

# भारतीय प्रबंधन संस्थान मुंबई Indian Institute of Management (IIM), Mumbai

# (Erstwhile NITIE, Mumbai)

विहार सरोवर मुंबई- Vihar Lake, Mumbai 400 087

Website https://www.iimmumbai.ac.in

(Only Through Online e-Procurement Mode)

IIM e-Procurement / e-Tendering Website : : <u>https://nitie.ewizard.in/</u>

# Notice Inviting e-Tender (NIT) for the Work of

e-Tender for Non-comprehensive annual maintenance contract for Fire Hydrant System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda Hall and ALB at IIM, Mumbai (erstwhile NITIE, Mumbai). (Tender Document, Instructions to Tenderer, General conditions of Contract and Special conditions of Contract)

# Indian Institute of Management (IIM), Mumbai (erstwhile NITIE, Mumbai).

Ref. No: IIM/Estate/Fire/2023-24

Date: 20/09/2023

# **NOTICE INVITING e-TENDERS (NIT)**

Name of the work: Director, IIM invites Online tender on percentage rate basis under two bid system for the work of "Non-comprehensive annual maintenance contract for Fire Hydrant System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda Halland ALB at IIM, MUMBAI (erstwhile NITIE, Mumbai).".

Details of Tender fee, EMD, submission of tender and other details are elaborated in the tender document. (Pay through e-Payment mode online on portal, e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking)

**Tender Document**: Tender document will not be issued in person. The tender document can be downloaded from <u>https://nitie.ewizard.in/</u> & <u>https://www.iimmumbai.ac.in</u> for downloading of tender documents on <u>https://nitie.ewizard.in/</u> or https://eprocure.gov.in Or IIM Website <u>https://www.iimmumbai.ac.in</u>. Tenders downloaded from the website must be accompanied by requisite tender fee failing which tender will not be considered.

	& ITI Ltd Tender Wizard e-Tender Processing Fees	Rs. 500.00 (Rupees Five Hundred Only) : (Pay through e- Payment mode online on portal , e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking for Cost of Tender Document
2	Download of Tender	21.09.2023 : 1500 Hours to
	document Online	
3	Last date for receipt of	05.10.2023 - 1100 hours
	Tender Online	
4	Opening of the Tenders	05.10.2023 - 1130 hours
	(Part-1) Online	
5	EMD	Rs. 58,332.00
		Pay through e-Payment mode online on portal, e-Payment
		facility are available on website for making the payment
		through Debit / Credit Card / Net Banking.

**Opening of the bid Online**: Bid will be opened in the presence of tenderers or their authorized representatives, who are present online. Late and delayed tenders will not be opened and such tenders will stand summarily rejected.

In case any document(s) produced in support of eligibility criteria or any other document(s) turns out to be fraudulent, following will be the course of action:

[a] **Before award of work**: The work will not be awarded, EMD will stand automatically forfeited, and the tenderer will be liable for further action as may be deemed fit; OR

[b] **After award of work**: The award of work will be cancelled, EMD and Security Deposit, will stand forfeited, and the contractor will be liable for action as deemed fit.

**Evaluation of tender**: In case two or more tenders are found equal in commercial bids, work will be awarded to the contractor who has executed satisfactorily contracts of higher values based on the certificate of experience submitted along with tender papers assessment carried out by the Institute.

The Director, IIM, MUMBAI (erstwhile NITIE, Mumbai). reserves the right to: a) reject any or all the tenders without assigning any reason whatsoever; b) not binding himself/herself to accept the lowest or any tender; and c) accept the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted. Canvassing in connection with tender/quotation is strictly prohibited. Tender details can be viewed on the website <u>https://nitie.ewizard.in/</u> & <u>https://www.iimmumbai.ac.in</u> & <u>https://eprocure.gov.in.</u> Tenders downloaded from the website must be accompanied by requisite tender fee failing which tender will not be considered.

**Executive Engineer** 

# Indian Institute of Management (IIM), Mumbai

Ref. No: IIM/ESTATE/FIRE/2023-24

Date: 20/09/2023

e-Tender document

Name of the Work: "Non-comprehensive annual maintenance contract for Fire Hydrant System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda Halland ALB at IIM (erstwhile NITIE, Mumbai)".

#### **INSTRUCTION TO TENDERERS**

The Tender document has only one part.

Failure to comply with any of the conditions laid down herein renders the Tender invalid. All the enclosures/documents will have to be submitted along with bid. Any enclosure/document found not submitted along with bid of the Tender such enclosures /documents will not be accepted, at a later stage.

