00			
2.2	Line Isolators					
2.2.1	Line Isolators	no.				Rate Only
2.3	Detection Devices					
	Ceiling-mounted, smoke sensitive and heat sensitive, addressable type detection devices, complete with plug-in type mounting base and indication light emitting diode (LED)					
2.3.1	Analogue, optical, smoke, addressable detection	no.	6.00			
2.3.2	Analogue, thermal, addressable detection device	no.				Rate Only
2.3.3	Analogue, beam, addressable detection 100 m	no.				Rate Only
2.3.4	Reposition existing thermal, detection device	no.				Rate Only
2.4	Fire-rated Cable					
2.4.1	Fire-rated PH120 type 1 mm ² cable (installed into galvanised conduit which shall be supplied and installed by appointed Mechanical Sub-contractor, complete with galvanised draw-wire)	m	264.00			
2.5	Remote LED Devices					
2.5.1	Remote LED devices to suit above detection devices	no.				Rate Only
2.6	Sounders (Sirens)					
2.6.1	Ceiling-mount addressable sounder (siren) mounted on the same base as the detector including the detector	no.	2.00			
2.7	Strobe Warning Lights					
2.7.1	Ceiling mounted strobe warning light with shallow base, red lens, supervision facilities for short and open circuits, flash energy of 0.5 joule and IP65 rating, suitable for 24 Volt operation	no.	2.00			
Total for Schedule carried forward					R	

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System (continued)			Amount Brought Forward		
2.8	Break-glass Units (Call Units)					
2.8.1	Surface-mounted, break-glass unit, complete with glass front, suitable clip-on type transparent lift-flap and seal and normally-open type contacts rated at 5 A with glass front which shall require firm pressure / impact to be broken and shall be fitted with transparent plastic film, to prevent injury to person activating call, labelled "FIRE Break Glass Press Here" with a directional arrow on the face, fitted with a test probe, to enable on-site testing without breaking glass front	no.	4.00			
2.9	Fire Suppression System (Server Room)					
2.9.1	Electrically-fused, thermally-activated, self-contained, aerosol-generating fire suppression system for fitment into areas, compete with detection devices, interface units, gas control unit, gas status unit etc.	sum				Rate Only
2.10	Addressable Line Interface Unit					
2.10.1	Addressable Line Interface Unit	no.	4.00			
2.11	Addressable Line Relay Unit					
2.11.1	Addressable Line Relay Unit	no.	4.00			
2.12	Magnetic Double Door Release Unit					
2.12.1	Sequential Magnetic Double Door Release Unit complete release push button and door closers	no.				Rate Only
2.12.2	Power supplies for magnetic door release units	no.				Rate Only
2.13	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of yellow powder-coated conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, etc.					
2.13.1		m	88.00			
2.13.2	25 mm diameter conduit	no.	21.00			
2.13.3	50 mm diameter conduit box for 25 mm conduit	no.	4.00			
2.13.4	75 mm x 75 mm x 50 mm conduit box					
2.13.5	2.5 m x 25 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	6.00			
	Extra over for painting conduit (colour to be specified) (accessories inclusive in measurement)	m	2.00			
Total for Schedule carried forward to Summary					R	

Schedule 3 : Provisional Sums and Contingency Sums

				Early Warning Detection and Alarm		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00	2 500.00		2 500.00
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	3 500.00

Summary Page

(Foam Cell Enclosure)		
Item	Description	Early Warning Detection and Alarm
1	Preliminary & General Items	
2	Early Warning Detection and Alarm System	
3	Provisional Sums and Contingency Sums	3 500.00
Sub-total carried forward to Summary (Page 31)		

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)			Amount Brought Forward		
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Detection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				Rate Only
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary						R

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System					
2.1	Control Panel					
2.1.1	Analogue addressable 1 loop control panel capable of supporting a maximum of 127 addressable sensors, equipped to receive radio signals from remote panels, have a liquid crystal display of more than 150 characters, complete with 28 Amp battery backup and battery charging unit, ability to carry out automatic "self testing" at regular intervals and report, and all fully compliant with BS5839 and EN54.	no.				Rate Only
2.1.2	As above, but as a "slave panel"	no.				Rate Only
2.1.3	Interface to existing fire detection panel	no.	1.00			
2.2	Line Isolators					
2.2.1	Line Isolators	no.				Rate Only
2.3	Detection Devices					
	Ceiling-mounted, smoke sensitive and heat sensitive, addressable type detection devices, complete with plug-in type mounting base and indication light emitting diode (LED)					
2.3.1	Analogue, optical, smoke, addressable detection	no.	2.00			
2.3.2	Analogue, thermal, addressable detection device	no.				Rate Only
2.3.3	Analogue, beam, addressable detection 100 m	no.				Rate Only
2.3.4	Reposition existing thermal, detection device	no.				Rate Only
2.4	Fire-rated Cable					
2.4.1	Fire-rated PH120 type 1 mm ² cable (installed into galvanised conduit which shall be supplied and installed by appointed Mechanical Sub-contractor, complete with galvanised draw-wire)	m	144.00			
2.5	Remote LED Devices					
2.5.1	Remote LED devices to suit above detection devices	no.				Rate Only
2.6	Sounders (Sirens)					
2.6.1	Ceiling-mount addressable sounder (siren) mounted on the same base as the detector including the detector	no.	2.00			
2.7	Strobe Warning Lights					
2.7.1	Ceiling mounted strobe warning light with shallow base, red lens, supervision facilities for short and open circuits, flash energy of 0.5 joule and IP65 rating, suitable for 24 Volt operation	no.	2.00			
Total for Schedule carried forward					R	

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System (continued)			Amount Brought Forward		
2.8	Break-glass Units (Call Units)					
2.8.1	Surface-mounted, break-glass unit, complete with glass front, suitable clip-on type transparent lift-flap and seal and normally-open type contacts rated at 5 A with glass front which shall require firm pressure / impact to be broken and shall be fitted with transparent plastic film, to prevent injury to person activating call, labelled "FIRE Break Glass Press Here" with a directional arrow on the face, fitted with a test probe, to enable on-site testing without breaking glass front	no.	2.00			
2.9	Fire Suppression System (Server Room)					
2.9.1	Electrically-fused, thermally-activated, self-contained, aerosol-generating fire suppression system for fitment into areas, compete with detection devices, interface units, gas control unit, gas status unit etc.	sum				Rate Only
2.10	Addressable Line Interface Unit					
2.10.1	Addressable Line Interface Unit	no.	2.00			
2.11	Addressable Line Relay Unit					
2.11.1	Addressable Line Relay Unit	no.	2.00			
2.12	Magnetic Double Door Release Unit					
2.12.1	Sequential Magnetic Double Door Release Unit complete release push button and door closers	no.				Rate Only
2.12.2	Power supplies for magnetic door release units	no.				Rate Only
2.13	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of yellow powder-coated conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, etc.					
2.13.1		m	48.00			
2.13.2	25 mm diameter conduit	no.	12.00			
2.13.3	50 mm diameter conduit box for 25 mm conduit	no.	2.00			
2.13.4	75 mm x 75 mm x 50 mm conduit box					
	2.5 m x 25 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	4.00			
2.13.5	Extra over for painting conduit (colour to be specified) (accessories inclusive in measurement)	m	1.00			
Total for Schedule carried forward to Summary						R

Schedule 3 : Provisional Sums and Contingency Sums

				Early Warning Detection and Alarm		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00	2 500.00		2 500.00
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	3 500.00

Summary Page

(Dispatch W206)		
Item	Description	Early Warning Detection and Alarm
1	Preliminary & General Items	
2	Early Warning Detection and Alarm System	
3	Provisional Sums and Contingency Sums	3 500.00
Sub-total carried forward to Summary (Page 31)		

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)			Amount Brought Forward		
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Detection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				Rate Only
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary						R

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System					
2.1	Control Panel					
2.1.1	Analogue addressable 1 loop control panel capable of supporting a maximum of 127 addressable sensors, equipped to receive radio signals from remote panels, have a liquid crystal display of more than 150 characters, complete with 28 Amp battery backup and battery charging unit, ability to carry out automatic "self testing" at regular intervals and report, and all fully compliant with BS5839 and EN54.	no.				Rate Only
2.1.2	As above, but as a "slave panel"	no.				Rate Only
2.1.3	Interface to existing fire detection panel	no.	1.00			
2.2	Line Isolators					
2.2.1	Line Isolators	no.				Rate Only
2.3	Detection Devices					
	Ceiling-mounted, smoke sensitive and heat sensitive, addressable type detection devices, complete with plug-in type mounting base and indication light emitting diode (LED)					
2.3.1	Analogue, optical, smoke, addressable detection	no.	5.00			
2.3.2	Analogue, thermal, addressable detection device	no.				Rate Only
2.3.3	Analogue, beam, addressable detection 100 m	no.				Rate Only
2.3.4	Reposition existing thermal, detection device	no.				Rate Only
2.4	Fire-rated Cable					
2.4.1	Fire-rated PH120 type 1 mm ² cable (installed into galvanised conduit which shall be supplied and installed by appointed Mechanical Sub-contractor, complete with galvanised draw-wire)	m	180.00			
2.5	Remote LED Devices					
2.5.1	Remote LED devices to suit above detection devices	no.				Rate Only
2.6	Sounders (Sirens)					
2.6.1	Ceiling-mount addressable sounder (siren) mounted on the same base as the detector including the detector	no.	2.00			
2.7	Strobe Warning Lights					
2.7.1	Ceiling mounted strobe warning light with shallow base, red lens, supervision facilities for short and open circuits, flash energy of 0.5 joule and IP65 rating, suitable for 24 Volt operation	no.	2.00			
Total for Schedule carried forward					R	

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System (continued)			Amount Brought Forward		
2.8	Break-glass Units (Call Units)					
2.8.1	Surface-mounted, break-glass unit, complete with glass front, suitable clip-on type transparent lift-flap and seal and normally-open type contacts rated at 5 A with glass front which shall require firm pressure / impact to be broken and shall be fitted with transparent plastic film, to prevent injury to person activating call, labelled "FIRE Break Glass Press Here" with a directional arrow on the face, fitted with a test probe, to enable on-site testing without breaking glass front	no.	2.00			
2.9	Fire Suppression System (Server Room)					
2.9.1	Electrically-fused, thermally-activated, self-contained, aerosol-generating fire suppression system for fitment into areas, compete with detection devices, interface units, gas control unit, gas status unit etc.	sum				Rate Only
2.10	Addressable Line Interface Unit					
2.10.1	Addressable Line Interface Unit	no.	2.00			
2.11	Addressable Line Relay Unit					
2.11.1	Addressable Line Relay Unit	no.	2.00			
2.12	Magnetic Double Door Release Unit					
2.12.1	Sequential Magnetic Double Door Release Unit complete release push button and door closers	no.				Rate Only
2.12.2	Power supplies for magnetic door release units	no.				Rate Only
2.13	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of yellow powder-coated conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, etc.					
2.13.1		m	60.00			
2.13.2	25 mm diameter conduit	no.	16.00			
2.13.3	50 mm diameter conduit box for 25 mm conduit	no.	2.00			
2.13.4	75 mm x 75 mm x 50 mm conduit box					
2.13.5	2.5 m x 25 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	5.00			
	Extra over for painting conduit (colour to be specified) (accessories inclusive in measurement)	m	2.00			
Total for Schedule carried forward to Summary						R

Schedule 3 : Provisional Sums and Contingency Sums

				Early Warning Detection and Alarm		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00	2 500.00		2 500.00
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	3 500.00

Summary Page

(Dispatch CUN)		
Item	Description	Early Warning Detection and Alarm
1	Preliminary & General Items	
2	Early Warning Detection and Alarm System	
3	Provisional Sums and Contingency Sums	3 500.00
Sub-total carried forward to Summary (Page 31)		

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)			Amount Brought Forward		
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Detection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				Rate Only
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary						R

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System					
2.1	Control Panel					
2.1.1	Analogue addressable 1 loop control panel capable of supporting a maximum of 127 addressable sensors, equipped to receive radio signals from remote panels, have a liquid crystal display of more than 150 characters, complete with 28 Amp battery backup and battery charging unit, ability to carry out automatic "self testing" at regular intervals and report, and all fully compliant with BS5839 and EN54.	no.				Rate Only
2.1.2	As above, but as a "slave panel"	no.				Rate Only
2.1.3	Interface to existing fire detection panel	no.	1.00			
2.2	Line Isolators					
2.2.1	Line Isolators	no.				Rate Only
2.3	Detection Devices					
	Ceiling-mounted, smoke sensitive and heat sensitive, addressable type detection devices, complete with plug-in type mounting base and indication light emitting diode (LED)					
2.3.1	Analogue, optical, smoke, addressable detection	no.				Rate Only
2.3.2	Analogue, thermal, addressable detection device	no.				Rate Only
2.3.3	Analogue, beam, addressable detection 100 m	no.				Rate Only
2.3.4	Reposition existing thermal, detection device	no.				Rate Only
2.4	Fire-rated Cable					
2.4.1	Fire-rated PH120 type 1 mm ² cable (installed into galvanised conduit which shall be supplied and installed by appointed Mechanical Sub-contractor, complete with galvanised draw-wire)	m	96.00			
2.5	Remote LED Devices					
2.5.1	Remote LED devices to suit above detection devices	no.				Rate Only
2.6	Sounders (Sirens)					
2.6.1	Ceiling-mount addressable sounder (siren) mounted on the same base as the detector including the detector	no.	2.00			
2.7	Strobe Warning Lights					
2.7.1	Ceiling mounted strobe warning light with shallow base, red lens, supervision facilities for short and open circuits, flash energy of 0.5 joule and IP65 rating, suitable for 24 Volt operation	no.	2.00			
Total for Schedule carried forward					R	

