

THE CONTRACT

PART C2: AGREEMENT AND CONTRACT DATA

C2.1 - Pricing Instructions

FREE STATE PROVINCIAL GOVERNMENT

DEPARTMENT OF SPORT, ARTS, CULTURE AND RECREATION

THE SUPPLY AND INSTALLATION OF GAS SUPPRESSION SYSTEM AT FREE STATE PROVISIONAL ARCHIVES.

SCM-INFRA 009/2021

C2.1 Pricing Instructions

- 1 The 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. Where applicable the:
 - a) civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardized Specifications for Civil Engineering Works.
 - b) mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Mechanical Work, published by the South African Association of Quantity Surveyors, July 2005).
 - c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- 2 The agreement is based on the JBCC Minor Works Agreement, prepared by the Joint Building Contracts Committee, Edition 5.1, March 2014. 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 Bills of Quantities are recited.
- 3 Preliminary and general requirements are based on the JBCC Minor Works Agreement, May 2005 Addition preliminaries for the use of JBCC Series 2000. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 4 It will be assumed that prices included in the 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).
- 5 The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the Principal Agent or Engineer and can be viewed at any time during office hours up until the completion of the works.
- 6 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.

- 7 Where any item is not relevant to this specific contract, such item is marked N/A (signifying "not applicable")
- 8 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 Section 1 (Preliminaries) of the Bills of Quantities
- 9 The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- 10 The amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.
- 11 Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 10 but taking into account the revised period for completing the works.
- 12 The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:
- a) an amount which is not to be varied, namely Fixed (F)
 - b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
 - c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).
- 13 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 12 apply or where no selection is made, the adjustments shall be based on the following breakdown:
- a) 10 percent is fixed;
 - b) 15 percent is Value Related
 - c) 75 percent is Time Related.
- 14 The adjustment of the Preliminaries shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminaries shall exclude any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.

PART C3: SCOPE OF WORK

FREE STATE PROVINCIAL GOVERNMENT

DEPARTMENT OF SPORT, ARTS, CULTURE AND RECREATION

THE SUPPLY AND INSTALLATION OF GAS SUPPRESSION SYSTEM AT FREE STATE PROVISIONAL ARCHIVES.

SCM-INFRA 009/2021

C3. Scope of Work

1 DESCRIPTION OF THE WORKS

1.1 Employer's objectives

The employer's objective is to renovate/repair/refurbish existing facility.

1.2 Extent of the works

NB Tenderers are specifically requested to inspect the site beforehand so as to become acquainted with the location of the site, conditions, existing building work, access roads, layout of various buildings, availability of water, electricity, etc.

1.3 Location of the works

The site is situated at the existing premises: Archives Provisional Building, 29 Badenhorst Street, Bloemfontein.

2 Drawings

The drawings used for setting up the Bills of Quantities are as follows:

- n/a

3 Procurement

3.1 Preferential procurement procedures

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the preferencing schedule.

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO 1</u>				
	<u>ALTERATIONS</u>				
	<u>REMOVAL OF EXISTING FIRE PROTECTION SERVICES</u>				
1.01	TAKE OFF AND COMPLETELY REMOVE EXISTING SMOKE DETECTION SYSTEM AND ALL PIPE WORKS RELATING TO FIRE PROTECTION SYSTEM IN THE BUILDING, INCLUDING MAKING GOOD ALL AFFECTED AREAS.	Item	1		
1.02	TAKE OFF AND COMPLETELY REMOVE EXISTING GAS SUPPRESSION SYSTEM AND ALL PIPE WORKS RELATING TO GAS SUPPRESSION SYSTEM IN THE ENTIRE BUILDING, INCLUDING MAKING GOOD ALL AFFECTED AREAS.	Item	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.2</u>				
	<u>INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ARCHIVE LIBRARY</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	AIRCON SHUTDOWN UNIT	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	kg	64		
2.02	75 LT SUPPRESSION CYLINDERS	No	1		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 11/2 INCH)	No	1		
2.04	SOLONOID VALVE 13wW/24V UL CRASTIN	No	1		
2.05	BRACKETS/HP HOSE/DIAPHRAGM/SAFETY SIGNS/ETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
3.	<u>DOCUMENTATION</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.03	OPERATING INSTRUCTIONS	No	1		
3.04	LOGBOOK & DOCUMENT HOLDER	No	1		

