

**PROPOSAL ITEM 19-47
One Time Purchase of ITS Network Hardware**



**MACOMB COUNTY PURCHASING DEPARTMENT
REQUEST FOR BID**

BID ITEM NO. : 19-47

BID TITLE: One Time Purchase of ITS Network Hardware

REQUEST FOR BID

The Macomb County Purchasing Department will be receiving sealed proposals for a one time purchase of ITS Network Hardware; FOB: 117 S. Groesbeck Hwy., Mt. Clemens, MI 48043.

The project consists of all necessary work to provide ITS Network Hardware as specified in the proposal document.

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OBJECTIVE

The purpose of this Request for Proposal (RFP) is to select a vendor to provide ITS Network Hardware FOB as specified. The goal is to select the most capable vendor offering the most competitive price. This proposal is in accordance with the Macomb County Procurement Policy.

SUBMISSION PROCEDURES

Date Due: **August 8, 2019 at 10:00 AM (local time)**

Bids will be publicly opened and read.

DELIVER via FEDEX, UPS, or hand deliver DIRECTLY TO 34592 Nova Dr., Clinton Twp., MI 48035 PURCHASING DEPARTMENT/SHIPPING AND RECEIVING BY DUE DATE & TIME.

If USPS is utilized for submissions, there is no guarantee of a timely delivery as the Post Office does not deliver to individual County Buildings

NO LATE BIDS ACCEPTED.

Deliver to: Macomb County Purchasing
JoAnna Strizic, Asst. Purchasing Manager
ATTN: Sara Lozen
34592 Nova Dr.
Clinton Twp., MI 48035

Return: One (1) hard copy original
One (1) copy of the Bid.
Clearly mark on the envelope **SEALED PROPOSAL ITEM 19-47 ITS Network Hardware**
Label all submission envelopes with the **company name on the outside.**

Complete and return all pages requiring vendor response.

All Bids must be submitted on the forms provided, properly executed and with all items filled out in ink or typed. Do not change or add words to the forms. Unauthorized conditions, limitations, or provisions on or attached to the forms may be cause for rejection of the Bid. Any Bidder information that is altered by erasure or by inter-lineation prior to submittal must be initialed and explained by notation above the signature of the Bidder.

Macomb County vendors should be registered on the Michigan Inter-governmental Trade Network (MITN) website www.mitn.info.

QUESTIONS

Due: **August 2, 2019 at 11:00 AM (local time)**

Submit to: Email: jstrizic@rcmcweb.org
Fax: 586-791-5860

Questions regarding bid specifications may be directed in writing only, by email or fax. All questions or clarifications must be directed to the Purchasing Department. Any attempt to contact a County department, other than Purchasing, regarding current bids may be grounds for disqualification as a vendor. Answers will be posted to MITN.

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MODIFICATIONS

Macomb County vendors should be registered on the Michigan Inter-governmental Trade Network (MITN) website www.mitn.info. Clarifications, modifications, or amendments may be made to this document at the discretion of the Macomb County Purchasing Department prior to the opening of the solicitations. Should any such changes be made, an addendum will be issued and posted on the MITN website. It is the responsibility of each Bidder to check the website and verify that he/she has received all Addenda prior to submitting a Bid.

It is also the responsibility of each Bidder to verify that all sub-Bidders and material suppliers whose prices are incorporated in the Bidder's Bid are familiar with the Bidding Documents in their entirety, including all Addenda issued up to the time of the Bid opening. (See also *ERRORS, OMISSIONS, AND/OR DISCREPANCIES, below.*)

All addenda issued to Bidders prior to date of receipt of Bids shall become a part of these specifications, and all Bids are to include the Work therein described.

DEFINITIONS

- A. Bidding Documents include this Request for Bid, (including drawings, specifications and all Addenda issued prior to execution of the Contract) and the proposed Contract Documents.
- B. Addenda are written or graphic instruments issued by Macomb County prior to the execution of the Contract that modify or interpret the Bidding Documents.
- C. The Base Bid is the sum state in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted.
- D. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work as described in the Bidding Documents.
- E. A Bidder is a person or entity who submits a Bid to Macomb County, and who meets the requirements set forth in the Bidding Documents.
- F. Default is the failure of the Bidder to fulfill the obligations of the contract, including but not limited to, failure to deliver on time or the unauthorized substitution of articles other than those quoted and specified on the contract; or failure to deliver specified quantities (repetitive shortages).
- G. Owner is the County of Macomb.
- H. Contractor is a person or business which provides goods or services to the County of Macomb under terms specified in a contract.

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BIDDING DOCUMENTS

All Bidding Documents are available on the Michigan Inter-governmental Trade Network (MITN) website www.mitn.info. Bidders shall use complete sets of Bidding Documents in preparing Bids. Macomb County assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. All Bidding Documents are the property of the Department of Roads.

EXAMINATION OF BIDDING DOCUMENTS AND SITE

Before submitting a Bid, the Bidder shall carefully examine the drawings, read the specifications and all other Bidding Documents; and visit the site of the Work. Each Bidder shall inspect the site of the proposed Work to arrive at a clear understanding of the conditions under which the Work is to be performed. The Bidder shall fully inform himself/herself prior to bidding as to all existing conditions and limitations under which the Work is to be performed and he/she shall include in the Bid a sum to cover the cost of all items necessary to perform the Work as set forth in the Bidding Documents. No allowance will be made to the Bidder because of lack of such examination or knowledge. The submission of a Bid shall be construed as conclusive evidence that the Bidder has made such examination. Claims for extra payments based on lack of knowledge of existing circumstances will not be allowed.

BIDDER'S QUALIFICATIONS

Bidders must be properly licensed under the state laws governing their respective trades. Bidders shall meet qualifications indicated in the Bidding Documents. Macomb County may make such investigations as necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to Macomb County all such information and data for this purpose as Macomb County may request. Macomb County reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy Macomb County that such Bidder is not properly qualified to carry out the obligations of the Contract.

Submission of a Bid shall serve as evidence that the Bidder has confirmed that the Bidder is properly qualified to perform the work and is capable of obtaining the required bonds and insurance.

COMPONENT/PRODUCT RESPONSIBILITY

The successful Bidder will provide field instructions for Macomb County's operators, mechanics and/or supervisors. The successful Bidder shall be responsible to insure that all components delivered operate properly and with the intent and details of these specifications.