Schedule 2 : Early Warning Detection and Alarm System

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Early Warning Detection and Alarm System (continued)			Amount Brought Forward		
2.8	Break-glass Units (Call Units)					
2.8.1	Surface-mounted, break-glass unit, complete with glass front, suitable clip-on type transparent lift-flap and seal and normally-open type contacts rated at 5 A with glass front which shall require firm pressure / impact to be broken and shall be fitted with transparent plastic film, to prevent injury to person activating call, labelled "FIRE Break Glass Press Here" with a directional arrow on the face, fitted with a test probe, to enable on-site testing without breaking glass front	no.	2.00			
2.9	Fire Suppression System (Server Room)					
2.9.1	Electrically-fused, thermally-activated, self-contained, aerosol-generating fire suppression system for fitment into areas, compete with detection devices, interface units, gas control unit, gas status unit etc.	sum				Rate Only
2.10	Addressable Line Interface Unit					
2.10.1	Addressable Line Interface Unit	no.	1.00			
2.11	Addressable Line Relay Unit					
2.11.1	Addressable Line Relay Unit	no.	1.00			
2.12	Magnetic Double Door Release Unit					
2.12.1	Sequential Magnetic Double Door Release Unit complete release push button and door closers	no.				Rate Only
2.12.2	Power supplies for magnetic door release units	no.				Rate Only
2.13	Galvanised SANS Approved Conduit and Supply, delivery to site, installation of yellow powder-coated conduit on surface, in ceiling void, chased into or cast into concrete works and / or brickwork, including bushes, locknuts, couplings, galvanized saddles, etc.					
2.13.1		m	32.00			
2.13.2	25 mm diameter conduit	no.	9.00			
2.13.3	50 mm diameter conduit box for 25 mm conduit	no.	2.00			
2.13.4	75 mm x 75 mm x 50 mm conduit box					
2.13.5	2.5 m x 25 mm diameter sprague, fitted with 50 mm conduit box on one end and 50 mm round lid on other end, with bushes and locknuts	no.	2.00			
	Extra over for painting conduit (colour to be specified) (accessories inclusive in measurement)	m	1.00			
Total for Schedule carried forward to Summary						R

Schedule 3 : Provisional Sums and Contingency Sums

Early Warning Detection and Alarm

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00	2 500.00		2 500.00
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	3 500.00

Summary Page

(Tugger Route)		
Item	Description	Early Warning Detection and Alarm
1	Preliminary & General Items	
2	Early Warning Detection and Alarm System	
3	Provisional Sums and Contingency Sums	3 500.00
Sub-total carried forward to Summary (Page 31)		

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Values

FIRE PROTECTION INSTALLATION

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Protection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Sprinkler Installation

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
2	Sprinkler Installation The schedule shall be priced in accordance with the specifications contained in this document, and shall include the following i.e. measuring up on site, supply, delivery installation and commissioning of all items contained herein, including all pipework, fittings, hangers and painting for a complete installation					
2.1	Sprinkler Installation					
2.1.1	Supply and install conventional pattern, fast response 15 mm sprinklers having an operating temperature of 68 °C (k=8), within office block roof voids (Brass finish)	no.				Rate Only
2.1.2	Supply and install standard response 15 mm conventional sprinklers in office block ceiling tiles, activating at 68 °C (k=8) including Escutcheons for ceiling tiles (White polyester finish)	no.				Rate Only
2.1.3	Supply and install 25 mm ESFR brass pendant fast response sprinklers (Viking K=25.2 to match existing) having an operating temperature of 74 °C, within the factory floor and canopy areas	no.	230.00			
2.1.4	Supply and install a 150 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.	1.00			
2.1.5	Supply and install a 200 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.	1.00			
2.1.6	Sprinkler manifold to be extended to accommodate the above control valve assembly take-off's (i.e. 2 no)	sum	1.00			
2.1.7	Supply and install flow switch including wiring to adjacent interface unit provided by Fire Detection Sub-contractor	no.	2.00			
2.1.8	Supply and install 50 mm terminal test arrangement with drain c/w 50 mm isolating valve	sum	1.00			
2.1.9	Supply and install a direct reading flow test arrangement with isolating valves	sum	1.00			
2.1.10	Painting of all sprinkler, exposed pipework both in accordance with specification	sum	1.00			
2.1.11	Supply and install a 150 mm diameter monitored gear operated butterfly valve	no.	4.00			
2.1.12	Supply and install a 200 mm diameter monitored gear operated butterfly valve	no.	6.00			
2.1.13	Supply and installation of Valve Location Sign	no.	1.00			
2.1.14	Supply and installation of Valve Instruction Chart	no.	1.00			
Total for Schedule carried forward					R	

Schedule 2 : Sprinkler Installation

Schedule 2 : Sprinkler Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Fire Protection Installation continued	Amount Carried Forward				
2.1.15	Supply and installation of Remote Test Sign	no.	1.00			
2.1.16	Supply and installation of Booster Limitation Sign	no.	1.00			
2.1.17	Supply and installation of a fiberglass / galvanized cabinet containing the required spare sprinkler heads, blanks and sprinkler spanner	sum	1.00			
2.2	Black Mild Steel Piping to SABS Standards Supply and install black mild steel fire water piping (Internal Pipe-work). Void pipe-work to be painted with red oxide and exposed pipe-work to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
2.2.1	Ø25 mm	m				Rate Only
2.2.2	Ø32 mm	m				Rate Only
2.2.3	Ø40 mm	m				Rate Only
2.2.4	Ø50 mm	m				Rate Only
2.2.5	Ø65 mm	m	726.00			
2.2.6	Ø80 mm	m				Rate Only
2.2.7	Ø100 mm	m				Rate Only
2.2.8	Ø150 mm	m	35.00			
2.2.9	Ø200 mm	m	170.00			
2.2.10	Ø200 mm Connecting Mains	m	170.00			
2.3	Additional Fire Protection Systems					
2.3.1	Allow a provisional sum for sprinklers to be installed beneath platforms, mezzanines and stairwells	sum	1.00	150 000.00		150 000.00
2.3.2	Allow a provisional sum for the hydraulic calculations for the entire facility, including the new additions and block plans required for ICV	sum	1.00	100 000.00		100 000.00
2.3.3	Allow a provisional sum for the upgrading of the ICV chamber and items required by the ASIB Inspection Report 2019	sum	1.00	70 000.00		70 000.00
2.4	Fire Water Flow and Pressure Test					
2.4.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements at the ICV Chamber	sum	1.00			
2.4.2	Pressure testing of complete fire water installation to be undertaken (15 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 3 : Fire Appliance Installation

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation					
3.1	Portable Fire Extinguishers : Carbon Dioxide Supply and install carbon dioxide (CO ₂) type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.1.1	5.0 kg CO ₂ hand held fire extinguisher	no				Rate Only
3.1.2	10.0 kg CO ₂ hand held fire extinguisher	no	15.00			
3.2	Portable Fire Extinguishers : Dry Chemical Supply and install dry chemical powder type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.2.1	4.5 kg	no				Rate Only
3.2.2	9.0 kg	no				Rate Only
3.3	Portable Fire Extinguishers : Foam Supply and install foam type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.3.1	5 kg	no				Rate Only
3.4	Fire Hose Reel : FHR Supply and install fire hose reel 30m x 20 mm internal diameter rubber and nozzle, pressure gauge, brass water way and gland, stopcock, pipework, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.4.1	30 m FHR	no	6.00			
3.5	Fire Hydrants Supply and install fire hydrants including a 30 m Canvas Fire Hose, key, all connection fittings, couplings, 16 mm internal diameter nozzle and red storage box, to be fitted next to the fire hydrants, pipework, bends, tees, connection, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.5.1	Internal Hydrant Head, Handwheel type	no	2.00			
3.5.2	Reposition existing fire hydrant	no	1.00			
3.5.3	Red Storage box	no	3.00			
3.5.4	30 m Canvas Fire Hose, key, connection fittings, couplings, 16 mm internal diameter nozzle	sum	3.00			
3.5.5	External fire hydrant concrete riser / base. To be painted yellow	sum	1.00			
Total for Schedule carried forward						R

Schedule 3 : Fire Appliance Installation

Schedule 3 : Fire Appliance Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation (continued)	Amount Brought Forward				
3.6	Galvanized Piping to SABS Standards Supply and install galvanized steel fire water piping. Mains to have 300 mm wide red band spaced every 6 m. All dropper pipes to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
3.6.1	Ø25 mm	m	70.00			
3.6.2	Ø32 mm	m				Rate Only
3.6.3	Ø40 mm	m				Rate Only
3.6.4	Ø80 mm	m				Rate Only
3.6.5	Ø100 mm	m	45.00			
3.7	Galvanised Fittings to SABS Standards					
3.7.1	Ø25 mm Elbow	no	15.00			
3.7.2	Ø32 mm Elbow	no				Rate Only
3.7.3	Ø110 mm Elbow	no	6.00			
3.7.4	Ø25 mm "T"	no	5.00			
3.7.5	Ø32 mm "T"	no				Rate Only
3.7.6	Ø110 mm "T"	no	5.00			
3.7.7	Ø32 mm reducer to Ø25 mm	no				Rate Only
3.7.8	Ø80 mm reducer to Ø25 mm	no				Rate Only
3.7.9	Ø110 mm reducer to Ø25 mm	no	4.00			
3.7.10	Ø110 mm reducer to Ø32 mm	no				Rate Only
3.7.11	Ø110 mm reducer to Ø80 mm	no				Rate Only
3.7.12	Ø25 mm Ball Valve	no				Rate Only
3.7.13	Supply and install a chain driven 100 mm diameter gear operated butterfly valve	no.	2.00			
3.8	Booster Connection					
3.8.1	Supply and install a dual booster connection including pressure gauge, thrust block, non-return valve, fittings, joints, reducers, etc. for the complete installation	sum				Rate Only
3.8.2	External fire booster concrete riser / base. To be painted yellow	sum				Rate Only
3.8.3	Supply and install Ø110 non-return after municipal connection including thrust block, fittings, joints, reducers, etc. for the complete installation thereof	sum				Rate Only
3.9	Fire Water Flow and Pressure Test					
3.9.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements	sum	1.00			
3.9.2	Pressure testing of complete fire water installation to be undertaken (6 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Provisional Sums and Contingency Sums

Schedule 4 : Provisional Sums and Contingency Sums				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	?????? Allow a provisional sum for ??????					
4.1.1.1	??????	sum	1.00			
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	6 000.00		6 000.00

Summary Page

Item	Description	Fire Protection
1	Preliminary & General Items	
2	Sprinkler Installation	
3	Fire Appliance Installation	
4	Provisional Sums and Contingency Sums	6 000.00
Sub-total carried forward to Summary (Page 33)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Protection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Sprinkler Installation

Schedule 2 : Sprinkler Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Sprinkler Installation The schedule shall be priced in accordance with the specifications contained in this document, and shall include the following i.e. measuring up on site, supply, delivery installation and commissioning of all items contained herein, including all pipework, fittings, hangers and painting for a complete installation					
2.1	Sprinkler Installation					
2.1.1	Supply and install conventional pattern, fast response 15 mm sprinklers having an operating temperature of 68 °C (k=8), within office block roof voids (Brass finish)	no.				Rate Only
2.1.2	Supply and install standard response 15 mm conventional sprinklers in office block ceiling tiles, activating at 68 °C (k=8) including Escutcheons for ceiling tiles (White polyester finish)	no.				Rate Only
2.1.3	Supply and install 25 mm ESFR brass pendant fast response sprinklers (Viking K=25.2 to match existing) having an operating temperature of 74 °C, within the factory floor and canopy areas	no.	95.00			
2.1.4	Supply and install a 150 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.5	Supply and install a 200 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.6	Sprinkler manifold to be extended to accommodate the above control valve assembly take-off's (i.e. 2 no)	sum				Rate Only
2.1.7	Supply and install flow switch including wiring to adjacent interface unit provided by Fire Detection Sub-contractor	no.				Rate Only
2.1.8	Supply and install 50 mm terminal test arrangement with drain c/w 50 mm isolating valve	sum				Rate Only
2.1.9	Supply and install a direct reading flow test arrangement with isolating valves	sum				Rate Only
2.1.10	Painting of all sprinkler, exposed pipework both in accordance with specification	sum	1.00			
2.1.11	Supply and install a 150 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.12	Supply and install a 200 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.13	Supply and installation of Valve Location Sign	no.				Rate Only
2.1.14	Supply and installation of Valve Instruction Chart	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 2 : Sprinkler Installation

Schedule 2 : Sprinkler Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Fire Protection Installation continued	Amount Carried Forward				
2.1.15	Supply and installation of Remote Test Sign	no.				Rate Only
2.1.16	Supply and installation of Booster Limitation Sign	no.				Rate Only
2.1.17	Supply and installation of a fiberglass / galvanized cabinet containing the required spare sprinkler heads, blanks and sprinkler spanner	sum				Rate Only
2.2	Black Mild Steel Piping to SABS Standards Supply and install black mild steel fire water piping (Internal Pipe-work). Void pipe-work to be painted with red oxide and exposed pipe-work to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
2.2.1	Ø25 mm	m				Rate Only
2.2.2	Ø32 mm	m				Rate Only
2.2.3	Ø40 mm	m				Rate Only
2.2.4	Ø50 mm	m	50.00			
2.2.5	Ø65 mm	m	140.00			
2.2.6	Ø80 mm	m	100.00			
2.2.7	Ø100 mm	m				Rate Only
2.2.8	Ø150 mm	m				Rate Only
2.2.9	Ø200 mm	m	100.00			
2.2.10	Ø200 mm Connecting Mains	m				Rate Only
2.3	Additional Fire Protection Systems					
2.3.1	Allow a provisional sum for sprinklers to be installed beneath platforms, mezzanines and stairwells	sum	1.00	100 000.00		100 000.00
2.3.2	Allow a provisional sum for the hydraulic calculations for the entire facility, including the new additions and block plans required for ICV	sum	1.00	20 000.00		20 000.00
2.3.3	Allow a provisional sum for the upgrading of the ICV chamber and items required by the ASIB Inspection Report 2019	sum		70 000.00		Rate Only
2.4	Fire Water Flow and Pressure Test					
2.4.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements at the ICV Chamber	sum	1.00			
2.4.2	Pressure testing of complete fire water installation to be undertaken (15 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 3 : Fire Appliance Installation

