ETHIRAJ COLLEGE FOR WOMEN
70, Ethiraj Salai Egmore, Chennai, Tamil Nadu 600008
Telephone: 044 2827 9189

ETHIRAJ INVITES TENDER FROM REPUTED FIRMS FOR THE "for supply and installation – For Wireless Access Points

Infrastructure at the Campus"

INSTRUCTIONS TO TENDERERS

Sealed Tenders are invited from reputed vendors for the **"for supply and installation - for Wireless Access points Infrastructure at the Campus"** addressed to The Principal, Ethiraj College for Women, Chennai - 600008 on or before 06-06-2022, 3:00 PM.

All Tenders in the prescribed form at **Annexure-1, together with other enclosures, in sealed envelopes,** should be placed in the Tender Box at the College premises before the time and date fixed for the receipt of tenders as set out above. The sealed enveloped should be superscribed " **Tender For supply and installation - for Wireless Access points Infrastructure at the Campus**".

Release oF tender date	**27th May 2022**
Site Survey	
deadline for Submission of Queries	**Till 3rd June 2022**
deadline of submission of Bid	**6th June 2022**

Tenders received after the stipulated time and date or those that do not satisfy the tender requirements shall be rejected. All laptops and workstations should strictly comply with the specifications laid down in **Annexures 2 and 3** below.

1. TENDERS ELIGIBILITY & QUALIFICATION

The Tenderer shall provide satisfactory evidence acceptable to the College as follows:

- Audited financial statements for the past 3 years (3 years up to 31 March 2021) to show that it has adequate financial standing.
- Average total turnover of the tenderer for last 3 financial years must be at least 10 Crores or above.
- Bidders must submit copies of GST, PAN, company registration documents.
- The bidders should provide details of at least 5 of its customers in Chennai, and allow the college management to Interact with the customers given as per eligibility criteria
- The bidders should clearly mention the country of manufacture Of Equipments Provided
- The Tenderer Should be Original Equipment Manufacturers (OEM) / Authorised Dealer (AUD)/Distributor of OEM and also Tenderer should submit valid documents with respect to the Authorization or Distribution from the OEM.
- Bidder should have provided Networking & Wi-Fi Solutions at least for the last

10 Years

- Copy of the Single Purchase Order Value- Only on WiFi Solution and Networking Switching – With Wi-Fi Points + Implementation amounting more than 30+ lakhs or above during the last three years.
- Copy of the purchase orders totalling to the value of `80 lakhs or above during the last three years put together – Only on Passive + Active LAN Networking solutions + Wi-Fi Access points Including Installation & Implementation
- Bidder should have organization strength of atleast 5 certified engineers in the relevant field with 1 yr experience in the quoted Vendor and to provide the details of Technical staffs.
- The successful vendor has to undertake this project without allocating the project Full or Partial to any third party vendor(no sub contract will be allowed)
- Delivery Period: The delivery should be made within 3-4 weeks from the date of receipt of purchase order.
- Warranty: The entire item supplied by the vendor shall be guaranteed against any defects and the vendor should provide time-to-time operational maintenance support (On Site comprehensive Warranty). The said warranty should cover all the Hardware & Software Products. The warranty and service shall be provided directly from the manufacturer. The vendor shall be liable to rectify any defects that may be found in the equipment supplied at free of cost.
- Installation: The installation should be done at the Ethiraj College For Women (ECW), Chennai at no extra cost.
- Response Time: The response time of the vendor to attend to any complaint upon receipt of the complaint/information from the user should not be more than 24 hours.
- The vendor must submit their tender document in the given format. Deviations from this format will automatically disqualify the tender process.
- ECW reserves the right to increase or reduce the quantity or even withdraw the tender without assigning any reasons thereof.
- ECW reserves the right to cancel the contract under repeated violations of the specified and mutually agreed QoS parameters.
- ECW is not responsible for any delay in delivery of equipment.
- The items must be delivered and installed at the required locations at your own risk and cost.
- Any Proposal or Bid received after Bid submission date and time will not be entertained/ considered.
- The Successful vendor has to provide training for installation and configuration for the items supplied by them to the staff involved in the project.