4.	P&G'S				
4.01	LABOUR FOR INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	m	60		
4.04	m x PH30 FIRE RATED CABLE	m	90		
4.05	STEEL SADDLES & SPACERS	No	120		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	4		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA	No	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.3</u>				
	<u>INSTALLATION OF ADDRESSABLE SMOKE DETECTION SYSTEM WITHIN THE BUILDING.</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	4 LOOP ADVANCED MX PRO FIRE CONTROL PANEL	No	1		
1.02	XP95 ADDRESSEBLE OPTICAL DETECTORS	No	48		
1.03	XP95 ADDRESSABLE HEAT DETECTERS	No	2		
1.04	XP95 ADDRESSABLE DETECTOR BASES	No	39		
1.05	DISCOVERY MANUAL CALL POINTS	No	6		
1.06	MCP PROTECTIVE TRANSPARENT FLAPS	No	6		
1.07	XP95 SOUNDER/BEACON BASES WITH BUILT IN ISOLATOR	No	11		
1.08	OPEN AREA SOUNDER/BEACON ABOVE FIRE PANEL	No	1		
1.09	XPRT ADDRESSING CARDS FOR DEVICES	No	60		
2.	<u>DOCUMENTATION</u>				
2.01	SYSTEMS MANUALS	No	2		
2.02	DEVICE INDICATION PLAN	No	1		
2.03	OPERATING INSTRUCTIONS	No	1		
2.04	LOGBOOK & DOCUMENT HOLDER	No	1		
3.	<u>FIRE EQUIPMENT</u>				
3.01	5KG CO2 FIRE EXTINGUISHERS C/W BACKING BOARDS (ARCHIVES ROOMS & SECURITY)	No	13		
3.02	9KG DCP FIRE EXTINGUISHERS C/W BACKING BOARDS (HALLWAYS)	No	8		
3.03	PHOTOLUMINESCENT SIGNAGE FOR FIRE EQUIPMENT	No	25		
3.04	PHOTOLUMINESCENT SIGNAGE FOR EMERGENCY ESCAPE	No	12		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		

4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
	m x 25mm				
4.03	CONDUIT/SPRAQ/TRUNKING	m	600		
4.04	m x PH30 FIRE RATED CABLE	m	1500		
4.05	STEEL SADDLES & SPACERS	No	1200		
4.05	18AH 12V POWER SUPPLY BATTERIES	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.4				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B1				
1.	ELECTRONIC EQUIPMENT				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	12		
1.03	ORBIS DETECTION BASE	No	12		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	SUPPRESSION				
2.01	KG NAF S227 SUPPRESSION MEDIUM	kg	218		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 1 1/2 INCH)	No	2		
2.04	SOLOINOID VALVE 13wW/24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAGRAGM/SAFETY SIGNS/ETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	DOCUMENTS				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.03	OPERATING INSTRUCTIONS	No	1		

3.04	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	P&G'S				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm	No	100		
4.04	m X PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.5				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B2				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		
2.04	SOLOINOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	1		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		

3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.6				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B3				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	1		

3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.7</u>				
	<u>INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B4</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		

3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.8				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B5				
1.	ELECTRONIC EQUIPMENT				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHERANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	SUPPRESSION				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.9				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B6				
1.	ELECTRONIC EQUIPMENT				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHERANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	SUPPRESSION				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 1 1/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.10</u>				
	<u>INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B7</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHER PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	12		
1.03	ORBIS DETECTION BASE	No	12		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	206		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 1 1/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.11</u>				
	<u>INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B8</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		

