

TENDER REF. NO.: KK/222/2026/SSBH(TC)

**MINISTRY OF HEALTH
NEGARA BRUNEI DARUSSALAM**

**THE PROVISION OF MAINTENANCE SERVICES FOR FIRE
ALARM SYSTEM, CARBON DIOXIDE (C02) FIRE
SUPPRESSION SYSTEM, FIRE HOSEREEL SYSTEM AND
FIRE EXTINGUISHERS AT SURI SERI BEGAWAN
HOSPITAL FOR THREE (3) YEARS**

TENDER FEE : \$50.00

RECEIPT NO. :

CLOSING DATE : ON TUESDAY, 13th October 2026

TIME : 2.00 PM

FOA :

**THE CHAIRMAN
MINI TENDER BOARD, TENDER BOX
GROUND FLOOR, MINISTRY OF HEALTH
COMMONWEALTH DRIVE
BANDAR SERI BEGAWAN BB3910
NEGARA BRUNEI DARUSSALAM**

[CLUSTERING]

SECTION 2

SPECIFICATIONS

THE PROVISION OF MAINTENANCE SERVICES FOR FIRE ALARM SYSTEM, CARBON DIOXIDE [CO2] FIRE SUPPRESSION SYSTEM, FIRE HOSE-REEL SYSTEM AND FIRE EXTINGUISHERS AT SURI SERI BEGAWAN HOSPITAL FOR THREE (3) YEARS

1. GENERAL

- 1.1 Tenderers are sought from suitably qualified and registered Fire Protection Firms with skilled staff and adequate testing instruments who wish to be considered for the maintenance services (hereinafter "Maintenance Services") for the Fire Alarm System, Carbon Dioxide Fire Suppression, Fire Hose-reel System and Fire Extinguishers (hereinafter "the System") for Suri Seri Begawan Hospital under the purview of the Ministry of Health as set out in **Schedule I – Location of Buildings** for a duration of **Three (3) years**.
- 1.2 The Tenderer shall provide Maintenance Services for the System inclusive of all necessary spare parts and replacement parts to ensure that the System is kept in good working order and condition and functioning within the manufacturer's specifications. The Maintenance Services consist of:
- Preventive maintenance, and
 - Corrective maintenance
- 1.3 All prices to be quoted shall include labour, parts and transport charges.
- 1.4 Tenderer shall also ensure that technical services shall be available twenty-four (24) hours a day for the convenience of the Government to provide assistant for any emergency service. In the event that any attended call be made during the preventive maintenance period, there shall not be any charges for the replacement of parts.

2. MAINTENANCE SERVICES

2.1 Preventive maintenance

- 2.1.1 Scheduled or routine preventive maintenance, which includes testing and inspection, on the System shall be performed during Government working hours [07.45 am – 12.15pm and 01.30 pm – 04.30 pm].
- 2.1.2 Preventive maintenance shall be performed every three (3) months in accordance with the maintenance schedules set out in **Schedule II – Maintenance and Servicing Schedule** as recommended by the manufacturers' service manuals.
- 2.1.3 Although the maintenance schedules may not include instructions for every component of each item of the equipment, the Tenderer is expected to carry out the usual maintenance process in accordance with the normal trade practices and to meet specific requirements of the respective equipment's manufacturer's recommendations.

- 2.1.4 The frequencies of the preventive maintenance may be adjusted, by mutual agreement, to suit the duty and conditions of operation of the System's equipment.
- 2.1.5 Where follow-up work is considered necessary and involves further repairs, the Tenderer shall notify the Superintending Officer of the extent of the repairs before proceeding with the work.
- 2.1.6 The Tenderer shall ensure that downtime of any of the equipment within the System is kept to a minimum. The maximum period for which any equipment to be continuously out-of-service shall be **one (1) day**. A penalty of **B\$100.00 per day** shall be imposed if the said period is exceeded and that, it is in the opinion of the Superintending Officer, the System ought reasonably to have been put back to service.
- 2.1.7 The Tenderer is also required to submit monthly reports covering details of periodic inspection, servicing and repairs. The monthly report shall include, but not limited to, a log showing the time when fault notice was received, nature of fault, time when rectification work was initiated, actual time taken for repair, materials and parts used.