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation					
3.1	Portable Fire Extinguishers : Carbon Dioxide Supply and install carbon dioxide (CO ₂) type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.1.1	5.0 kg CO ₂ hand held fire extinguisher	no	6.00			Rate Only
3.1.2	10.0 kg CO ₂ hand held fire extinguisher	no				
3.2	Portable Fire Extinguishers : Dry Chemical Supply and install dry chemical powder type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.2.1	4.5 kg	no				Rate Only
3.2.2	9.0 kg	no				Rate Only
3.3	Portable Fire Extinguishers : Foam Supply and install foam type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.3.1	5 kg	no				Rate Only
3.4	Fire Hose Reel : FHR Supply and install fire hose reel 30m x 20 mm internal diameter rubber and nozzle, pressure gauge, brass water way and gland, stopcock, pipework, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.4.1	30 m FHR	no	2.00			
3.5	Fire Hydrants Supply and install fire hydrants including a 30 m Canvas Fire Hose, key, all connection fittings, couplings, 16 mm internal diameter nozzle and red storage box, to be fitted next to the fire hydrants, pipework, bends, tees, connection, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.5.1	Internal Hydrant Head, Handwheel type	no				Rate Only
3.5.2	Reposition existing fire hydrant	no				Rate Only
3.5.3	Red Storage box	no				Rate Only
3.5.4	30 m Canvas Fire Hose, key, connection fittings, couplings, 16 mm internal diameter nozzle	sum				Rate Only
3.5.5	External fire hydrant concrete riser / base. To be painted yellow	sum				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Fire Appliance Installation

Schedule 3 : Fire Appliance Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation (continued)	Amount Brought Forward				
3.6	Galvanized Piping to SABS Standards Supply and install galvanized steel fire water piping. Mains to have 300 mm wide red band spaced every 6 m. All dropper pipes to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
3.6.1	Ø25 mm	m	50.00			
3.6.2	Ø32 mm	m	15.00			
3.6.3	Ø40 mm	m				Rate Only
3.6.4	Ø80 mm	m				Rate Only
3.6.5	Ø100 mm	m				Rate Only
3.7	Galvanised Fittings to SABS Standards					
3.7.1	Ø25 mm Elbow	no	8.00			
3.7.2	Ø32 mm Elbow	no	3.00			
3.7.3	Ø110 mm Elbow	no				Rate Only
3.7.4	Ø25 mm "T"	no	1.00			
3.7.5	Ø32 mm "T"	no	1.00			
3.7.6	Ø110 mm "T"	no	1.00			
3.7.7	Ø32 mm reducer to Ø25 mm	no				Rate Only
3.7.8	Ø80 mm reducer to Ø25 mm	no				Rate Only
3.7.9	Ø110 mm reducer to Ø25 mm	no				Rate Only
3.7.10	Ø110 mm reducer to Ø32 mm	no	1.00			
3.7.11	Ø110 mm reducer to Ø80 mm	no				Rate Only
3.7.12	Ø25 mm Ball Valve	no				Rate Only
3.7.13	Supply and install a chain driven 100 mm diameter gear operated butterfly valve	no.				Rate Only
3.8	Booster Connection					
3.8.1	Supply and install a dual booster connection including pressure gauge, thrust block, non-return valve, fittings, joints, reducers, etc. for the complete installation	sum				Rate Only
3.8.2	External fire booster concrete riser / base. To be painted yellow	sum				Rate Only
3.8.3	Supply and install Ø110 non-return after municipal connection including thrust block, fittings, joints, reducers, etc. for the complete installation thereof	sum				Rate Only
3.9	Fire Water Flow and Pressure Test					
3.9.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements	sum	1.00			
3.9.2	Pressure testing of complete fire water installation to be undertaken (6 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Provisional Sums and Contingency Sums

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	?????? Allow a provisional sum for ??????					
4.1.1.1	??????	sum	1.00			
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	2 000.00		2 000.00
Total for Schedule carried forward to Summary					R	2 000.00

Summary Page

Item	Description	Fire Protection
1	Preliminary & General Items	
2	Sprinkler Installation	
3	Fire Appliance Installation	
4	Provisional Sums and Contingency Sums	2 000.00
Sub-total carried forward to Summary (Page 33)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Fire Protection			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Protection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Sprinkler Installation

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Sprinkler Installation The schedule shall be priced in accordance with the specifications contained in this document, and shall include the following i.e. measuring up on site, supply, delivery installation and commissioning of all items contained herein, including all pipework, fittings, hangers and painting for a complete installation					
2.1	Sprinkler Installation					
2.1.1	Supply and install conventional pattern, fast response 15 mm sprinklers having an operating temperature of 68 °C (k=8), within office block roof voids (Brass finish)	no.				Rate Only
2.1.2	Supply and install standard response 15 mm conventional sprinklers in office block ceiling tiles, activating at 68 °C (k=8) including Escutcheons for ceiling tiles (White polyester finish)	no.				Rate Only
2.1.3	Supply and install 25 mm ESFR brass pendant fast response sprinklers (Viking K=25.2 to match existing) having an operating temperature of 74 °C, within the factory floor and canopy areas	no.	40.00			
2.1.4	Supply and install a 150 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.5	Supply and install a 200 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.6	Sprinkler manifold to be extended to accommodate the above control valve assembly take-off's (i.e. 2 no)	sum				Rate Only
2.1.7	Supply and install flow switch including wiring to adjacent interface unit provided by Fire Detection Sub-contractor	no.				Rate Only
2.1.8	Supply and install 50 mm terminal test arrangement with drain c/w 50 mm isolating valve	sum				Rate Only
2.1.9	Supply and install a direct reading flow test arrangement with isolating valves	sum				Rate Only
2.1.10	Painting of all sprinkler, exposed pipework both in accordance with specification	sum	1.00			
2.1.11	Supply and install a 150 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.12	Supply and install a 200 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.13	Supply and installation of Valve Location Sign	no.				Rate Only
2.1.14	Supply and installation of Valve Instruction Chart	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 2 : Sprinkler Installation

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Fire Protection Installation continued			Amount Carried Forward		
2.1.15	Supply and installation of Remote Test Sign	no.				Rate Only
2.1.16	Supply and installation of Booster Limitation Sign	no.				Rate Only
2.1.17	Supply and installation of a fiberglass / galvanized cabinet containing the required spare sprinkler heads, blanks and sprinkler spanner	sum				Rate Only
2.2	Black Mild Steel Piping to SABS Standards					
	Supply and install black mild steel fire water piping (Internal Pipe-work). Void pipe-work to be painted with red oxide and exposed pipe-work to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
2.2.1	Ø25 mm	m				Rate Only
2.2.2	Ø32 mm	m				Rate Only
2.2.3	Ø40 mm	m				Rate Only
2.2.4	Ø50 mm	m				Rate Only
2.2.5	Ø65 mm	m	56.00			
2.2.6	Ø80 mm	m	48.00			
2.2.7	Ø100 mm	m				Rate Only
2.2.8	Ø150 mm	m				Rate Only
2.2.9	Ø200 mm	m	62.00			
2.2.10	Ø200 mm Connecting Mains	m				Rate Only
2.3	Additional Fire Protection Systems					
2.3.1	Allow a provisional sum for sprinklers to be installed beneath platforms, mezzanines and stairwells	sum		100 000.00		Rate Only
2.3.2	Allow a provisional sum for the hydraulic calculations for the entire facility, including the new additions and block plans required for ICV	sum	1.00	20 000.00		20 000.00
2.3.3	Allow a provisional sum for the upgrading of the ICV chamber and items required by the ASIB Inspection Report 2019	sum		70 000.00		Rate Only
2.4	Fire Water Flow and Pressure Test					
2.4.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements at the ICV Chamber	sum	1.00			
2.4.2	Pressure testing of complete fire water installation to be undertaken (15 Bar)	sum	1.00			
2.5	Existing Sprinkler System					
		sum	1.00	10 000.00		10 000.00
Total for Schedule carried forward to Summary					R	

Schedule 3 : Fire Appliance Installation

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation					
3.1	Portable Fire Extinguishers : Carbon Dioxide Supply and install carbon dioxide (CO ₂) type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.1.1	5.0 kg CO ₂ hand held fire extinguisher	no	4.00			Rate Only
3.1.2	10.0 kg CO ₂ hand held fire extinguisher	no				
3.2	Portable Fire Extinguishers : Dry Chemical Supply and install dry chemical powder type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.2.1	4.5 kg	no				Rate Only
3.2.2	9.0 kg	no				Rate Only
3.3	Portable Fire Extinguishers : Foam Supply and install foam type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.3.1	5 kg	no				Rate Only
3.4	Fire Hose Reel : FHR Supply and install fire hose reel 30m x 20 mm internal diameter rubber and nozzle, pressure gauge, brass water way and gland, stopcock, pipework, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.4.1	30 m FHR	no	1.00			
3.5	Fire Hydrants Supply and install fire hydrants including a 30 m Canvas Fire Hose, key, all connection fittings, couplings, 16 mm internal diameter nozzle and red storage box, to be fitted next to the fire hydrants, pipework, bends, tees, connection, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.5.1	Internal Hydrant Head, Handwheel type	no				Rate Only
3.5.2	Reposition existing fire hydrant	no				Rate Only
3.5.3	Red Storage box	no				Rate Only
3.5.4	30 m Canvas Fire Hose, key, connection fittings, couplings, 16 mm internal diameter nozzle	sum				Rate Only
3.5.5	External fire hydrant concrete riser / base. To be painted yellow	sum				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Fire Appliance Installation

Schedule 3 : Fire Appliance Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation (continued)	Amount Brought Forward				
3.6	Galvanized Piping to SABS Standards Supply and install galvanized steel fire water piping. Mains to have 300 mm wide red band spaced every 6 m. All dropper pipes to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
3.6.1	Ø25 mm	m	40.00			
3.6.2	Ø32 mm	m				Rate Only
3.6.3	Ø40 mm	m				Rate Only
3.6.4	Ø80 mm	m				Rate Only
3.6.5	Ø100 mm	m				Rate Only
3.7	Galvanised Fittings to SABS Standards					
3.7.1	Ø25 mm Elbow	no	8.00			
3.7.2	Ø32 mm Elbow	no				Rate Only
3.7.3	Ø110 mm Elbow	no				Rate Only
3.7.4	Ø25 mm "T"	no				Rate Only
3.7.5	Ø32 mm "T"	no				Rate Only
3.7.6	Ø110 mm "T"	no	1.00			
3.7.7	Ø32 mm reducer to Ø25 mm	no				Rate Only
3.7.8	Ø80 mm reducer to Ø25 mm	no				Rate Only
3.7.9	Ø110 mm reducer to Ø25 mm	no	1.00			
3.7.10	Ø110 mm reducer to Ø32 mm	no				Rate Only
3.7.11	Ø110 mm reducer to Ø80 mm	no				Rate Only
3.7.12	Ø25 mm Ball Valve	no				Rate Only
3.7.13	Supply and install a chain driven 100 mm diameter gear operated butterfly valve	no.				Rate Only
3.8	Booster Connection					
3.8.1	Supply and install a dual booster connection including pressure gauge, thrust block, non-return valve, fittings, joints, reducers, etc. for the complete installation	sum				Rate Only
3.8.2	External fire booster concrete riser / base. To be painted yellow	sum				Rate Only
3.8.3	Supply and install Ø110 non-return after municipal connection including thrust block, fittings, joints, reducers, etc. for the complete installation thereof	sum				Rate Only
3.9	Fire Water Flow and Pressure Test					
3.9.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements	sum	1.00			
3.9.2	Pressure testing of complete fire water installation to be undertaken (6 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 4 : Provisional Sums and Contingency Sums

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	?????? Allow a provisional sum for ??????					
4.1.1.1	??????	sum	1.00			
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	1 000.00

Summary Page

Item	Description	Fire Protection
1	Preliminary & General Items	
2	Sprinkler Installation	
3	Fire Appliance Installation	
4	Provisional Sums and Contingency Sums	1 000.00
Sub-total carried forward to Summary (Page 33)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Fire Protection Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Sprinkler Installation

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Sprinkler Installation The schedule shall be priced in accordance with the specifications contained in this document, and shall include the following i.e. measuring up on site, supply, delivery installation and commissioning of all items contained herein, including all pipework, fittings, hangers and painting for a complete installation					
2.1	Sprinkler Installation					
2.1.1	Supply and install conventional pattern, fast response 15 mm sprinklers having an operating temperature of 68 °C (k=8), within office block roof voids (Brass finish)	no.				Rate Only
2.1.2	Supply and install standard response 15 mm conventional sprinklers in office block ceiling tiles, activating at 68 °C (k=8) including Escutcheons for ceiling tiles (White polyester finish)	no.				Rate Only
2.1.3	Supply and install 25 mm ESFR brass pendant fast response sprinklers (Viking K=25.2 to match existing) having an operating temperature of 74 °C, within the factory floor and canopy areas	no.				Rate Only
2.1.4	Supply and install a 150 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.5	Supply and install a 200 mm diameter wet pipe monitored control valve assembly, complete with all ancillary items and fittings, as detailed in the valve chamber specification	no.				Rate Only
2.1.6	Sprinkler manifold to be extended to accommodate the above control valve assembly take-off's (i.e. 2 no)	sum				Rate Only
2.1.7	Supply and install flow switch including wiring to adjacent interface unit provided by Fire Detection Sub-contractor	no.				Rate Only
2.1.8	Supply and install 50 mm terminal test arrangement with drain c/w 50 mm isolating valve	sum				Rate Only
2.1.9	Supply and install a direct reading flow test arrangement with isolating valves	sum				Rate Only
2.1.10	Painting of all sprinkler, exposed pipework both in accordance with specification	sum				Rate Only
2.1.11	Supply and install a 150 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.12	Supply and install a 200 mm diameter monitored gear operated butterfly valve	no.				Rate Only
2.1.13	Supply and installation of Valve Location Sign	no.				Rate Only
2.1.14	Supply and installation of Valve Instruction Chart	no.				Rate Only
Total for Schedule carried forward					R	