- 1. Estimated cost of work: Total estimated cost of work is is **Rs.29,16,604.00** (**Rupees Twenty-Nine Lakhs Sixteen Thousand Six Hundred and Four only**)
- 2. Visit of the Campus: Tenderers are advised to visit IIM, MUMBAI (erstwhile NITIE, Mumbai). campus/premises and ascertain the nature and quantum of work before tendering.
- 3. Tender fee: The Tender/bid should be submitted in the prescribed proforma for Rs. 500.00 towards tender fee. (Pay through e-Payment mode online on portal, e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking. Tender/bid not accompanied by tender fee stands automatically rejected.
- 4. Earnest Money Deposit (EMD) 2% of Estimated Cost of Work (Sr. No.1): EMD of Rs. 58,332.00 (Rupees Fifty-Eight Thousand Three Hundred and Thirty-Two only) is a must and should be submitted along with the tender/bid. (Pay through e-Payment mode online on portal, e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking).
- 5. EMD of successful bidder will be refunded on completion of contract period and/or extended period. EMD will not bear any kind of interest. EMD of unsuccessful bidder/s will be refunded on deciding after finalization of the contract. Tenders received without valid EMD stand automatically rejected. (Pay through e-Payment mode online on portal, e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking).
- 6. Tender Fee should be separate and should not be combined with EMD. Upload the Online e-Payment Receipt. (Pay through e-Payment mode online on portal, e-Payment facility are available on website for making the payment through Debit / Credit Card / Net Banking).

#### Tender should be submitted online only.

#### Bid Forms and Documents scan copies should be submitted online only.

- 7. Security Deposit: Security Deposit @ 10% will be deducted as specified in the tender document.
- 7.1. Refund of Security Deposit: Security Deposit thus recovered will be refunded as specified in the tender document.
- 8. Acceptance of tender conditions: The tenderer should read the 'General Terms and Conditions' of IIM, MUMBAI (erstwhile NITIE, Mumbai). annexed hereto and give acceptance. The tenderer is advised to visit the IIM, MUMBAI(erstwhile NITIE, Mumbai). on any working day with prior intimation between 1000 hours and 1600 hours to assess the nature and quantum of work before tendering.
- **9. Filling tender documents**: The tender should be clearly filled or typed and signed in ink legibly giving full address and contact details of the tenderer. The tenderer should quote in figures as well as in words the amount tendered by him. Alteration if any, unless legibly attested by the tenderer with full signature shall invalidate the tender. Tender should be duly signed by the authorized person(s). In case there is any difference in the amount between figures and words, the amount indicated in words will be treated as valid offer. The tenderer should ensure that the figures of amounts are written in such a way that interpolation is not possible. No blank space should be left.
- This notice is also available on website IIM, MUMBAI (erstwhile NITIE, Mumbai).
   e-Tender & on IIM, Mumbai (erstwhile NITIE, Mumbai). website: <u>https://nitie.ewizard.in/</u> & <u>https://www.iimmumbai.ac.in</u> for downloading of tender documents.

The Tender document can be downloaded from IIM e-Procurement Website i.e, https://https://nitie.ewizard.in or From IIM Official website. The tender should be submitted through online mode only.

IIM reserves the right to reject any or all tenders without assigning any reason thereof. This notice & tender document is also available on web-site: <u>https://nitie.ewizard.in/</u>, <u>https://www.iimmumbai.ac.in</u> & CPP Portal for downloading of tender documents.

#### Standard e-Tender Terms & Conditions For NITIE e-Procurement.

NITIE e-Procurement Website are : <u>https://nitie.ewizard.in/</u>.

1. The details of tender notification can be downloaded from https://nitie.ewizard.in/

Vendors should obtain the USER ID and PASSWORD from <u>https://nitie.ewizard.in/</u> by clicking on "Enrolment" link in the homepage. The Vendor registration fees has to be paid to ITI Ltd for Rs. 2360/-. Using the e-Payment link provided at the time of registration, and the mode of payments are Credit Card, Debit Card and Internet Banking. Vendor Registration is Valid for 1year.

2. For further details on e-Tender participation, please contact ITI Help desk on :

• Telephone: 011 - 49606060 (Delhi) & ewizard Helpdesk – Mumbai & Maharashtra (8448288982) Email : <u>eprochelpdesk.54@gmail.com</u>

• Email: <u>helpdesk@ewizard.in</u>

3. Tenders should be submitted only through e-Tender portal and obtain the Tender Acknowledgement copy as a proof of successful submission.

#### INFORMATION & INSTRUCTIONS TO THE BIDDERS FOR USING ONLINE ELECTRONIC TENDERING SYSTEM (eTS)

Special Conditions & instructions for using online Electronic Tendering System :

e-Tenders through portal (website) https://nitie.ewizard.in/ adopted by IIM , Mumbai .Vendor Registration Fees Rs.2,000/-+ 18% (GST) through e-Payment Gateway on NITIE e-Procurement Portal i.e., <u>https://nitie.ewizard.in/</u>

Note: The e-Payment Gateway are available on e-Procurement Portal for making the Online Vendor Registration Payment.

Bidders are required to Enroll for Vendor Registration on the NITIE e-Procurement Tender wizard Portal (URL: https://nitie.ewizard.in/) by clicking on the link "Enrolment" on the home page of e- Portal which is chargeable. (Rs.2000/- + GST(18%)(Non-Refundable ) to be paid online by e-payment gateway).

The bidders are required to submit soft copies of their bids electronically on the IIM Tender Wizard e-Procurement Portal, using valid Class III Digital Signature Certificates. The step by step instructions about e-Tender Process are given in "Vendor Help Manual".