2.2 Corrective maintenance

- 2.2.1 Corrective maintenance shall be performed at **ANY TIME (inclusive of public holiday)** upon notification by the Superintending Officer or his representative.
- 2.2.2 The Tenderer shall dispatch his technician to a site specified by the Superintending Officer or his representative **within 30 minutes** (hereinafter "Call Out Time") after being notified in writing or telephone that a fault is reported via a "Service Call Slip" which the Tenderer shall collect prior to commencing the repair or replacement works. This Service Call Slip must be certified by the Superintending Officer or his representative with an official stamp, time in, time out and date.
- 2.2.3 If the Response Time is exceeded, a penalty of **B\$50.00 per hour** shall be imposed upon the Tenderer for every hour or part thereof that the Response Time is exceeded.
- 2.2.4 The technician shall complete any repair or replacement of parts within **seven (7) days** from the time the technician arrives at the specified site. A penalty of **\$100.00 per day** shall be imposed if the said downtime is exceeded and that, it is in the opinion of the Superintending Officer, the System ought reasonably to have been put back to service.

2.3 Additional Services

- 2.3.1 The Tenderer shall service the existing panels such as tightening the cable, terminations, replacement of fused indicating lights, faulty meters, tidying up the internal wirings, relays, components and boards.
- 2.3.2 The Tenderer is also required to provide necessary protection against the existing plants and equipment in the adjacent working areas while carrying out the Maintenance Services.

3. SPARE PARTS

- 3.1 The Tenderer shall maintain sufficient spare parts which are commonly used to ensure and enable all preventive maintenance to be carried out and to replace any parts which may be reasonably expected to be needed due to breakdown.
- 3.2 The Tenderer shall submit a price list of all parts or items as listed out in **Schedule III – Schedule of Parts**. This list shall be inclusive of all duties, taxes, labour charges, transport charges and maintained for three years.
- 3.3 Tenderer shall remove and replace any parts supplied which are damaged, defective or do not meet the respective specification within one (1) day. Failure to do within the stipulated time may result in the removal of the part/s by the Superintending Officer and replaced by others. The Government reserves the right to recover all costs and expenses incurred for such removal and replacement.
- 3.4 A grace period of **two (2) weeks** for repairs which are outstanding due to unavailability of spare parts or awaiting spare parts, after which a penalty of **B\$100.00 per day or part thereof** shall be imposed. A written notice will be given to the Tenderer seven (7) days prior to expiry of the grace period and start of the penalty.
- 3.5 If, in the opinion of the Superintending Officer, any of the parts supplied are not in accordance with the specifications, the superintending officer reserves the right to submit the part/s to expert examination and/or test. All costs in connection therewith shall be borne by the Tenderer unless such examination and/or test show that the said part/s is/are in accordance with its specification/s.
- 3.6 All parts supplied must be certified with approval from the Department of Fire and Rescue Services.

4. PERSONNEL

- 4.1 To ensure the proper and efficient execution of the Maintenance Services, the Tenderer shall provide and employ qualified and competent workers to perform the Maintenance Services as follows:
- One (1) registered technician/supervisor
 - Two (2) tradesmen
- 4.2 Failure to provide the required personnel to carry out the Maintenance Services will result in an imposition of the following charges:
- Supervisor/Technician - **B\$75.00 / day**
 - Tradesman - **B\$50.00 / day**
- 4.3 The Tenderer shall ensure that such personnel are properly trained and employed (if they are employed outside of Brunei Darussalam) by the Tenderer throughout the three-year duration.
- 4.4 The Tenderer is required to submit a list of names, addresses, qualifications, experiences and other relevant information that the Superintending Officer may require, of all persons that shall be employed for the performance of the Maintenance Services in the format set out in **Section 3** of this Invitation to Tender. Any amendments made to the list shall be submitted in writing within five (5) days upon knowledge that any person has been added or deleted from the list during the three-year duration.
- 4.5 The Superintending Officer reserves the right to remove, reject or replace any persons employed by the Tenderer, who in the opinion of the Superintending Officer is not competent to execute the Maintenance Services, and shall direct the Tenderer to replace such person/s.

