



Shri Mata Vaishno Devi University

Kakryal, Katra-182320 (J&K) INDIA

(A Statutory Technical University of J&K Legislature; recognized u/s 2(f) & 12(B) of UGC)

No:SMVDU/Engg/17/

Dt:

NOTICE INVITING TENDER-3rd CALL

Shri Mata Vaishno Devi University, Kakryal, Katra, J&K invites sealed tender in Two Bid format i.e. double envelope Technical bid & Financial bid from reputed firms having suitable experience, technical competence, capacity and financial wherewithal of supplying and installing Automatic Irrigation System (Pop-up Sprinkler)with gear driven mechanism containing the components as mentioned in Annexure-II to this NIT for work namely **“Design,Supply, Installation, Testing, Commissioning and Five (05) years Maintenance of Automatic Irrigation System (Pop-up Sprinklers) with Gear Driven Mechanism at Shri Mata Vaishno Devi Multi Purpose Sports Stadium, Kakryal”** for the below mentioned work:

S. No	Description of work	Approx Cost of work (Amt. in Lacs)	Earnest Money Deposit	Period of Completion
1.	<i>Design, Supply, Installation, Testing, Commissioning and Five (05) years Maintenance of Automatic Irrigation System (Pop-up Sprinklers) with Gear Driven Mechanism at Shri Mata Vaishno Devi University Multi Purpose Sports Stadium, Kakryal, Katra</i>	Rs`15.00 lac	R`30,000.00	30 days

The detailed tender document can downloaded from our website www.smvdu.net.in. The tender document should be accompanied with a Demand Draft of `1,000/- (Rupees One thousand only) (non-refundable/ non-transferable) favouring Registrar, SMVDU towards the cost of tender. The tender document complete in all respects along with EMD in the shape of DD from Scheduled/ Nationalized bank pledged in favour of Registrar, SMVDU should reach the office of Registrar SMVDU Kakryal , Katra by or before 14th June,2017 upto 1300 hrs and shall be opened on the same day or any other convenient day as decided by the

Tender Opening Committee in presence of the tenderers or their representatives who wish to be present. Any tender received through post or courier after prescribed date shall be out rightly rejected.

Tender complete in all respects must be sent to the undersigned through Speed Post/ Registered A.D. / reputed courier service or to be dropped in the sealed Tender box available in Registrar Office, SMVDU, Kakryal.

For & On behalf of SMVDU
Registrar

No:

Dated:

Design, Supply, Installation, Testing, Commissioning and Five (05) years Maintenance of Automatic Irrigation System (Pop-up Sprinklers) with Gear Driven Mechanism at Shri Mata Vaishno Devi Multi Purpose Sports Stadium, Kakryal

Annexure-I

Detailed Terms & Conditions in respect of Tender Notice issued vide:

Eligibility Conditions

1. The Tenderer who are original Manufacturer/ authorized dealer of Automatic Irrigation System (Pop-Up Sprinkler) for Sports play field are eligible to quote.
2. The Tenderer shall be an Income Tax Payee. The Tenderer shall submit attested copies of the Income Tax Returns/ Income Tax Assessment Order for the last three years 2014-15, 2015-16, 2016-17. The tenderer shall also submit proof of PAN, J&K Service Tax Registration detail along with TIN No.
3. The Tenderer should have a minimum average annual turnover of Rs.30.00 lakh for last three years. (i.e. for FY 2014-15, 2015-16, 2016-17). Attested copies of Balancesheet & Profit & Loss account of last three years are to be attached.
4. The bids of only such Tenderers will be entertained who have experience of Design, Supply, Installation, Testing, Commissioning and Maintenance of Automatic Irrigation System (Pop-up Sprinklers) with Gear Driven Mechanism. They must have executed similar works valuing not less than Rs.90.00 lakh in aggregate during the last three years (since 2014-15 till date) including atleast one single work of similar nature valuing not less than Rs. 15.00 lakh. This experience must be based on the works executed by the Bidder without having subcontracted the work or its components. The tenderer shall submit the relevant Letters of Award & Completion Certificate in this regard all relevant documentary evidence.
5. The company should have relevant ISO certification as a testimony to its quality recognition.