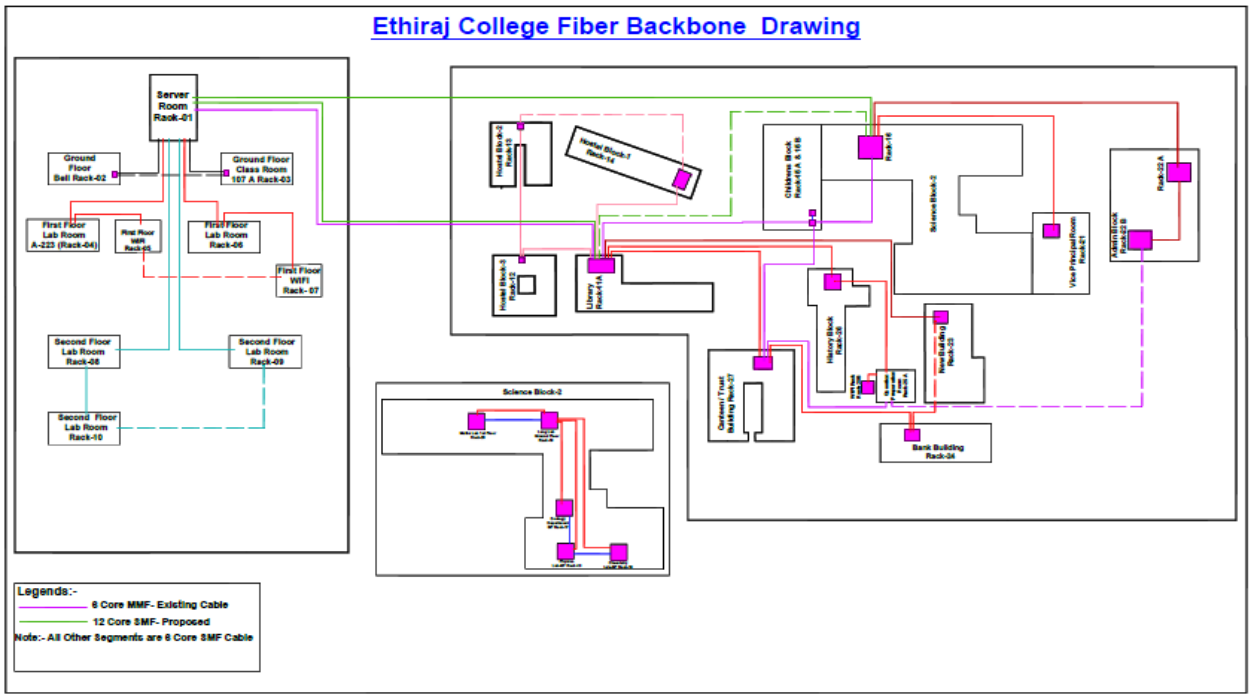
1.A – INTRODUCTION To ECW- Ethiraj College For Women Networking Landscape

ECW – Ethiraj College For Women is having one Academic/Administrative block , Annexe Block and Hostel block – spread over 10 Acre Campus and has 200MBPS internet bandwidth. The Networking & LAN Wired Infrastructure was strengthened through Solution Implemented at ECW – Where the 30+ Switches were replaced with new Aruba Switches, and the whole back-bone connectivity was done on Single Mode Fibre connectivity between Switches, thus ensuring less Interruptions on data transfer.