- 4.6 All personnel employed by the Tenderer shall be neatly and properly attired in uniforms and equipped with proper tools and safety equipment to enable them to carry out their work safely, accurately and without any risk of causing damage to the System or any of the buildings.
- 4.7 Where the System is installed in a secured area, the Tenderer is required to obtain security clearance for all his personnel and vehicle requiring access to such area.

5. INSURANCE

The Tenderer shall warrant that he will maintain at his own expense, comprehensive general liability, errors and omissions, workers' compensation, public liability, property damage and automobile liability insurance. Upon request by the Government, the Tenderer shall furnish certificates showing that such insurance is in effect and will not be cancelled or changed in the absence of a prior 30-days' written notice to the Government.

6. LOG BOOKS AND REPORTS

- 6.1 A record of the work done on each maintenance visit for each location in **Schedule I** shall be noted in a log book by the Tenderer.
- 6.2 The log book must show the date, time and duration of work performed; a description of the work performed; and the names of the Tenderer's personnel responsible for performing the work.
- 6.3 Completion of the maintenance visit shall be affixed via the technician's signature and shall be confirmed in writing by the Superintending Officer or his representative.
- 6.4 The log book must be available for inspection by the Government at any time.

6.5 The Tenderer shall also submit Maintenance Service Reports in a format acceptable to the Government and shall include the following information:

- Reference number of any equipment of the System;
- Job number;
- Date of completion of job;

6.6 Any verbal reports made by the EMS on any breakdown shall be made available to the superintending officer or his representative within twenty-four (24) hours of receiving the complaint. Such report must state the nature of the fault, work done and whether any further work is required.

7. EQUIPMENT

The Tenderer shall ensure that all technicians working on site are equipped with adequate equipment and/or tools to enable them to carry out their work safely, accurately and without risk of causing any damage to the System or any of the buildings. Such equipment and tools include but are not limited to the following:

- Multi tester
- Insulation Tester
- Smoke/heat detector tester
- Glass fuse
- Indicator panel bulbs
- General Tool kit

8. CONTRACT PRICE AND PAYMENT

8.1 The Tenderer shall quote the cost of an annual service contract which shall consist of the maintenance services charges and the cost of parts replaced (if any), upon receipt of:

- One (1) original invoice;
- One (1) duplicate invoice;
- Service Call Slip; and
- A detailed Maintenance Service Report

8.2 The Tenderer shall submit the invoice of the previous month **within first two (2) weeks of the next month**. All claims shall be addressed to:

For Suri Seri Begawan Hospital:

**Head of Estate Maintenance
Belait District
Ministry of Health
Brunei Darussalam**

Telephone No: 3335331 ext 3272

8.3 Payment will be made within forty-five (45) days after submission of the invoice and other related documents, subject to any deduction under the Contract and satisfactory certification by the Government during the preceding month.

SCHEDULE I
LOCATION OF BUILDINGS

Item No.	Name Of Building
A.	Suri Seri Begawan Hospital with Complete Fire Protection (Fire Alarm System + CO2 Fire Suppression System + Fire Hosereel System + Fire Extinguishers) : -
1.0	Suri Seri Begawan Hospital
1.1	Block A
1.2	Block B
1.3	Block C
1.4	Block D
1.5	Block E
1.6	Block F
1.7	Block G
1.8	Block H
1.9	Block J
1.10	Block K
1.11	Block L
1.12	Block M
1.13	Block N
1.14	Block O
1.15	Block P
1.16	Block Q
1.17	Block R
1.18	Nurses Home
1.19	MCH and Dental
1.20	Multipurpose Hall
1.21	Estate Maintenance
1.22	Dialysis Centre
1.23	Speech and Language Therapy
1.24	Occupational Therapy
1.25	Learning and Development Centre
1.26	Chiller Yard
1.27	Standby Generator no 1 and 2 House
1.28	EMAS BAY

SCHEDULE II
MAINTENANCE & SERVICING SCHEDULE

1. TESTING AND INSPECTION FOR FIRE ALARM SYSTEM

- 1.1 **QUARTERLY TEST:** The following inspection and testing procedures should be carried out.