General Conditions:

6. The Tenderer shall be required to set up as a part of the work, an **Automatic Irrigation System (Pop up Sprinkler) having a diameter of coverage of 84 Meters with Gear Driven Mechanism and 360⁰ coverage at SMVDU Multi purpose Sports Stadium, Kakryal.**
7. Tenders shall be submitted only in the prescribed format. The prescribed format for submitting Technical & Financial bids are available and the Tender forms can be downloaded from the webpage (www.smvdu.ac.in) and shall be accompanied by demand draft of `1000/- drawn in favour of Registrar, SMVD University, kakryal. If a demand draft is not submitted along with the downloaded tender forms such tenders will be summarily rejected.
8. The Tenderer should submit Technical bid and Financial bid separately. The Technical bid and financial bid should be submitted in separate covers and each of these covers should be sealed. On the cover containing Financial bid, the following should be clearly written: "Financial Bid for Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers)". On the cover containing technical bid, the following should be clearly written: "Technical Bid for Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers)". These two covers should be put in another separate cover which should also be sealed and on this cover the following should be written clearly "Bid for establishment of Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers)". Each page of the tender form, schedules etc., should be signed and stamped with the seal of the Company.
9. The Technical bids will be scrutinized first followed by financial bids. In the first stage those Tenderer whose technical bids confirms to the terms and conditions of NIT will be shortlisted. Financial bids of these short listed Tenderer will be opened separately. The short listed Tenderer will be informed the date of opening of the Financial bids. The short listed companies will be informed. Therefore, the Tenderer should submit the details of their working Telephone & Fax numbers and e-mail ID for this purpose. The undersigned may also inform the short listed Tenderer by telephone, fax or

email. Non-functioning of the telephone, fax or emails of the Tenderer & consequent delay in such intimation shall not be the responsibility of SMVD University.

10. All such offers, along with the terms and conditions duly signed and enveloped as described above, must be dropped by hand in the sealed Tender Box placed in the office of the Registrar, SMVD University, Kakryal by 01:00 PM on 14-6-2017 alternatively the sealed tenders may be sent by Registered Post / Speed Post / courier addressed to the office of the Registrar, SMVD University, Kakryal so as to reach by 01:00 PM on or before 14-6-2017. The tenders received after the due date and time shall not be considered.
11. The SMVD University shall not be responsible for any postal delay. Any conditional tender or tenders, which are not appropriately sealed in the two-bid format, as explained above, or tenders received after the stipulated date and time, shall not be entertained. Any cutting or overwriting in the Tender Documents will also make the bid liable for rejection. The Technical Bids shall be opened by the Tender Committee on the same day at 03:15 PM at Kakryal in the presence of the bidders who may choose to be present. In case of change in date and time of opening of Technical Bids, the information regarding the same shall be intimated. The date of opening of Financial Bids shall be intimated only to the eligible short-listed Tenderer after evaluation of the Technical Bids.
12. The tenderer must go through the technical details mentioned in the Annexure-II and stick to the specifications specified therein while quoting the rates. The rate should include all incidental expenditure such as transportation of the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium to the site including transit, Insurance, etc.
13. The tenders should be typed neatly or written in ink & tenders filled in with pencil will be summarily rejected. All tender document 7 schedules shall be signed on all pages and the seal of the company shall be fixed on all document and schedules on each page as a token of unconditional acceptance of terms & conditions of NIT. All

corrections if any should be duly attested. Any tender which have corrections which are not attested by the tenderer will be summarily rejected.

14. The tenderer should quote separately for each of the item mentioned in Annexure-II.
15. Any Government body in India should not have blacklisted the bidder/OEM its subsidiary, dealing in similar products.
16. The tender should be filled in neatly quoting the rates both in words and figures, without any cutting/over writing. In case of any cutting/overwriting the same should be authenticated under the signatures of the Tenderer.
17. Conditional, illegible, ambiguous tender(s) received after the stipulated date and time shall be out rightly rejected.
18. The University reserves absolute right to reject or cancel any or all bids without giving any reason thereof whatsoever.
19. Tenders not submitted on the lines indicated above are liable to be rejected without correspondence.
20. Request for extension in last date of receipt of tender shall not be entertained on any grounds.
21. SMVD University reserves the right to order additional quantity or reduce the quantity of the material advertised at the time of placement of order for which the quoted rates shall be valid.
22. All legal proceeding in connection with the order / tender will be subject to the jurisdiction of local court of Jammu and Kashmir State alone.
23. The University reserves the right to divide the target between two or more Tenderer for 100% achievement.
24. In case of any doubt, dispute or difference arising out of the contract, the same shall be referred to the Arbitrator to be appointed by the Vice Chancellor, SMVDU shall be final & binding on both the parties.
25. The University shall not be bound to accept the lowest or any tender and reserves to itself the right of accepting the whole or a portion of any of the tender, as it may deem fit, without assigning any reason thereof.