Class III Digital Signature Certificate are mandatory for e-Tender /e-Procurement . For Digital Signature Certificate Contact to above number of ewizard helpdesk (Mumbai , Pune & Maharashtra)

#### Note: Information about e-Procurement Portal.

More information useful for submitting online bids on the NIA e-Procurement e wizard Portal may be obtained at: https://nitie.ewizard.in/. N.B: Bidders can download the Vendor's manual by visiting on home page of NITIE e-Procurement Website : https://nitie.ewizard.in/.

KEY INSTRUCTIONS for BIDDERS by clicking on "Latest Circulars/Formats/Help Manuals/Faq". The complete Step by Step "Vendors Help Manual For e-Procurement / e-Tendering Process, Vendors Registration Process, System Settings Requirements & JAVA Settings Manuals, e-Payment Guidelines" & "Digital Signature Certificate Process" this details are available on NITIE e-Procurement Website for e-Tenders.

Note: Online Support / Web Support / E-Mail Support / Phone Support are also available for Bidders as well as Department Officials . Online support through "Team viewer", "Ammy Admin " Or "Any Desk" Remote software only. For Downloading this software , the downloading software links are available on home page of NITIE e-Procurement Website.

- 1. Bid to be submitted online within the due date.
- 2. Tenders should be submitted only through e-Tender portal and obtain the Tender

Acknowledgement copy as a proof of successful submission.

3. All prospective bidders are requested to visit our NITIE E-PROCUREMENT WEBISTE

regularly for any such updates / corrigendums.

- 4. Please see attached e-Tender Documents
- 5. All the Documents Scan copies should be uploaded online also ) (All the Documents Scan copies should be uploaded online also )

Tender submission through online mode only.

5.1 **Attestation of documents by the contractor**: All the documents, submitted by the tenderer should be attested by the contractor. And same scan copies should be submitted online also.

5.2 **Producing originals documents for verification:** All above concerned original documents should be produced for verification at any stage of tender process or as and when sought for, failing which the bids are liable for disqualification.

#### **EXECUTIVE ENGINEER**

#### NOTICE INVITING E-TENDER

Executive Engineer IIM, MUMBAI -400 087 invites percentage Rate e-Tenders for the following work:

1.	NIT No.	:	IIM/ESTATE/FIRE/2023-24
2.	Name of Work	:	Non-comprehensive annual maintenance contract for
			Fire Hydrant System, Sprinkler System & Addressable
			Fire Alarm System at Swami Vivekananda Hall and ALB at
			IIM, Mumbai.
3.	Estimated Cost	:	Rs. 29,16,604.00 /- (including GST)
4.	Earnest Money	:	Rs. 58,332.00
5.	Period of completion	:	1 year

- 6. Tender Fee : Rs. 500.00
- 7. Last date of issue of tender form : 04/10/2023 up to 3:00 pm
- 8. Last date & time of submission technical and financial bid: 05/10/2023 upto 11:00 am
- 9. Date of opening of tender : 05/10/2023 at 11:30 am
- 10. Validity period of tenders for acceptance : 180 days from date of opening
- 11. Place of submission of tenders: Online mode only

For more clarification you may visit on above website and contact 022-28035377.

#### **Executive Engineer**

#### TECHNICAL CRITERIA TO TENDERERS (PART A)

- 1. NITIE reserves the right to accept or reject the tender if the tenderer fails to submit the scanned copies of the following documents.
  - i. EMD Paid Online
  - ii. Tender fee Online payment
  - iii. Pan card
  - iv. GST registration certificate
  - v. EPF & ESIC Registration
  - vi. Should have solvency certificate from Nationalized or scheduled bank of 40 % of estimated cost.
- vii. Fire License
- viii. Work completion certificates of similar nature of works executed in last five years (similar nature means Fire Fighting & Fire Alarm System works.)

#### Should have completed.

(a). One work of similar nature costing 80 % or more of estimated cost

#### OR

(b). Two works of similar nature costing 60 % or more of estimated cost.

#### OR

(c). Three works of similar nature costing 40% or more of estimated cost.

# **TECHNICAL BID**

Sr no.	Descriptions	Information to be filled by the tenderer (if required separate sheet may be enclosed)					
1.	Name and address of firm/ agency with complete contact details						
2.	Type of organization (whether proprietorship, partnership, private limited, limited company)						
3.	Name and address of the Directors, Proprietor/partners						
4.	No. of years of experience of the Firm						
5.	No. of years of experience of the Firm in the area of Fire Fighting & Fire Alarm System.						
6.	Details of registration of the Firm	R. No.	Copy enclosed Y / N				
9.	Details of EPF & EST registration (attach copies)	EPF Regn. No.:	Copy enclosed Y / N				
		ESI Regn. No.:	Copy enclosed Y / N				
10.	GST No./ Certificate	No.:	Copy enclosed Y / N				
11.	PAN No.	No.:	Copy enclosed Y / N				
12.	Details of Earnest Money	DD No.:					
		DD/Banker's Cheque					
		No.:					
		Drawn on Bank:					
		OR cop of transaction details Y/No					
13.	Any other information						

(Documentary evidence in support of the above facts are to be provided by the bidder)