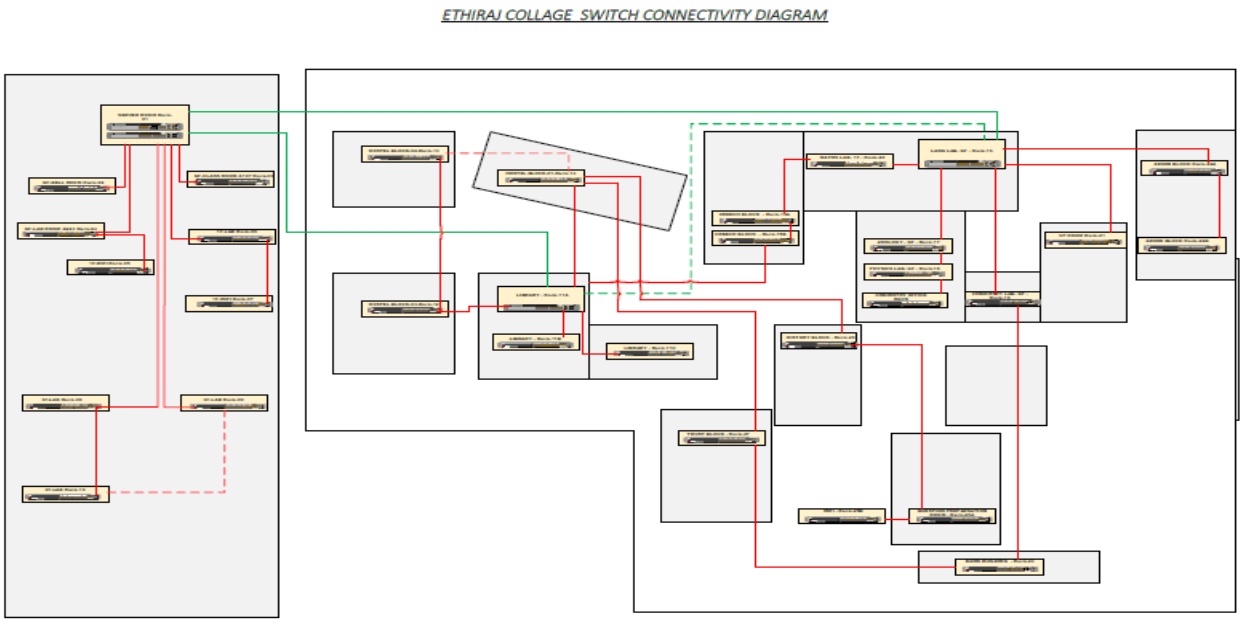
However, strengthening the Wi-Fi infrastructure and providing the uninterrupted internet connection through Wi-Fi is taken up now, for the same, ECW is planning **Tender For supply and installation - for Wireless Access points Infrastructure at the Campus**. This set up implementation meant to ensure seamless connectivity, faster data transfer throughout the ECW campus.

As a part of Explaining the Networking Architecture at ECW – The Existing Networking architecture is Distributed Networking Structure – where multiple access switches at different locations connects with core switch at the Main server room, which is connected with the WAN.

Since the distances between each and every points are atleast 100+ Metres, its been decided upon to strengthen the Fibre backbone layer and having fibre connectivity between switches to switches



The Above Mentioned Schematic explains the Fibre Back-bone connectivity needed across the switches to Core-Switch and Vice-versa.



The Current Tender aims at 200 Wireless Access points + Controller based solution…

2. VALIDITY OF TENDER

The offer shall be kept valid for acceptance for a minimum period of 120 days from 6th June 2022. The College Reserves the Right to award Both Active & Passive Components to One/Multiple Vendors based on the merit of solution & commercials quoted.

3. ETHICAL STANDARDS:

Bidders, Suppliers, Contractors and their subcontractors and Consultants should observe the highest standard of ethics during the procurement and execution of this contract.

4. AWARD OF CONTRACT

The College has the right to accept any tender and to reject any or all tenders without assigning any reason.

There Shall be Technical Solutioning Session that shall be conducted before opening of the tender – so that the Technical evaluation of the tender solution quoted by the bidder along with compliance sheet shall be evaluated and Top3 Technically qualified vendors shall be proceeded to Commercial Bid Opening.

Its necessary for all the bidders to be present at the Technical evaluation session which shall be Online/Offline- based on then prevalent conditions. The Bidder shall need to furbish their Solution Architecture Diagram –along with the clear SOW (Scope Of Work) and deliverables from their side.

5. NOTIFICATION OF AWARD:

The College will notify all the tenderers of the result of their bids on or before 10 June 2022.

6. GENERAL

The tenderers must ensure that the conditions laid down for submission of Tenders detailed in this document are completely and correctly fulfilled. Tenders, which are not complete in all respects as stipulated above, shall be summarily rejected.

7. PAYMENT TERMS

No advance will be paid. 50% of the invoice value will be paid within 7-15 days from date of delivery and verification of materials at the College premises. 30% will be released within 7 days from the date of Successful installation, testing and acceptance of the machines and other Warranty related documents. The balance 20% will be released within 30 days from the date of Final acceptance – The Installed Networking Solution must be submitted with Validated Fluke Test report for Cabling components.

8. DELIVERY PERIOD

The Tenderer should clearly mention the Delivery Timeline and Installation Timeline of the Products. Delivery of the Goods shall be made by the Tenderer in accordance with the agreed terms mentioned in tender. The Tenderer should take responsibility

of the Goods till it reaches the delivery destination and successful completion of Installation.

9. Product and Warranties

The Solution Components proposed should strictly comply to the Technical specifications given in the Annexure 2 and it should be supported for a minimum period of 3 years including warranty period. The Models proposed/ marked for withdrawal/End of Life from the market and the models under quality testing should not be offered/quoted in the Tender.