STATUS OF BIDDERS

Proprietors submitting Bids shall indicate their status as proprietors.

Bidders submitting Bids for partnerships shall indicate their status as partners and shall submit, upon request of Macomb County within 24 hours following receipts of Bids, a certified copy of the power of attorney authorizing the executor of the Bid to bind the partnership.

Bidders submitting Bids for corporations shall indicate their status as corporations and shall submit, upon request of the Owner within 24 hours following receipt of Bids, a certified copy of the board of directors' authorization for the Bidder to bind the corporation and shall affix the corporate seal on the Bid.

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Bidders shall provide, upon request of Macomb County, within 24 hours following receipt of Bids, the following:

1. Names and addresses of proprietors, of all members of a partnership, or of the corporation's officers.
2. Name of county or state where the partnership is registered or where the corporation is incorporated. Corporations must be licensed to do business in the project state at the time of executing the contract.

ERRORS, OMISSIONS, AND/OR DISCREPANCIES

Bidder shall not be allowed to take advantage of errors, omissions, and/or discrepancies found in the Bidding Documents. In the event a conflict or omission is discovered in the Bidding Documents after the issuing of the last addendum such that an interpretation cannot be issued by Macomb County prior to bidding, the Bidder is directed to estimate on and provide the quantity and quality of material and labor consistent with the overall represented work so as to provide all materials, equipment, labor, and services necessary for the completion of the Work.

SUBSTITUTION OF MATERIALS AND EQUIPMENT

Whenever a material, article or piece of equipment is identified on the Drawings or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or the like, it is so identified for the purpose of establishing a standard, and any material, article, or piece of equipment of other manufacturers or vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided that the material, article, or piece of equipment so proposed is, in the opinion of the Architect, of equal substance appearance and function.

To obtain approval to use unspecified products, Bidders shall submit written requests at least ten (10) days before the bid date. Requests received after this time will not be considered. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability.

If the product is acceptable, the Architect will approve it in an Addendum which will be posted on the MITN website. The product shall not be purchased or installed by the Contractor without the Architect's written approval.

Voluntary alternates or qualifications contrary to the Contract requirements made by the Bidder in or accompanying his/her Bid as a condition for the acceptance of the Contract will not be considered in the award of the Contract and will cause the rejection of the entire Bid.

TERMINATION

Macomb County reserves the right to terminate any award to the Bidder without any liability, upon a 30 day notice from Macomb County.

DEFAULT (refer to Section: Definitions, Item F)

If continued abuse of any/or all of the default conditions persist, Macomb County will notify the Contractor in writing. The Contractor will be given thirty (30) days to correct this default condition. Failure to correct within the specified period will result in Macomb County canceling the Contract and procuring the articles or services from other sources. The Contractor will be responsible for any excess costs occasioned thereby.

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RIGHT TO REJECT

Macomb County reserves the right to reject any or all Bids in whole or in part and to waive any informalities therein, or accept any Bid it may deem in the best interest of the County.

Note: Past experience and performance may be a factor in making an award.

MODIFICATION AND WITHDRAWAL OF BIDS

A Bid may be withdrawn on personal requests received from Bidder prior to submission time. A Bid being withdrawn may be re-submitted up to submission time. Negligence or error on the part of the Bidder in preparing his/her Bid confers no right for withdrawal of the Bid after it has been opened.

OFFER PERIOD

Bids will remain firm for a period of 120 days after official opening of Bids.

EXECUTION OF CONTRACT

Macomb County reserves the right to accept any and all Bids, or to negotiate contract terms with the various Bidders when such is deemed by Macomb County to be Macomb County's best interest.

UNIT PRICES

Unit prices shall include all charges applicable to the items including, but not limited to, materials, shoring, hauling removal, fee, layout, supervision and overhead (field and home office), labor, general expenses, transportation, taxes, insurance and profit. Single unit prices shall apply to additions to, or deductions from the Work.

SALES AND EXCISE TAXES

The County of Macomb, being a governmental unit, is exempt from sales and federal excise taxes. The price is to be net, exclusive of any taxes. All prices stated in the Bid response will include all Federal, State, County and Municipal taxes, including Michigan State Sales and Use Taxes, or contributions required by Bidder's business.

INDEMNIFICATION

Macomb County will not be responsible for injury to Contractor's employees, Sub-Contractors, or to third parties caused by the Contractor's agents, servants or employees. Therefore, the Contractor agrees to incorporate the below hold harmless agreement into the required insurance and to be evidenced by being contained in the certificate of insurance. Further, the below listed indemnification is incorporated and is part of the subject contract.

The Contractor agrees to protect, defend, indemnify and hold the County of Macomb and its commissioners, officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees, or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, legal fees, liens, demands, court costs, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc. relating to personal injury, death, damage to property, defects in materials or workmanship, or any actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder.

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The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc. at his sole expense and agrees to bear all other costs and expenses related hereto, even if it (claims, etc.) is groundless, false or fraudulent. In any case in which this indemnification would violate legal prohibition, the foregoing provision concerning indemnification shall not be construed to identify the County for damage arising out of bodily injury to persons or damage to property caused by or resulting from the sole negligence of the County, its commissioners, officers, employees or agents.

CONTRACTS WITH SUB-CONTRACTORS

All contracts made by the Bidder with Sub-Contractors shall be covered by the terms and conditions of the Contract. The Bidder shall inform all Sub-Contractors of these terms and conditions. Macomb County reserves the right to require of the Bidders tentatively selected for consideration in the awarding of the Contract, a list of the Sub-Contractors whom the Contractor intends to employ.

Macomb County reserves the right to disapprove the use of any proposed Sub-Contractor, and in such event, the Bidder submitting such Sub-Contractor shall submit another such Sub-Contractor in like manner within the time specified by Macomb County. Macomb County reserves the right to reject any proposal if such information required by Macomb County is not submitted as above indicated.

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INSURANCE

COMMERCIAL GENERAL LIABILITY INSURANCE

Shall be written on an occurrence basis with limits of Liability of not less than \$1,000,000 (one million dollars) as combined single limit for each occurrence of bodily injury and personal injury with an annual aggregate of not less than \$2,000,000 (two million dollars). The policy shall include;

- a. Contractual Liability
- b. Products and Completed Operations
- c. Independent Contractors Coverage
- d. Broad Form General Liability Extensions or equivalent

WORKERS' COMPENSATION

Workers' Compensation Insurance meeting Michigan statutory requirements. Employer's Liability Insurance with minimum limits of \$500,000 each accident, \$500,000 bodily injury by disease policy limit, \$500,000 bodily injury by disease each employee.

