



Chippewa Valley Schools

2018 Bond Issue

Wireless & Network Infrastructure (E-Rate)



Request for Proposals

Bid Package 19-T01 (E-Rate)



December 19, 2018

Project Manual



Metro Technology Services IT, Inc.



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E-Rate Bid Information

1. **IDENTIFICATION NUMBER** - The Vendor's Universal Service Fund (USF) Service Provider Identification Number (SPIN) **MUST** be included in the Bid Proposal and must be updated for the 2019 funding year. Questions regarding the USF project should be directed to the Schools and Library Division at (888) 203-8100.
2. **FUNDING YEAR 2019** - This project qualifies for Funding Year 2019 USF funding. Construction may begin as early as April 1, 2019; however, no invoices can be dated prior to July 1, 2019.
3. **CONDITIONAL UPON USF** - The contract is 100% conditional upon Universal Service Funding. Further, the Owner reserves the unrestricted right to reduce the contract amount by reducing the scope of work and/or components in order to meet budget requirements in the event the level of the USF discount is reduced. Unit pricing, as specified in the Bid Proposal, will be used to control contract adjustments. Any such action will be taken before specific work on a building, or on a project component, has commenced.
4. **DISCOUNT IMPLEMENTATION** - The Owner reserves the unrestricted right to specify the reimbursement filing option for implementing the USF E-rate discounts; Billed Entity Applicant Reimbursement (BEAR) *or* Service Provider Invoice (SPI).

Section 00020 Invitation for Bid Proposals

Project

Chippewa Valley Schools – Wireless & Network Infrastructure (E-Rate)
Bid Package – 19-T01 (E-Rate)

Owner

Chippewa Valley Schools
19120 Cass Avenue
Clinton Township, MI 48038
(586) 723-2000

Technology Designer

Metro Technology Services IT, Inc.
59 North Walnut Street
Suite 202
Mount Clemens, Michigan 48043
(586) 203-8423

Project Description

Procure, install, integrate and configure a new Wireless Infrastructure system, Network Infrastructure Equipment and all associated Low Voltage Cabling at Chippewa Valley Schools (District Wide). Project also includes removal of existing Cisco equipment for credit and labeling and creating new as-built documentation. This RFP is subject to the following E-rate requirements:

1. *IDENTIFICATION NUMBER - The Vendor's Universal Service Fund (USF) Service Provider Identification Number (SPIN) MUST be included in the Bid Proposal and must be updated for the 2019 funding year. Questions regarding the E-rate Program should be directed to the Schools and Library Division at (888) 203-8100.*
2. *FUNDING YEAR 2019 - This project qualifies for Funding Year 2019 USF funding. Construction may begin as early as April 1, 2019; however, no invoices can be dated prior to July 1, 2019.*
3. *CONDITIONAL UPON USF - The Contract is 100% conditional upon Universal Service Funding. Further, the Owner reserves the unrestricted right to reduce the contract amount by reducing the scope of work and/or components in order to meet budget requirements in the event the level of the USF discount is reduced. Unit pricing, as specified in the Bid Proposal, will be used to control contract adjustments. Any such action will be taken before specific work on a building, or on a project component, has commenced.*
4. *DISCOUNT IMPLEMENTATION - The Owner reserves the unrestricted right to specify the reimbursement filing option for implementing the USF E-rate discounts; Billed Entity Applicant Reimbursement (BEAR) or Service Provider Invoice (SPI).*

Type of Proposal

A single lump sum Bid Proposal is being solicited for each section of the work described in this Request for Proposal (the "RFP").

Date of Submission

The Owner will receive sealed Bid Proposals for the work herein set forth until 2:00 P.M. EST, on Thursday, February 12, 2019 (the "Due Date") at the Chippewa Valley Schools' Administration Building, 19120 Cass Ave, Clinton Township, Michigan 48038. Bid Proposals will be publicly opened and read aloud shortly thereafter. Late Bids Proposals will not be opened, accepted or considered.

Each Bid Proposal must be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the Bidder or any employee of the Bidder and any member of the Owner's School Board or the Superintendent of Schools. The Owner will not accept a Bid Proposal that does not include this sworn and notarized disclosure statement.

Each Bid Proposal must be accompanied by the Iran Sanctions Affidavit. The Owner will not accept a Bid Proposal that does not include this sworn and notarized Iran Sanctions Affidavit.

Each Bid Proposal must be accompanied by the Affidavit for Criminal Background Checks. The Owner will not accept a Bid Proposal that does not include this sworn and notarized statement.

In the event of a weather-related district closure, the bid opening shall automatically occur the very next business day the district is open.

Bid Proposal Security

Each Bid Proposal must be accompanied by a certified check, cashier's check, or a satisfactory surety bid bond in an amount not less than five percent (5%) of the total Bid Proposal price as guaranty. No Bid Proposal shall be considered unless it is accompanied by the required guaranty.

Each check shall be made payable to **Chippewa Valley Schools**.

Bid security will be returned to all bidders for each Bid Proposal Package within thirty (30) days after the award of Contract by the Chippewa Valley Schools Board of Education and the accepted bidders have executed the Contract, or if no award has been made, within ninety (90) days after the date of the opening of Bid Proposals, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of its Bid Proposal.

Pre-Bid Proposal Meeting

A Pre-Bid Proposal meeting is scheduled for **Thursday, January 3, 2019 at 10:00AM** at the Chippewa Valley Schools' Administration Building, 19120 Cass Ave, Clinton Township, Michigan 48038.

Attendance at this Pre-Bid Proposal meeting is not mandatory; however, absolutely no extra cost will be allowed for any item or thing which could have been seen or obtained at the Pre-Bid Proposal meeting.

Bidding Documents

Copies of the Bid Proposal Documents will be on file for reference at the office of:

1. The Owner (<http://vendors.chippewavalleyschools.org/vendors/index.asp>)
2. The Technology Designer

Copies of Documents

Bidding Documents will be available by emailing Ken Wosik at Metro Technology Services IT, Inc. at ken@mts4it.com.

Proposal Acceptance

The Owner expressly reserves the right to accept or reject any or all Bid Proposals in whole or in part, to waive any irregularities or informalities therein, and to award the Contract(s) to other than the low bidder.

Proposal Withdrawal

Proposals for base Bid Proposals may not be withdrawn for a period of ninety (90) days after the Due Date. Bidders may withdraw at any time prior to the Due Date, however.