26. Any form of canvassing by the Tenderer to influence the consideration of their tender shall render the tender liable to summary rejection.
27. In order to avoid delay caused by postal correspondence and to expedite the process, the University may require the successful Tenderer to hold technical & commercial negotiations with the University.
28. The conditions hereinafter deals with system details and supplementary conditions of the contract in addition to those stipulated in foregoing clauses which alongwith Schedules & Annexures, shall be deemed to form part of detailed specification for equipment. The Tenderer are advised to study and familiarize themselves with the terms and conditions of the tender.
29. All materials shall be of the Government approved quality, new and unused and be capable of satisfactory operation when exposed to the local atmospheric conditions.
30. The Tenderer is required to submit a statement of facts in details as to their previous experience in performing a similar of comparable work and business and technical organization, financial resources and manufacturing facilities available and to be used in performing the contract.
31. Force Majure: If during the currency of Contract, there is any out – break of war / natural calamity, which whether financially or otherwise affects the execution of the Contract the firm unless contract is terminated under provision of this Clauses shall make his / her best efforts to complete the Contract. However after outbreak of such war / natural calamity, University shall be entitled to termite the Contract at any time by giving notice in writing. Force Majure is hereby defined as a ‘Clause’ which is beyond the control of University / Firm and which consequently affects the performance of the Contract.
32. **Special Conditions:**
 - a. The area to be covered is nearly 29,000 sq.mtr. approx.of play field. Therefore, the tenderers are required to cover the play field with minimum number of pop-ups but at the same time providing irrigation coverage to a maximum extent possible.
 - b. Bidder shall have to provide maximum irrigation coverage to play field using minimum number of irrigation units.

- c. While providing Automatic Irrigation System to playfield the main focus shall be on cricket pavilion of 65mtr radius. The layout of the playfield is enclosed.
33. **Training:** The Tenderer shall make provision of imparting training to University staff on operation and use of Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) for sports stadium equipments, its accessories for the intended applications and troubleshooting repair and maintenance of Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) free of cost, if any, of such training and the details regarding the course covered and its duration should be specified if otherwise not included in the cost offer itself.
- a. The successful bidder shall formulate a training module covering the entire duration of the project period including five years of AMC. The proposal of such module with details on courses covered with duration of each session covered shall be submitted within 20 days from the date of issuance of Letter of Award.
- b. Such training module shall commence immediately after the commissioning of the units for a period of 07 days at the beginning and during the regular maintenance period, the training session shall be conducted at an interval of 45 days during the first year of AMC, at an interval of 60 days during the 2nd year of AMC & at an interval of 90 days for the remaining period of AMC & each session should not be less than two days.
- c. **Penalty:** In case of failure on the part of the firm to provide training during the stipulated time as per the schedule, a penalty of Rs.5,000/- will be levied for the each session missed and the penalty shall be recovered from the amount payable to the supplier under Annual Maintenance Contract.
34. **Technology Certificate:** The supplier shall issue a certificate stating that-
- a) The Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) is of the latest technology. (Proof to be attached).
- b) The Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) may be upgraded as and when required by the SMVD University.

- c) The Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) shall be promptly and properly serviced by them whenever desired and such service will remain available to SMVD University for 5 years from the date of its commissioning, failing which the company / manufacturer will be blacklisted.
- d) All the civil works to be executed by the successful Tenderer will be certified by the Engineering wing, SMVD University for release of payment corresponding to that piece of work.
- e) The rates quoted must be in Indian Rupees and inclusive of all taxes. Moreover the cost of importing of any component will be the responsibility of the tenderer.

35. Prices, Taxes & Levies etc

- a) Prices quoted must be firm and FOR work site and it should include all the components of taxes, local levies (entry tax and toll tax payable at Lakhampur), prices for transit insurance, freight, installation, etc. at destination site, discount, if any, should be shown separately while quoting rates per unit.
- b) Sales Tax, J&K GST, Service Tax or any other tax chargeable at present rates shall be borne by the Tenderer. However any variation in taxes during execution of work shall be borne by SMVD University.