AUTOMOBILE LIABILITY INSURANCE

Motor Vehicle Liability Insurance including Michigan NO-FAULT Coverage for all vehicles, owned and non-owned, leased and hired used in the performance of this contract with limits of \$1,000,000 (one million dollars) as the combined single limit for each occurrence for bodily injury and property damage.

PROFESSIONAL LIABILITY/ERRORS & OMISSIONS

Professional Liability Insurance with minimum limits of \$1,000,000 (one million dollars) each occurrence and \$2,000,000 (two million dollars) aggregate.

INSURANCE INSTRUCTIONS

All certificates of insurance and duplicate policies shall contain the following:

The County of Macomb shall be named additional insured on all policies (excluding Worker's Compensation) and the underwriters will have no right of recovery or subrogation against the County of Macomb including its agents, employees, elected and appointed officials and agencies. It being the intention of the parties that the insurance policy so effected will protect both parties in primary coverage for any and all losses covered by the subject policy. The insurance carrier(s) must have an A.M. Best rating of no less than an A-, VII.

The insurance company(s) issuing the policy or policies will have no recourse against the County of Macomb for payment of any premiums or for assessments under any form of policy.

The Contractor will assume any and all deductibles in the above any and all deductibles in the above-described insurance policies.

The term "INSURED" is used severally, not collectively, but the inclusion in this policy of more than one insured will not operate to increase the limit of the Owner's liability.

All certificates are to provide a thirty (30) day notice of material change or cancellation. Certificates of insurance must be provided no less than ten (10) working days before commencement of work to the County of Macomb, 120 North Main Street, Mt. Clemens, Michigan 48043 Attention: Department of Risk Management and Macomb County Dept. of Roads, 34592 Nova Dr., Clinton Twp., MI 48035 Attention: Purchasing Department.

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MACOMB COUNTY DEPARTMENT OF ROADS
Specifications for ITS Network Hardware

Description

Furnish and deliver network equipment for the ITS network for MCDR.

Specified materials shall be delivered to the Macomb County Department of Roads (MCDR) Administrative Office at 117 S Groesbeck Hwy, Mount Clemens, MI 48043. 48 hours prior notification of any delivery to MCDR Project Manager is required for the delivery to be accepted.

A summary of equipment required is shown in Table 1 below.

Table 1. Equipment

Type	Quantity
Next Generation Firewall	1
Layer 3 Managed Core Stacked Switch	1
Layer 3 Managed Field Ethernet Switch	25
Layer 2 Managed Field Ethernet Switch	
Small	14
Large	8
Rack Mounted	6

All equipment shall include a three (3) year manufacturer warranty from the date of delivery.

Within two (2) weeks after award and prior to delivering equipment, provide technical submittal(s). Submit all equipment data to the Project Manager electronically in portable document format (.PDF). Include a letter of transmittal with all submittals that includes the following information:

- (a) Date of submittal;
- (b) Name and contact information of company making submittal;
- (c) Macomb County contract number;
- (e) Itemized list of enclosures (e.g., 5 copies of inside wiring submittals);
- (e) Recipient name and department (i.e. to the attention of); and
- (f) Action requested (e.g., please review submittals for approval).

Requirements for equipment data submittals include:

- (a) Submit equipment data for all equipment and components required by the contract.
- (b) Equipment data sheets must demonstrate compliance with the contract.
- (c) If the manufacturer's literature covers multiple products or presents options, clearly identify the model and options proposed for the project. Provide sufficient

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information to define the specific item being proposed.

(d) If any aspect of the proposed material differs from the description in the manufacturer’s literature, mark up the literature to indicate the deviation.

(e) Allow 10 working days for the Project Manager to review the submitted material, unless otherwise noted.

(f) Amended submittals must be complete, including all parts of the original submittal that were not revised. Ensure each submittal can stand alone as a complete description of the proposed items, with no need to reference earlier versions.

(g) Provide an itemized bill of materials (BOM) for all components being provided as part of the shop drawing and equipment submittal. BOM must include component type, quantity, and model number as applicable.

Specified materials shall be delivered to the Macomb County Department of Roads (MCDR) Administrative Office at 117 S Groesbeck Hwy, Mount Clemens, MI 48043. 48 hours prior notification of any delivery to MCDR Project Manager is required for the delivery to be accepted.

Next Generation Firewall

Furnish one (1) network firewall appliance (SonicWall NSA 6650 or approved equivalent) capable of handling all ITS field devices inbound and outbound traffic. Firewall appliance shall be capable to police and analyze all traversing traffic and drop malicious sessions.

Ensure firewall appliance supports graphical user interface (GUI) to manage firewall and IPS features without need of dedicated management station.

1. General.

Furnish and install Firewall appliance that meet minimum requirements outlined in Table 1 below;

Table 1- Firewall Device Requirements

Form factor	1U rack unit
Copper RJ-45 Gigabit port	6
Fiber SFP+ 10 Gigabit port	6
USB port	1
Console port (RJ-45)	1

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Features	Firewall protection, IPS, VPN (IPsec, SSL), Web threat protection, Stateful packet inspection, layer 7 application control, traffic shaping & QoS, Geo-IP country blocking, Zone segmentation, Netflow, IPsec client
Storage (SSD)	64GB
RAM	16GB
Firewall throughput	12Gbps
VPN throughput	1Gbps
IPS throughput	2Gbps
Antivirus throughput	2Gbps
Concurrent connections	5,000,000
Management	Console, SSHv2, https/GUI
Protocols	OSPFv3, SNMPv2c/3, PIM-SM, BGP, RIP, IGMPv2, ARP, STP/RSTP, VLAN & 802.1Q, LACP, DHCP, NTP, IPv4/IPv6, RADIUS Authentication, NAT
Dashboard Features	Traffic and security threat, App risk, blocked apps, network and threads analysis for IPS.
Alert, Logging and reporting	Yes- (accessible through GUI), Export report as PDF, Excel (XLS), report scheduling to multiple recipient
Compliance Standards	UL 60950-1, EN 60950 (EMI and susceptibility-class B) and FCC Class A
Power supply	Redundant power
Power consumption	170 Watt (Max)
Operating temperature	0 to 40 degree Celsius
Operating humidity	0 to 90 percent non-condensing

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2. Provide SFP+ transceivers for all fiber 10Gbps fiber ports. The cost of the SFP transceivers shall be included in the ITS Firewall Appliance.