End of Section 00020

Section 00100 Instructions to Bidders

Chippewa Valley Schools will receive sealed Bid Proposals only as set forth in this RFP and complying with all requirements as contained in Instructions to Bidders.

Documents

Bidding documents can be obtained by contacting Ken Wosik of Metro Technology Services IT, Inc. at ken@mts4it.com.

Bidding Documents

The Bidding Documents must consist of the following:

- All documents contained in the Request for Proposal (the "RFP").
- All other documents as provided for in Article 1, Paragraph 1, Section 1 of the General Conditions, as modified.

Examination

Each bidder shall examine the Bidding Documents and satisfy itself about the extent of the proposed work by personal examinations of the site and surroundings and make its own estimate there from of the facilities and difficulties attending the performance and completion of the work.

No additional compensation will be allowed on account of conditions which could be determined by examining the Bidding Documents or the sites.

Interpretation

If any person contemplating submitting a Bid Proposal is in doubt as to the true meaning of any part of the Bidding Documents, he/she must submit to the Technology Designer a written request for an interpretation thereof. If such an interpretation is not requested, the Bid Proposals will be presumed to be based upon the interpretation and directions given by the Technology Designer in accordance with provisions of this RFP.

Neither the Owner nor the Technology Designer will be responsible for any verbal explanations or interpretations of the Bidding Documents.

Every request for such interpretation should be in writing, via email, addressed to the Technology Designer at ken@mts4it.com, and to be given consideration, must be received prior to the end of business day (5:00 p.m. EST) on **January 9, 2019**. All such interpretations, and any supplemental instructions will be in the form of written addenda to the Bidding Documents which, if issued, will be submitted to and announced to all known prospective bidders (at the respective email addresses furnished for such purposes) prior to the Due Date. All addenda so issued shall become part of the Bidding Documents.

Substitutions

To obtain approval to use unspecified products, bidders shall submit written requests at least fourteen (14) days before the Due Date to the Technology Designer at ken@mts4it.com. 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 Technology Designer will approve it in an Addendum issued to all prospective bidders on record.

Basis of Bid

A single lump sum bid is being solicited for each section of the work described in this RFP.

Partial or segregated Bid Proposals or assignments will not be considered or accepted. Include Bid Proposals for all alternates and unit prices; failure to do so may result in rejection of the Bid Proposal.

Preparation

Proposal shall be submitted on the form bound in this RFP, Form of Proposal, in original form without erasures, interlineations or alterations.

Submit one (1) original and three (3) copies of proposal; retain one for your records. Oral, telegraphic, electronic or telephone bids will not be accepted.

Bid Proposals must be filled out in ink or typewritten in duplicate. Blank spaces in the Bid Proposals must be filled in and no changes shall be made to the phraseology of the Bid Proposal Form. Quotes shall be entered in written and numeric forms. In case of a discrepancy between the written and the numeric form, the written form shall govern.

All Bid Proposals shall be signed and dated in longhand.

Bid Proposals which are not signed by the individual making them should have attached thereto a power of attorney, evidencing authority to act as agent for the person whom it is signed.

Bid Proposals which are signed for a partnership should be signed by one of the partners or by an attorney-in-fact. If signed by an attorney-in-fact, evidence of authority to sign the Bid Proposal shall be attached.

Bid Proposals which are signed for a corporation should have the correct corporate name thereon and the signature of the president or other officer legally able to contract in the name of the corporations. In addition, a signed Secretary's Certificate evidencing the authority of the Officer to contract in the name of the corporation shall be included. Any Bid Proposal submitted by a corporation shall bear its seal.

Bidders shall provide a detailed project schedule within their Bid Proposal including all major work components that materially affect any other work within the project and projected building completion dates.

Any exceptions to the terms and conditions contained in this RFP or the form of Contract attached to this RFP, or any other special considerations or conditions requested or required by the Contractor MUST be specifically enumerated by the Bidder and be submitted as part of its Bid Proposal, together with an explanation as to the reason such terms and conditions of the RFP or form of Contract cannot be met by, or, in the Bidder's opinion, are not applicable to, the Bidder. The Bidder shall be required and expected to meet the specifications and requirements as set forth in this RFP and the form of Contract in their entirety, except to the extent exceptions or special considerations or conditions are expressly set forth in the Contractor's Bid Proposal and those exceptions or special considerations or conditions are expressly accepted by the Owner. All Pricing factors must be clearly indicated in the Bid Proposal Forms provided as part of the Bidder's Bid Proposal.

Bid Security

Each Bid Proposal must be accompanied by a certified check, cashier's check, or a satisfactory surety bid bond in an amount not less than five percent (5%) of the total Bid Proposal as guaranty. No Bid Proposal shall be considered unless it is accompanied by the required guaranty.

Each check shall be made payable to **Chippewa Valley Schools**.

Bid security will be returned to all bidders for each Bid Package within thirty (30) days after the award of Contract by the Chippewa Valley Schools Board of Education and the accepted bidders have executed the Contract, or if no award has been made, within ninety (90) days after the date of the opening of Bid Proposals, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of its Bid Proposal.

Subcontractors

The Owner and Technology Designer reserve the right to require of bidders tentatively selected for consideration in the awarding of the Contract, a list of the subcontractors whom the Contractor intends to employ.

The Owner reserves the right to disapprove the use of any proposed subcontractor, and in such event, the bidder submitting such subcontractor shall submit another such subcontractor in like manner within the time specified by the Owner. The Owner reserves the right to reject any Bid Proposal if such information required by the Owner is not submitted as above indicated.

Bid Proposals

Submit (1) original and (3) copies of the Bid Proposal in a sealed opaque envelope having listed thereon the following:

Sealed Bid: Wireless & Network Infrastructure (E-Rate)

Bid Package: 19-T01 (E-Rate)

Bidder Name

Address

City, State and Zip Code

Phone Number

Withdrawal

Bid Proposals may not be withdrawn for a period of ninety (90) days after the Due Date. Bidders may withdraw at any time prior to the Due Date, however.

Irregularities

The Owner reserves the right to disqualify Bid Proposals before or after opening, upon evidence of collusion with intent to defraud, or other illegal practices upon the part of the bidder.

The Owner also reserves the right to accept or reject any or all Bid Proposals in whole or in part, to waive any informality therein, and to award the Contract(s) to other than the low bidder.