The WARRANTY of the Hardware 3 years comprehensive onsite warranty with Accidental damage Protection, and the warranty terms should be clearly mentioned in the Invoice and the warranty period will start from Date of Acceptance. The Warranty should be BACK TO BACK from OEM. The warranty should cover the complete components and any deviations should be clearly mentioned in the Tender

The warranty would be on-site and comprehensive in nature and back to back support from the OEM. The Tenderer warrant all the hardware and software for a period of Three years from the date of acceptance of the hardware. The vendor will provide support for Operating Systems/Firmware and other pre-installed software components during the warranty period of the hardware on which these will be installed. Defective hardware shall be replaced by the Tenderer at his own cost, including the cost of transport.

Annexure-1

PRICE BID						
Name of Work: "for supply and installation – Wireless Access Points Infrastructure at the Campus"						
(Name of the Vendor) :						
Sl. No.	**Make & Model**	**Description**	**Qty**	**Price in INR**	**GST Value**	**Total Amount in INR**
Rupees in Words :						
AMOUNTS QUOTED SHOULD BE INCLUSIVE OF ALL TAXES AND ALL OTHER COSTS AND CHARGES						
We confirm that the products offered strictly comply with the specifications set out in Annexure 2. The amounts quoted are firm and final and will be valid for 120 days from 6th June 2022. **Authorised signatory** **Date** **Company seal**						

Annexure 2

Schedule Of Requirements

Technical Specification of Wi-Fi and WIPS of the Solution – 200 Nos of WAP (Wireless Access points) With Controller Based Solution

- The proposed Controller and Access Points must be of Cisco/HPE(Aruba)/Arista /Alcatel/Ruckus make only.
- The Wi-Fi Access Points should have a total of 3 or more radios, of which at least two should be dedicated 2x2 MU-MIMO radios for Wi-Fi access on both 2.4 GHz and 5 GHz bands, and at least one dedicated radio for WIPS and automatic channel allocation, operating simultaneously in a single device.
- The solution must support wireless intrusion prevention system (WIPS) without effecting Wi-Fi performance.
- Apart from DC power, the Wi-Fi Access Points and WIPS must work with all features supported on 802.3at PoE+.
- Wi-Fi Access Points and the solution must support the following protocols: IEEE 802.11a/b/g, IEEE 802.11n, IEEE 802.11ac (WAVE 2), IEEE 802.11h, IEEE 802.11d, 802.11i.
- The Wi-Fi Access Points devices and the solution should support Wi-fi 6 Protocols & Technology
- Wi-Fi Access Points and WIPS should be remotely upgradeable from the controller, so that new features / upgrades can be added.
- Wi-Fi Access Points should facilitate auto channel allocation to avoid interference between APs.
- Wi-Fi Access Points and the solution should support configuration in both Bridge and NAT modes.
- Wi-Fi Access Points should support configurable management VLAN (support other than VLAN-1 as management VLAN).
- Wi-Fi Access Points should be ceiling mountable.
- Supply should include as many ceiling mountable units as the number of Access Points quoted
- Proposed Wi-Fi management solution shall be a scalable cloud based for central management of all Wi-Fi and WIPS functionality
- Solution must support intelligent edge architecture for Wi-Fi access and wireless intrusion prevention (WIPS). All WLAN services should be delivered at the edge, eliminating the dependency on the controller i.e. all Wi-Fi & WIPS services should be functional on the device even if the link between AP and its management controller or the controller itself goes down
- Wi-Fi controller should support deployment of set policies across the Wi-Fi AP devices placed on different network segments over LAN and WAN.
- The Controller and Access Point device should support dual stack for IPV4 and IPV6.
- The solution should be able to work in a heterogenous environment by not hindering the operation of existing APs of different makes already deployed at ECW Campus….
- Quote should include all required Hardware and Software licenses to support all the Access Points and WIPS –
- Solution should have role-based admin rights

- The solution must have policy-based management and administration.
- The solution should locate wireless devices (APs and Clients) accurately on floor maps.
- The solution must provide location tracking of a DoS attacker.
- Both the controller and Wi-Fi device should support SNMP v2c, v3.
- The solution should support RADIUS, Active Directory and LDAP based authentication for both Corporate as well as Guest Clients.
- The solution should support "Walled Garden" or equivalent feature for Guest Network.