- 1.2 Before proceeding the quarterly test, the Superintending Officer or his representative must be notified.
- 1.3 Test operation of fire alarm panel "test", "isolate", "fault test", bell isolate", "buzzer isolate" "AHU isolate" and other switches in the panel, ensuring their correct functioning and that appropriate bells and or buzzers are sounded and appropriate indicators are lit. Bell rings shall be kept as short duration as possible to enable the functioning test of bells.
- 1.4 Simulate alarm panel mains supply failure. Ensure that the battery supply is on and appropriate indicators are lit.
- 1.5 Check battery voltages and charging current in accordance with the manufacturer's instruction.
- 1.6 Check batteries including terminals for cleanliness and correct level of electrolyte in each cell to ensure that they are in good serviceable condition.
- 1.7 Check condition of battery cabinet for corrosion and to ensure that batteries are stored in secure condition.
- 1.8 Simulate fire condition by operating test switches and break glass fire points on all alarm groups and resetting the installation to normal.
- 1.9 Simulate fault conditions on all alarm groups to ensure that the fire indicator board is operating correctly including fault annunciators and audible alarms.
- 1.10 Check that the fire indicator board is in clean and operative condition and ensure that the enclosure is maintaining a satisfactory dust seal.
- 1.11 Examine the condition of components, resistors, capacitors and cables.
- 1.12 Record results of the test in the log book and note any circuits that are subject to repair alteration or extension.
- 1.13 Reseat all switches in the alarm panel to normal after the test.

2. TESTING AND INSPECTION FOR FIRE HOSEREEL SYSTEM

- 2.1 **QUARTERLY TEST:** The following inspection and testing procedures should be carried out.
- 2.2 Before proceeding the quarterly test, the Superintending Officer or his representative must be notified.
- 2.3 Check water level of water storage tank in the system
- 2.4 Check that all stop valves are secured in the open or closed position as appropriate.
- 2.5 Check and record the pressure at the installation gauge and water supply gauge and ensure that normal water pressure is maintained.
- 2.6 Start all pumping units by operating the test valve in the manner which simulate the operation of hose-reel and checking the following.
 - a) Correct cut-in pressure
 - b) Efficient pump gland operation
 - c) Operation of both local and remote pump run alarms
- 2.7 On the electric motor driven pumps, check the phase failure alarm and check that there is no excessive vibration or noise. Pump shall be operation within 30 seconds.
- 2.8 After testing of the pumps and resetting of the systems, check and record the pressure at the installation gauge and water supply gauge to ensure that normal pressure is maintained.
- 2.9 Check the pump room to ensure it is kept free of combustible material and accessible at all times.
- 2.10 Check hose-reel to ensure that the inlet valve, shut off nozzles are sound and free of leaks.
- 2.11 Check nozzles to ensure no blockage or restriction to the flow.
- 2.12 Check swivel joint of drum for leakage and ease of movements.

3. TESTING AND INSPECTION OF CARBON DIOXIDE [CO₂] FIRE SUPPRESSION SYSTEM.

- 3.1 **QUARTERLY TEST:** The following inspection and testing procedures should be carried out.
- 3.2 Before proceeding the quarterly test, the Superintending Officer or his representative must be notified.
- 3.3 Check and test CO₂ control panel
- 3.4 Check and clean all the smoke detectors
- 3.5 Check the Abort switch
- 3.6 Check the Manual Release button / switch
- 3.7 Check and Clean 'Gas Discharge Sign'
- 3.8 Check and Clean 'Evacuate Sign'

- 3.9 Check, test and clean Siren c/w Beacon
- 3.10 Check and test and clean alarm bell
- 3.11 Check the indicator for 'Airconditioning tripping
- 3.12 Check CO2 cylinders [replace if empty]
- 3.13 Check the conditions of the nozzles, service if required.
- 3.14 Check and clean CO2 fire extinguisher, make sure it is not empty.
- 3.15 Check ABC Dry Powder, make sure it is not empty.