Any error and/or omission in the Bid Proposal Form or any other irregularity as a result of negligent preparation shall not furnish cause for relief for any damages resulting therefrom, nor in any way relieve the Bidder from fulfillment of all contractual obligations as provided for in the Bidding Documents.

Taxes and Contributions

Bid, unit prices, alternate prices stated shall include all taxes or contributions required by bidder's business.

Michigan State sales tax may be applicable to the work of this Bid Package/RFP. The Bid Proposal Form requires that the bidder show a deduct amount for sales tax subtracted from the base bid amount.

Bid Preparation Costs

The Bidder is responsible for all costs incurred by the bidder or his/her subcontractors in responding to this RFP.

Shipping of Equipment

All shipping and insurance costs to and from the Site(s) shall be included in the Bid Proposal. All payments to shipping agents and for insurance fees shall be made directly by the Bidder. Bidder shall be responsible for all arrangements for the shipment and receipt of equipment to Owner prepared Site(s). Bidder shall provide all properly trained representatives to unpack all items of equipment and place this equipment in the proper locations. Bidder shall also be responsible for removal of all debris and packing materials from the Site(s) resulting from the installation of the equipment on a daily basis.

Opening

The Owner will receive sealed Bid Proposals for the work herein set forth until 2:00 P.M. EST, on Thursday, February 12, 2019 (the "Due Date") at the Chippewa Valley Schools' Administration Building, 19120 Cass Ave, Clinton Township, Michigan 48038. Bid Proposals will be publicly opened and read aloud shortly thereafter. Late Bid Proposals will not be opened, accepted or considered.

Each Bid Proposal must be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the bidder or any employee of the bidder and any member of the Owner's School Board or the Superintendent of Schools. The Owner will not accept a bid that does not include this sworn and notarized disclosure statement.

Each Bid Proposal must be accompanied by the Iran Sanctions Affidavit. The Owner will not accept a Bid Proposal that does not include this sworn and notarized Iran Sanctions Affidavit.

Each Bid Proposal must be accompanied by the Affidavit for Criminal Background Checks. The Owner will not accept a Bid Proposal that does not include this sworn and notarized statement.

In the event of a weather-related district closure, the bid opening shall automatically occur the very next business day the district is open.

Bid Breakdown Information

Upon request from the Technology Designer, the low bidders shall submit a detailed cost breakdown of all work covered by the Bidding Documents. The breakdown shall show quantity of material and labor, units of material and labor, material cost, labor cost and total cost.

Award of Contract

The Contract will be awarded to the lowest responsible bidder who complies with the terms of the Bidding Documents, with full consideration of alternates.

List of Specific Products

The Owner expects that all supplies, materials or equipment offered by a Bidder shall meet or exceed the specifications set forth in this RFP. Further, it is the Owner's intent that this RFP permit competition. Accordingly, the use of any patent, proprietary name or manufacturer's name is for demonstrative purposes only and is not intended to curtail competition. Whenever any supplies, material or equipment requested in this RFP are specified by patent, proprietary name or by the name of the manufacturer, unless stated differently, such specification shall be considered as if followed by the words "or comparable equivalent," whether or not such words appear. The Owner, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent products/brands submitted by Bidder shall meet the specifications contained in this RFP and possess equivalent and/or better qualities. It shall be the Bidder's responsibility to notify the Owner in writing if any specifications or suggested comparable equivalent products/brands require clarification by the Owner prior to the date and time established above.

Execution of Contract

The contents of this Request for Proposal ("RFP") and the bidder's Bid Proposal shall become contractual obligations, if a contract ensues. Award of a contract by the Owner is subject to the bidder executing the form of Contract attached hereto (found in Section 00700) which shall incorporate the contents of this RFP and the bidder's Bid Proposal. It should be understood by the Bidder that this means the Owner expects the Bidder to satisfy substantially all of the requirements/specifications contained herein. Exceptions to any terms and conditions contained in the RFP **MUST** be explicitly noted in the bidder's Bid Proposal. Lack of listing all exceptions will be considered acceptance of all of the requirements/specifications presented in this RFP.

End of Section 00100

**Section 00311
Bid Proposal Form**

**Wireless & Network Infrastructure (E-Rate)
Due Date: Tuesday, February 12, 2019 @ 2:00PM**

Bidder Name: _____

Address: _____

City, State, Zip Code: _____

Contact Person: _____

Contact Phone Number: _____

Contact Fax Number: _____

Contact E-mail Address: _____

Owner

Chippewa Valley Schools
19120 Cass Avenue
Clinton Township, MI 48038

Technology Designer

Metro Technology Services IT, Inc.
59 North Walnut Street
Suite 202
Mount Clemens, Michigan 48043

Bidders are to submit one (1) original and three (3) copies of their Bid Proposal in a sealed opaque envelope having listed thereon the following:

- Sealed Bid: **Wireless & Network Infrastructure (E-Rate)**
- Bid Package: **19-T01 (E-Rate)**
- Contractor Name
- Address
- City, State and Zip Code

Base Proposal for Section 17200 – Network Infrastructure Equipment

Pursuant to and in compliance with the Request for Proposal and the Instructions to Bidders, and having carefully examined the Bidding Documents and all Addenda, the undersigned agrees to enter into the Contract with the Owner to complete the work in accordance with the said Bidding Documents for the sum of:

_____ Dollars
(Sum to be written out)

Dollars \$ _____

Deduct for Taxes \$ _____

Base Proposal for Section 17570 – Wireless Local Area Network (WLAN)

Pursuant to and in compliance with the Request for Proposal and the Instructions to Bidders, and having carefully examined the Bidding Documents and all Addenda, the undersigned agrees to enter into the contract with the Owner to complete the work in accordance with the said Bidding Documents for the sum of:

_____ Dollars
(Sum to be written out)

Dollars \$ _____

Deduct for Taxes \$ _____

By submitting a Bid Proposal, the bidder agrees that a Contract resulting from this bid is 100% contingent upon E-Rate funding for Funding Year 2019.

Alternates for Section 17570 – Wireless Local Area Network (WLAN)

The undersigned further proposes to execute the work specified in the respective technical division or indicated on the Bidding Documents for the sum added to the base Bid Proposal as stated below:

Section 17570 - Alternate #1. Deduct the cost of Network Integration Services.

Bidders are to provide the cost to deduct the scope of network integration services included in base Bid Proposal.