36. **Validity of the offer:** The Tender should be unconditionally valid for a period of **120 days**. Quoted prices shall be fixed and not fluctuating with the market price. The rates approved as per the NIT would be valid for further contract during the validity period.

37. **Jurisdiction:** All questions, disputes, or difference arising under and out of, in connection with the contract, if concluded, shall be subject to the jurisdiction of Courts at Katra/ Reasi/Jammu/ (J&K), India.

Location

38. The Tenderer should establish the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium at Kakryal, Katra, District: Reasi (J&K)-182301. Necessary power connection will be provided by the Shri Mata Vaishno Devi University.

Earnest Money Deposit

39. The Tenderer should submit an **EMD of `30,000.00** (Rupees Thirty Thousand Only) in the form of Demand Draft pledged to the Registrar, Shri Mata Vaishno Devi University, Kakryal.
40. EMD should be included along with the Technical Bid in the cover containing Technical bid as the Technical bid will be opened first. The Tenderer should NOT include EMD in the cover containing Financial Bid. If the EMD is not found in the cover containing Technical Bid, the tender will be rejected. EMD of unsuccessful Tenderer will be refunded within 7 days of opening of financial bids
41. The earnest money of the Tenderer shall be forfeited if they withdraw their tender or raise the price of their offer within the validity period. The earnest money shall also be forfeited in case of the Tenderer who do not comply with the purchase order placed on them within the validity period of the offer or violate any terms and conditions contained herein, for this purpose purchase order shall be deemed to have been placed from the date of letter of intent.
42. Earnest money deposited shall be released in favour of the unsuccessful Tenderer(s) within one month after the final acceptance of the tender.

Security Deposit:

43. The successful Tenderer(s) shall furnish security deposit equivalent to 10% (ten *percent*) of the value of the contract in the form of CDR / FDR / Bank Guarantee from Nationalized / Scheduled Bank pledged to the Registrar, Shri Mata Vaishno Devi University, Kakryal **valid upto the end of Maintenance Contract period of five (05) years.** Such security deposit shall be furnished within one month from the date of detailed purchase order / receipt of supplies. Failure to do so within the stipulated period will make the contract liable for cancellation together with forfeiture of the E.M.D at the discretion of Registrar, Shri Mata Vaishno Devi University. The EMD of the successful Tenderer of the contract could also be adjusted as security deposit subject to its validity.

44. The security deposit will be released within one month from the date of completion of agreed contract and no interest will be paid thereon.

Place of Manufacture and Inspection:

45. The Tenderer shall state in his tender the place of manufacture and inspection of the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium offered in the tender. SMVD Unievrstity or his duly authorized representative / Agency shall have access to the supplier's work place at any time during working hours for the purpose of inspecting the manufacture of the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium and the supplier shall provide all necessary facilities for such inspection. No supplies unless otherwise directed shall be dispatched without prior inspection and approval by the Competent Authority and the charges on account of inspection shall be borne by the supplier.
46. Bidders are advised to visit the stadium and understand the prevailing site situation.

Warranty:

47. The Tenderer shall be fully responsible for the manufacturer's warranty in respect of proper quality and workmanship of all the components of Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium, accessories etc. covered by the tender for a period of 12 months from the date of satisfactory installation of the Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers) equipment. The provision for extended warranty with terms and conditions thereof, if any, may also be specifically mentioned.
- A. The supplier shall be responsible to replace free of cost (*including transportation and insurance expenses*) to the University, whole or any part of supplies which under normal and proper use becomes dysfunctional within one month from the issue of such complaint by the University. This agreement will be valid for the maintenance period of the supplies.
- B. In case the supplier fails to rectify / replace the defective / damaged Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium including transit

damages, shortage within one week from the date of intimation of such shortage / damages, they shall have to pay interest to the University @ 5% per month on the value of such materials.