4. **TESTING AND INSPECTION FOR FIRE EXTINGUISHER (SIX MONTHLY) INCLUDING REFILLING**

4.1 WATER CO2

- Safety Pin
- Adhesive Label
- 'O' Ring

4.2 DRY POWDER

- 1 Kg. Powder
- Quad Ring
- Operating Head Complete
- Adhesive Label
- Safety Pin
- Pressure Gauge
- Nozzle c/w Hose (4.5Kg. above only)

4.3 CARBON DIOXIDE

- 1Kg. CO2 gas
- Quad Ring
- Safety Pin
- Discharge Horn
- Adhesive label
- Valve Body

4.3.1 CARBON DIOXIDE (CO2) CARTRIDGE

- 55gm
- 75gm
- Refilling CO2

4.3.2 FOAM

- Quad Ring
- Plunger
- Safety Pin
- Aluminum Sulphate
- Sodium Bicarbonate
- Adhesive Label

4.4 STICKERS

4.5 BRACKETS

SECTION 3

FORMS TO BE USED

LIST OF FORMS

SCHEDULE A:	TENDER FORM
SCHEDULE B:	INFORMATION SUMMARY
SCHEDULE C:	SUB-CONTRACTS
SCHEDULE D:	COMPANY'S BACKGROUND
SCHEDULE E:	REFERENCES
SCHEDULE F:	DECLARATION
SCHEDULE G:	SCHEDULE OF PARTS

TENDER FORM

To:

TENDER REFERENCE NO: KK/222/2026/SSBH(TC)

**THE PROVISION OF MAINTENANCE SERVICES FOR FIRE ALARM SYSTEM, CARBON DIOXIDE [CO2] FIRE SUPPRESSION SYSTEM, FIRE HOSE-REEL SYSTEM AND FIRE EXTINGUISHERS
AT SURI SERI BEGAWAN HOSPITAL FOR THREE (3) YEARS**

TENDER OF (*name of tenderer*) _____

Company/Business Registration No: _____

Tender Closing Date _____

Item No.	Name of Building	Rate	Price for Quarterly Test
A.	Preventive maintenance to Fire Protection / Detection System		
1.0	<u>Suri Seri Begawan Hospital</u>		
1.1	Block A		
1.2	Block B		
1.3	Block C		
1.4	Block D		
1.5	Block E		
1.6	Block F		
1.7	Block G		
1.8	Block H		
1.9	Block J		
1.10	Block K		
1.11	Block L		
1.12	Block M		
1.13	Block N		
TOTAL AMOUNT =			

Item No.	Name of Building	Rate	Price for Quarterly Test
		B/F	
1.14	Block O		
1.15	Block P		
1.16	Block Q		
1.17	Block R		
1.18	Nurses Home		
1.19	MCH and Dental		
1.20	Multipurpose Hall		
1.21	Estate Maintenance		
1.22	Dialysis Centre		
1.23	Speech and Language Therapy		
1.24	Occupational Therapy		
1.25	Learning and Development Centre		
1.26	Chiller Yard		
1.27	Standby Generator no 1 and 2 House		
1.28	EMAS BAY (Schedule I)		
1.29	Hot kitchen (Fire Suppression System)		
1.30	IT SERVER ROOM (Fire Suppression System)		
TOTAL AMOUNT A =			