Total Price for Alternate #1

_____ Dollars

(Sum to be written out)

Dollars \$ _____

Section 17570 - Alternate #2. Deduct the cost of the Pre-Survey.

Bidders are to provide the cost to deduct the scope of the pre-survey included in base Bid Proposal.

Total Price for Alternate #2

_____ Dollars

(Sum to be written out)

Dollars \$ _____

Section 17570 - Alternate #3. Deduct the cost of 10 Year Licensing and provide 5 Year Licensing.

Bidders are to provide the deduct cost associated with providing a 5 Year licensing term in lieu of the specified 10 Year licensing term.

Total Price for Alternate #3

_____ Dollars

(Sum to be written out)

Dollars \$ _____

Price Guarantee

The undersigned proposes that the price stated in this Bid Proposal is guaranteed for ninety (90) consecutive days from Due Date.

Taxes and Contributions

Bid, unit prices, alternate prices stated shall include all taxes or contributions required by bidder's business.

Michigan State sales tax may be applicable to the work of this Bid Proposal/RFP. The Bid Proposal Form requires that the bidder show a deduct amount for sales tax subtracted from the base Bid Proposal amount.

Chippewa Valley Schools is exempt from taxes. However, when state and local taxes are required on construction materials installed by the bidder, such taxes must be included in the bidder's Bid Proposal price.

Time of Completion

The undersigned agrees to commence work operations immediately upon award of Contract, with completion of the work as specified, and that the Bidder's Bid Proposal is in full consideration of this. Date of completion is extremely important to the Owner and will be a very important consideration in award of the Contract.

Addenda

If any addenda or bulletins covering changes to the Bidding Documents have been received during the bidding period, the bidder shall fill in their numbers and dates which acknowledges having received same, and having included in this bid the work involved:

_____	Dated: _____
_____	Dated: _____
_____	Dated: _____
_____	Dated: _____

Bid Security

Each Bid Proposal must be accompanied by a certified check, cashier's check, or a satisfactory surety bid bond in an amount not less than five percent (5%) of the total Bid Proposal price as guaranty. No bid shall be considered unless it is accompanied by the required guaranty.

Each check shall be made payable to **Chippewa Valley Schools**.

Bid security will be returned to all bidders for each Bid Package within five (5) days after the award of Contract by the Chippewa Valley Schools Board of Education and the accepted bidders have executed the Contract, or if no award has been made, within ninety (90) days after the date of the opening of Bid Proposals, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of its Bid Proposal.

Performance and Payment Bond

Successful bidders whose Bid Proposals are \$50,000 or more will be required to furnish a Performance Bond and Payment Bond, each in the amount of 100% of their Bid Proposal. The cost of the Bond shall be included in each bid. Bonds shall be furnished through a U.S. Treasury Listed Company.

The Board of Education reserves the right to accept or reject any and/or all Bid Proposals in whole or in part, to waive any irregularities therein and to award the Contract(s) to other than the low bidder. The Board of Education reserves the right to accept that Bid Proposal which in its opinion, is in the best interest of the Owner.

Familial Disclosure

Bidder has included Section 00401 Familial Disclosure Form (Bid Proposals will not be considered without this form).

Asbestos Notification Form

Bidder has included Section 00402 Asbestos Notification Form (Bid Proposals will not be considered without this form).

Iran Sanctions Affidavit

Bidder has included Section 00403 Iran Sanction Act Affidavit (Bid Proposals will not be considered without this form).

Affidavit of Compliance – Criminal Background Checks

Bidder has included Section 00404 Affidavit of Compliance – Criminal Background Checks (Bid Proposals will not be considered without this form).

Negotiation

The undersigned agrees that, should the overall cost exceed the funds available, he/she will be willing to negotiate with the Owner and Technology Designer 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 the Owner, including full value of labor, materials, and subcontract work and reasonable proportionate reductions in overhead and profit, thereby arriving at an agreed upon Contract price.

E-Rate Regulations for Funding Year 2019

By submitting a Bid Proposal, the vendor agrees that a Contract resulting from this Request for Proposals is 100% contingent upon E-Rate funding for Funding Year 2019.

I have examined the specifications and instructions included herein and agree, provided I am awarded a Contract within 90 days of Bid Proposal Due Date, to provide the specified items for the sum shown in accordance with the terms stated herein. All deviations from specifications and terms are in writing and attached hereto.

Year 1 Annual Cost: _____

E-Rate Eligible Cost: _____

Company Name: _____

Address: _____

Name/Title: _____

Authorized Signature: _____

Email Address: _____

Phone Number: _____ Fax: _____

Cellular Number: _____ Date: _____

Contract Execution

The undersigned agrees to execute a Contract for work covered by this RFP, provided that he/she be notified of its acceptance within ninety (90) after the opening of Bid Proposals.

The undersigned hereby declares that he/she has the legal status checked below:

() Individual

() Partnership having the following partners:

() Corporation incorporated under the State laws of:

This Bid Proposal is submitted in the name of, and notice of acceptance should be mailed, telegraphed, or delivered to:

Date: _____ Bidder's Name: _____

Phone Number: (_____) _____

By: _____
(Signature)

In the presence of: _____ Title: _____

End of Section 00311

**Section 00402
Asbestos Notification Form
Chippewa Valley Schools**

29 CFR 1926.1101(k). requires that persons performing Construction Work, as defined in 29 CFR 1910.12, working in a building that contains Potentially Asbestos Containing Materials ("PACMs") or Asbestos-Containing Materials (ACM) be notified.

Chippewa Valley Schools is committed to providing a safe working environment for all people working in Chippewa Valley Schools' facilities. Therefore, do not disturb any PACMs or ACMs that you encounter, which may include, but is not limited to, the following:

1. Flooring materials
2. Flooring mastics
3. Ceiling tiles and ceiling tile glue pods
4. Thermal system insulation
5. Piping insulation
6. Electrical insulation
7. Sprayed or troweled on surfaces: walls, ceilings, structural members, acoustical, decorative, and fireproofing
8. Patching and joint compound
9. Roofing material and transite shingles
10. Other suspect asbestos containing materials

Please contact Chippewa Valley Schools for typical descriptions of asbestos materials, their known locations and quantities that are present through-out the District. In addition, other suspect ACM that may become exposed or accessible during construction work; when in doubt, please contact Chippewa Valley Schools for sampling and analysis to verify the absence or presence of asbestos prior to disturbance.

Thank you for your cooperation.