Layer 3 Managed Core Stacked Switch

Furnish one (1) resilient dual Stacked Layer 3 switch and all required mounting hardware, dual power supplies, stacking cables, patch cords, Small Form Factor Pluggable (SFPs), and jumpers.

1. General

- A. Furnish two (2) x 1U stacked switch that is suitable for indoor 19-inch rack and cabinet shelf mounting. Ensure the switch support fan temperature control system.
- B. Ensure the switch supports full-duplex Ethernet communication.
- C. Provide a switch that complies with the *Institute of Electrical and Electronics Engineers (IEEE)* networking standards *IEEE-802.1* and *IEEE-802.3*. Specifically, the switch must comply with the following *IEEE 802.1* standards:
 - (1) IEEE 802.1D Media Access Control (MAC) Bridges, including Rapid Spanning Tree Protocol (RSTP).
 - (2) IEEE 802.1Q Virtual Local Area Network (VLAN) tagging and Multiple Spanning Tree Protocol (MSTP).
 - (3) IEEE 802.1X (Port Based Network Access Protocol).
 - (4) ITU-T G.8032/Y.1344 2010 Ethernet Ring Protection (ERPv2).
- D. Provide a switch that can be managed using Simple Network Management Protocol (SNMP) Version 3.
- E. Provide a power supply that interfaces the switch to 120 volts alternating current (VAC) power, 60 hertz (Hz), single-phase power.
- F. Provide a switch resistant to electromagnetic interference (EMI).
- G. Provide a switch and power supply that has an operating temperature range of at least 0 to 45 degrees Celsius.
- H. Provide a switch and power supply that has an operating humidity range of at least 5 percent to 95 percent relative humidity (RH) -no Condensing.
- I. Provide a switch with diagnostic light-emitting diodes (LED). These indicators must include link, activity, and power LEDs.
- J. Provide a switch Supporting Secure Copy Protocol (SCP) to transfer configuration files to and from a central server.

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- K. Provide power cables as required and switch SFP+ fiber port must be able to accommodate copper SFP+ for Ethernet Cat6 connections.
- L. Provide a switch that has American Standard Code for Information Interchange (ASCII) based configuration files for offline editing and bulk configuration.
- M. Provide a switch that is configurable using a web browser or Graphical User Interface (GUI), in addition to the terminal emulation and SSHv2.

(1) Core Stacked Switch, Layer 3

- A. Each switch in stack shall accommodate minimum 20 ports capable of 10Gbps communications and four (4) 100Gbps ports for 400Gbps stacking bandwidth. The switch shall support copper SFP+ and be equipped with stacking cables.
- B. Each switch in stack shall accommodate redundant power supply.
- C. Provide stacked switch with minimum switching capacity of 2.88Tbps
- D. All fiber transceivers must utilize LC-type connectors and ensure the launch power of the modules is great enough such that when coupled with the receiver sensitivity of the connecting device, the optical budget of the link is not exceeded.
- E. Ensure ports are independently configurable to operate as Layer 2 or Layer 3.
- F. Ensure the switch consumes no more than 350 watts of power.
- G. Provide minimum five (5) fiber SFP+ transceiver for the 10Gbps connections and five (5) Spares.
- H. Ensure the switch has Layer 3 capabilities, including support for:
 - (1) Internet Protocol Version 4 (IPv4) and Version 6 (IPv6);
 - (2) Static route and Dynamic routing with OSPFv3 protocol.
 - (3) Virtual Local Area Network (VLAN) and switch virtual interface (SVI).
 - (4) Virtual Router Redundancy Protocol (VRRPv3) and Virtual route forwarding (VRF).
 - (5) Address Resolution Protocol (ARP) and Link aggregation control protocol (LACP);
 - (6) IP multicast routing utilizing Protocol Independent Multicast (PIM) and Internet Group Management Protocol, Version 2 (IGMPv2). Support for PIM sparse mode (PIM-SM), PIM dense mode (PIM-DM) and PIM for IPv6.
 - (7) Quality of Service (QoS).
 - (8) Security utilizing Access Control Lists (ACLs).

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- (9) MAC based and 802.1x Authentication.
 - (10) Support 8K multicast entries, 9.2KB jumbo frames, 94K MAC address entries.
 - (11) NTP client and Server and NTP version 3.
 - (12) Simple Network Management Protocol version 3 (SNMPv3).
 - (13) SFlow, Software define Networking-Open flow switch specification v1.3.
- I. Provide one of the switches listed below.
- (1) Allied Telesis x950
 - (2) Alcatel Lucent OS6900-V72

Layer 3 Managed Field Ethernet Switch

Furnish a resilient Layer 3 Managed Field Ethernet Switch (MFES) in the quantity shown and all required mounting hardware, power supplies, cables, patch cords, SFPs and jumpers.

1. General

- A. Furnish a 1U switch that is suitable for an outdoor 19-inch rack and cabinet shelf mounting. Ensure the switch support fan-less temperature control system.
- B. Ensure the switch supports full-duplex Ethernet communication.
- C. Provide a switch that complies with the *Institute of Electrical and Electronics Engineers (IEEE)* networking standards *IEEE-802.1* and *IEEE-802.3*. Specifically, the switch must comply with the following *IEEE 802.1* standards:
 - (1) IEEE 802.1D Media Access Control (MAC) Bridges, including Rapid Spanning Tree Protocol (RSTP).
 - (2) IEEE 802.1Q Virtual Local Area Network (VLAN) tagging and Multiple Spanning Tree Protocol (MSTP).
 - (3) IEEE 802.1X (Port Based Network Access Protocol).
 - (4) ITU-T G.8032/Y.1344 2010 Ethernet Ring Protection (ERPv2)
- D. Provide a switch that can be managed using Simple Network Management Protocol (SNMP) Version 3.
- E. Provide a power supply that interfaces the switch to 120 volts alternating current (VAC) power, 60 hertz (Hz), single-phase power.
- F. Provide a switch resistant to electromagnetic interference (EMI).