Schedule 2 : Sprinkler Installation

Schedule 2 : Sprinkler Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Fire Protection Installation continued	Amount Carried Forward				
2.1.15	Supply and installation of Remote Test Sign	no.				Rate Only
2.1.16	Supply and installation of Booster Limitation Sign	no.				Rate Only
2.1.17	Supply and installation of a fiberglass / galvanized cabinet containing the required spare sprinkler heads, blanks and sprinkler spanner	sum				Rate Only
2.2	Black Mild Steel Piping to SABS Standards Supply and install black mild steel fire water piping (Internal Pipe-work). Void pipe-work to be painted with red oxide and exposed pipe-work to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
2.2.1	Ø25 mm	m				Rate Only
2.2.2	Ø32 mm	m				Rate Only
2.2.3	Ø40 mm	m				Rate Only
2.2.4	Ø50 mm	m				Rate Only
2.2.5	Ø65 mm	m				Rate Only
2.2.6	Ø80 mm	m				Rate Only
2.2.7	Ø100 mm	m				Rate Only
2.2.8	Ø150 mm	m				Rate Only
2.2.9	Ø200 mm	m				Rate Only
2.2.10	Ø200 mm Connecting Mains	m				Rate Only
2.3	Additional Fire Protection Systems					
2.3.1	Allow a provisional sum for the inspection of the existing sprinklers installed and for any alterations required	sum	1.00	50 000.00		50 000.00
2.3.2	Allow a provisional sum for the hydraulic calculations for the entire facility, including the new additions and block plans required for ICV	sum		20 000.00		Rate Only
2.3.3	Allow a provisional sum for the upgrading of the ICV chamber and items required by the ASIB Inspection Report 2019	sum		70 000.00		Rate Only
2.4	Fire Water Flow and Pressure Test					
2.4.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements at the ICV Chamber	sum				Rate Only
2.4.2	Pressure testing of complete fire water installation to be undertaken (15 Bar)	sum				Rate Only
Total for Schedule carried forward to Summary					R	

Schedule 3 : Fire Appliance Installation

Item	Description	Unit	Qty	Fire Protection		
				Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation					
3.1	Portable Fire Extinguishers : Carbon Dioxide Supply and install carbon dioxide (CO ₂) type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.1.1	5.0 kg CO ₂ hand held fire extinguisher	no				Rate Only
3.1.2	10.0 kg CO ₂ hand held fire extinguisher	no	2.00			
3.2	Portable Fire Extinguishers : Dry Chemical Supply and install dry chemical powder type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.2.1	4.5 kg	no				Rate Only
3.2.2	9.0 kg	no				Rate Only
3.3	Portable Fire Extinguishers : Foam Supply and install foam type hand-held fire extinguishers, as detailed in the Project Specification, complete with meranti wooden backing board, etc.					
3.3.1	5 kg	no				Rate Only
3.4	Fire Hose Reel : FHR Supply and install fire hose reel 30m x 20 mm internal diameter rubber and nozzle, pressure gauge, brass water way and gland, stopcock, pipework, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.4.1	30 m FHR	no	1.00			
3.4.2	Reposition existing 30 m FHR	no	1.00		500.00	500.00
3.5	Fire Hydrants Supply and install fire hydrants including a 30 m Canvas Fire Hose, key, all connection fittings, couplings, 16 mm internal diameter nozzle and red storage box, to be fitted next to the fire hydrants, pipework, bends, tees, connection, etc. all confirming to SANS 542, as detailed in the Project Specification					
3.5.1	Internal Hydrant Head, Handwheel type	no				Rate Only
3.5.2	Reposition existing fire hydrant	no				Rate Only
3.5.3	Red Storage box	no				Rate Only
3.5.4	30 m Canvas Fire Hose, key, connection fittings, couplings, 16 mm internal diameter nozzle	sum				Rate Only
3.5.5	External fire hydrant concrete riser / base. To be	sum				Rate Only
3.4.2	Reposition existing 30 m FHR	no	1.00		500.00	500.00
Total for Schedule carried forward					R	1 000.00

Schedule 3 : Fire Appliance Installation

Schedule 3 : Fire Appliance Installation				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Fire Appliance Installation (continued)	Amount Brought Forward				1 000.00
3.6	Galvanized Piping to SABS Standards Supply and install galvanized steel fire water piping. Mains to have 300 mm wide red band spaced every 6 m. All dropper pipes to be painted with red oxide and also signal red enamel. All piping is to include hangers, bends, fittings, joints reducers, etc. for the complete installation thereof					
3.6.1	Ø25 mm	m	20.00			
3.6.2	Ø32 mm	m				Rate Only
3.6.3	Ø40 mm	m				Rate Only
3.6.4	Ø80 mm	m				Rate Only
3.6.5	Ø100 mm	m				Rate Only
3.7	Galvanised Fittings to SABS Standards					
3.7.1	Ø25 mm Elbow	no	8.00			
3.7.2	Ø32 mm Elbow	no				Rate Only
3.7.3	Ø110 mm Elbow	no				Rate Only
3.7.4	Ø25 mm "T"	no	1.00			
3.7.5	Ø32 mm "T"	no				Rate Only
3.7.6	Ø110 mm "T"	no				Rate Only
3.7.7	Ø32 mm reducer to Ø25 mm	no				Rate Only
3.7.8	Ø80 mm reducer to Ø25 mm	no				Rate Only
3.7.9	Ø110 mm reducer to Ø25 mm	no				Rate Only
3.7.10	Ø110 mm reducer to Ø32 mm	no				Rate Only
3.7.11	Ø110 mm reducer to Ø80 mm	no				Rate Only
3.7.12	Ø25 mm Ball Valve	no				Rate Only
3.7.13	Supply and install a chain driven 100 mm diameter gear operated butterfly valve	no.				Rate Only
3.8	Booster Connection					
3.8.1	Supply and install a dual booster connection including pressure gauge, thrust block, non-return valve, fittings, joints, reducers, etc. for the complete installation	sum				Rate Only
3.8.2	External fire booster concrete riser / base. To be painted yellow	sum				Rate Only
3.8.3	Supply and install Ø110 non-return after municipal connection including thrust block, fittings, joints, reducers, etc. for the complete installation thereof	sum				Rate Only
3.9	Fire Water Flow and Pressure Test					
3.9.1	Flow and pressure test to be undertaken to check if in compliance with fire water requirements	sum	1.00			
3.9.2	Pressure testing of complete fire water installation to be undertaken (6 Bar)	sum	1.00			
Total for Schedule carried forward to Summary					R	1 000.00

Schedule 4 : Provisional Sums and Contingency Sums

				Fire Protection		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
4	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
4.1	Provisional Sums					
4.1.1	?????? Allow a provisional sum for ??????					
4.1.1.1	??????	sum	1.00			
4.2	Contingency Sum					
4.2.1	Contingency Sum					
4.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	1 000.00

Summary Page

Item	Description	Fire Protection
1	Preliminary & General Items	
2	Sprinkler Installation	
3	Fire Appliance Installation	
4	Provisional Sums and Contingency Sums	1 000.00
Sub-total carried forward to Summary (Page 33)		

Description	(Factory Mezzanine)	(Foam Cell Enclosure)	(Dispatch W206)	(Dispatch CUN)	Accumulative Values
Preliminary & General Items					
Sprinkler Installation					
Fire Appliance Installation					
Provisional Sums and Contingency Sums					
Sub-totals					
					Total

**GOODS HOISTS
(LIFTS & DOCK LEVELLERS)**

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Lifts and Dock Levellers		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Lifts and Dock Levellers			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Lift Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Rate Only

Schedule 2 :Lifts and Dock Levellers

Item	Description	Unit	Qty	Lifts and Dock Levellers		
				Rates		Nett Amount
				Supply	Install	
2	Lifts and Dock Levellers					
2.1	Vertical Linear Beam Lift					
	Allow the following provisional sums :					
2.1.1	Design, supply and installation of a vertical linear beam lift capable of lifting 1500 kg to a height of 5.7 m (6.7 m total height) to a precision position of +/-1 mm (3 mm within life) including interfacing to the AGV System. The system is to have an automatic control interfaced to the AGV system and a manual system if needed. The system is to include sensors interface control, platform and is to allow the AGV to move freely over the lift platform on ground and mezzanine	no.	2.00	210 000.00	40 000.00	500 000.00
2.1.2	Shipping and delivery to site	sum	1.00	50 000.00		50 000.00
2.1.3	Lift frame and guides	no.	2.00	30 000.00	10 000.00	80 000.00
2.1.3	Interface to existing fire detection panel	no.	1.00	5 000.00		5 000.00
2.2	Dock Leveller					
	Allow the following provisional sums :					
2.2.1	Design, supply and installation of the dock leveller to match existing units on site (and to Client's standard specifications)	no.		104 000.00	40 000.00	Rate Only
2.2.2	Free standing frame	no.		20 000.00	5 000.00	Rate Only
Total for Schedule carried forward to Summary					R	635 000.00

Schedule 3 : Provisional Sums and Contingency Sums

Schedule 3 : Provisional Sums and Contingency Sums				Lifts and Dock Levellers		
				Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
3.1.1.1	Allow a provisional sum for....	sum	1.00			
3.1.1.1	??????					
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	4 000.00		4 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

Item	Description	Lifts and Dock Levellers
1	Preliminary & General Items	
2	Lifts and Dock Levellers	
3	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 11)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Lifts and Dock Levellers		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Lifts and Dock Levellers			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items (continued)	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Lift Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 :Lifts and Dock Levellers

				Lifts and Dock Levellers		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Lifts and Dock Levellers					
2.1	Vertical Linear Beam Lift					
	Allow the following provisional sums :					
2.1.1	Design, supply and installation of a vertical linear beam lift capable of lifting 1500 kg to a height of 5.7 m (6.7 m total height) to a precision position of +/-1 mm (3 mm within life) including interfacing to the AGV System. The system is to have an automatic control interfaced to the AGV system and a manual system if needed. The system is to include sensors interface control, platform and is to allow the AGV to move freely over the lift platform on ground and mezzanine	no.		210 000.00	40 000.00	Rate Only
2.1.2	Shipping and delivery to site	sum		50 000.00		Rate Only
2.1.3	Lift frame and guides	no.		30 000.00	10 000.00	Rate Only
2.1.3	Interface to existing fire detection panel	no.		5 000.00		Rate Only
2.2	Dock Leveller					
	Allow the following provisional sums :					
2.2.1	Design, supply and installation of the dock leveller to match existing units on site (and to Client's standard specifications)	no.	1.00	104 000.00	40 000.00	144 000.00
2.2.2	Free standing frame	no.	1.00	20 000.00	5 000.00	25 000.00
Total for Schedule carried forward to Summary					R	169 000.00

Schedule 3 : Provisional Sums and Contingency Sums

				Lifts and Dock Levellers		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional Sums and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	Existing Services Allow a provisional sum for the connection to the existing fire detection system, including all necessary precautions during connection process					
3.1.1.1	Existing Services	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00
Total for Schedule carried forward to Summary					R	

Summary Page

Item	Description	Lifts and Dock Levellers
1	Preliminary & General Items	
2	Lifts and Dock Levellers	
3	Provisional Sums and Contingency Sums	
Sub-total carried forward to Summary (Page 11)		

STATUTORY SIGNAGE

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Signage Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Regulatory. Escape and Associated Signage