Acknowledgment of Notification

Signature	Print
-----------	-------

Company	Date
---------	------

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Section 00403
IRAN ECONOMIC SANCTIONS ACT AFFIDAVIT OF COMPLIANCE
Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below-named contractor (“Contractor”), pursuant to the compliance certification requirement provided in the Chippewa Valley Schools’ (the “School District”) Request For Proposals (the “RFP”), hereby certifies, represents and warrants that the Contractor (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 Contractor is awarded a contract as a result of the aforementioned RFP, the Contractor will not become an “Iran linked business” at any time during the course of performing any Work under the Contract.

The Contractor further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date the it is determined that the person has submitted the false certification.

CONTRACTOR:

 Name of Contractor

By: _____

Its: _____

Date: _____

STATE OF _____)
) ss.
 COUNTY OF _____)

This instrument was acknowledged before me on the ____ day of _____, 20__, by
 _____.

 , Notary Public

_____ County, _____

My Commission Expires: _____

Acting in the County of _____

Section 00404

AFFIDAVIT OF COMPLIANCE – CRIMINAL BACKGROUND CHECKS

The undersigned, the owner or authorized officer of the below-named contractor (the “Contractor”), pursuant to the criminal background compliance certification requirements of Chippewa Valley Schools’ (the “School District”) hereby represents and warrants that the Contractor has performed and/or will perform sufficient criminal background checks, including at a minimum, an Internet Criminal History Tool (“ICHAT”) check, for all of its owners, employees, agents, representatives, contractors and/or other personnel who will be on any School District premises to carry out the services contemplated by the Contract Documents. The Contractor further hereby certifies that no owner, employee, agent, representative, contractor and/or other personnel of the Contractor will be on any School District premises if they are a registered criminal sexual offender under the Sex Offenders Registration Act, Public Act 295 of 1994, or have been convicted of “Listed Offense” as defined under Section 722 of the Sex Offenders Registration Act, MCL 28.722.

The Contractor further acknowledges that if it is found to have submitted a false certification or otherwise fails to comply with the requirements of this certification, the School District may immediately terminate the Contract.

CONTRACTOR:

Name of Contractor

By: _____

Its: _____

Date: _____

STATE OF _____)
) ss.
COUNTY OF _____)

This instrument was acknowledged before me on the ____ day of _____, 201__, by _____.

, Notary Public
_____ County, _____
My Commission Expires: _____
Acting in the County of: _____

Section 00700
Form of Agreement

DOCUMENTS:

"The Standard Form of Agreement between Owner and Vendor for Furniture, Furnishings and Equipment" AIA Document A-151, 2007 Edition forms, as modified, are part of this RFP and is bound herein.

This AIA Document A-151 is modified as described in "Additions and Deletions Report for AIA Document A-151, 2007 Edition" of the General Conditions and may be obtained by contacting the Technology Designer.

Bidders shall be held responsible for having familiarized themselves with this Document and all other Contract Documents affecting their contracts in this RFP.

Note: The term "vendor" and "bidder" are used interchangeably in this RFP and the AIA documents contained in this RFP.

End of Section 00700

**Section 00710
General Conditions**

DOCUMENTS:

"The General Conditions of the Contract for the Construction" AIA Documents A-251, 2007 Edition forms, as modified, are part of this RFP and is bound herein.

This AIA Document A-251 is modified as described in "Additions and Deletions Report for AIA Document A-251, 2007 Edition" of the General Conditions and may be obtained by contacting the Technology Designer.

Bidders shall be held responsible for having familiarized themselves with this Document and all other Contract Documents affecting their contracts in this RFP.

Note: The term "vendor" and "bidder" are used interchangeably in this RFP and the AIA documents contained in this RFP.

End of Section 00710

Section 00810 Modifications of the General Conditions

The following modify, change, delete from, or add to the "General Conditions of the Contract for Construction" AIA Document A251, 2007 Edition. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, or Clause shall remain in effect.

ARTICLE 1, GENERAL PROVISIONS

Add the following Subparagraph to Paragraph 1:

1.2.4 Where reference is made to specifications of manufacturers, trade associations or the like, such is understood to be made a part of this Specification to have the same effect as if fully reproduced herein. Approval or equal, acceptable, and words of similar definition are understood to mean in the judgment of Technology Designer.

Add the following Subparagraph to Paragraph 1:

1.2.5 Computed dimensions take precedence over scaled dimensions, large scale details over smaller; should disagreements occur in the drawings, or the Specifications describe a higher quality of work or material, the better quality shall be estimated, unless otherwise directed by the Technology Designer. The Technology Designer shall be notified at once, in writing, of any and all discrepancies.

ARTICLE 3, CONTRACTOR

Add the following Subparagraph to paragraph 3:

3.4.4 After the Contract has been executed, the Owner and the Technology Designer will consider a formal written request for the substitution of products in place of those specified only under the conditions set forth herein.

3.4.5 By making requests for substitutions based on Clause 3.1.3. above, the Contractor:

- (a) represents that he/she has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- (b) represents that he/she will provide the same warranty for the substitution that he/she would for that specified;
- (c) certifies that the cost data presented is complete and includes all related costs under the Contract, but excludes cost under separate contract, and excludes the Technology Designer's redesign costs, and waives all claims for additional costs related to the substitution which subsequently becomes apparent; and
- (d) will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete in all respects.

End of Section 00810

Section 01010 Summary of Work and Schedule

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to Division 1, General Requirements, which are hereby made a part of this Section.

1.02 PROJECT:

- A. Procure, install, integrate and configure a new Wireless Infrastructure system, Network Infrastructure Equipment and all associated Low Voltage Cabling at Chippewa Valley Schools (District Wide). Project also includes removal of existing Cisco equipment for credit and labeling and creating new as-built documentation.
- B. The Project is considered a "Turnkey Solution" as described in the Agreement between the Owner and the Contractor, AIA Document A151, 2007 Edition, as modified.