2.04	SOLOINOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.12</u>				
	<u>INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B9</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHERANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 1 1/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>BILL NO.13</u>				
	<u>SUPPRESSION SYSTEM FOR ROOM B10</u>				
1.	<u>ELECTRONIC EQUIPMENT</u>				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHERANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	<u>SUPPRESSION</u>				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMIUM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.14				
	SUPPRESSION SYSTEM FOR ROOM B11				
1.	ELECTRONIC EQUIPMENT				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	SUPPRESSION				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		
2.06	LOGISTICS	No	1		

2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BILL NO.15				
	INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR ROOM B12				
1.	ELECTRONIC EQUIPMENT				
1.01	3 ZONE ADVANCED DETECTION & EXTINGUISHEANT PANEL	No	1		
1.02	MULTI-SENSOR DETECTOR WITH FLASHING LED	No	10		
1.03	ORBIS DETECTION BASE	No	10		
1.04	SOUNDER BEACONS	No	2		
1.05	ALARM GONG 6" 95DB	No	1		
1.06	LED EVACUATION SIGN (ON ACTIVATION)	No	1		
1.07	VESDA ASPIRATION EARLY WARNING DETECTOR	No	1		
1.08	VESDA PIPE & FITTINGS	No	1		
1.09	ELECTRONIC AUTOMATIC DOOR CLOSER	No	1		
1.10	ACTIVE EOL UNITS	No	1		
1.11	SUPPRESSION HOLD SWITCH	No	1		
1.12	SUPPRESSION ABORT SWITCH	No	1		
1.13	8 WAY RELAY CARD (FOR USE WITH DOOR & DAMPERS)	No	1		
1.14	XP95 ZONE MONITORING UNIT WITH ISOLATOR	No	1		
2.	SUPPRESSION				
2.01	KG NAF S227 SUPPRESSION MEDIUM	No	204		
2.02	LT SUPPRESSION CYLINDERS	No	2		
2.03	DISCHARGE NOZZLES (STEEL CHROMUIM 11/2 INCH)	No	2		
2.04	SOLONOID VALVE 13WW24V UL CRASTIN	No	2		
2.05	BRACKETS/HP HOSE/DIAPHRAM/SAFETY SIGNSETC	No	1		

2.06	LOGISTICS	No	1		
2.07	SCHED40 HIGH PRESSURE PIPE & 3000IB FITTINGS	No	1		
2.08	DUCT CONTROL DAMPERS	No	5		
3.	<u>DOCUMENTS</u>				
3.01	SYSTEMS MANUALS	No	2		
3.02	DEVICE INDICATION PLAN	No	1		
3.04	OPERATING INSTRUCTIONS	No	1		
3.05	LOGBOOK & DOCUMENT HOLDER	No	1		
4.	<u>P&G'S</u>				
4.01	LABOUR FOR THE ABOVE INSTALLATION	No	1		
4.02	MISCELLANEOUS FIXINGS (UPATS/SCREWS/BITS/ETC)	No	1		
4.03	m x 25mm CONDUIT/SPRAQ/TRUNKING	No	100		
4.04	m x PH30 FIRE RATED CABLE	No	180		
4.05	STEEL SADDLES & SPACERS	No	200		
4.06	7AH 12V POWER SUPPLY BATTERIES	No	6		
4.07	BOXED PSU 220 TO 12 2A REGULATED FOR VESDA/DUCTS	No	2		
	TOTAL CARRIED TO SUMMARY				

FINAL SUMMARY PAGE

BILL NO	Item	Brought Forward
1	ALTERATIONS - REMOVAL OF EXISTING FIRE PROTECTION SYSTEMS	
2	INSTALLATION OF A GAS SUPPRESSION SYSTEM FOR THE LIBRARY	
3	INSTALLATION OF ADDRESSABLE SMOKE DETECTION (ENTIRE BUILDING)	
4	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B1	
5	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B2	
6	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B3	
7	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B4	
8	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B5	
9	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B6	
10	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B7	
11	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B8	
12	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B9	
13	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B10	
14	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B11	
15	INSTALLATION OF A GAS SUPPRESSION SYSTEM ROOM B12	
	SUB TOTAL	
	VAT 15%	
	TOTAL	