Schedule 2 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage					
2.1	Fire Appliance Directional Signage 290 mm (H) Photo-illuminiscent, red pictogram (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved (Stamp)" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.1.1	Signage Type F1 (Arrow pointing down, fire extinguisher, fire hose reel and fire hydrant)	ea.	2.00			
2.1.2	Signage Type F2 (Arrow pointing left, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.3	Signage Type F3 (Arrow pointing right, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.4	Signage Type F4 (Arrow pointing down, fire extinguisher and fire hose reel)	ea.	4.00			
2.1.5	Signage Type F5 (Arrow pointing left, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.6	Signage Type F6 (Arrow pointing right, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.7	Signage Type F7 (Arrow pointing down, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.8	Signage Type F8 (Arrow pointing left, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.9	Signage Type F9 (Arrow pointing right, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.10	Signage Type F10 (Arrow pointing down, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.11	Signage Type F11 (Arrow pointing left, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.12	Signage Type F12 (Arrow pointing right, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.13	Signage Type F13 (Arrow pointing down and fire extinguisher)	ea.	6.00			
2.1.14	Signage Type F14 (Arrow pointing left And fire extinguisher)	ea.	2.00			
2.1.15	Signage Type F15 (Arrow pointing down and fire hydrant)	ea.				Rate Only
2.1.16	Signage Type F16 (Arrow pointing left and fire extinguisher)	ea.				Rate Only
2.1.17	Signage Type F17 (Arrow pointing left and fire hose reel)	ea.				Rate Only
2.1.18	Signage Type F18 (Arrow pointing left and fire hydrant)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.1.19	Signage Type F19 (Arrow pointing right and fire extinguisher)	ea.				Rate Only
2.1.20	Signage Type F20 Arrow pointing right and fire hose reel)	ea.				Rate Only
2.1.21	Signage Type F21 (Arrow pointing right and fire hydrant)	ea.				Rate Only
2.1.22	Signage Type F22 (Fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.23	Signage Type F23 (Fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.24	Signage Type F28 (Fire extinguisher)	ea.				Rate Only
2.1.25	Signage Type F29 (Fire hose reel)	ea.				Rate Only
2.1.26	Signage Type F30 (Fire hydrant)	ea.				Rate Only
2.2	Escape Directional Signage					
	290 mm (H) Photo-illuminiscent, white pictogram (s), all on green background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign					
2.2.1	Signage Type E1 (Running man and arrow pointing right)	ea.	6.00			
2.2.2	Signage Type E2 (Arrow pointing left and running man)	ea.	6.00			
2.2.3	Signage Type E3 (Arrow pointing down and running man)	ea.				Rate Only
2.2.4	Signage Type E11 (Running man and Diagonal arrow pointing up to right)	ea.				Rate Only
2.2.5	Signage Type E12 (Diagonal arrow pointing up to left and running man)	ea.				Rate Only
2.2.6	Signage Type E13 (Running man and Diagonal arrow pointing down to right)	ea.				Rate Only
2.2.7	Signage Type E14 (Diagonal arrow pointing down to left and running man)	ea.				Rate Only
2.2.8	Signage Type E16 (Running man, descending stairs and arrow pointing right)	ea.	1.00			
2.2.9	Signage Type E17 (Arrow pointing left, ascending stairs and running man)	ea.	1.00			
2.2.10	Signage Type E18 (Running man, ascending stairs and arrow pointing right)	ea.				Rate Only
2.2.11	Signage Type E19 (Arrow pointing left, descending stairs and running man)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.3	Text Signage 290 mm (H) Photo-illuminiscent, red letter (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.3.1	Signage Type E6 (Exit)	ea.				Rate Only
2.3.2	Signage Type E15 (In case of emergency use stairs and not the lift)	ea.				Rate Only
2.4	Illuminated / Lamp Type Signage Illuminated / lamp type pictogram surface mounted (approximately) 375 mm (long) x 147 mm (high) x 25 mm (wide), all complying to South African Bureau of Standards, including steel frame finished with a white epoxy powder coating, minimum 10 off 2 watt light emitting diodes (led) with a total circuit current of 40 mA providing a uniform illumination, three off 0.3 Ahr ni-cad batteries, providing (minimum) 2 hours of operation and control gear suitable for operation with the specified rating of the lamps on a 230 V ± 10 % 50 Hz single phase system					
2.4.1	Signage Type E3(I) (Arrow pointing down and running man, white pictogram (s), all on green background)	ea.				Rate Only
2.4.2	Signage Type E6 (I) (Exit, red letter (s), all on white background)	ea.				Rate Only
2.5	Signage Frames (Suspended / Hanging Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign (s), suspended 100 mm from underside of roof slab (or 100 mm from underside of ceiling finish) by means of 2 off purpose-manufactured galvanized steel suspension wire rope loops, secured to the roof slab by means of a 6 mm (diameter) x 125 mm stainless steel eye screw and nylon plug (or secured to the ceiling "T" by means of pop-rivets). All to be manufactured and installed in accordance with SANS 1186					
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.5.1	Frame to house 290 mm x 1160 mm single sign, i.e. F1 to F3 signs	ea.				Rate Only
2.5.2	Frame to house 290 mm x 1160 mm back to back signs, i.e. F1 to F3 signs	ea.				Rate Only
2.5.3	Frame to house 290 mm x 870 mm single sign, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.4	Frame to house 290 mm x 870 mm back to back signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.5	Frame to house 290 mm x 580 mm single sign, i.e. F13 to F22 and E1 to E14 signs	ea.				Rate Only
2.5.6	Frame to house 290 mm x 580 mm back to back signs, i.e. F13 to F22 and E1 to E14 signs	ea.	12.00			
2.5.7	Frame to house 290 mm x 290 mm single sign, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.5.8	Frame to house 290 mm x 290 mm back to back signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.6	Signage Frames (Wall Mounted Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign, wall-mounted at 2450 mm AFFL - by means of 4 off purpose-manufactured wall brackets, each secured by means of 6 mm (Diameter) x 50 mm (Long) stainless steel screw fastener and suitable nylon wall plug. All to be manufactured and installed in accordance with SANS 1186					
2.6.1	Frame to house 290 mm x 1160 mm signs, i.e. F1 to F3 signs	ea.	2.00			
2.6.2	Frame to house 290 mm x 870 mm signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.6.3	Frame to house 290 mm x 580 mm signs, i.e. F13 to F22 and E1 to E14 signs	ea.	6.00			
2.6.4	Frame to house 290 mm x 290 mm signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.7	Miscellaneous Allow the extra-over costs involved in :					
2.7.1	Any addition to the above purpose-manufactured galvanized steel suspension wire	m	60.00			
2.7.2	Reposition existing signage as per details above	ea.	2.00			
2.7.3	Allowance for storage height limitation signage	sum	1.00			
Total for Schedule carried forward					R	

Schedule 3 : Provisional and Contingency Sums

Schedule 3 : Provisional and Contingency Sums				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
3.1.1.1	Allow a provisional sum for....					
3.1.1.1	??????	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00

		Signage
Item	Description	Summary
1	Preliminary & General Items	
2	Regulatory, Escape and Associated Signage	
3	Provisional and Contingency Sums	
Sub-total carried forward to Summary (Page 41)		

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Signage Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Regulatory. Escape and Associated Signage

Schedule 2 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage					
2.1	Fire Appliance Directional Signage 290 mm (H) Photo-illuminiscent, red pictogram (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved (Stamp)" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.1.1	Signage Type F1 (Arrow pointing down, fire extinguisher, fire hose reel and fire hydrant)	ea.	1.00			
2.1.2	Signage Type F2 (Arrow pointing left, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.3	Signage Type F3 (Arrow pointing right, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.4	Signage Type F4 (Arrow pointing down, fire extinguisher and fire hose reel)	ea.	1.00			
2.1.5	Signage Type F5 (Arrow pointing left, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.6	Signage Type F6 (Arrow pointing right, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.7	Signage Type F7 (Arrow pointing down, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.8	Signage Type F8 (Arrow pointing left, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.9	Signage Type F9 (Arrow pointing right, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.10	Signage Type F10 (Arrow pointing down, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.11	Signage Type F11 (Arrow pointing left, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.12	Signage Type F12 (Arrow pointing right, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.13	Signage Type F13 (Arrow pointing down and fire extinguisher)	ea.	4.00			
2.1.14	Signage Type F14 (Arrow pointing left And fire extinguisher)	ea.				Rate Only
2.1.15	Signage Type F15 (Arrow pointing down and fire hydrant)	ea.				Rate Only
2.1.16	Signage Type F16 (Arrow pointing left and fire extinguisher)	ea.				Rate Only
2.1.17	Signage Type F17 (Arrow pointing left and fire hose reel)	ea.				Rate Only
2.1.18	Signage Type F18 (Arrow pointing left and fire hydrant)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.1.19	Signage Type F19 (Arrow pointing right and fire extinguisher)	ea.				Rate Only
2.1.20	Signage Type F20 Arrow pointing right and fire hose reel)	ea.				Rate Only
2.1.21	Signage Type F21 (Arrow pointing right and fire hydrant)	ea.				Rate Only
2.1.22	Signage Type F22 (Fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.23	Signage Type F23 (Fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.24	Signage Type F28 (Fire extinguisher)	ea.				Rate Only
2.1.25	Signage Type F29 (Fire hose reel)	ea.				Rate Only
2.1.26	Signage Type F30 (Fire hydrant)	ea.				Rate Only
2.2	Escape Directional Signage					
	290 mm (H) Photo-illuminiscent, white pictogram (s), all on green background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign					
2.2.1	Signage Type E1 (Running man and arrow pointing right)	ea.	4.00			
2.2.2	Signage Type E2 (Arrow pointing left and running man)	ea.	4.00			
2.2.3	Signage Type E3 (Arrow pointing down and running man)	ea.	2.00			
2.2.4	Signage Type E11 (Running man and Diagonal arrow pointing up to right)	ea.				Rate Only
2.2.5	Signage Type E12 (Diagonal arrow pointing up to left and running man)	ea.				Rate Only
2.2.6	Signage Type E13 (Running man and Diagonal arrow pointing down to right)	ea.				Rate Only
2.2.7	Signage Type E14 (Diagonal arrow pointing down to left and running man)	ea.				Rate Only
2.2.8	Signage Type E16 (Running man, descending stairs and arrow pointing right)	ea.				Rate Only
2.2.9	Signage Type E17 (Arrow pointing left, ascending stairs and running man)	ea.				Rate Only
2.2.10	Signage Type E18 (Running man, ascending stairs and arrow pointing right)	ea.				Rate Only
2.2.11	Signage Type E19 (Arrow pointing left, descending stairs and running man)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.3	Text Signage 290 mm (H) Photo-illuminiscent, red letter (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.3.1	Signage Type E6 (Exit)	ea.				Rate Only
2.3.2	Signage Type E15 (In case of emergency use stairs and not the lift)	ea.				Rate Only
2.4	Illuminated / Lamp Type Signage Illuminated / lamp type pictogram surface mounted (approximately) 375 mm (long) x 147 mm (high) x 25 mm (wide), all complying to South African Bureau of Standards, including steel frame finished with a white epoxy powder coating, minimum 10 off 2 watt light emitting diodes (led) with a total circuit current of 40 mA providing a uniform illumination, three off 0.3 Ahr ni-cad batteries, providing (minimum) 2 hours of operation and control gear suitable for operation with the specified rating of the lamps on a 230 V ± 10 % 50 Hz single phase system					
2.4.1	Signage Type E3(I) (Arrow pointing down and running man, white pictogram (s), all on green background)	ea.				Rate Only
2.4.2	Signage Type E6 (I) (Exit, red letter (s), all on white background)	ea.				Rate Only
2.5	Signage Frames (Suspended / Hanging Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign (s), suspended 100 mm from underside of roof slab (or 100 mm from underside of ceiling finish) by means of 2 off purpose-manufactured galvanized steel suspension wire rope loops, secured to the roof slab by means of a 6 mm (diameter) x 125 mm stainless steel eye screw and nylon plug (or secured to the ceiling "T" by means of pop-rivets). All to be manufactured and installed in accordance with SANS 1186					
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.5.1	Frame to house 290 mm x 1160 mm single sign, i.e. F1 to F3 signs	ea.				Rate Only
2.5.2	Frame to house 290 mm x 1160 mm back to back signs, i.e. F1 to F3 signs	ea.				Rate Only
2.5.3	Frame to house 290 mm x 870 mm single sign, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.4	Frame to house 290 mm x 870 mm back to back signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.5	Frame to house 290 mm x 580 mm single sign, i.e. F13 to F22 and E1 to E14 signs	ea.				Rate Only
2.5.6	Frame to house 290 mm x 580 mm back to back signs, i.e. F13 to F22 and E1 to E14 signs	ea.	8.00			
2.5.7	Frame to house 290 mm x 290 mm single sign, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.5.8	Frame to house 290 mm x 290 mm back to back signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.6	Signage Frames (Wall Mounted Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign, wall-mounted at 2450 mm AFFL - by means of 4 off purpose-manufactured wall brackets, each secured by means of 6 mm (Diameter) x 50 mm (Long) stainless steel screw fastener and suitable nylon wall plug. All to be manufactured and installed in accordance with SANS 1186					
2.6.1	Frame to house 290 mm x 1160 mm signs, i.e. F1 to F3 signs	ea.	1.00			
2.6.2	Frame to house 290 mm x 870 mm signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.	1.00			
2.6.3	Frame to house 290 mm x 580 mm signs, i.e. F13 to F22 and E1 to E14 signs	ea.	4.00			
2.6.4	Frame to house 290 mm x 290 mm signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.7	Miscellaneous					
	Allow the extra-over costs involved in :					
2.7.1	Any addition to the above purpose-manufactured galvanized steel suspension wire	m	20.00			
2.7.2	Reposition existing signage as per details above	ea.	4.00			
2.7.3	Allowance for storage height limitation signage	sum				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Provisional and Contingency Sums

Schedule 3 : Provisional and Contingency Sums				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
3.1.1.1	Allow a provisional sum for....					
3.1.1.1	??????	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00

		Signage
Item	Description	Summary
1	Preliminary & General Items	
2	Regulatory, Escape and Associated Signage	
3	Provisional and Contingency Sums	
Sub-total carried forward to Summary (Page 41)		

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Signage Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Regulatory. Escape and Associated Signage