1.03 E-RATE:

1. *IDENTIFICATION NUMBER - The Vendor's Universal Service Fund (USF) Service Provider Identification Number (SPIN) MUST be included in the Bid Proposal and must be updated for the 2019 funding year. Questions regarding the E-rate Program should be directed to the Schools and Library Division at (888) 203-8100.*
2. *FUNDING YEAR 2019 - This project qualifies for Funding Year 2019 USF funding. Construction may begin as early as April 1, 2019; however, no invoices can be dated prior to July 1, 2019.*
3. *CONDITIONAL UPON USF - The Contract is 100% conditional upon Universal Service Funding. Further, the Owner reserves the unrestricted right to reduce the contract amount by reducing the scope of work and/or components in order to meet budget requirements in the event the level of the USF discount is reduced. Unit pricing, as specified in the Bid Proposal, will be used to control contract adjustments. Any such action will be taken before specific work on a building, or on a project component, has commenced.*
4. *DISCOUNT IMPLEMENTATION - The Owner reserves the unrestricted right to specify the reimbursement filing option for implementing the USF E-rate discounts; Billed Entity Applicant Reimbursement (BEAR) or Service Provider Invoice (SPI).*

1.03 CONTRACT:

- A. A single lump sum bid is being solicited for the work described in this RFP.

1.04 SCHEDULE:

- A. The work will begin with a kick-off meeting approximately March 2019 with total completion expected by late August 2019. All work within this category will be 1st shift.

PARTS 2 & 3 - PRODUCT AND EXECUTION

Refer to Sections 17000, 17100, 17200 and 17570.

End of Section 01010

Section 01050 Coordination

PART 1 - GENERAL

1.01 PRE-JOB MEETING AND COMMENCEMENT OF WORK

- A. A Project "Kick-Off" Meeting will be held after the Project has been awarded, prior to the start of work. This meeting shall include the successful Bidder as Contractor, Owner, and Technology Designer. An agenda will be furnished prior to the meeting.
- B. The Contractor shall begin the work of this Project as early as possible.

1.02 PROGRESS MEETINGS

- A. At regular weekly or other suitable intervals at the request of the Owner's Technology Designer, a meeting will be held at the Project site to determine the progress of the work as it relates to the schedule initially agreed upon between the Owner and the Contractor.
- B. The Contractor and Subcontractors for the major trades shall be represented at these meetings by persons having full authority to act for them in regard to all portions of the work.

1.03 JOB COORDINATION AND EXPEDITING

- A. It shall be the full responsibility of the Contractor to coordinate and expedite all phases of the work, regardless of whether the Owner awards separate contracts for any trades, branches or items of work and equipment. All separate Contractors and Subcontractors for all trades shall cooperate fully with this Contractor.
- B. The organization of the Specifications into Divisions, Sections and Parts and the arrangement of the Drawings shall not control the Contractor in dividing the work among Subcontractors or in establishing the extent of work to be performed by any trade.
- C. The Contractor's work day shall avoid conflict with Owner's activities and cause minimal interruptions.
 - 1. Work inside the schools may not start until June 2019 unless specifically arranged with the Owner in advance and in writing.
 - 2. These criteria apply to all school building sites under this Contract and are in addition to schedule coordination with work of any separate Contracts that may be performed concurrently with work of this Contract on any of the buildings concerned.
- D. For information purposes during the time of processing the work, the buildings concerned may be reached by contacting the Technology Designer.

1.04 BUILDING CODES AND LAWS

The Contractor has the responsibility of complying with all applicable building codes and laws pertaining to this Project.

1.05 WORKMANSHIP

All workmen shall be thoroughly experienced in the particular class of work in which they are employed. The Owner reserves the right to demand removal from this Project any member of the Contractor's staff that, in the Owner's opinion, impedes the progress of the Project.

1.06 ASBESTOS IN CONSTRUCTION MATERIALS

Materials and products containing asbestos particles may not be employed in the work of this Contract.

End of Section 01050

Section 01090 Reference Standards

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Quality assurance
- B. Schedule of references

1.02 QUALITY ASSURANCE:

- A. For products or workmanship specified by association, trades, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date for receiving bids.
- C. Obtain copies of standards when required by Contract Documents.
- D. Maintain copy at job site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Technology Designer before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.03 SCHEDULE OF REFERENCE:

AA	Aluminum Association 900 19th Street, N.W. – Suite 300 Washington, DC 20006
AABC	Associated Air Balance Council 1518 K Street N.W. Washington, DC 20005
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. – Suite 249 Washington, DC 20001
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094
ADC	Air Diffusion Council 1901 N. Roselle Rd., Suite 800 Schaumburg, IL 60195
AF&PA	American Forest & Paper Association 1111 19th Street, NW, Suite 800 Washington, DC 20036
AGC	Associated General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201

AI	Asphalt Institute 2696 Research Park Drive Lexington, KY 40511-8480
AIA	American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006-5292
AISC	American Institute of Steel Construction One East Wacker Drive Suite 3100 Chicago, IL 60601-2001
AISI	American Iron and Steel Institute 1140 Connecticut Ave - Suite 705 Washington, DC 20036
AITC	American Institute of Timber Construction 7012 S. Revere Parkway – Suite 140 Englewood, CO 80112
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 25 West 43rd Street, Fourth Floor New York, NY 10036
APA	American Plywood Association Box 11700 Tacoma, WA 98411-0700
ARI	Air Conditioning and Refrigeration Institute 4100 North Fairfax Drive – Suite 200 Arlington, VA 22203
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990
ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, PA 19428-2959
AWI	Architectural Woodwork Institute 46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165
AWPA	American Wood-Preservers' Association

	P.O. Box 5690 Grandbury, TX 76049
AWS	American Welding Society 550 N.W. LeJeune Road Miami, FL 33126
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
BIA	Brick Institute of America 1350 Centennial Park Drive, Suite 301 Reston, VA 20191
BICSI	Building Industry Consulting Service International 8610 Hidden River Parkway Tampa, FL 33637
CDA	Copper Development Association 260 Madison Avenue - 16th Floor New York, NY 10016
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60173-4758
CSSB	Cedar Shake and Shingle Bureau P.O. Box 1178 Sumas, WA 98295-1178
DHI	Door and Hardware Institute 14150 Newbrook Drive, Suite 200 Chantilly, VA 20151
EJCDC	Engineers' Joint Contract Documents Committee American Council of Engineering Companies 1015 15th Street, N.W., 8th Floor Washington, DC 20005
EJMA	Expansion Joint Manufacturers Association 25 North Broadway Tarrytown, NY 10591
FGMA	Flat Glass Marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
FM	Factory Mutual System Standards Laboratories Department 1151 Boston-Providence Turnpike