Item No.	Name of Building	Rate	Price for Quarterly Test
B.	Preventive maintenance to Fire Extinguisher / Fire Suppression System		
1.0	<u>SURI SERI BEGAWAN HOSPITAL</u>		
1.1	Block A		
1.2	Block B		
1.3	Block C		
1.4	Block D		
1.5	Block E		
1.6	Block F		
1.7	Block G		
1.8	Block H		
1.9	Block J		
1.10	Block K		
1.11	Block L		
1.12	Block M		
1.13	Block N		
1.14	Block O		
1.15	Block P		
1.16	Block Q		
1.17	Block R		
1.18	Nurses Home		
1.19	MCH and Dental		
1.20	Multipurpose Hall		
1.21	Estate Maintenance		
1.22	Dialysis Centre		
1.23	Speech and Language Therapy		
1.24	Occupational Therapy		
1.25	Learning and Development Centre		
1.26	Chiller Yard		
TOTAL AMOUNT =			

Item No.	Name of Building	Rate	Price for Quarterly Test
1.27	Standby Generator no 1 and 2 House	B/F	
1.28	EMAS BAY		
1.29	Hot kitchen (Fire Suppression System)		
1.30	IT Server Room (Fire Suppression System)		
TOTAL AMOUNT B =			

Annual Price = TOTAL A + B X 4 = TOTAL C				
= X 4 =				
Price For 3 Years = TOTAL C X 3 = TOTAL AMOUNT				
= X 3 =				
TOTAL AMOUNT =				

1. We offer and undertake on your acceptance of our Tender to provide the abovementioned Services in accordance with your Invitation To Tender.
2. Our Tender is fully consistent with and does not contradict or derogate from anything in your Invitation To Tender. We have not qualified or changed any of the provisions of your Invitation To Tender.
3. We shall execute a formal agreement in the appropriate form set out in Section 4 "Contract" of the Invitation To Tender together with such further terms and conditions, if any, agreed between the Government and us.
4. OUR OFFER IS VALID FOR **SIX (6)** CALENDAR MONTHS FROM THE TENDER CLOSING DATE.
5. When requested by you, we shall extend the validity of this offer.
6. We further undertake to give you any further information which you may require.

Dated this **13TH day of October 2026**

Signature of authorised officer of Tenderer

Name:

Designation:

Tenderer's official stamp

SCHEDULE B
INFORMATION SUMMARY

2.1 Tenderers shall provide in this Schedule the following information:

- (a) Management summary
- (b) Company profile (including Tenderer and sub-contractor(s), if any)
- (c) Years of experience (as of the Tender Closing Date) of the Tenderer and sub-contractor(s) in the:
 - *Provision of maintenance services for fire alarm systems*
- (d) Other information which is considered relevant

SCHEDULE C

SUB-CONTRACTS

- 3.1 Tenderers shall complete Table 3.1 with information about all the companies involved in the provision of the services and items specified in this tender. This shall include details about the Tenderer and each sub-contractor involved, as well as their respective responsibilities.
- 3.2 Tenderers shall also indicate in Table 3.1 any alliance relationship established with each sub-contractor. An alliance is defined as a formal and binding business relationship between the allied parties.

Table 3.1 Responsibility Table

Company Name	Responsibility Description	Alliance Relationship between Contractor and Sub-contractor(s)		
		Alliance Exists? (Y/N)	Date Established	Alliance Description
Contractor				
		Not Applicable	Not Applicable	Not Applicable
Sub-contractor(s)				

SCHEDULE D

COMPANY'S BACKGROUND

- 4.1 Each of the companies involved in this tender, including the Tenderer and sub-contractor(s) (if any), shall provide information on the company's background, scope of operations, financial standing and certified copy of its Certificate of Incorporation or Certificate of Registration (as the case may be).

SCHEDULE E

REFERENCES

- 5.1 Tenderers shall submit a list of customers in Table 5.1 to whom the Tenderer has provided similar services and items as specified in this tender in the recent 5 years as of the Tender Closing Date.

Table 5.1 References of previous customers

Customer Name and Address	Customer Type (Govt or Quasi Govt)*	Contact Person	Title	Contact Number, Fax Number and E-mail Address

***Note:** Tenderers shall indicate whether the customer is a Government or Quasi Government organisation. A Quasi Government is defined as an organisation which (1) is managed and controlled by the Government; or (2) has at least 50% shares being held by the Government. Please leave the column blank if the customer is neither a Government or Quasi Government organisation.