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- G. Provide a switch and power supply that has an operating temperature range of at least -40 to 74 degrees Celsius.
- H. Provide a switch and power supply that has an operating humidity range of at least 10 percent to 95 percent relative humidity (RH).
- I. Provide a switch capable of providing power over Ethernet (POE), 802.3at to end devices.
- J. Provide a switch with diagnostic light-emitting diodes (LED). These indicators must include link, activity, and power LEDs.
- K. Provide a switch Supporting Secure Copy Protocol (SCP) to transfer configuration files to and from a central server.
- L. Provide power cables as required.
- M. Provide a switch that has American Standard Code for Information Interchange (ASCII) based configuration files for offline editing and bulk configuration.
- N. Provide all mounting hardware needed to mount the switch and power supply.
- O. Provide a switch that is configurable using a web browser or Graphical User Interface (GUI), in addition to the terminal emulation and SSH.

(2) Managed Field Ethernet Switch, Layer 3

- A. Provide switch with 28 ports capable of at least 100Mbps/1Gbps communications and 10Gbps for uplinks. The switch shall have a minimum of:
 - (1) Four (4) SFP+ 10 Gbps ports.
 - (2) And 24 - 100 Mbps/1Gbps ports that can handle fiber and copper, equipped with eight (8) optic SFPs and 16 copper transceivers.
- B. Provide switch with redundant power supply, and dual stacking capability with minimum 10Gbps for stacking fabric.
- C. Provide switch with minimum raw switching capacity of 220Gbps and minimum forwarding capacity of 208Gbps.
- D. All fiber transceivers must utilize LC-type connectors and ensure the launch power of the modules is great enough such that when coupled with the receiver sensitivity of the connecting device, the optical budget of the link is not exceeded.
- E. Ensure ports are independently configurable to operate as Layer 2 or Layer 3.
- F. Ensure the switch consumes no more than 400 watts of power.
- G. Ensure the switch has Layer 3 capabilities, including support for:
 - (1) Internet Protocol Version 4 (IPv4) and Version 6 (IPv6);

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- (2) Static route and Dynamic routing with OSPFv3 protocol;
 - (3) Virtual Local Area Network(VLAN) and switch virtual interface (SVI);
 - (4) Virtual Router Redundancy Protocol (VRRPv3) and Virtual route forwarding(VRF);
 - (5) Address Resolution Protocol (ARP) and Link aggregation control protocol(LACP);
 - (6) IP multicast routing utilizing Protocol Independent Multicast (PIM) and Internet Group Management Protocol, Version 2 (IGMPv2). Support for PIM sparse mode(PIM-SM) and PIM dense mode (PIM-DM);
 - (7) Quality of Service (QoS);
 - (8) Security utilizing Access Control Lists (ACLs).
- H. Provide one of the switches listed below.
- (1) Alcatel Lucent OS6865-U28X

Layer 2 Managed Field Ethernet Switch

Furnish a resilient Layer 2 Managed Field Ethernet Switch (MFES) of three (3) types, Small, Large, and Rack Mounted, in the quantity shown. Furnish all required mounting hardware, power supplies, cables, patch cords, SFPs and jumpers.

1. General

Furnish a switch that is suitable for an ITS cabinet without the need for special environmental conditioning. Ensure the switch has no fan or other moving parts for field layer 2 switches.

- A. Ensure the switch supports full-duplex Ethernet communication.
- B. Provide a switch that complies with the Institute of Electrical and Electronics Engineers (IEEE) networking standards IEEE-802.1 and IEEE-802.3. Specifically, the switch must comply with the following IEEE 802.1 standards and protocols:
 - (1) IEEE 802.1D Media Access Control (MAC) Bridges, including Rapid Spanning Tree Protocol (RSTP).
 - (2) IEEE 802.1Q Virtual Local Area Network (VLAN) tagging and Multiple Spanning Tree Protocol (MSTP).
 - (3) IEEE 802.1X (Port Based Network Access Protocol) with RADIUS, TACACS+.

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- (4) ITU-T G.8032/Y.1344 2010 Ethernet Ring Protection
 - (5) IEEE 802.1P (Class of Service)
 - (6) IEEE 802.1w (RSTP/MST)
 - (7) IEEE 802.3ad for Link aggregation
 - (8) IGMPv2/3 and Access control list (ACL)
- C. Provide a switch that can be managed using Simple Network Management Protocol (SNMP) Version 3.
 - D. Provide a power supply that interfaces the switch to 120 volts alternating current (VAC) power, 60 hertz (Hz), and single-phase power.
 - E. Provide a switch resistant to electromagnetic interference (EMI).
 - F. Provide a field switch and power supply that has an operating temperature range of at least -40 degrees Celsius (C) to 74 degrees C
 - G. Provide a field switch with shock/vibration compliance protection rating
 - H. Provide a switch and power supply that has an operating humidity range of at least 10 percent to 95 percent relative humidity (RH).
 - I. Provide a switch with diagnostic light-emitting diodes (LED). These indicators must include link, activity, and power LEDs.
 - J. Provide power cables as required.
 - K. Provide a switch that has American Standard Code for Information Interchange (ASCII) based configuration files for offline editing and bulk configuration.
 - L. Provide all mounting hardware needed to mount the switch and power supply.
 - M. Provide a switch that is configurable using a web browser or Graphical User Interface (GUI), in addition to the terminal emulation and SSH.
 - N. Provide switch supporting minimum 8K Mac addresses and 9.2KB jumbo frame.
 - O. Provide dust covers for all ports.
2. Managed Field Ethernet Switch, Layer 2, Small
- A. Provide a minimum of 8 RJ-45 copper ports capable of at least 100/1000Base-TX communications. This could be any combination of dedicated RJ-45 copper ports and copper SFPs. If copper SFP transceivers are used, provide transceivers for all ports.
 - B. Provide a minimum of two (2) SFP fiber ports equipped with 1000Base-LX transceivers.
 - (1) Ports must utilize LC-type connectors that are 1000Base-FX.