	Norwood, MA 02062
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) 1800 F Street, NW Washington, DC 20405
GA	Gypsum Association 810 First Street N.W. #510 Washington, DC 20002-4268
ICC	International Code Council 5203 Leesburg Pike, Suite 600 Falls Church, VA 22041
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005
MBMA	Metal Building Manufacturer's Association 1300 Sumner Avenue Cleveland, OH 44115-2351
MFMA	Maple Flooring Manufacturers Association 60 Revere Drive Northbrook, IL 60062
MIL	Military Specification Naval Publications and Forms Center 700 Robbins Avenue, Building 4, Section D Philadelphia, PA 19111-5093
ML/SFA	Metal Lath/Steel Framing Association Division of National Association of Architectural Metal Manufacturers (NAAMM MLIFSA) 600 South Federal Street, Suite 400 Chicago, IL 60605
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Road, Building C, Suite 312 Glen Ellyn, IL 60137
NCMA	National Concrete Masonry Association 2302 Horse Pen Road Herndon, VA 22071-3499
NEBB	National Environmental Balancing Bureau 8575 Grovement Circle Gaithersburg, MD 20877

NEMA	National Electrical Manufacturers' Association 1300 North 17th Street, Suite 1752 Rosslyn, VA 22209
NFPA	National Fire Protection Association #1 Battery March Park Quincy, MA 02269-9101
NSWMA	National Solid Wastes Management Association 4301 Connecticut Avenue, N.W., Suite 300 Washington, DC 20008-2304
NTMA	National Terrazzo and Mosaic Association 201 North Maple, Suite 208 Purcellville, VA 20132
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PCI	Precast Prestressed Concrete Institute 175 W. Jackson Blvd.-Suite 1859 Chicago, IL 60604-9773
PS	Product Standard U.S. Department of Commerce 1401 Constitution Avenue, N.W. Washington, DC 20230
RIS	Redwood Inspection Service Division of California Redwood Association) 405 Enfrente Drive Novato, CA 94949
SDI	Steel Deck Institute P.O. Box 25 Fox River Grove, IL 60021
SDI	Steel Door Institute c/o Wherry Associates 30200 Detroit Road Cleveland, OH 44145-1967
SIGMA	Sealed Insulating Glass Manufacturers Association 401 N. Michigan Avenue Chicago, IL 60611
SJI	Steel Joist Institute 3127 10th Avenue North Myrtle Beach, SC 29577-6760
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 4201 Lafayette Center Drive Chantilly, VA 20151-1209

SSPC	Society for Protective Coatings 40 24th Street, 6th Floor Pittsburgh, PA 15222-4656
TCNA	Tile Council of North America, Inc. 100 Clemson Research Blvd. Anderson, SC 29625
TPI	Turfgrass Producers International 2 East Main Street East Dundee, IL 60118
UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062-2096
WCLIB	West Coast Lumber Inspection Bureau 6980 S.W. Varns Road Tigard, OR 97223
WDMA	Window & Door Manufacturers Associations 1400 W. Touhy Avenue, Suite 470 Des Plaines, IL 60018
WWPA	Western Wood Products Association 522 SW Fifth Avenue, Suite 500 Portland, OR 97204-2122

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

End of Section 01090

Section 01100 Alternates

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to Division 1, General Requirements, which are hereby made a part of this Section.

1.02 DESCRIPTION OF WORK:

- A. This section identifies each Alternate by number and describes the basic changes to be incorporated into the work, only when the Alternate is made a part of the work by specific provisions in the Owner-Contractor Agreement.
- B. Alternate schedule below is part of the Bidding Documents and will be considered in selection of the Contractor(s) and awarding contracts.
- C. Unless otherwise provided, Owner will accept or reject alternates within sixty (60) days of date of Contract. Owner reserves the right to reject any or all alternates.

1.03 ALTERNATES:

- A. General:
 - 1. The descriptions for each alternate listed in the schedule are primarily scope definitions, and do not necessarily detail the full range of materials and processes needed to complete the work as required.
 - 2. Refer to applicable specification sections (Division 2 through 17), and to applicable drawings, for specific requirements of the work, regardless of whether references are so noted in description of each alternative.
 - 3. Coordinate pertinent related work and modify surrounding work as required to properly integrate the work under each Alternate, and to provide the complete construction required by Contract Documents.
 - 4. Referenced sections of specifications stipulate pertinent requirements for products and methods to achieve the work stipulated under each Alternate.

PART 2 – PRODUCTS

Refer to Section 00311 – Bid Proposal Form for the required Alternates.

End of Section 01100

Section 01340 Shop Drawings, Product Data and Samples

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to other Sections of Division 1, General Requirements, which are hereby made a part of this Section.

1.02 DESCRIPTION:

- A. Submit shop drawings, product data and samples as required by the RFP. Individual submittal requirements are specified in applicable sections for each unit of work. Receive, check and coordinate all submittals of contractors as provided herein.
- B. Definitions:
 - 1. Shop Drawings are drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or any subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
 - 2. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.
 - 3. Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the work will be judged.

1.03 SUBMITTAL REQUIREMENTS:

- A. Coordinate preparation and processing of submittals with performance of the work so that work will not be delayed by submittals. Coordinate and sequence different categories of submittals for the same work, and for interfacing units of work, so that one will not be delayed for coordination with another. No extension of time will be allowed because of failure to properly coordinate and sequence submittals.
- B. Submit one reproduction transparency and the two (2) prints of each shop drawing, including fabrication, erection, layout and setting drawings and such other drawings as required under various sections of the Specifications, until final acceptance is obtained. Prepare drawings legible, drawing plans, elevations, sections and details in scales required and on drawing sheets not larger than 30" x 42" or smaller than 24" x 30". Submit copies of manufacturer's descriptive data including catalog sheets for materials, equipment and fixtures, showing dimensions, performance characteristics and capacities, wiring diagrams and controls, schedules, and other pertinent information as required. Where printed materials describe more than one product or model, clearly identify which is to be furnished.
- C. Shop drawings, product data and samples shall be dated including Contractor and Subcontractor dates of submittal and approval, and marked to show the names of the Project, Technology Designer, Contractor, origination Subcontractor, manufacturer or supplier, and separate detailer if pertinent. Shop drawings shall completely identify Specification sections and locations at which materials or equipment are to be installed. Reproductions of Contract Drawings are acceptable as Shop Drawings only when specifically authorized in writing by the Technology Designer.
- D. Submission of shop drawings, product data and samples shall be accompanied by a copy of a transmittal letter containing Project name, Contractor's name, number of drawings, and samples, titles and other pertinent data. Transmittal shall bear signature of the Contractor as evidence he checked same and found them in conformance with the RFP.
- E. The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the RFP.