Schedule 2 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage					
2.1	Fire Appliance Directional Signage 290 mm (H) Photo-illuminiscent, red pictogram (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved (Stamp)" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.1.1	Signage Type F1 (Arrow pointing down, fire extinguisher, fire hose reel and fire hydrant)	ea.	1.00			Rate Only
2.1.2	Signage Type F2 (Arrow pointing left, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.3	Signage Type F3 (Arrow pointing right, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.4	Signage Type F4 (Arrow pointing down, fire extinguisher and fire hose reel)	ea.				
2.1.5	Signage Type F5 (Arrow pointing left, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.6	Signage Type F6 (Arrow pointing right, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.7	Signage Type F7 (Arrow pointing down, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.8	Signage Type F8 (Arrow pointing left, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.9	Signage Type F9 (Arrow pointing right, fire hose reel and fire hydrant)	ea.	3.00			Rate Only
2.1.10	Signage Type F10 (Arrow pointing down, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.11	Signage Type F11 (Arrow pointing left, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.12	Signage Type F12 (Arrow pointing right, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.13	Signage Type F13 (Arrow pointing down and fire extinguisher)	ea.				
2.1.14	Signage Type F14 (Arrow pointing left And fire extinguisher)	ea.				Rate Only
2.1.15	Signage Type F15 (Arrow pointing down and fire hydrant)	ea.				Rate Only
2.1.16	Signage Type F16 (Arrow pointing left and fire extinguisher)	ea.				Rate Only
2.1.17	Signage Type F17 (Arrow pointing left and fire hose reel)	ea.				Rate Only
2.1.18	Signage Type F18 (Arrow pointing left and fire hydrant)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.1.19	Signage Type F19 (Arrow pointing right and fire extinguisher)	ea.				Rate Only
2.1.20	Signage Type F20 Arrow pointing right and fire hose reel)	ea.				Rate Only
2.1.21	Signage Type F21 (Arrow pointing right and fire hydrant)	ea.				Rate Only
2.1.22	Signage Type F22 (Fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.23	Signage Type F23 (Fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.24	Signage Type F28 (Fire extinguisher)	ea.				Rate Only
2.1.25	Signage Type F29 (Fire hose reel)	ea.				Rate Only
2.1.26	Signage Type F30 (Fire hydrant)	ea.				Rate Only
2.2	Escape Directional Signage					
	290 mm (H) Photo-illuminiscent, white pictogram (s), all on green background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign					
2.2.1	Signage Type E1 (Running man and arrow pointing right)	ea.	1.00			
2.2.2	Signage Type E2 (Arrow pointing left and running man)	ea.	1.00			
2.2.3	Signage Type E3 (Arrow pointing down and running man)	ea.	1.00			
2.2.4	Signage Type E11 (Running man and Diagonal arrow pointing up to right)	ea.				Rate Only
2.2.5	Signage Type E12 (Diagonal arrow pointing up to left and running man)	ea.				Rate Only
2.2.6	Signage Type E13 (Running man and Diagonal arrow pointing down to right)	ea.				Rate Only
2.2.7	Signage Type E14 (Diagonal arrow pointing down to left and running man)	ea.				Rate Only
2.2.8	Signage Type E16 (Running man, descending stairs and arrow pointing right)	ea.				Rate Only
2.2.9	Signage Type E17 (Arrow pointing left, ascending stairs and running man)	ea.				Rate Only
2.2.10	Signage Type E18 (Running man, ascending stairs and arrow pointing right)	ea.				Rate Only
2.2.11	Signage Type E19 (Arrow pointing left, descending stairs and running man)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.3	Text Signage					
	290 mm (H) Photo-illuminiscent, red letter (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.3.1	Signage Type E6 (Exit)	ea.				Rate Only
2.3.2	Signage Type E15 (In case of emergency use stairs and not the lift)	ea.				Rate Only
2.4	Illuminated / Lamp Type Signage					
	Illuminated / lamp type pictogram surface mounted (approximately) 375 mm (long) x 147 mm (high) x 25 mm (wide), all complying to South African Bureau of Standards, including steel frame finished with a white epoxy powder coating, minimum 10 off 2 watt light emitting diodes (led) with a total circuit current of 40 mA providing a uniform illumination, three off 0.3 Ahr ni-cad batteries, providing (minimum) 2 hours of operation and control gear suitable for operation with the specified rating of the lamps on a 230 V ± 10 % 50 Hz single phase system					
2.4.1	Signage Type E3(I) (Arrow pointing down and running man, white pictogram (s), all on green background)	ea.				Rate Only
2.4.2	Signage Type E6 (I) (Exit, red letter (s), all on white background)	ea.				Rate Only
2.5	Signage Frames (Suspended / Hanging Type)					
	Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign (s), suspended 100 mm from underside of roof slab (or 100 mm from underside of ceiling finish) by means of 2 off purpose-manufactured galvanized steel suspension wire rope loops, secured to the roof slab by means of a 6 mm (diameter) x 125 mm stainless steel eye screw and nylon plug (or secured to the ceiling "T" by means of pop-rivets). All to be manufactured and installed in accordance with SANS 1186					
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.5.1	Frame to house 290 mm x 1160 mm single sign, i.e. F1 to F3 signs	ea.				Rate Only
2.5.2	Frame to house 290 mm x 1160 mm back to back signs, i.e. F1 to F3 signs	ea.				Rate Only
2.5.3	Frame to house 290 mm x 870 mm single sign, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.4	Frame to house 290 mm x 870 mm back to back signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.5	Frame to house 290 mm x 580 mm single sign, i.e. F13 to F22 and E1 to E14 signs	ea.				Rate Only
2.5.6	Frame to house 290 mm x 580 mm back to back signs, i.e. F13 to F22 and E1 to E14 signs	ea.	1.00			
2.5.7	Frame to house 290 mm x 290 mm single sign, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.5.8	Frame to house 290 mm x 290 mm back to back signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.6	Signage Frames (Wall Mounted Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign, wall-mounted at 2450 mm AFFL - by means of 4 off purpose-manufactured wall brackets, each secured by means of 6 mm (Diameter) x 50 mm (Long) stainless steel screw fastener and suitable nylon wall plug. All to be manufactured and installed in accordance with SANS 1186					
2.6.1	Frame to house 290 mm x 1160 mm signs, i.e. F1 to F3 signs	ea.				Rate Only
2.6.2	Frame to house 290 mm x 870 mm signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.	1.00			
2.6.3	Frame to house 290 mm x 580 mm signs, i.e. F13 to F22 and E1 to E14 signs	ea.	3.00			
2.6.4	Frame to house 290 mm x 290 mm signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.7	Miscellaneous Allow the extra-over costs involved in :					
2.7.1	Any addition to the above purpose-manufactured galvanized steel suspension wire	m	10.00			
2.7.2	Reposition existing signage as per details above	ea.				Rate Only
2.7.3	Allowance for storage height limitation signage	sum	1.00			
Total for Schedule carried forward					R	

Schedule 3 : Provisional and Contingency Sums

Schedule 3 : Provisional and Contingency Sums				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
3.1.1.1	Allow a provisional sum for....					
3.1.1.1	??????	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00

		Signage
Item	Description	Summary
1	Preliminary & General Items	
2	Regulatory, Escape and Associated Signage	
3	Provisional and Contingency Sums	
Sub-total carried forward to Summary (Page 41)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Signage		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items	Amount Brought Forward				Rate Only
1.3	Time Related Items					
1.3.1	Project Supervision	mths	2.00			
1.3.2	Project Administration	mths	2.00			
1.3.3	Other Overheads (travel, accommodation)	mths	2.00			
1.3.4	Other time related items not detailed above	mths	2.00			
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Signage Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>					
1.4	General Items					
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00			
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00			
1.4.3	Inspect site, prior to submission of tender	sum	1.00			
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum				
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00			
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00			
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00			
1.4.9	Provision of Record Drawings	sum	1.00			
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00			
Total for Schedule carried forward to Summary					R	

Schedule 2 : Regulatory. Escape and Associated Signage

Schedule 2 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage					
2.1	Fire Appliance Directional Signage 290 mm (H) Photo-illuminiscent, red pictogram (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved (Stamp)" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.1.1	Signage Type F1 (Arrow pointing down, fire extinguisher, fire hose reel and fire hydrant)	ea.	1.00			Rate Only
2.1.2	Signage Type F2 (Arrow pointing left, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.3	Signage Type F3 (Arrow pointing right, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.4	Signage Type F4 (Arrow pointing down, fire extinguisher and fire hose reel)	ea.				
2.1.5	Signage Type F5 (Arrow pointing left, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.6	Signage Type F6 (Arrow pointing right, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.7	Signage Type F7 (Arrow pointing down, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.8	Signage Type F8 (Arrow pointing left, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.9	Signage Type F9 (Arrow pointing right, fire hose reel and fire hydrant)	ea.	3.00			Rate Only
2.1.10	Signage Type F10 (Arrow pointing down, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.11	Signage Type F11 (Arrow pointing left, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.12	Signage Type F12 (Arrow pointing right, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.13	Signage Type F13 (Arrow pointing down and fire extinguisher)	ea.				
2.1.14	Signage Type F14 (Arrow pointing left And fire extinguisher)	ea.				Rate Only
2.1.15	Signage Type F15 (Arrow pointing down and fire hydrant)	ea.				Rate Only
2.1.16	Signage Type F16 (Arrow pointing left and fire extinguisher)	ea.				Rate Only
2.1.17	Signage Type F17 (Arrow pointing left and fire hose reel)	ea.				Rate Only
2.1.18	Signage Type F18 (Arrow pointing left and fire hydrant)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.1.19	Signage Type F19 (Arrow pointing right and fire extinguisher)	ea.				Rate Only
2.1.20	Signage Type F20 Arrow pointing right and fire hose reel)	ea.				Rate Only
2.1.21	Signage Type F21 (Arrow pointing right and fire hydrant)	ea.				Rate Only
2.1.22	Signage Type F22 (Fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.23	Signage Type F23 (Fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.24	Signage Type F28 (Fire extinguisher)	ea.				Rate Only
2.1.25	Signage Type F29 (Fire hose reel)	ea.				Rate Only
2.1.26	Signage Type F30 (Fire hydrant)	ea.				Rate Only
2.2	Escape Directional Signage					
	290 mm (H) Photo-illuminiscent, white pictogram (s), all on green background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign					
2.2.1	Signage Type E1 (Running man and arrow pointing right)	ea.	3.00			
2.2.2	Signage Type E2 (Arrow pointing left and running man)	ea.	3.00			
2.2.3	Signage Type E3 (Arrow pointing down and running man)	ea.	1.00			
2.2.4	Signage Type E11 (Running man and Diagonal arrow pointing up to right)	ea.				Rate Only
2.2.5	Signage Type E12 (Diagonal arrow pointing up to left and running man)	ea.				Rate Only
2.2.6	Signage Type E13 (Running man and Diagonal arrow pointing down to right)	ea.				Rate Only
2.2.7	Signage Type E14 (Diagonal arrow pointing down to left and running man)	ea.				Rate Only
2.2.8	Signage Type E16 (Running man, descending stairs and arrow pointing right)	ea.				Rate Only
2.2.9	Signage Type E17 (Arrow pointing left, ascending stairs and running man)	ea.				Rate Only
2.2.10	Signage Type E18 (Running man, ascending stairs and arrow pointing right)	ea.				Rate Only
2.2.11	Signage Type E19 (Arrow pointing left, descending stairs and running man)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.3	Text Signage 290 mm (H) Photo-illuminiscent, red letter (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.3.1	Signage Type E6 (Exit)	ea.				Rate Only
2.3.2	Signage Type E15 (In case of emergency use stairs and not the lift)	ea.				Rate Only
2.4	Illuminated / Lamp Type Signage Illuminated / lamp type pictogram surface mounted (approximately) 375 mm (long) x 147 mm (high) x 25 mm (wide), all complying to South African Bureau of Standards, including steel frame finished with a white epoxy powder coating, minimum 10 off 2 watt light emitting diodes (led) with a total circuit current of 40 mA providing a uniform illumination, three off 0.3 Ahr ni-cad batteries, providing (minimum) 2 hours of operation and control gear suitable for operation with the specified rating of the lamps on a 230 V ± 10 % 50 Hz single phase system					
2.4.1	Signage Type E3(I) (Arrow pointing down and running man, white pictogram (s), all on green background)	ea.				Rate Only
2.4.2	Signage Type E6 (I) (Exit, red letter (s), all on white background)	ea.				Rate Only
2.5	Signage Frames (Suspended / Hanging Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign (s), suspended 100 mm from underside of roof slab (or 100 mm from underside of ceiling finish) by means of 2 off purpose-manufactured galvanized steel suspension wire rope loops, secured to the roof slab by means of a 6 mm (diameter) x 125 mm stainless steel eye screw and nylon plug (or secured to the ceiling "T" by means of pop-rivets). All to be manufactured and installed in accordance with SANS 1186					
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.5.1	Frame to house 290 mm x 1160 mm single sign, i.e. F1 to F3 signs	ea.				Rate Only
2.5.2	Frame to house 290 mm x 1160 mm back to back signs, i.e. F1 to F3 signs	ea.				Rate Only
2.5.3	Frame to house 290 mm x 870 mm single sign, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.4	Frame to house 290 mm x 870 mm back to back signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.5	Frame to house 290 mm x 580 mm single sign, i.e. F13 to F22 and E1 to E14 signs	ea.				Rate Only
2.5.6	Frame to house 290 mm x 580 mm back to back signs, i.e. F13 to F22 and E1 to E14 signs	ea.	3.00			
2.5.7	Frame to house 290 mm x 290 mm single sign, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.5.8	Frame to house 290 mm x 290 mm back to back signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.6	Signage Frames (Wall Mounted Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign, wall-mounted at 2450 mm AFFL - by means of 4 off purpose-manufactured wall brackets, each secured by means of 6 mm (Diameter) x 50 mm (Long) stainless steel screw fastener and suitable nylon wall plug. All to be manufactured and installed in accordance with SANS 1186					
2.6.1	Frame to house 290 mm x 1160 mm signs, i.e. F1 to F3 signs	ea.				Rate Only
2.6.2	Frame to house 290 mm x 870 mm signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.	1.00			
2.6.3	Frame to house 290 mm x 580 mm signs, i.e. F13 to F22 and E1 to E14 signs	ea.	3.00			
2.6.4	Frame to house 290 mm x 290 mm signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.7	Miscellaneous Allow the extra-over costs involved in :					
2.7.1	Any addition to the above purpose-manufactured galvanized steel suspension wire	m	25.00			
2.7.2	Reposition existing signage as per details above	ea.				Rate Only
2.7.3	Allowance for storage height limitation signage	sum	1.00			
Total for Schedule carried forward					R	

Schedule 3 : Provisional and Contingency Sums

Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
3.1.1.1	Allow a provisional sum for....					
3.1.1.1	??????	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00

		Signage
Item	Description	Summary
1	Preliminary & General Items	
2	Regulatory, Escape and Associated Signage	
3	Provisional and Contingency Sums	
Sub-total carried forward to Summary (Page 41)		

Schedule 1 : Preliminary & General Items

Item	Description	Unit	Qty	Signage		
				Rates		Nett Amount
				Supply	Install	
1	Preliminary & General Items					
1.1	Contractual Items					
1.1.1	Provision of a Sub-contract Construction Guarantee, in terms of the Nominated / Selected Sub-contract Agreement	sum	1.00			
1.1.2	Provision of an Advanced Payment Guarantee, in the amount as is required for the procurement of any materials and / or equipment, so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00			
1.1.3	Provision of the Insurances e.g. Contract Works Insurance, Special Insurances, Supplementary Insurance, Public Liability Insurance, etc., as is deemed necessary for the sub-contract Works	sum	1.00			
1.1.4	Allowance for the Compliance with the Construction Regulations, w.r.t. the Occupational Health and Safety Specification prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.5	Allowance for the Compliance with the Construction Regulations, w.r.t. the Construction Environment Management Plan prepared by the Employer and / or their designated Agent, and the Principal Contractor and / or their designated Agent, and as further detailed in the Occupational Health & Safety Act, Act 85 of 1993	sum	1.00			
1.1.6	Allow for the warranty of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.7	Allow for the servicing and routine maintenance of the Sub-contract Works for the duration of the stipulated defects liability period	sum	1.00			
1.1.8	Allow for the provision of all applicable Test Certificates and / or Compliance Certificates	sum	1.00			
1.1.9	Other contractual items not detailed above	sum	1.00			
1.2	Fixed Cost Items					
1.2.1	Establishment of Offices on Site	sum	1.00			
1.2.2	Establishment of Storage Facilities on Site	sum	1.00			
1.2.3	Establishment of Ablution Facilities on Site	sum	1.00			
1.2.4	Maintenance of Offices, Storage Facilities & Ablutions	sum	1.00			
1.2.5	Removal of all facilities upon Completion of the Sub-contract Works	sum	1.00			
1.2.6	Other fixed cost items not detailed above	sum	1.00			
Total for Schedule carried forward					R	