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- C. Ensure the switch consumes no more than 150 watts of power.
 - D. Ensure switch is mounted via DIN rail clip.
 - E. Provide one of the switches listed below.
 - (1) Alcatel Lucent OS6465-P12
 - (2) Antaira LMX-1204G-SFP
 - (3) MOXA EDS-G512E-8PoE-4GFP-T, Unlocked
3. Managed Field Ethernet Switch, Layer 2, Large
- A. Provide a minimum of 12 RJ-45 copper ports capable of at least 100Base-TX communications. This could be any combination of dedicated RJ-45 copper ports and copper SFPs. If copper SFP transceivers are used, provide transceivers for all ports.
 - B. Provide a minimum of two (2) SFP fiber ports equipped with 1000Base-LX transceivers.
 - (1) Ports must utilize LC-type connectors that are 1000Base-FX.
 - C. Ensure switch consumes no more than 150 watts of power.
 - D. Ensure Switch is mounted via DIN rail clip.
 - E. Provide one of the switches listed below.
 - (1) Antaira LNX-2012GN-SFP-T
 - (2) RUGGEDCOM RSG920P
 - (3) MOXA EDS-G516E-SERIES, Unlocked
4. Managed Field Ethernet Switch, Layer 2, Rack Mounted
- A. Provide a minimum of 24 RJ-45 copper ports capable of at least 100/1000Base-TX communications. This could be any combination of dedicated RJ-45 copper ports and copper SFPs. If copper SFP transceivers are used, provide transceivers for all ports.
 - B. Provide a minimum of two (2) SFP fiber ports equipped with 1000Base-LX transceivers.
 - (1) Ports must utilize LC-type connectors that are 1000Base-FX.
 - C. Ensure switch consumes no more than 690 watts of power.
 - D. Ensure Switch is 19-inch rack mountable.
 - E. Provide one of the switches listed below.
 - (1) Antaira LNP-2804GN-SFP-T
 - (2) COMnet CNGE28FX4TX24MSPOE2/48
 - (3) Alcatel Lucent-OS6465-P28

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PROPOSAL EVALUATION:

Scoring will be based on the ability of the proposal to demonstrate the following:

- Provision of ITS Network components as defined in the specification above.
- Unit price.
- Reasonable time from order to delivery.
- Most comprehensive Standard Manufacturer's warranty against defects.

EACH LINE ITEM MAY BE AWARDED SEPARATELY

****Only brands listed in the specifications are acceptable due to coordinating with other ITS hardware currently in place**

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FORMS

INSTRUCTIONS

All Bids must be submitted on the forms provided, properly executed and with all items filled out in ink or typed. Do not change or add words to the forms. Unauthorized conditions, limitations, or provisions on or attached to the forms may be cause for rejection of the proposal. Any Bidder information that is altered by erasure or by inter-lineation prior to submittal must be initialed and explained by notation above the signature of the Bidder.

LIST

The following is a list of forms that are to be completed and returned:

County Vendor Disclosure Form.	Page 22-23
Non-Collusion Affidavit	Page 24
Macomb County Preference	Page 25
General Information	Page 26
Work References	Page 27
Federal E-Verify Program	Page 28
Iran Economic Sanction Act	Page 29
Bid Form	Page 30-33
Bid Form Supplement	Page 34
List of Sub-Contractors	Page 35
Vendor Certification Debarment ..	Page 36

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County of Macomb, Michigan
VENDOR DISCLOSURE FORM

The Macomb County ethics ordinance requires vendors of the County to complete and file a disclosure statement, the purpose of which is to disclose any financial relationships or other conflicts of interest that may exist between vendors and employees or elected officials (or their appointees) of the County. Once filed, the disclosure form does not need to be updated unless there is a change in circumstance that would cause the answer to any of the questions to change, at which time an amended disclosure form must be filed. Filing of the disclosure form is considered a condition of payment.

PLEASE RETURN THE COMPLETED FORM TO:
Macomb County Purchasing Department
ATTN: Vendor Disclosure
34592 Nova Dr.
Clinton Twp., MI 48035

VENDOR NAME: _____

1. Does the vendor currently employ a relative of any employee, elected official or appointee of an elected official of Macomb County? Relative is defined as husband or wife, father or mother, son or daughter, brother or sister, uncle or aunt, first cousin, nephew or niece, great uncle or great aunt, grandfather or grandmother, grandson or granddaughter, father-in-law or mother-in-law, son-in-law or daughter-in-law, brother-in-law or sister-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister, half-brother or half-sister, the parents or grandparents of the individual's fiancée.

YES **NO**

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
County Department or _____
- C. Agency: _____

2. Does any employee or elected official of Macomb County have an interest in the vendor organization in any of the following capacities, either compensated or non-compensated: director, officer, partner, beneficiary, trustee, member, employee or contractor.

YES **NO**

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
- C. County Department or Agency: _____
- D. Position/Title with Vendor: _____

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3. Does any current employee or elected official of Macomb County have legal or beneficial ownership of 10% or more of the outstanding stock of the vendor organization?

YES **NO**

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
- C. County Department or Agency: _____
 % of Ownership of Vendor
- D. Organization: _____

4. In the last five calendar years, has the vendor failed to perform or otherwise deliver on the terms of a contract or agreement with Macomb County, or any other public entity, including suspensions or debarments?

YES **NO**

If yes, please provide further explanation:

I hereby certify that the information included on this form is complete, true and accurate to the best of my knowledge and belief. I understand that either myself or the organization to which this form applies may be subject to sanctions and/or penalties as set forth in the ethics ordinance if any information has been falsified or omitted.

Name (Please Print)

Title

Signature

Date

**PROPOSAL ITEM 19-47
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NON-COLLUSION AFFIDAVIT

STATE OF)
) ss
COUNTY OF)

_____, being first duly sworn, deposes and says that he/she is authorized on behalf of _____ (Bidder Name) who is making the foregoing proposal(s) that:

- 1) Such proposals are genuine and not collusive or a sham.
- 2) This Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder or person to submit a proposal which is a sham.
- 3) This Bidder has not in any manner agreed with any other persons or businesses to fix the proposed price, overhead, profit, or any cost element of the submitted proposal.
- 4) This Bidder has not attempted to secure any advantage against any other Bidders through collusion with any other Bidder or employees or representative of the County.
- 5) That the proposals submitted are true and accurate to the best of my knowledge and belief and are made in good faith.
- 6) This Bidder has not directly or indirectly submitted or disclosed its proposal or its contents or divulged information or data relative thereto to any association or to any member or agent of any other Bidder to this proposal.