C. This agreement will be valid for the maintenance period of the supplies.

Sprinklers:

48. **Scope of Work:** The proper execution of work involves provision of all plans, equipment, materials, liaison and performance of all operations of whereas needed for complete and proper continuation and testing of irrigation system as in the Annexure II of NIT and to the satisfaction of Engineering wing. The scope of work also includes 05 year maintenance of the project of detailed below:

- a. Pop-up Sprinklers shall be of Gear driven mechanism having 2" female inlet diameter of coverage 84.0m at 6.0bar, capable of delivering discharge 15.6lps and trajectory of throw 25⁰ .It is suitable for sports fields like Football, Rugby, Hockey, Cricket, Soccer & Baseball. It should have a feature of special internal rubber folding top, avoids the passage of pwde, sand and dirty water around the telescopic pipe.
- b. The coverage of Pop-up Sprinklers should be 360⁰ wherever it is required or it shall be adjusted to the suitable angle of coverage according to the local site conditions.

Maintenance:

49. i. Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium, shall be maintained by the successful Tenderer to the satisfaction of the user for a period of five years after their installation. The Tenderer shall specifically spell out the arrangements envisaged for carrying out the maintenance of Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers). The supplier shall however execute a separate agreement with SMVD University for the maintenance of Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers).
- ii. The successful tenderer shall ensure proper functioning of the system as a whole during the maintenance period of five years, which shall begin on the date of actual successful commissioning of the Systems. All preventive/ routine maintenance

required for ensuring maximum uptime shall have to be provided by the successful tenderer.

iii The irrigation maintenance manuals (provide 2 copies) shall be presented in a hard covered. As a minimum they shall include:

- a) Cover sheet stating project name and date of installation;
- b) Table of contents;
- c) Warranties and certificates;
- d) Contact details of Contractor Local Service Centres (include after hours details);
- e) Controller manuals and information;
- f) Sprinkler and drip emitter technical data and maintenance instructions on Pop-up Sprinklers;
- g) Autocad 2012 or later drawing files on CD;
- h) All drawings suitable for re-printing on PDF format (Version 6.0 or later); and
- i) 1 copy of all drawings in hard copy inserted into the manual for viewing without removal

Delivery:

50. A. Delivery and installation & commissioning of the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium should commence simultaneously within one month from the date of placement of order and should be completed within 30 days.

B. In case of failure to execute the contract, the University shall have the right to order risk contract at the cost of supplier or / and cancel the contract and claim reasonable compensation / damages. The contract of the supply shall be repudiated if the work is not executed within the prescribed period and to the satisfaction of the SMVD University.

Payment Schedule:

51. a) Payment to the extent of 60% shall be released on construction of Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium at the site subject to the condition that the structure has been inspected by the third party preferable by Technical Experts

from J&K Govt. Sports/ Tourism Department and concerned Engineer Incharge/Project Incharge of SMVD University.

- b) The 30% payment shall be released after the successful installation, testing & commissioning of the Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers).
- c) The balance 10% payment shall be released only upon furnishing of bank guarantee of the equal amount which shall be valid for 05 years of maintenance agreement.

Penalty:

- 52. In case of failure on the part of the Tenderer to install & commission the Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium and execute the work in full or part thereof within the delivery schedule stipulated in the purchase order, a penalty @ 0.5% (*half percent*) per week of unfinished work subject to a maximum of 5% (*five percent*) of the cost of unfinished portion of the contract shall be levied at the discretion of SMVD University.

Changes:

- 53. No variation or modification, or waiver of any of terms and provisions of these specifications shall be deemed valid unless mutually agreed upon in writing by both the parties.

Agreement:

- 54. The successful Tenderer shall be required to execute an agreement on a valid stamped paper for strict compliance of the terms and conditions of the contract, vis-à-vis the NIT and work order within a period of 15 days after the placement of order. The supplier shall bear the legal expenses, which shall be incurred on the execution of the agreement.