Schedule 1 : Preliminary & General Items

Schedule 1 : Preliminary & General Items				Signage			
Item	Description	Unit	Qty	Rates		Nett Amount	
				Supply	Install		
1	Preliminary & General Items	Amount Brought Forward				Rate Only	
1.3	Time Related Items						
1.3.1	Project Supervision	mths	2.00				
1.3.2	Project Administration	mths	2.00				
1.3.3	Other Overheads (travel, accommodation)	mths	2.00				
1.3.4	Other time related items not detailed above	mths	2.00				
	<i>Note : The Work shall at all times, for the duration of the sub-contract, be carried out under the supervision of a competent representative of the Signage Sub-contractor in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended.</i>						
1.4	General Items						
1.4.1	Provision of a Programme for the Sub-contract Works, considered and prepared in accordance with the approved Principal Contractor's Construction Programme	sum	1.00				
1.4.2	Completion of necessary commencement, compliance and completion forms for the installation as required in terms of the Occupational Health and Safety Act No. 85 of 1993, as amended, the relevant SABS Specifications and the requirements of the relevant Supply Authorities	sum	1.00				
1.4.3	Inspect site, prior to submission of tender	sum	1.00				
1.4.4	Providing a "Master Installation Electrician" for overseeing the electrical installations within the hazardous locations (if and where applicable)	sum					
1.4.5	Provision of all necessary forms of access i.e. scaffolding, cherry pickers, etc., in complete and strict accordance with the relevant Construction Regulations (refer to Clause 1.1.6), so as to facilitate the successful and timeous completion of the sub-contract Works	sum	1.00				
1.4.6	Carrying out of all testing of the complete sub-contract Works and the commissioning thereof, so as to facilitate the handover of the complete sub-contract Works to the Employer complete with all applicable Test Certificates and / or Compliance Certificates (refer to clause 1.1.8)	sum	1.00				
1.4.7	Training of Client's representative (s) at "practical completion"	sum	1.00				
1.4.8	Training of Client's representative (s) at "end of defects liability period"	sum	1.00				
1.4.9	Provision of Record Drawings	sum	1.00				
1.4.10	Provision of Operating and Maintenance manuals	sum	1.00				
Total for Schedule carried forward to Summary							R

Schedule 2 : Regulatory. Escape and Associated Signage

Schedule 2 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage					
2.1	Fire Appliance Directional Signage 290 mm (H) Photo-illuminiscent, red pictogram (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved (Stamp)" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.1.1	Signage Type F1 (Arrow pointing down, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.2	Signage Type F2 (Arrow pointing left, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.3	Signage Type F3 (Arrow pointing right, fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.4	Signage Type F4 (Arrow pointing down, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.5	Signage Type F5 (Arrow pointing left, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.6	Signage Type F6 (Arrow pointing right, fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.7	Signage Type F7 (Arrow pointing down, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.8	Signage Type F8 (Arrow pointing left, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.9	Signage Type F9 (Arrow pointing right, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.10	Signage Type F10 (Arrow pointing down, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.11	Signage Type F11 (Arrow pointing left, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.12	Signage Type F12 (Arrow pointing right, fire extinguisher and fire hydrant)	ea.				Rate Only
2.1.13	Signage Type F13 (Arrow pointing down and fire extinguisher)	ea.	2.00			
2.1.14	Signage Type F14 (Arrow pointing left And fire extinguisher)	ea.	1.00			
2.1.15	Signage Type F15 (Arrow pointing down and fire hydrant)	ea.				Rate Only
2.1.16	Signage Type F16 (Arrow pointing left and fire extinguisher)	ea.				Rate Only
2.1.17	Signage Type F17 (Arrow pointing left and fire hose reel)	ea.				Rate Only
2.1.18	Signage Type F18 (Arrow pointing left and fire hydrant)	ea.				Rate Only
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.1.19	Signage Type F19 (Arrow pointing right and fire extinguisher)	ea.				Rate Only
2.1.20	Signage Type F20 Arrow pointing right and fire hose reel)	ea.				Rate Only
2.1.21	Signage Type F21 (Arrow pointing right and fire hydrant)	ea.				Rate Only
2.1.22	Signage Type F22 (Fire extinguisher and fire hose reel)	ea.				Rate Only
2.1.23	Signage Type F23 (Fire extinguisher, fire hose reel and fire hydrant)	ea.				Rate Only
2.1.24	Signage Type F28 (Fire extinguisher)	ea.				Rate Only
2.1.25	Signage Type F29 (Fire hose reel)	ea.				Rate Only
2.1.26	Signage Type F30 (Fire hydrant)	ea.				Rate Only
2.2	Escape Directional Signage					
	290 mm (H) Photo-illuminiscent, white pictogram (s), all on green background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign					
2.2.1	Signage Type E1 (Running man and arrow pointing right)	ea.	2.00			
2.2.2	Signage Type E2 (Arrow pointing left and running man)	ea.	2.00			
2.2.3	Signage Type E3 (Arrow pointing down and running man)	ea.				Rate Only
2.2.4	Signage Type E11 (Running man and Diagonal arrow pointing up to right)	ea.				Rate Only
2.2.5	Signage Type E12 (Diagonal arrow pointing up to left and running man)	ea.				Rate Only
2.2.6	Signage Type E13 (Running man and Diagonal arrow pointing down to right)	ea.				Rate Only
2.2.7	Signage Type E14 (Diagonal arrow pointing down to left and running man)	ea.				Rate Only
2.2.8	Signage Type E16 (Running man, descending stairs and arrow pointing right)	ea.				Rate Only
2.2.9	Signage Type E17 (Arrow pointing left, ascending stairs and running man)	ea.				Rate Only
2.2.10	Signage Type E18 (Running man, ascending stairs and arrow pointing right)	ea.				Rate Only
2.2.11	Signage Type E19 (Arrow pointing left, descending stairs and running man)	ea.				Rate Only
Total for Schedule carried forward					R	

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.3	Text Signage 290 mm (H) Photo-illuminiscent, red letter (s), all on white background. Manufacture and installed in strict accordance with South African National Standard, SANS 1186 - 1 : 2015 - edition 3.7, entitled "Symbolic Safety Signs - Part : Standard Signs and General Requirements". The wording "SANS 1186:5, SANS approved" and the signage manufacture's relevant permit number must be reflected on the bottom right of the sign.					
2.3.1	Signage Type E6 (Exit)	ea.				Rate Only
2.3.2	Signage Type E15 (In case of emergency use stairs and not the lift)	ea.				Rate Only
2.4	Illuminated / Lamp Type Signage Illuminated / lamp type pictogram surface mounted (approximately) 375 mm (long) x 147 mm (high) x 25 mm (wide), all complying to South African Bureau of Standards, including steel frame finished with a white epoxy powder coating, minimum 10 off 2 watt light emitting diodes (led) with a total circuit current of 40 mA providing a uniform illumination, three off 0.3 Ahr ni-cad batteries, providing (minimum) 2 hours of operation and control gear suitable for operation with the specified rating of the lamps on a 230 V ± 10 % 50 Hz single phase system					
2.4.1	Signage Type E3(I) (Arrow pointing down and running man, white pictogram (s), all on green background)	ea.				Rate Only
2.4.2	Signage Type E6 (I) (Exit, red letter (s), all on white background)	ea.	2.00			
2.5	Signage Frames (Suspended / Hanging Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign (s), suspended 100 mm from underside of roof slab (or 100 mm from underside of ceiling finish) by means of 2 off purpose-manufactured galvanized steel suspension wire rope loops, secured to the roof slab by means of a 6 mm (diameter) x 125 mm stainless steel eye screw and nylon plug (or secured to the ceiling "T" by means of pop-rivets). All to be manufactured and installed in accordance with SANS 1186					
Total for Schedule carried forward						R

Schedule 3 : Regulatory. Escape and Associated Signage

Schedule 3 : Regulatory. Escape and Associated Signage				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
2	Regulatory, Escape and Associated Signage	Amount Brought Forward				
2.5.1	Frame to house 290 mm x 1160 mm single sign, i.e. F1 to F3 signs	ea.				Rate Only
2.5.2	Frame to house 290 mm x 1160 mm back to back signs, i.e. F1 to F3 signs	ea.				Rate Only
2.5.3	Frame to house 290 mm x 870 mm single sign, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.4	Frame to house 290 mm x 870 mm back to back signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.5.5	Frame to house 290 mm x 580 mm single sign, i.e. F13 to F22 and E1 to E14 signs	ea.				Rate Only
2.5.6	Frame to house 290 mm x 580 mm back to back signs, i.e. F13 to F22 and E1 to E14 signs	ea.	2.00			
2.5.7	Frame to house 290 mm x 290 mm single sign, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.5.8	Frame to house 290 mm x 290 mm back to back signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.6	Signage Frames (Wall Mounted Type) Signage frames manufactured from 20 mm (Wide) x 5 mm (Thick) natural anodized and extruded aluminium, manufactured with a 5 mm lip for the recessing of the sign, wall-mounted at 2450 mm AFFL - by means of 4 off purpose-manufactured wall brackets, each secured by means of 6 mm (Diameter) x 50 mm (Long) stainless steel screw fastener and suitable nylon wall plug. All to be manufactured and installed in accordance with SANS 1186					
2.6.1	Frame to house 290 mm x 1160 mm signs, i.e. F1 to F3 signs	ea.				Rate Only
2.6.2	Frame to house 290 mm x 870 mm signs, i.e. F4 to F12, F23 and E16 to E19 signs	ea.				Rate Only
2.6.3	Frame to house 290 mm x 580 mm signs, i.e. F13 to F22 and E1 to E14 signs	ea.	3.00			
2.6.4	Frame to house 290 mm x 290 mm signs, i.e. F28 to F30 and E15 signs	ea.				Rate Only
2.7	Miscellaneous					
	Allow the extra-over costs involved in :					
2.7.1	Any addition to the above purpose-manufactured galvanized steel suspension wire	m	5.00			
2.7.2	Reposition existing signage as per details above	ea.				Rate Only
2.7.3	Allowance for specialized signage	sum	1.00			
Total for Schedule carried forward						R

Schedule 3 : Provisional and Contingency Sums

Schedule 3 : Provisional and Contingency Sums				Signage		
Item	Description	Unit	Qty	Rates		Nett Amount
				Supply	Install	
3	Provisional and Contingency Sums These provisional and contingency sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Engineers, in writing. These sum may be deleted in full or in part.					
3.1	Provisional Sums					
3.1.1	??????					
	Allow a provisional sum for....					
3.1.1.1	??????	sum	1.00			
3.2	Contingency Sum					
3.2.1	Contingency Sum					
3.2.1.1	Allow a contingency sum for unforeseen circumstances	sum	1.00	1 000.00		1 000.00

		Signage
Item	Description	Summary
1	Preliminary & General Items	
2	Regulatory, Escape and Associated Signage	
3	Provisional and Contingency Sums	
Sub-total carried forward to Summary (Page 41)		

Description	(Factory Mezzanine)	(Foam Cell Enclosure)	(Dispatch W206)	(Dispatch CUN)	(Tugger Route)	Accumulative Values
Preliminary & General Items						
Regulatory, Escape and Associated Signage						
Provisional and Contingency Sums						
Sub-totals						
					Total	

C2.3 SCHEDULE FOR IMPORTED MATERIALS AND EQUIPMENT

C2.3 DPW-23 (EC): Schedule for Imported Materials and Equipment

Project title:	EXTENSION OF MANUFACTURING FACILITY IN ZONE 1A OF THE ELIDZ
Tender no:	ASP/YANFENG/EXT/11/09/Z1A

This schedule should be completed by the tenderer. (Attach additional pages if more space is required)

Item	Material / Equipment	Rand (R) (Excl. VAT)
1.		R
2.		R
3.		R
4.		R

The Contractor shall list imported items, materials and/or equipment which shall be excluded from the Contract Price Adjustment Provisions (if applicable) and shall be adjusted in terms of currency fluctuations only. Copies of the supplier's quotations for the items, materials or equipment (provided that such costs shall not be higher than the relevant contract rate as listed above) should be lodged with the Principal Agent / Engineer of the Department of Public Works within 60 (sixty) days from the date of acceptance of the tender. No adjustment of the local VAT amount, nor the contractor's profit, discount, mark-up, handling costs, etc. shall be allowed.

These net amounts will be adjusted as follows:

FORMULA:

The net amount to be added to or deducted from the contract sum: $A = V \times (\frac{Z}{Y} - 1)$

A = the amount (R) of adjustment

V = the net amount (supplier's quotation) (R) of the imported item

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment.

SIGNED FOR THE TENDERER:	<div style="text-align: center; border-top: 1px dotted black; margin-top: 20px;"> NAME OF TENDERER </div>
<div style="text-align: center; border-top: 1px dotted black; margin-top: 20px;"> SIGNATURE: TENDERER </div>	<div style="text-align: center; border-top: 1px dotted black; margin-top: 20px;"> SIGNATURE: WITNESS 1 </div>
NAME:	NAME:
CAPACITY:	<div style="text-align: center; border-top: 1px dotted black; margin-top: 20px;"> SIGNATURE: WITNESS 2 </div>
DATE:	NAME:

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

C2.4: GUARANTOR PROFORMA LETTER OF INTENT

C2.4: Guarantor Proforma Letter of Intent

EXTENSION OF YANFENG MANUFACTURING FACILITY IN ZONE 1A OF THE ELIDZ

TENDER No. ASP/YANFENG/EXT/11/09/Z1A

The following letter is to be reproduced on the Guarantor's company letterhead

EAST LONDON INDUSTRIAL DEVELOPMENT ZONE SOC LTD
Lower Chester Road
EAST LONDON
5201

Date:

Attention: Mr G. Whittaker

Dear Sir,

ELIDZ: EXTENSION OF YANFENG MANUFACTURING FACILITY IN ZONE 1A OF THE ELIDZ - TENDER No. ASP/YANFENG/EXT/11/09/Z1A

I/we the undersigned undertake to provide an unaltered
JBCC Construction Guarantee on behalf of(the
Contractor) for the amount of R (in words) in favour
of the East London Industrial Development Zone SOC Ltd should
(the Contractor) be awarded the ELIDZ: Provision of Manufacturing Facility IN ZONE 1A OF
THE ELIDZ.