# FINANCIAL BID (PART B)

Sr. no.	Description of Item	Days	Qty.	Unit	Rate	Amount	
1	Fire Operator	365	6	Nos.	816	17,87,040.00	
2	Specialized Fire Engineer (4 days per Month x 12)	48	1	No.	1000	48,000.00	
3	EPF @13% (1950/- per Month x 12 x 6)					1,40,400.00	
4	ESIC @3.25% of 1787040.00					58,078.80	
	Total (A)					20,33,518.80	
	Reimbursement						
1	Cleaning material		24	Month	549.96	13,199.00	
2	Uniform (6 x 3000.00)					18,000.00	
3	Bonus to 6 operators (26 Days x 816 x 6 workers)					1,27,296.00	
4	Provision for expected VDA (46+60) x 365 x 6					2,32,140.00	
5	ESIC @ 3.25 on <b>Rs. 232140.00</b>					7,544.55	
6	Issue of Form-B twice in a year (Rs.10000/- x 4)					40,000.00	
	Total (B)					4,38,179.55	
	Total (A+B)					24,71,698.35	
	Add: GST @ 18%					4,44,905.70	
	Grand Total:						

Note: -

- 1. Contractor must quote service charges only on Total (A).
- 2. No services charges will be given on reimbursement items.

#### Name of Work: <u>Non-comprehensive annual maintenance contract for Fire Hydrant</u> <u>System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda</u> <u>Hall& ALB at IIM, Mumbai (earlier was NITIE)</u>.

## TERMS AND CONDITIONS

## (A)General Conditions:

1) The work has to be carried out as per IIM, Mumbai specifications.

2) Prospective tenderer shall visit the site and acquaint himself with existing site condition, restriction in movement / working hours / security aspects / condition of electrical installation, Wet riser, Sprinkler System and Automatic Fire Alarm System, installation before quoting for the job. No complaint for loss of the labour shall be entertained at later stage on the account. Prospective tenderer should have adequate past experience of handling such jobs.

**3**) Tenderer shall provide the staff for running the installation strictly as per requirement with qualification as prescribed in tender documents should have valid licence / certified for relating trades.

**4**) In case of any accident during maintenance work / operation leading to injuries / damages to human being / equipment, loss of life the contractor shall be fully responsible for settling all claims and indemnify the department against any claim arising out of such accident.

**5**) The Director reserves the right to terminate the contract without giving any notice, at any time if the performance of the contractor is found unsatisfactory.

**6**) Preventive maintenance of Fire System installation shall be done as per schedule given by the Executive Engineer.

7) Successful tenderer shall maintain complaint register / log books and preventive maintenance work of installation work under taken by him time to time shall be entered in the record and on the basis of such record payment shall be released. Contractor shall obtain counter signature of Executive Engineer. The required **weekly inspection checklist** of tools and tackles, fire extinguishers ,fire alarm system & fire fighting system / stationary / forms / registers etc. shall be arranged by contractor.

**8**) Contractor will also be responsible for general daily like cleaning of Fire Control Room, pump room. The required material for daily cleaning i.e. broom, cotton waste, dhotis etc. will be arranged by contractor within tender cost.

**9)** In case fire operator of the contractor fails to attend the duty, the contractor shall have to provide suitable arrangement. If contractor fails to provide suitable arrangement the recoveries of Rs. 1500/- per day per fire operator shall be made from the dues of the contractor.

10) Successful Tenderer should provide the Personal Protective Equipment's as below

- Safety Helmet (6 Nos.) Certified to IS 2925:1984, EN 397, CE.
- Industrial Safety Shoe (6 Nos.) Certified to EN 20345:2011 IS 15298(Part-02):2016 DGMS.
- Hand Gloves (144 Pairs Yearly) (UHMWPE liner with PU coating on palm) Certified to- EN388: 2016 – 4543D.
- Safety Goggles (6 Nos.)- Certified to- EN 166:2001 & ANSI Z 87.1 2010.
- **Reflective Jacket (6 Nos.) Certified to** IS 15809:2017

## 11) Periodic inspection through inspection checklist of existing Emergency Personal Protective Equipments as below

• Nomex 3-layer Fireman Suit (2 Nos.) –

Enables the fire fighter to fight the fire from close proximity, even in a high - rise

building on fire where the temperatures can reach up to 350c, it has 4 layers.

Components: Trouser & Jacket, Compact Helmet, Fireman Boot, Fireman Glove,

Protective Flash Hood – Resguardo.

The manufacturer's test certificate shall be submitted.

- Breathing Apparatus (3 Nos.) SCOTT BACKPLATE SIGMA TYPE 2 WITH FACE MASK WITH 45MIN CARBON COMPOSITE CYLINDER. The manufacturer's test certificate shall be submitted.
- **FRP Wall Mounted Box with glass door (3 Nos.)** Which can accommodate a full set of breathing apparatus and one spare cylinder. Size: 32"H x 21"D x 13"L.
- LED Torch (3 Nos.) PEL 150 HSL, high beam and long range.

**12)** In case any major defects or abnormalities found in the system during checking it should be informed to the Executive Engineer.

**13)** Contractor shall submit worker details, address, qualification certificate etc. before start of work to Executive Engineer.

**14)** Duties of staff can be changed/ rearranged by Executive Engineer as per site requirement.

15) Dismantle material received from site has to be returned back to department.