Further, Affiant sayeth not.

Subscribed and sworn to before me
this ___ day of _____, 20__.

Notary Public
County of _____,
State of _____,
My Commission Expires:

BIDDER: THIS AFFIDAVIT MUST BE COMPLETED, SIGNED, NOTARIZED AND INCLUDED IN YOUR PROPOSAL SUBMISSION.

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MACOMB COUNTY BASED PREFERENCE

A local preference percentage credit from the following allowance table will be applied to the bid of any County-based Enterprise. This credit will be subtracted from the bid of the County-based Enterprise. In comparing bids, the bid of the County –based Enterprise after subtraction of the credit shall be considered the official bid. However, if the County-based Enterprise is awarded the Contract, the bid without the equalization percentage credit shall be the Contract price.

<u>Contract Amount</u>	<u>Local Preference Percentage</u>
Up to \$50,000.00	5
\$50,000.00 to \$200,000.00	3
\$200,000.00 and over	1

1. No business shall receive these credits unless it has been certified by the Purchasing Manager.
2. Any business who claims entitlement to any local preference credit shall disclose the records necessary to establish eligibility to the County.
3. After applying any local preference credits as provided above, the Contract shall be awarded to the lowest Responsible Bidder thus evaluated.

IN ORDER TO DETERMINE IF YOUR BUSINESS IS ENTITLED TO RECEIVE A LOCAL PREFERENCE PERCENTAGE CREDIT PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. Is your business headquarters physically located within Macomb County, or has it been conducting business at a location with a permanent street address in the County of Macomb on an ongoing basis for not less than one taxable year prior to your bid or response to this Request for Proposal? **YES _____ NO _____**
2. Has your business paid property taxes on real or personal property within the past year on property which is ordinarily needed to perform the proposed contract? **YES _____ NO _____**
3. Are at least 50 percent of your regular full-time employees based at the County location to perform the proposed contract? **YES _____ NO _____**
4. Has your business been dealing for at least one year on a regular commercial basis in the kind of goods or services which are the subject of this bid or proposal? **YES _____ NO _____**

Drug Screening

To the extent not prohibited by law, all contracts for construction, repair, alteration, or rebuilding of a County building or other property shall include a provision requiring the contractor and any subcontractor providing services under the contract to conduct pre-hire screening for illegal drug use by their employees who provide services under the contract.

If applicable, is your business compliant with this requirement? **YES _____ No _____**

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GENERAL INFORMATION

In further description of this Bid, we desire to submit sheets marked as follows:

Bidding under the name of: _____

DUNS Number: _____
Federal Employer Identification Number: _____
which is (check one of the following):

() Corporation, incorporated under the laws of the State of: _____

() Partnership, consisting of (list partners): _____

() Assumed Name (Register No.) _____

() Individual

AUTHORIZED SIGNATURE: _____

Printed or typed signature: _____

Title: _____

Address: _____

City, State: _____

Date: _____

Telephone Number: _____

Fax Number: _____

Email: _____

When payment on such order or contract is to be directed to the same company at an address different from above, please list the address to be used below:

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WORK REFERENCES

BIDDER'S COMPANY NAME _____
Please list at least three (3) companies or public agencies for which you have done similar work.

Macomb County reserves the right to reject low Bids for poor past performance or inadequate references.

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

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FEDERAL E-VERIFY PROGRAM

The Macomb County Board of Commissioners has established a policy regarding the Federal E-Verify Program. This policy states that future contracts (including both new and reviewing contracts) between Macomb County and contractors and vendors who provide services in excess of twenty-thousand dollars (\$20,000) shall require the contractors and vendors to register with, participate in, and utilize the E-Verify Program (or any successor program implemented by the federal Department of Homeland Security and Social Security Administration) when hiring their employees and require the County’s Human Resources Department to utilize the E-Verify Program (or any successor program implemented by the federal Department of Homeland Security and Social Security Administration) when hiring new employees.

For more information about E-Verify, go to www.uscis.gov. Click on the E-Verify icon on the bottom left-hand corner of page.

**ACKNOWLEDGMENT OF MACOMB COUNTY’S POLICY
REQUIRING PARTICIPATION IN THE FEDERAL E-VERIFY PROGRAM
AND CERTIFICATION OF COMPLIANCE**

The undersigned hereby acknowledges receipt of a copy of the policy of the Macomb County Board of Commissioners requiring contractors, including those providing professional services, who provide services **in excess of \$20,000 a year** to the County to register and participate in the Federal E-Verify Program.

The undersigned hereby certifies that (he/she/it) will comply with this policy and will register with, participate in and utilize the E-Verify Program or any successor program implemented by the Federal Department of Homeland Security and Social Security Administration when hiring employees.

DATED: _____

Authorized Signature

Printed or Typed Signature

Name of Company



CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below-named Bidder _____, hereby certifies, represents and warrants that the Bidder, including its officers, directors and employees, is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Bidder is awarded a contract, the Bidder will not become an “Iran linked business” at any time during the course of performing any services under the contract.

BIDDER: _____
Name of Bidder

By: _____

Its: _____

Date: _____

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One Time Purchase of ITS Network Hardware**



BID FORM

**Proposal Item 19-47
ITS Network Hardware**

Bidder: _____
(print or type company name)

County of Macomb
Mount Clemens, Michigan

OWNER

(Telephone Number)

MACOMB COUNTY
MT. CLEMENS, MICHIGAN 48043

GENERAL AGREEMENTS

- A. The Bidder acknowledges that he/she has had the opportunity to examine the site and locality where the Work is to be performed and has become familiar with the legal requirements, laws, rules, regulations and conditions affecting the cost, progress and performance of the Work; and has made such independent investigations as Bidder deemed necessary to prepare the Bid. Further, Bidder hereby states that the Base Bid set forth in this Bid Response is true and correct.
- B. The Bidder agrees that this Bid shall not be withdrawn for a period of 120 calendar days after the scheduled closing time for receiving Bids.
- C. The Bidder declares that in preparing this Bid, Bidder is assured of the availability of all labor, materials and products to meet the substantial completion date.
- D. The Bidder acknowledges that the price stated below includes all taxes of whatever character or description.
- E. The Bidder agrees to execute a Contract for work covered by this Bid, provided that he/she be notified of its acceptance within one hundred twenty (120) days after the opening of Bids.