Signature of the Tenderer

Registrar
SMVDU

SCHEDULE -A

S.No.	Particular/Criterion		
1	Name of the Firm Organization with complete details, including Address (Telephone Number / Contact Mobile No. / Fax No. / E-mail) along with brief description of background (The background may be as a separate	:	
2	Date of establishment of the Firm. Details of Registration NO. of the firm/ company. Location of Head Office, Regional Office and Branch Office.	:	
3	Please specify whether you are submitting you tender as a proprietor of the firm or as a partner of the firm or Director of the Company.	:	
4	Name of the Proprietor / Partner / Directors of the tendering firm / Company together with technical qualifications. Organization Charts, Manpower Strength and details of key personnel	:	Attached / Not Attached
5	Past experience in the field along with performance certificates (please enclose testimonials / documentary evidence)	:	Attached / Not Attached
6	Annual turnover in the last three years as per audited balance sheet, a copy whereof to be enclosed along with profit and loss account statements.	:	Attached / Not Attached

7	a) PAN (proof to be enclosed) b) ITR statements / Income Tax Assessment Order (for the last three years to be enclosed) c) Service Tax Registration No.	:	Attached / Not Attached
8	Detail of EMD (in form of DD only)	:	Amount: Name of issuing Bank: Date of issue
9	Duration of validity of bid	:	
10	Does the Tenderer owe by himself or by proxy or on behalf of any other person any money / due in connection what so ever to SMVD University	:	Yes/ No
11	VAT/ Sale Tax Registration Number (attach copy)	:	
12	Tender Fee `	:	SMVD University Receipt No. & date _____ Or DD No. _____ dated _____

			Bank _____ Payable at _____
13	Attested copy of valid BIS Certificate attached or not:	:	
14	Literature / leaflets on products	:	Attached / not attached
15	Copy of Certificate,	:	Attached / not attached
16	Authenticate Photostat copies of test certificates from	:	Attached / not attached
17	Any other documents / information required to be provided as per terms and conditions and requirements of the tender document (indicate item wise)	:	Attached / not attached

I certify that I am authorized to furnish the information given in the Schedule-A on behalf of the firm I represent and that it is true to the best of my knowledge and belief

Signature of Tenderer_____

Name in Block Letters_____

Name of the Firm & Address_____

SCHEDULE -'B'
Financial Bid

Name of the Tender: _____

NIT No. with Date: _____

Amount of CDR/FDR with
number & date: _____

To

The Registrar
SMVD University
Kakryal

Sir,

I _____ S/o Shri _____
_____ R/o _____ in capacity
as Proprietor of a firm/ Partner of a firm/ Director of Company, hereby submit my tender for
the **Design, Supply, Installation, Testing & Commissioning and Five (05) years
Maintenance of Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium
having Large Radius Pop-up Sprinkler with Gear Driven Mechanism at Shri Mata
Vaishno Devi University Stadium, Kakryal** for an amount mentioned below:-

1. Total Cost of the project `Rs. _____
(Lump sum Amount) (in words) _____

2. Maintenance cost for 5 yrs Rs. _____
(in words) _____

3. Total Cost (1+2) Rs. _____
(Lump sum Amount) (in words) _____

I affirm that the rates offered are inclusive of all taxes, duties, freight, insurance, carriage, etc. I further affirm that I have read and fully understood the tender notice and agree to abide by all the terms and conditions laid therein, which are being signed in token of my acceptance.

Signature of Tenderer _____ Name in Block Letters _____

Name of the Firm & Address _____

Annexure-II
Technical Specifications

A. Automatic Irrigation System for Sports Stadium (Pop-up Sprinklers)

Design, Supply, Installation, Testing & Commissioning and Five (05) years Maintenance of Automatic Irrigation System (Pop-up Sprinklers) for Sports Stadium having Large Radius Pop-up Sprinkler with Gear Driven Mechanism at Shri Mata Vaishno Devi University Stadium, Kakryal

	Description	UOM	Qty.	Price per Unit	Amount
				(in `)	(in `)
1	<i>Piping Network (Dinesh/ Captain)</i> Providing, laying & jointing in position HDPE pipe conforming to IS:4984:1995 and suitable for the respective working pressures with all compression fittings and accessories e.g. couplings, tees, bends, reducers, screwed adapters, flanged tail pieces etc. jointing as per manufacturers' instruction, including earth work in excavation and refilling (Earth work includes 450mm of soil cover over the pipe and width of 300mm).				
(a)	HDPE Pipe110mm OD/PN-10/PE-80	Meter	54		
(b)	HDPE Pipe90mm OD/PN-10/PE-80	Meter	366		
(c)	HDPE Pipe63mm OD/PN-10/PE-80	Meter	702		
2	<i>Sprinkler & Accessories</i>				
(a)	Providing & Fixing of Large Radius Pop up Sprinkler with Gear driven mechanism having 2" female inlet, dia of coverage 84.0m at 6.0 bar, capable of delivering discharge 15.6 lps and trajectory of throw 25°. It is suitable for sports fields like Football, Rugby, Hockey, Cricket, Soccer & Baseball. It should have a feature of special internal rubber folding top, avoids the passage of powder, sand and dirty water around the telescopic pipe.	Each	8		
	Make: Sime (Italy), Vyrsa(Spain), Nelson(USA) or equivalent Brand				
(b)	Supply of ISI Mark Penguin Raingun with 1 ¼ BSP female thread connection with both full & part circl4e arrangement adjustable jet breaker to provide uniform rainfall capable of	Each	2		