**16)** All the related documents such as log book, complaint registers, attendance register etc. should be available at site for inspecting officer.

17) No camping rights will be allowed to Fire Operators in the campus.

**18)** All the related maintenance record has to be submitted to department time to time or whenever asked by Executive Engineer.

**19)** While taking over the installation for maintenance purpose the contractor shall bring all deficiencies to the notice of department. The contractor invariably shall be handed over the installation in working condition with all the fittings intact on the expiry of contract / termination.

**20)** The staff on duty shall wear the cleaned proper uniform and possess the Identity Card and basic Personal Protective Equipments PPE's while carrying out the work.

**21**) The contractor is required to depute the following minimum staff as indicated below or as decided Executive Engineer:-

**a**) Fire Operator -One person in each shift for each building, 8 hours each.(3 shifts, round the clock) (Three persons for each building)

(Total 6 Persons should be provided by Contractor per day)

**b**)Specialize Work Skilled Engineer - **Four Visits Per Month** of Engineer For Addressable Fire Alarm System. Total 48 visit per year.

22) The workmen to be engaged for the work shall be qualified as per relevant trade rules.

**23**) Payment to the Fire Operator to be made as per Minimum Wages Act.

**24**) Any increase in VDA to the workers will be reimbursed by the Institute to the contractor on submission of proof of payment. Contractor's profit will not be added to the VDA arrears.

Qu	Qualification required					
1) <b>Specialized</b> Programming Knowledge of fire Alarm Panel & wireman tra						
	Skilled Engineer	valid Wireman license. 2 years practical experience for E/M				
		equipment.				
2)	Fire Operator	Skilled operator having 3 years relevant experience in maintenance and operation of firefighting system & Addressable Fire Alarm System.				

**25**) All the complains receive at site has to be attended within 24 hours otherwise penalty of Rs. 200/- each complaint shall be imposed due to non-attending within 24 hours if there is

any hindrance to attend the complaint, has to be reported to Executive Engineer. **26**) The contractor shall arrange own T&P nothing shall be given by department.

27) The staff deputed by the contractor shall be the liability of the contractor, no claim for regulation wages etc. shall be entertained by department.

**28)** The Contractor should have compulsory valid licence of Maharashtra Fire Service for related work.

**29)** The agency will be responsible for the working condition of the all services and at the end of the contract, they will hand over the all equipment in working conditions, otherwise suitable recovery will be made from the agency's bill.

**30)** The contract period is for one year only. However it may be extended for another year based on satisfactory performance and approval from Director.

**31**) Payment will be made quarterly after verifying the payments and statutory payments.

**32)** 10% Security Deposit will be deducted from each running bill. Security Deposit will be refunded after completion of the contract. Security deposit will not bear any interest.

**33**) If the contractor wants to terminate the contract, he must give three months' notice to IIM, failing which Security Deposit will be forfeited.

**34**) Work will be awarded to the agency who have quoted lowest rates for the respective work.

**35) Tenure of contract:** The contract will be for a period of one year initially, which may be extended for one more year on satisfactory performance of the initial period of the contract. IIM, MUMBAI may renew/extend the contract to such further period (s), not exceeding two years from the date of commencement of work, as it may deem proper, having regard to the quality and manner of the contractor's performance. However, it shall be with consent/written request by the contractor in this regard and subject to the sole discretion of IIM, Mumbai.

**36)** Service Charges/Contractor's Profit: No escalation of Contractor's Service Charges and/or cost of materials shall be admissible during the term of the contract.

**37)** Payment of wages in cash is not permissible and under no circumstances, payment of wages in cash shall be made. Payment is to be released to the Workers as mentioned in the

rate analysis of the Institute. V.D.A. arrears will be paid separately when increment will take place. Contractor's profit will not be added to the increased V.D.A. arrears.

**38)** Contractor's profit should not be included in the bill for reimbursement of Bonus payment. IIM will reimburse only the actual Bonus payment after making the Bonus payment to the eligible staff only.

#### (B) Additional Conditions (Technical)

#### For operation of Fire Fighting/ Fire Alarm System.

a. Routine checking of installation and their cleaning as per maintenance manual.
b. However, work also includes routine running of pump set manually and operation of hose reel / hose pipes physically and fire alarm system by making smoke near the detector and checking the display / sounder activation and entry shall be made in the register and periodical cleaning of these system as per direction of Executive Engineer. Mock drill of down comer / Fire Fighting /Fire Alarm system has to be done in presence of Executive Engineer & also in the presence of available Security personals / watchman's etc. as per directions & guidelines and as per maintenance manual.

#### **Routine maintenance of following:**

#### (A) Wet riser system:

1) Check water level in base of tank and operate pumps.

**2**) Check-up the water in the collection chamber and operate the priming pump as and when required.

**3**) Check pumps sets for excessive gland leakage / vibration and heating and take corrective measures.

4) Check the water in radiator.

5) Check the batteries for its healthy charging and its specific gravity.

6) Apply grease on battery terminals and put distilled water to maintain the electrolyte level.

**7**) Test the wet riser system every day for at least 10 min. And see the performance of all the equipment. If found any equipment's working unsatisfactory take corrective measures.