Yours faithfully,

.....
Guarantor

C2.5: CONTRACT DATA CE

C2.5: Contract Data CE (Contractor)

	<p>The Conditions of Contract are clauses 1 to 42 of the JBCC series 2000 Principal Building Agreement (Edition 5 of July 2007) prepared by the Joint Building Contracts Committee.</p> <p>Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors, Master Builders Association, South African Association of Consulting Engineers, South African Institute of Architects, Association of Construction Project Managers, Building Industries Federation South Africa, South African Property Owners Association or Specialist Engineering Contractors Committee.</p>		
	<p>Definitions</p> <p>The definitions used in this document and the interpretation thereof are as listed in the Principal Building Agreement. The word or phrase of a definition is in bold text and shall bear the meaning assigned to it in the Principal Building Agreement. Where such word or phrase is not highlighted it shall bear the meaning consistent with the context of its use. The listed defined word or phrase does not qualify as a definition where information required to be stated in the contract data has not been provided.</p>		
	<p>Provision of Contract Data</p> <p>Spaces requiring information must be filled in, shown as “not applicable” or deleted but not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross referenced to the applicable clause of the contract data.</p>		
	<p>Reference Clauses</p> <p>Where relevant the Principal Building Agreement clause applicable to the required information is printed in italics under the Contract Data clause number ie. <i>[27.4.2]</i></p>		
1.0	CONTRACTING PARTY		
1.1	Contractor:		
	Postal address:		
		Code	
	Tel :		Fax :
	Email :		
	Tax/VAT registration No :		
[1.2]	Physical address:		
	Tel :		Fax :
	Email:		
2.0	SECURITIES		
2.1	Security		
	The security provisions selected are:		
2.1.1 [14.3]	Variable Construction Guarantee		Yes/No
2.1.2 [14.4]	Fixed Construction Guarantee and Payment Reduction		Yes/No
2.1.3	Advanced Payment is required. Where	(Amount)	

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

[14.5]	"Yes"		
2.1.4	An Advance Payment Guarantee to be provided	Yes/No	
3.0	PAYMENT AND ADJUSTMENT OF PRELIMINARIES		
3.1	Payment of Preliminaries The payment of preliminaries shall be according to the option selected by the contractor. The amount included in each monthly payment certificate in respect of preliminaries as stated in the contract data shall be.		
3.1.1	Option A Assessed by the principal agent as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the contract sum excluding: <ul style="list-style-type: none"> • The amount for preliminaries • Any contingency sum • Any amount in respect of CPAP • All inclusive of tax 		
3.1.2	Option B Calculated from the priced items in the bills of quantities/lump sum document. The contractor and the principal agent shall agree on a division of the priced preliminaries items into: <ul style="list-style-type: none"> • An initial or establishment charge • A monthly charge • A final or disestablishment charge • All inclusive of tax In arriving at such a division cognizance shall be taken of such factors as: <ul style="list-style-type: none"> • Premiums for annually renewable insurance policies • Plant, scaffolding and the like remaining the property of the contractor or the hiring company and the capital costs thereof not treated as part of the initial charge • Where the initial construction period is extended the monthly charge shall be recalculated on the same basis as was originally applied but taking into account the revised construction period and the amounts already paid to the contractor • Should the contractor and the principal agent be unable to agree such division then the principal agent shall make a division of the amount of the preliminaries to be incorporated in the valuations for each monthly payment certificate. 		
3.2	Adjustment of preliminaries The amount or items of preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time and/or value have on preliminaries. Such an adjustment shall be based on the particulars provided by the contractor for this purpose in terms of Option A or B and shall preclude any further adjustment of preliminaries. Adjustment of preliminaries in terms of Option A or B shall apply notwithstanding the actual employment of resources by the contractor in the execution of the works. The adjustment of preliminaries shall be based on the option as selected in the contractor's tender. For the adjustment of preliminaries both the contract sum and the contract value shall exclude: <ul style="list-style-type: none"> • The amount of the preliminaries • Any contingency sum • Any amount in respect of CPAP • Dayworks • All inclusive of tax 		
3.2.1	Option A		

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

	<p>The amount of preliminaries shall be adjusted in the following categories:</p> <ul style="list-style-type: none"> • An amount which shall not be varied • An amount which shall be varied in proportion to the contract value as compared with the contract sum • An amount which shall be varied in proportion to the construction period as compared to the initial construction period excluding revisions to the construction period for which the contractor is not entitled to adjustment of of the contract value in terms of the agreement. • The contractor shall, within fifteen (15) working days of taking possession of the site, give the principal agent a breakdown, sub-divided into the above categories, of the amount for preliminaries in tabulated form, all to the satisfaction of the principal agent. 		
	<p>Should the contractor fail to provide such information within the period stipulated then the amount for preliminaries shall be subdivided into the following proportions:</p> <ul style="list-style-type: none"> • 10% (ten percent) which amount shall not be varied • 15% (fifteen percent) which amount shall be varied in proportion to the contract value as compared to the contract sum • 75% (seventy percent) which amount shall be varied in proportion to the construction period as compared with the initial construction period 		
	<p>For a lump sum document, should the contractor fail to identify the amount for preliminaries, then such an amount shall be deemed to be 7.5% (seven and a half percent) of the contract sum excluding:</p> <ul style="list-style-type: none"> • Any contingency sum • Any amount in respect of CPAP • All inclusive of tax 		
	<p>Where sectional completion is required in terms of the agreement, the contractor shall provide the principal agent with the division of the above categorised amounts into sections. Should the contractor fail to provide such information within the period stipulated the categorised amounts shall be prorated to the value of each section</p>		
	<p>Option B</p>		
3.2.2	<p>The contractor shall, within fifteen (15) working days of taking possession of the site, give the principal agent with a detailed breakdown of the amount for preliminaries. This breakdown shall set out, among others, full particulars of administrative, supervisory and other personnel, plant, transport and other resources and charges included in the amount for preliminaries. The contractor shall show the periods to which the individual items relate with the charge rate for such items by means of a program all to the satisfaction of the principal agent.</p>		
	<p>Where sectional completion is required in terms of the agreement, the contractor shall provide the principal agent with details of the resources required for each section and those that are common to sections. Should the contractor fail to provide such information within the period stipulated, Option A shall apply.</p>		
3.2.3	<p>Payment certificate cash flow</p>		
	<p>The contractor shall provide all reasonable assistance to the principal agent in the preparation of cash flow projections of claims for payment certificates where required by the employer. The projections shall be based on the program and shall be updated as and when the program requires updating. The cooperation of the contractor in terms of this item shall not prejudice his right to receive payment in terms of the agreement</p>		
3.2.4	The contract value shall be adjusted according to CPAP [3.1] (Yes/No)		YES
3.2.5	Payment of preliminaries [3.1.1, 3.1.2]	(A or B)	
3.2.6	Adjustment of preliminaries [3.2.1, 3.2.2]	(A or B)	
4.0	EMPLOYER CHANGES TO JBCC STANDARD DOCUMENTS		

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

4.1	Changes (if any) in terms of the Contract Data - Employer are accepted (Yes/No)	
	<i>Where "No" an addendum referenced to this clause is to be attached</i>	
5.0	THE TENDER	
5.1	This tender is to be submitted to the Employer at the street address provided in the invitation to tender before the tender closing date and time stipulated therein	
5.2	By the submission of this tender to the employer the tenderer offers and agrees to contract for, execute and complete the works for the tender sum as stated below	
5.3	Tenders will be opened in public directly after the stated closing time. Only the total tender sum as stated in each tender will be announced (Not Applicable)	
5.4	The lowest or any tender will not necessarily be accepted	
5.5	This tender shall remain in full legal force for 120 (One Hundred and Twenty) calendar days. the tenderer accepts liability for damages as may be suffered by the Employer should the Tender validity period not be honoured.	
5.6	This tender takes into account all listed items [4.0] for the purpose of preparing and submitting this tender.	
5.7	The successful tenderer will be appointed in terms of the JBCC Principal Building Agreement.	

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

C2.6: FORM OF OFFER AND ACCEPTANCE

C2.6: Form of Offer and Acceptance

Project title:	EXTENSION OF MANUFACTURING FACILITY IN ZONE 1A OF THE ELIDZ
Contract No:	ASP/YANFENG/EXT/11/09/Z1A

A. OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **EXTENSION OF MANUFACTURING FACILITY IN ZONE 1A OF THE ELIDZ**

The Tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

Rand (in words):	
Rand in figures:	R

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the tender data, whereupon the Tenderer becomes the party named as the Contractor in the conditions of contract identified in the contract data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or Close Corporation:	OR	Natural Person or Partnership:
		Whose Identity Number(s) is/are:
		Whose Income Tax Reference Number is/are:

AND WHO IS (if applicable):

Trading under the name and style of:	
--------------------------------------	--

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

AND WHO IS (if applicable):

Represented herein, and who is duly authorised to do so, by:	Note: A Resolution / Power of Attorney, signed by all the Directors / Members / Partners of the Legal Entity must accompany this Offer, authorising the Representative to make this offer.
Mr/Mrs/Ms:	
In his/her capacity as:	

SIGNED FOR THE TENDERER:

Name of Representative	Signature	Date

WITNESSED BY:

Name of Witness	Signature	Date

GUARANTEE OFFERED:

Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 35 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the Form of Guarantee included in Part C2.4. No alterations or amendments of the wording of the pro-forma will be accepted.

DOMICILIUM CITANDI ET EXECUTANDI:

The Tenderer elects as its domicilium citandi et executandi in the Republic of South Africa, where any and all legal notices may be served, as (physical address):

Domicilium Citandi Et Executandi:

Other Contact Details of the Tenderer are:

Postal address:			
Code:		Tel:	
Cell:		Fax:	
Email:			

B. ACCEPTANCE

By signing this part of this form of offer and acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the Tenderer's offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- 2.1 Agreement and contract data
- 2.2 Pricing data
- 2.3 Scope of work
- 2.4 Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 2.1 to 2.4 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect, if delivered by hand on the day of delivery, or if delivered by courier within two working days after submission by the Employer to the courier services for a door-to-door delivery to the Tenderer, provided that the Employer notifies the Tenderer of the tracking number within 24 hours of such submission. Unless the Tenderer (now Contractor) within seven working days of the date of such submission notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

FOR THE EMPLOYER:

Name of Signatory	Signature	Date

Name of Organisation:	East London Industrial Development Zone SOC Ltd
Address of Organisation	Lower Chester Road, Sunnyridge, East London, 5201

WITNESSED BY:

Name of Witness	Signature	Date

Tenderer ____ Witness 1 ____ Witness 2 ____ Employer ____ Witness 1 ____ Witness 2 ____

SCHEDULE OF DEVIATIONS:

1. Subject:
Detail:

2. Subject:
Detail:

3. Subject:
Detail:

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

C2.7: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

Tenderer ____ Witness 1 ____ Witness 2 ____ Employer ____ Witness 1 ____ Witness 2 ____

Part C2.7: Declaration Certificate for Local Production and Content for Designated Sectors

C2.7: SBD 6.2 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

1.6. A bid may be disqualified if –

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;
- 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
- 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
- 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
National Treasury Designated Sectors Instruction No. 15 of 2016/2017 Stipulated Minimum Threshold of Conversion Processes for Local Production and Content for Steel Products in Components for Construction	100% as set out in Table 1A and 1B

4. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES		NO	
-----	--	----	--

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?

(Tick applicable box)

YES		NO	
-----	--	----	--

- 5.1. If yes, provide the following particulars:

- (a) Full name of auditor:
- (b) Practice number:
- (c) Telephone and cell number:
- (d) Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Institution):

.....
NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thdti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as

of(name of bidder entity),
the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
 - (ii) the declaration templates have been audited and certified to be correct.
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

Tenderer ____ Witness 1 ____ Witness 2 ____ Employer ____ Witness 1 ____ Witness 2 ____

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

C2.8: DECLARATION FOR 30% SMME SUB- CONTRACTING AND TARGETED PERCENTAGE PER CIDB GROUP

Tenderer ____ Witness 1 ____ Witness 2 ____ Employer ____ Witness 1 ____ Witness 2 ____

C2.8: Declaration for 30% SMME Subcontracting and Targeted Percentage per CIDB Group

C2.8 DECLARATION FOR 30% SMME SUB-CONTRACTING AND TARGETED PERCENTAGE PER CIDB GROUP

TARGETED PERCENTAGES PER CIDB GROUP

CIDB Grading irrespective of trade	Max CIDB Value Range	Minimum Targeted Percentage Allocation Appportioned to the 30%	Percentage Goal Tendered	Estimated Rand Value (R) Including VAT
Grade 1-2	R 650 000	1%	%	R
Grade 3	R 2 000 000	1%	%	R
Grade 4	R 4 000 000	3%	%	R
Grade 5	R 6 500 000	5%	%	R
Grade 6	R 13 000 000	6%	%	R
Grade 7	R 40 000 000	14%	%	R
Total % SMME Goal Tendered ⁽¹⁾		30%	%	R

Note (1): *Bidders that do not meet minimum SMME 30% subcontracting requirements will be deemed to be non-responsive and shall be disqualified.

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____

CONTRACTOR DECLARATION WITH REGARDS TO 30% SMME SUB-CONTRACTING:

I / We tender the following SMME participation targets of:

Tender Amount Including VAT	R
SMME Value Including VAT	R
Percentage of SMME to Tender Amount ⁽¹⁾	%

Note (1): **Bidders that do not meet minimum SMME 30% subcontracting requirements will be deemed to be non-responsive and shall be disqualified.*

SIGNED FOR THE TENDERER: NAME OF TENDERER
..... SIGNATURE: TENDERER SIGNATURE: WITNESS 1
NAME:	NAME:
CAPACITY: SIGNATURE: WITNESS 2
DATE:	NAME:

Tenderer _____ Witness 1 _____ Witness 2 _____ Employer _____ Witness 1 _____ Witness 2 _____