SCHEDULE - TIME OF COMPLETION

The undersigned agrees to commence the Work of the Contract Documents on a date specified in a written "Notice to Proceed", and shall fully complete the Work within the required time allowed. Owner requires work to be substantially complete no later than the agreed upon delivery date. The proposed Bid is in full consideration of this.

ACKNOWLEDGEMENT OF ADDENDA

The Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

Addendum No. 1, dated _____, Addendum No. 3, dated _____

Addendum No. 2, dated _____, Addendum No. 4, dated _____

**PROPOSAL ITEM 19-47
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BID FORM SUPPLEMENTS

Attached to this Bid Form and incorporated herein are the following documents, completed in full by the undersigned:

Base Bid Form Supplement – Unit Prices/Supplemental Fees

BASE BID

The undersigned Bidder, having carefully examined the Bidding and Contract Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, all as issued by the Owner, and being familiar with all conditions and requirements of the Work, hereby proposes and agrees to furnish all material, labor, equipment, tools and supervision; and to furnish all services necessary to complete the Work required in accordance with the Bidding Documents for the amounts listed below:

ALL PRICING MUST BE FOB: 117 South Groesbeck Hwy., Mt. Clemens, MI 48043

All prices firm for: 90 days after award of contract: _____ Yes _____ No

Manufacturer, Part Number, Price and Delivery of Item being bid:

Next Generation Firewall – 1 each

Manufacturer	Part Number
--------------	-------------

Price: _____ Number of Days for Delivery: _____

Layer 3 Managed Core Stacked Switch – 1 each

Manufacturer	Part Number
--------------	-------------

Price: _____ Number of Days for Delivery: _____

Layer 3 Managed Field Ethernet Switch – 25 each

Manufacturer	Part Number
--------------	-------------

Price per Switch: _____ Number of Days for Delivery: _____

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Layer 2 Managed Field Ethernet Switch – Small – 14 each

Manufacturer	Part Number
--------------	-------------

Price per Switch: _____ Number of Days for Delivery: _____

Layer 2 Managed Field Ethernet Switch – Large – 8 each

Manufacturer	Part Number
--------------	-------------

Price per Switch: _____ Number of Days for Delivery: _____

Layer 2 Managed Field Ethernet Switch – Rack Mounted – 6 each

Manufacturer	Part Number
--------------	-------------

Price per Switch: _____ Number of Days for Delivery: _____

Warranty: _____

****Please Note: EACH ITEM MAY BE AWARDED SEPARATELY ****

**PROPOSAL ITEM 19-47
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VOLUNTARY ALTERNATES

The following voluntary alternates are offered by the Bidder. The undersigned agrees that the amounts indicated below shall be added to or deducted from the Base Bid, as the case may be for each alternate which is accepted.

Description of Voluntary Alternates	Add	Deduct
1. _____	\$ _____	\$ _____
2. _____	\$ _____	\$ _____
3. _____	\$ _____	\$ _____
4. _____	\$ _____	\$ _____

Respectfully submitted this ____ day of _____, 20__.

By: _____
(Name of bidding firm or corporation)

Witness:

By: _____
(Signature)

Attest: _____
(Signature)

(Type or print name)

By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice Pres.)

Title: _____
(Corporate Secretary or Assistant Secretary Only)

Address: _____
Phone: _____

License: _____

Federal ID No.: _____

(Affix Corporate Seal Here)

Company Name

Company Representative

Title

Date

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BID FORM SUPPLEMENT - UNIT PRICES/SUPPLEMENTAL FEES

This form is required to be attached to the Base Bid Form.

**Proposal Item 19-47
ITS Network Hardware**

Bidder: _____
(print or type company name)

County of Macomb
Mount Clemens, Michigan

NEGOTIATION

The undersigned agrees that, should the overall cost exceed the funds available, he/she will be willing to negotiate with Macomb County and Architect; for the purpose of making further reductions in the Contract work, and shall agree to give full credit for all such reductions in the work requested by Macomb County, including full value of labor, materials, and Sub-Contract work and reasonable proportionate reductions in overhead and profit, thereby arriving at an agreed upon Contract price.

Submitted this ____ day of _____, 20____.

By: _____
(Name of bidding firm or corporation)

By: _____
(Signature)

(Type or print name)

Title: _____
(Owner/Partner/President/Vice Pres.)

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BID FORM SUPPLEMENT - LIST OF SUB-CONTRACTORS

All sealed bids for construction contracts shall provide a list of preferred sub-contractors and identify, with documentation, whether each subcontractor is a County-based Enterprise.

NAME OF BIDDER: _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

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COUNTY OF MACOMB

VENDOR CERTIFICATION DEBARMENT

All information requested in this section must be completed and the document notarized. Any information omitted, or erroneously reported, may result in disqualification for current or future bidding and supply on behalf of the County of Macomb.

The undersigned warrants and presents that they have full complete authority to make representations for and on behalf of the undersigned company and that their representations are fully binding upon the undersigned company.

1. The undersigned are not presently debarred, suspended, proposed for debarment, declared ineligible, or excluded from transactions by any federal department or agency, or any state, county or local municipality, department or agency.
2. The undersigned has not within a three (3) year period preceding this bid been convicted of, or had a civil judgment rendered against them for the commission of fraud, a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction, or a contract a public transaction, violation of federal or state antitrust statutes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. The undersigned are not presently indicted for or otherwise criminally or civilly charged by any governmental entity (federal, state or local) with commission of any of the offenses set forth in paragraph 2.
4. The undersigned have not within a three (3) year period preceding this bid, had one or more public transactions (federal, state or local) terminated or attempted to be terminated for cause or default.

IF THE APPLICANT IS UNABLE TO CERTIFY TO ANY OF THE STATEMENTS IN THIS CERTIFICATION, CERTIFICATION AND EXPLANATION SHALL BE ATTACHED AND PRESENTED WITH THIS CERTIFICATION.

THE UNDERSIGNED CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED MADE ON BEHALF OF THE UNDERSIGNED BIDDER.

Bidder: _____

Bidder Address: _____

Applicant/Bidder Representative: _____

Signature: _____
(Print full name)

Subscribed and sworn to before me this
____ day of _____, 20____.

Notary Public
County of _____,
State of _____
My Commission expires: _____