**8**) Test the auto / manual mode and record the parameters every day and also start the set as and when required.

9) Check the engine oil in crank case and do the topping up as and when required.

**10**) Checking and filling the fuel tank as and when required.

**11**) Check the values and glands for dripping of water through gland and take correcting measures, if necessary.

12) Greasing of motors and pumps as and when necessary.

**13**) Keep the installation neat and clean all time.

**14**) Check the earth continuity and earth resistance and insulation resistance for motors alternator and the result at least once in 6 months.

**15**) Check the wet riser control panel for its healthy working and for loose connection if any.

16) Checking of shaft alignment.

17) Checking of all material arrangement for its working.

18) Cleaning of all hydrant valve hose reel and hose boxes with brass/silver polish.

**19)** In case of fire or siren developed, the operator shall have to check for cause and render necessary help to extinguish fire in co-ordination with Addressable Fire Alarm System.

#### Checking of wet riser system: (Daily)

**1**) Operate the Bypass valve (water to flow back to sump) & see the operation of the jockey pump and then the electrical fire pump and Diesel fire pump.

**2**) After Electric fire pump has run for 5 minutes, switch off the normal electric supply and then watch for automatic operation of diesel pump.

3) Note various reading of current, voltage, pressure etc. of the system.

4) Operate booster pump & also keep it in working condition. To check the hydrants

performance makes the plan for operation of these on holidays/Sundays. Check to be done in auto mode also.

#### (B) FIRE ALARM SYSTEM:

#### Weekly inspection of fire alarm system:-

1) Cleaning all the control panels, sounders and call boxes.

**2**) While cleaning each panel, verify whether any fault indication lamp is on with or without an alarm, investigate and rectify the fault.

3) Check whether all panel lamps are healthy by the "panel lamp test button" in each panel.

**4**) Check that the system operates under mains failure condition, by switching of the mains supply to the control & indicating panel and testing any zone for fault / fire condition from the zonal panel.

Confirm also that the audio visual alarm comes up in the C & I panel Restore mains supply after the test.

5) Log all the panel instruments in C & I Panel.

**6**) If Lead Acid type battery is used for Fire Alarm System, check the electrolyte level (and top up with distilled water, as required) and specific gravity.

#### Check on control panel operation:

1) All Zonal (sector) panels and C & I panel should be checked once a month.

2) Repeater panels if any should also be checked once a month.

**3**) The check is to confirm operation of the system in each zone, through the test button in zonal (sector) panel. Concerned and in the C&I panel and also relevant sounders.

**4**) C

heck the Talk back system from both ends and also PA system of C & I panel.

**5**) Check the battery condition from the log book readings of voltage. Check the charger, If is any problem. Check battery terminal and replace old grease with fresh grease to corrosion.

#### CONTRACTOR

#### **EXECUTIVE ENGINEER**

Name of Work: Non-comprehensive annual maintenance contract for Fire Hydrant System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda Hall& ALB at IIM,Mumbai (erstwhile NITIE, Mumbai).

Sl. No.	Description Of Item	Amount
1.	Operation and general service maintenance of Fire Fighting and Addressable Fire Alarm system of Swami Vivekananda Hall(Gr. to Terrace Level) having the following main equipment & associate accessories by providing staff as round the clock i/c Sunday and holidays as per attached additional terms and conditions.	
	Fire Fighting System.	
	1) Sprinkler Main Electrical motor driven fire pump- 1 Nos.	
2.	Motor-make-ABB-415Volt,3 phase RPM 1450, Pump make - Kirloskar-2280LPM atheightmtr 2) Hydrant Main Electric driven pump -1 Nos. motor make ABB 415 V,3 Phase, RPM 1450 , pump make Kirloskar ,-2280 lpm ,height-95mtr. 3) Jockey pump for sprinkler and hydrant system-1 Nos. motor make ABB 415V, 3 Phase, 50 Hz pump make Kirloskar, 2280 lpm 95 mtr head.	
	4)Stand by (Diesel engine) make Kirloskar 2400 lpm1 Nos.	
	<ul> <li>5) Priming drainage pump- 2 Nos. 50 lpm at height of 8 mtr , 415v,</li> <li>6) 150 mm butterfly valve - 5 Nos.</li> </ul>	
	7) 100 mm butterfly valve - 8 Nos.	
	8) 40 mm butterfly valve -2 Nos.	
	9) Pressure Gauge -8Nos.&Pressure switch - 7 Nos.	
	<b>10</b> ) Air vessel tank <b>-6 Nos.</b>	
	<b>11</b> ) Main control panel with 630 amp, pole MCB as in-comer and other outgoing control, metering for all the pump and the booster pump at terrace pump at terrace level -1 Nos.	
	<b>12</b> ) Booster pump at terrace level <b>-1Nos.</b> motor make ABB-415V, 3 phase, 50 Hz pump make - kirlosker- 900 lpm at 35 mtr head.	
	Wet Riser and Courtyard Hydrant system and sprinkler	