	delivering 1.76-5.18 IPS with dia of coverage 16-29 mtr at 2.0-5.0 bar. Make-Harit, Aqua, IrriTech (Italy)				
(c)	Providing & fixing of Service Saddle 63mm x1.25" metallic Make-Harit, Aqua, IrriTech (Italy)	Each	23		
(d)	Providing & fixing of 1.25"two piece Aluminium QCV with autoclose lid made of heavy duty rubber when QCV is not in use, One piece construction having stainless steel spring brass valves Make-Harit, Aqua IrriTech (Italy)	Each	23		
(e)	Providing & fixing of 1.25"Steel QCV key with handle with 1.25"outlet	Each	3		
3	Valves & Accessories				
(a)	Providing & Fixing of 3" Butterfly Valve for Isolation. It shall be with integral synthetic rubber lining. It shall be lever operated quarter turn and offers bi-directional smooth operation. The hydraulic body test pressure of the cast iron buffer type Butterfly Valve is 15 bar and hydraulic seat test pressure of the product is 11 bar. Make: Zoloto, Leader, Sant	Each	1		
(b)	Providing & fixing of Valve box 20" Rectangular Valve Box with cover. The valve boxes shall be high strength, high density polyethylene constructed material. It should be UV stabilizer with anti oxidants, resistant to moisture. Make:MAIS (KSA), Carson (USA), Rain Spa (Italy) or equivalent Brand	Each	8		
(c)	Providing & fixing of Valve box 6" Round Valve Box with cover. The valve boxes shall be high strength, high density polyethylene constructed material. It should be UV stabilizer with anti oxidants, resistant to moisture. Make:MAIS (KSA), Carson (USA), Rain Spa (Italy) or equivalent Brand	Each	23		
(d)	Providing and fixing of Aluminum pilot Pressure relief valve size 2" along with bypass arrangement, cover & necessary fittings. It shall be adjustable Pressure setting from 22 PSI - 120 PSI for maximize performance. It should be high strength cast Aluminum body, Stainless Steel shaft offer, strength and corrosion resistant. Oil tempered coil spring provides	Each	1		

	quick response for individual pressure range Make: Harit (India), Aqua (India), Bermad (Israel) or equivalent Brand				
(e)	Providing & fixing of a double acting Continuous Air release valve 2" made of Aluminum. The Continuous Air release valve shall be capable of both releasing and admitting air from and into the line during system operation. The working pressure shall be 10 Bars and testing pressure shall be 16 Bars. Make: Harit (India), Auqa (India), ARI (Israel) or equivalent Brand	Each	1		
(f)	Providing & fixing of a double acting plastic Air release valve 2" made of high strength plastic with fiber glass reinforced . The Air release valve shall be capable of both releasing and admitting air from and into the line. The working pressure shall be 10 Bars and testing pressure shall be 16 Bars. Make: Harit (India), Auqa (India), ARI (Israel) or equivalent Brand	Each	3		
4	Filtration Unit				
(a)	Providing & Fixing of Disc filter (120 mesh) 50m ³ /hr having an inlet & two outlets connections of 3", 2 pressure gauge ports of 3/4", a helix made of fiber glass reinforce polyamide at base of disc filter cartridge to create a helical effect in the incoming water ,spinning particulate in suspension away from the filtering element and so minimizing cleanings frequency ,3/4" outlet for flushing at bottom of filter & maximum working pressure of 14 bars. Make: Harit (India), Arkal (Isreal), Amaid (Israel) or equivalent Brand	Each	1		
(b)	Providing & Fixing of Pressure Gauge (Glycerine filled) Make: Wika, Fiebig, Guru, Automat (India) or equivalent Brand	Each	2		
5	Automation Unit				
(a)	Providing & Fixing of 3" BSP Straight flow Solenoid valve with flow control which shall be normally closed 24 VAC 50/60 cycle solenoid actuated angle pattern design. The valve pressure rating shall not be less than 10.5 bar. The valve body shall be constructed of high-impact, weather-resistant Nylon Glass Filled	Each	8		