SCHEDULE F

TENDERER'S DECLARATION

SCHEDULE G

SCHEDULE OF PARTS

(Prices quoted to include labour)

NO	REPLACEMENT OF PARTS	UNIT	CONVENTIONAL TYPE	ADDRESSABLE TYPE
1.	Fire Alarm Panel and Accessories			
	a. Smoke Detector	no		
	b. Heat Detector	no		
	c. Break Glass / Manual Call Point	no		
	d. Alarm Bell / Sounder	no		
2.	Seal Lead Acid Battery: -			
	a. 18AH 12V/20HR	no		
3.	Indicating Bulb	no		
4.	Indicating bulb holder	no		
5.	Main Panel Key	no		
6.	Mimic panel key	no		
7.	Fit End of Line Resistor for Zoning	no		
8.	Fault Buzzer	no		
9.	Battery Charger	no		
10.	Zone Module Card	no		
11.	Spare Glass or Manual Call Point	no		
12.	Interface Card	no		
13.	Line Isolator	no		
14.	Loop Card	no		
15.	Detector Base	no		
16.	Strobe Light	no		
17.	Sounder beacon	no		
18.	Main Frame Fire Alarm Panel Board			
	a. 4 Zone and 6 Zone	no		
19.	Main Frame FAPS c/w Zoning Card & System			
	a. 8 Zone	no		
	b. Fire Alarm repeater panel	no		
20.	Surface wiring 2 x 1.5mm ² FP100/20 cable in G.I (red) conduit per meter	m		
21.	Surface wiring 2 x 2.5mm ² FP100/20 cable in G.I (red) conduit per meter	m		
22.	To supply and install new LCD / approve touch screen monitor / panel c/w necessary	no		

	materials needed set to work			
23.	Carbon Dioxide [CO2]			
	a. CO2 Fire Suppression Panel	no		
	b. Manual Discharge Switch	no		
	c. Manual Abort Switch	no		
	d. EVACUATE Sign	no		
	e. GAS DISCHARGE Sign	no		
	f. EXIT Sign	no		
	g. 24VDC Warning Strobe Light	no		
	h. Warning Siren	no		
	i. Cylinder refilling [including transport]-64Kg	kg		
	j. Discharge Nozzle	no		
	k. Actuator	no		
	l. Solenoid	no		
	m. Panel enclosure repainting	no		
	n. Heat Resistant Cable [IC 1.5mm ²]	m		
	o. PVC Electrical Pipe	m		
	p. GI Conduit Pipe	m		
24.	Piping c/w Mounting Bracket			
	a. 100mm diameter	m		
	b. 75mm diameter	m		
	c. 50mm diameter	m		
	d. 40mm diameter	m		
	e. 25mm diameter	m		
	f. 20mm diameter	m		
25.	Dry Chemical [4.5 KG]			
	a. Refill / Servicing	kg		
	b. Valve assembly	no		
	c. Discharge Nozzle	no		
	d. Safety Pin	no		
	e. Safety Seal	no		
	f. CO2 Cartridge	no		
26.	Carbon Dioxide [2.3 KG]			
	a. Refill / Servicing	kg		
	b. Discharge Nozzle	no		
	c. Safety Pin	no		
	d. Safety Seal	no		
	e. CO2 Cartridge	no		
27.	Carbon Dioxide [5.0 KG]			
	Refill / Servicing	kg		