#### SCHEDULE OF WORK FOR SWAMI VIVEKANANDA HALL

	system.	
	1)150 mm butter fly valve - 11 Nos.	
	2)100 mm butter fly valve - 1Nos.	
	3) 80 mm butter fly valve -10 Nos.	
3.	4) 65 mm butter fly valve -30 Nos.	
	5) 50 mm butter fly valve - 38 Nos.	
	6) Double headed internal hydrant valve 36 Nos.	
	7) single headed courtyard hydrant - 9 Nos.	
	8) 63 mm dia. 15mtr long canvas hose pipe - 94 Nos.	
	9) Hose reel Drum with Rubber Hose Reel 25mm ball valve jet nozzle, 36mtr long- <b>36 Nos.</b>	
	10)MS Hose cabinet- 47Nos.	
	<ul><li>11)3 Way FBC with 3 Nos. gun metal male instantaneous inlet-</li><li>2 Nos.</li></ul>	
	12)Flow switch - 34 Nos.	
	13) Control valve with water gong/hydraulic siren- 2 Nos.	
	14) Twin plate sprinkler with flexi drop - 521 Nos.	
	15) Pendant type sprinkler 118 Nos.	
	Addressable Fire Alarm System (Make -Notifier Honeywell)	
	1) 8 loop Addressable Fire Alarm Panel Make -Notifier- 1 Nos.	
	2)Network Repeater Panel Make -Notifier - 1 Nos.	
	3) Digital Audio Amplifier Make-Notifier -6 Nos.	
	4) PC with user interface software -1Nos.	
4.	5)Fire Fighter Telephone jack Make-Notifier-50 Nos.	
	6)Fire Fighters handset Make-Notifier -4Nos	
	7)Addressable Multi-sensor detector Make- Notifier -804 Nos.	
	8)Addressable Heat detector Make -Notifier-38 Nos.	
	9)Addressable Manual Call point/MCP Make-Notifier50Nos.	
	10)Addressable Control modules Make-Notifier-100Nos.	
	11)Isolator modules Make-Notifier - 132Nos.	
	12)Response indicator Make -Notifier- 499Nos.	

	13)Module panel fixing FRM module and FTM module1Nos.
	Public address system Make-Notifier
	1)Annunciation panel -1Nos.
	2)Ceiling coil Excavation Speaker-296Nos.
	3)Wall mounted coil Excavation Speaker -53Nos.
5.	Portable Fire Extinguisher
	1) 6 Kg ABC type Extinguisher -36Nos.
	2)4.5 Kg CO2 type Extinguisher-23Nos.
	3) 9 Litre FOAM type Extinguisher – 01 No.
6.	Including issue Form 'B' Twice in a year.

## CONTRACTOR

#### **EXECUTIVE ENGINEER**

# SCHEDULE OF WORK FOR ACADEMIC CUM LIBRARY BUILDING

Sl. No.	Description Of Item	Amount
1.	Operation and general service maintenance of Fire Fighting and Addressable Fire Alarm system, Public Address System of Academic Cum Library Building (Basement to Terrace Level) having the following main equipment & associate accessories by providing staff as round the clock i/c Sunday and holidays as per attached additional terms and conditions.	
	Fire Fighting System. (BASEMENT FIRE PUMP ROOM)	
	<ol> <li>Electric Motor driven Fire Pump Set ABB make ,75 HP 2 Nos.</li> <li>Jockey pump 15 HP 2 Nos. motor make ABB.</li> </ol>	
	<b>3</b> )Stand by (Diesel engine) Driven Pump Set make Kirloskar 2400 lpm. <b>-1NOs.</b>	
	(TERRRACE FIRE PUMPS)	
	<ul> <li>4) Booster Pumps 15 HP , Motor Make ABB 04 Nos.</li> <li>5) 150 mm butterfly valve - 54 Nos.</li> </ul>	
	6) 50 mm butter fly valve - <b>32 Nos.</b>	
	7) 80 mm butter fly valve -08 Nos.	
	8) Non Return valve /Check valve	
	150 mm dia (Horizontal)NRV-15 Nos.	
	9) 80 mm dia (Horizontal) non return valve -06 nos.	
	10) 65 mm dia Gunmetal valve-2 Nos.	
	11) 200 mm butter fly valve -05 Nos.	
	12) Air vessel tank -4 Nos.	
	<b>13</b> ) Main control panel with all Accessories (Location: Outside the pump room at Basement Make Abak - <b>1 Nos.</b>	
	<b>14</b> ) Terrace Panel with all Accessories (Location: Near Landing Between Shaft no. 3& 4 Panel Make: Abak <b>1 Nos</b> .	
	<b>15</b> ) Annunciation Panel (Location: Panel at Ground Floor Below the stair case <b>1 No.</b>	
2.	Wet Riser and Courtyard Hydrant system and sprinkler system.	
	1) Double headed internal hydrant valve 30 Nos.	
	2) single headed courtyard hydrant - 6 Nos.	