	<p>with heavy duty diaphragm and stainless steel screws, fasteners and components. The valve shall have manual open/close control (internal bleed) for manual opening and closing of valve without electrically energizing the solenoid, manual bleed can be removed for "tamper proof" operation. The valve shall operate with minimum 24 VAC at 10.5 bar. The valve must open or close in less than 1 minute at 10.5 bar, and less than 30 seconds at 0.7 bar. The valve construction shall provide for all internal parts to be removable from the top of the valve without disturbing the valve installation.</p> <p>Make: HIT (USA), K-Rain (USA), Rain-Spa (Italy) or equivalent Brand</p>				
(b)	<p>Providing & fixing of (16 Station) Controller with two wire technology having six programs with six start times per program with run time per station 0-10 hrs and irrigation water budget by program 0-250%, capable of running two program simultaneously with two nos. of maximum valves plus master valve running simultaneously and should have rain sensor capability.</p> <p>Make: HIT (USA), K-Rain (USA), Rain-Spa (Italy) or equivalent Brand</p>	Each	1		
(c)	<p>Providing & fixing of Decoder (Receiver)</p> <p>Make: HIT (USA), K-Rain (USA), Orbit (USA) or equivalent Brand</p>	Each	9		
(d)	<p>Supply of DBR connectors. It shall be pre-filled, low voltage, dry supplies, direct bury, water proof wire connector that protect electrical connection from corrosion and moisture. Each supplies kit contains 02 No. wires, nuts, waterproof gel, filled housing & one dual supplies organizer</p> <p>Make: HIT (USA), K-Rain (USA), Orbit (USA) or equivalent Brand</p>	Each	20		
(e)	<p>Providing & fixing of Pump Start Relay enclosure shall be constructs with a corrosion resistant, UV resistant and shock proof, rain tight, secure and rust proof enclosure.</p> <p>Make: PLA(India), K-Rain (USA), Siemens (India) or equivalent Brand</p>	Each	1		
(f)	<p>Providing & fixing of 1.5mm² double core copper conductor 24volt</p> <p>Make: Finolex(India), Empire(India),</p>	Meter	400		

	Havells(India)				
(g)	Providing & fixing of 10mm ² triple core copper conductor 24volt Make: Finolex(India), Empire(India), Havells(India)	Meter	10		
(h)	Providing & fixing of Conduit Pipe 1" dia for laying of electric wires Make: Finolex, Empire, Havel or equivalent Brand	Meter	400		
6	<i>Pumping Unit</i>				
(a)	Providing & Fixing of Booster Pump Capable of Discharging 11.5lps at 72mtr Head with Control Panel having ammeter, voltmeter, single phase preventer, and all necessary protections , Foot Valve, Non Return Valve, Suction and Delivery assembly. (1 working + 1 stand by) Make: Kirloskar (India), Crompton or equivalent Brand	Set	1		
(b)	Providing & Fixing of Booster Pump Capable of Discharging 3lps at 45mtr Head with Control Panel having ammeter, voltmeter, single phase preventer, and all necessary protections , Foot Valve, Non Return Valve, Suction and Delivery assembly. (1 working + 1 stand by) Make: Kirloskar (India), Crompton or equivalent Brand	Set	1		
(c)	Providing & Fixing of Water Level Sensor Make: Havel, Automat (India) or equivalent Brand	Each	1		

Wiring:

All wiring shall be in accordance with the relevant Indian Standard. All wire shall be run in continuous lengths from controller to valve. All cable jointing shall be contained in waterproof containers and adequately sealed against moisture penetration with commercially available joiners designed for direct burial. All joints shall be in a valve box. Adequate wire (1000 mm) shall be left at valves during installation to enable future replacement of valves without the need for excessive jointing of wires. Wires shall be laid below or beside the pipe reticulation system in a common trench with the pipes. Wires not in pipe trenches should be in suitably sized heavy duty electrical conduit.

Signature of the Tenderer

Registrar
SMVDU