Passive Networking Components Requirement

Sl No	Description	Make	Qty	Unit
	FIBER COMPONENTS			
1	12 Core Outdoor Ofc Cable SM	Molex or Better	Sizing yet to be Done	Mtr
2	24 Port Rack mount LIU- Unloaded - Sliding Type	Molex or Better	Sizing yet to be Done	No
3	12 Port LC Adapter Plate SM	Molex or Better	Sizing yet to be Done	No
4	LC Pigtails SM	Molex or Better	Sizing yet to be Done	No
5	12 Port LC Adapter Plate MM	Molex or Better	Sizing yet to be Done	No
6	LC Pigtails MM	Molex or Better	Sizing yet to be Done	No
7	12/24 Splice Holder	Molex or Better	Sizing yet to be Done	No
8	Blanking Plate for LIU	Molex or Better	Sizing yet to be Done	No
9	LC LC Ofc Patch Cord SM	Molex or Better	Sizing yet to be Done	No
10	LC LC Ofc Patch Cord MM	Molex or Better	Sizing yet to be Done	No

	RACKS AND MISCELLANEOUS ITEMS			
1	42U 600mm x 1200mm Closed Server Rack with Standard Accessories.	APW or Equivalent	Sizing yet to be Done	No
2	45U HDCM Open Rack with Horizontal PDU with 5 Amps 5 socket,Hardware pkt - 4 nos, 8"Vertical Wiremanager front and back -2 nos	APW or Equivalent	Sizing yet to be Done	No
3	Ladder Set with accessories	APW or Equivalent	Sizing yet to be Done	No
4	27U 800mm x 800mm Floor Mount Rack	BDC	Sizing yet to be Done	No
5	32mm HDPE Pipe	ISI	Sizing yet to be Done	Mtr
6	1" PVC Conduit/Flexible Pipe with accessories (Saddle- 3 Pkt,30 Mtr Flex,Ghatta, Screws 2 pkt)	Bajajplast	Sizing yet to be Done	Mtr
7	40mm Pvc Pipe with Accessories (15mtr Flex, Saddle-1 pkt, Ghatta, screws)	Reputed Make	Sizing yet to be Done	Mtr
8	Panduit Labels	Panduit	Sizing yet to be Done	Pkt
9	Panduit Cable ties - 200mm	Panduit	Sizing yet to be Done	Pkt
10	Panduit Velcros - 15 Feet	Panduit	Sizing yet to be Done	No

Passive Networking Implementation Requirement

Sl No	Description	Qty	Unit
1	Laying Charges of 12 Core Outdoor Ofc Cable	Sizing to Do	Mtr
2	Fixing charges of Rack Mount LIU	Sizing to Do	No
3	Splicing charges of LC Pigtails	Sizing to Do	No
4	Testing charges of Fibre Core	Sizing to Do	No
5	Installation and Integration charges of 42U Closed Rack	Sizing to Do	No
6	Integration of Wall mount/Floor Mounted racks	Sizing to Do	No
7	Laying Charges of 1" PVC Conduits.	Sizing to Do	Mtr
8	Laying charges of 2" Pvc Pipe/Conduits	Sizing to Do	Mtr
9	Site Survey, Design and Project management charges including Dressing, Patching of all network points for the neat upkeep of rack and other related works,(861 Points)	Sizing to Do	L/s

Pls note the Installation Service Components quoted are for your reference- The tenderer can quote any other additional service/Installation charges if needed.

Active Networking Switches & Accessories Requirement – Must be Supplied & Installed by the Solution Provider – these are additional switches that shall be augmented with existing Aruba switches which have been procured last year 2021 as part of networking devices refresh

Sl.No	Item Description	Quantity in Nos.
1	28-port Gigabit PoE Managed Switch – Cisco SG 350/Aruba 2530/ or Equivalent OEM Like Commscope/Barracuda/Dell/Juniper Only	6
	Pls also quote any necessary accessories needed for these switches to connect with WAP & Existing Switching connection	

Pls note – All the Interested tendering Parties can Visit the Campus to have a look at the College Networking Infrastructure on or before 31st May 2022 or write to systemadmin@ethirajcollege.edu.in/santhosh@catnipit.com – for More queries

Also pls note for Passive Cabling – Max deviation allowed is +/- 5% - If the deviations are considered by the Bidder – Its their responsibility to complete the whole task without any additional change Request/Price Increase in Bill Of material..Prices Once quoted shall be fixed and No changes shall be entertained post the submission of the tender.