	3) 63 mm dia. 15mtr long canvas hose pipe - 67 Nos.
3.	<b>4</b> ) FIRST AID HOSE REEL & DRUM with Rubber Hose Reel 25mm ball valve jet nozzle - <b>30 Nos.</b>
	5) WEATHER PROOF CABINET FOR FIRE SERVICE INLET LESS THEN 400 MM HIGHT X 1200 MM X 450 MM - <b>06</b> Nos. (HOSE BOX)
	6) WEATHER PROOF CABINET FOR SERVICE INLET LESS THEN 400 X 600 X 450 MM 5 Nos. (3 WAY F.B INLET)
	7) WEATHER PROOF CABINET ,300 X 300 X 300 MM - 6 Nos. (YARD HYDRANT)
	8) 2/3 Way Fire Service Inlet Collector gun metal male instantaneous inlet- 5 Nos.
	9)Flow switch - 32 Nos.
	10) Control valve with water gong/hydraulic siren- 1 Nos.
	11)
	12) Pendant type sprinkler 1216 Nos.
	Addressable Fire alarm System (Make - Notifier Honeywell)
	1) 8 loop Addressable Fire Alarm Panel Make - Notifier - 1 Nos.
	2)Network Repeater panel Make -Notifier - 6 Nos.
	3) Digital Audio Amplifier MAKE BOSCH -2 Nos.
	4) Controller -1No.
	5) Router- 1No.
4.	6) Call Station Microphone -01 No.
	7) Key Pad for call station -01 No.
	8) DVD Player -1 No.
	9) Equipment Rack-1 No.
	10) Multi Criteria Detector (AFC) makeNotifier -5 Nos.
	11) Multi Criteria Detector (BFC) Make-Notifier Fier-352 Nos.
	12)Photo Smoke Detector (AFC)Make- Notifier -450 Nos.
	13) Photo Smoke Detector (BFC) Make- Notie-Fier-186 Nos.
	14)Addressable Thermal Detector Make - Notifier -2Nos.
	15) Junction Box For Detector -541 Nos.
	16)Addressable Manual Call point/MCP Make- Notifier- 27 Nos.
L	

	17) Hooter Cum Strobe Make- Notifier - 38 Nos.
	18)Addressable Control modules Make- Notifier - 36 Nos.
	19) Monitor modules Make- Notifier - 32Nos.
	20) Fault Isolator Module -57 Nos.
	21)Response indicator Make - Notifier - 448 Nos.
	Public address system Make- Notifier
	1) High Intensive Hooter 01- No.
	2)Ceiling Mounted Speaker-126 Nos.
	3)Wall mounted coil Excavation Speaker - 10 Nos.
	Portable Fire Extinguisher
5.	1) 6 Kg ABC type Extinguisher -22 Nos.
	2) 9 Kg ABC type Extinguisher-18Nos.
	3) 4.5Kg CO <sub>2</sub> type Extinguisher-24 Nos.
	Including issue Form 'B' Twice in a year.
6.	

## CONTRACTOR

#### **EXECUTIVE ENGINEER**

#### **E-TENDER**

## (FINANCIAL BID)

Name of Work: - <u>Non-comprehensive annual maintenance contract for Fire Hydrant</u> <u>System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda</u> <u>Hall& ALB at IIM,Mumbai(erstwhile NITIE, Mumbai).</u>

Note: Below Schedule is for reference purpose only, the EXCEL (.xls) form are available on

e-Tender website, vendors need to download and upload the filled price bid form online on

e-Tender website.

(i) To be submitted by 11.00 hours on dated 05.10.2023

Issued to:....

Signature officer issuing the documents.....

Designation.....

Date of issue.....

#### IIM, MUMBAI.

#### **SCHEDULE**

#### <u>Name of Work: Non-comprehensive annual maintenance contract for Fire Hydrant</u> <u>System, Sprinkler System & Addressable Fire Alarm System at Swami Vivekananda</u> <u>Hall& ALB at IIM, Mumbai (erstwhile NITIE, Mumbai).</u>

Sr. no.	Description of Item	Days	Qty.	Unit	Rate	Amount	
1	Fire Operator	365	6	Nos.	816	17,87,040.00	
2	Specialized Fire Engineer (4 days per Month x 12)	48	1	No.	1000	48,000.00	
3	EPF @13% (1950/- per Month x 12 x 6)					1,40,400.00	
4	ESIC @3.25% of 1787040.00					58,078.80	
	Total (A)					20,33,518.80	
	Reimbursement						
1	Cleaning material		24	Month	549.96	13,199.00	
2	Uniform (6 x 3000.00)					18,000.00	
3	Bonus to 6 operators (26 Days x 816 x 6 workers)					1,27,296.00	
4	Provision for expected VDA (46+60) x 365 x 6					2,32,140.00	
5	ESIC @ 3.25 on <b>Rs. 232140.00</b>					7,544.55	
6	Issue of Form-B twice in a year (Rs.10000/- x 4)					40,000.00	
	Total (B)					4,38,179.55	
	Total (A+B)					24,71,698.35	
	Add: GST @ 18%					4,44,905.70	
	Grand Total:						

1. Contractor must quote service charges only on Total (A).

2. No services charges will be given on reimbursement items.

I/we are hereby ready to execute the work at _	%
(in words	)

Tender amount quoted after considering the percentage in figure Rs. \_\_\_\_\_

(in words \_\_\_\_\_

GST: (over the above quoted amount)

CONTRACTOR

**EXECUTIVE ENGINEER** 

•