	Discharge Nozzle	no		
	Safety Pin	no		
	Safety Seal	no		
	CO2 Cartridge	no		
27.	Sticker	no		
28.	Bracket	no		
29.	Fire Hose-reel Parts			
	a. PVC Non-Kink Rubber Hose	m		
	b. Gate Valve [2", 4", 6"]	no		
	c. Hose Clip	no		
	d. Hose-reel drum c/w flexible swing arm	no		
	e. Hose-reel cabinet	no		
	f. Cabinet lock	no		
	g. Emergency key box	no		
	h. Hose-reel sign label	piece		
	i. Inspection label	piece		
	j. Drum / cabinet repainting	set		
30.	Motor Pump Electric			
	a. Up to 5Kw	no		
31.	Re-piping per meter [surface] 50mmØ	m		
32.	Re-piping per meter [underground]	m		
33.	Pressure switch [any range c/w calibration and setting]	no		
34.	Pressure gauge [any range c/w calibration and setting]	no		
35.	Panel indicator bulb	no		
36.	Panel fuse	no		
37.	Float switch	no		
38.	Check valve [50mmØ]	no		
39.	Strainer [50mmØ]	no		
40.	Panel relay	no		
41.	Flexible expansion joint [50mm, 100mm, 150mm]	m		
42.	Pump bearing any size or make per no	per no		
43.	Pump shaft seals any size or make	per no		
44.	Contactor for pump control any type or make	no		
45.	Timer for pump control any type or make	no		
46.	Incoming power supply isolating switch any size or make	no		
47.	Indicating light bulb for pump control any type or make	no		
48.	Fire Pump Engine			
	a. Approved type or make fuel oil filter any size	no		
	b. Approved type or make air filter any size	no		

	c. Engine start dry cell battery any size, type or make	no		
	d. Pump stop solenoid	no		
49.	Fire Pump Motor - Diesel To disconnect and remove an existing defective fire pump motor, supply and fix a new pump motor including reconnection, testing and commissioning of system for motor rating up to:-			
	a. Up to 5Kw	no		
50.	Module LSN300A	no		
51.	Strobe	no		
52.	Sounder Base	no		
53.	Main Frame Fire Alarm Panel Board 4 Zones	no		
54.	Fire Hydrant Male Adaptor	no		
55.	Fire Assembly Point Sign Board	no		
56.	Fire Alarm Power Supply Unit	no		
57.	LED Emergency Exit Sign	no		
58.	LED Emergency Exit Bulb	no		
59.	Fire Blanket	no		
60.	Diesel Pump Fuel	no		
61.	Single Leaf Fire Rated Door with frame (with vision panel of wired glass of 10mm thk, including dismantling of existing doors)			
	a. UL listed / 60 minutes Fire Rated Door	M ²		
	b. UL listed / 120 minutes Fire Rated Door	M ²		
62.	Double Leaf Fire Rated Door with frame (with vision panel of wired glass of 10mm thk, including dismantling of existing doors)			
	a. UL listed / 60 minutes Fire Rated Door	M ²		
	b. UL listed / 120 minutes Fire Rated Door	M ²		
63.	Single Leaf Glazed Fire Rated Steel Doors with frame (including dismantling of existing doors)			

	a. UL listed / 60 minutes Fire Rated Door	M ²		
	b. UL listed / 120 minutes Fire Rated Door	M ²		
64.	Double Leaf Glazed Fire Rated Steel Doors with frame (including dismantling of existing doors)			
	a. UL listed / 60 minutes Fire Rated Door	M ²		
	b. UL listed / 120 minutes Fire Rated Door	M ²		
65.	UL listed / Fire Door Accessories			
	a. Door Closer	Nos		
	b. Fire & Smoke Seal	M		
	c. Mortice Latch & Lock	Nos		
	d. FR Sealant	M		
	e. Floor Spring Door Closers	Nos		
	f. Free-Swing Door Closers	Nos		
	g. Guide Rail Door Closers	Nos		
	h. Concealed Door Closers	Nos		
	i. Overhead Door Closers	Nos		
	j. Wall Mounted Fire Door Holders	Nos		
	k. Flush Mounted Fire Door Retainers	Nos		
	l. Single Leaves Door — Fast Push Panic Exit Device	Nos		
	m. Two-Leaved Door — Fast Push Panic Exit Device	Nos		
64	The design and construction of high challenge fire walls, fire walls, and fire barrier walls including protection of openings and penetrations shall comply with NFPA Standard No. 221.			
	a. UL listed fire stopping seal	M ²		
	b. UL listed fire retardant wall panel	M ²		
Total				