- F. By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he/she has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the RFP.
- G. The Contractor shall not be relieved of responsibility for the deviation from the requirements of the RFP by the Technology Designer acceptance of Shop Drawings, Product Data or Samples under Paragraph 3.12 of the General Conditions, unless the Contractor has specifically informed the Technology Designer in writing of such deviation at the time of sub deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Technology Designer's acceptance thereof.
- H. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Technology Designer on previous submittals.
- I. No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been accepted by the Technology Designer as provided in Paragraph 3.12 of the General Conditions. All such portions of the Work shall be in accordance with approved submittals.
- J. Technology Designer will review Shop Drawings, Product Data and Samples as provided in Paragraph 3.12 of the General Conditions. The Technology Designer will mark each such submittal as follows:
 - 1. Accepted - Where no comment made.
 - 2. Accepted as Noted - Where comments indicated on submittal qualifying, modifying, or otherwise changing it; however, submittal can be used for ordering, fabrication and erection at Contractor's own risk until revised submittals have been made, reviewed and stamped acceptable.
 - 3. Not Accepted - Submittal not in conformance; revise and resubmit. Acceptance does not authorize any changes in the RFP unless specifically stated in a separate letter or change order.
- K. Contractor is responsible for obtaining and distributing required prints of shop drawings to its subcontractors and material suppliers; after as well as before final approval. Prints of reviewed shop drawings shall be made from transparencies which carry the Technology Designers appropriate approval.
- L. Obtain copies of all shop drawings, product data and samples submitted to date and accepted from other contractors.

End of Section 01340

Section 01400 Quality Control

PART 1 - GENERAL

1.01 Testing

The Owner will pay for services of independent testing laboratories recommended by the Technology Designer to be engaged in accordance with the Specifications for any specific item that the Owner deems required.

1.02 Authorized Material Manufacturer's Field Representative

The Owner shall have the option of authorizing a Material Manufacturer's Field Representative to periodically examine the work in progress, as well as upon completion, in order to assist in ascertaining the extent to which materials and procedures conform to the requirements of these Specifications and to the published instructions of that Material Manufacturer. Such Authorized Material Manufacturer's Representative will be responsible for duties which may include the following:

- A. Rendering any inspection services to the Technology Designer;
- B. Keeping the Technology Designer informed after periodic inspections as to the progress and quality of the work observed;
- C. Calling the attention of the Contractor to those observed matters which he considers to be in violation of the Contract requirements;
- D. Reporting to the Technology Designer any failure or refusal of the Contractor to correct unacceptable practices called to his/her attention; and
- E. Certifying, after completion of the work and based on his/her tests and/or observations, his/her opinion as to the extent to which the Contractor has complied with these Specifications and the published instructions of the Material Manufacturer. Release of Final Payment may be subject to the Owner's receipt of this/her certification.

End of Section 01400

Section 01700 Project Closeout

PART 1 - GENERAL

1.01 CLEANING

- A. Prior to Final Acceptance of the entire work, and at such times as directed by the Technology Designer, the Contractor shall thoroughly clean all surfaces of the building relating to the Work of the Contract. Cleaning of all surfaces in areas worked is to be performed daily as the buildings will be in use during the installation period.
- B. The Contractor shall be held responsible for all damaged materials, which shall be replaced at completion at no cost to the Owner. Glass, tile and aluminum scratched through carelessness or improper cleaning shall be considered damaged and shall be replaced.

1.02 INSTALLATION AND MAINTENANCE INSTRUCTIONS

- A. The Contractor shall present to the Technology Designer two (2) duplicate sets of the manufacturer's installation and maintenance instructions for each and every item furnished or erected.
- B. In each of these, the correct model number and the data for the model number shall be checked off in ink where the literature covers more than one model number.
- C. Additional requirements will be required and specified in the specifications section of this document.

1.03 ADJUSTMENTS

- A. The complete installation consisting of the several parts and systems and all equipment installed according to the requirements of the Specifications and as shown on the Drawings shall be adjusted as required and ready in all respects for use by the Owner at the time of Final Acceptance of the Work.

End of Section 01700

Section 01800 Guarantee/Warranty

PART 1 - GENERAL

1.01 GUARANTEE PERIOD

The Contractor shall and hereby does guarantee and warrant that all work for this new Network Infrastructure Enhancements under this Contract, shall be free from defects or faulty labor and/or materials for a period of **five (5) years** from the date of Final Acceptance of same, except when longer periods are herein specified, which develop within any guarantee periods. The Warranty shall include all labor and materials to correct any malfunction for the entire warranty period. Equipment shall be considered limited lifetime warranty as defined by the manufacturer.

1.02 FINAL PAYMENT

Final payment is contingent upon the Technology Designer's receipt of such guarantees and/or warranties from the Vendor.

End of Section 01800

Section 17000 General Technology Requirements

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to other Sections of Division 1, General Requirements, which are hereby made a part of this Section.
- B. Related Specification Sections:
 - 1. 17100 – Low Voltage Cable Infrastructure
 - 2. 17200 – Network Infrastructure Equipment
 - 3. 17570 – Wireless Local Area Network (WLAN)

1.02 DEFINITIONS

- A. ADA: Americans With Disabilities Act
- B. AIA: American Institute of Architects
- C. B/W: Black and White
- D. DAS: Direct-Attached Storage
- E. FBO: Furnished by Other
- F. FCC: Federal Communication Commission
- G. FF: Fixed Focus
- H. IR: Infrared
- I. LAN: Local Area Network
- J. MPEG: Moving Picture Experts Group
- K. NAS: Network-Attached Storage
- L. NTSC: National Television System Committee
- M. PoE: Power over Ethernet
- N. PTZ: Pan/Tilt/Zoom
- O. RF: Radio Frequency
- P. SAN: Storage Area Network
- Q. TR: Telecommunications Room
- R. UTP: Unshielded Twisted Pair
- S. VMS: Video Management System
- T. WAN: Wide Area Network

1.03 SUMMARY

- A. Procure, install, integrate and configure a new Wireless Infrastructure system, Network Infrastructure Equipment and all associated Low Voltage Cabling at Chippewa Valley Schools (District Wide). Project also includes removal of existing Cisco equipment for credit and labeling and creating new as-built documentation. The following buildings are part of this project:
 - 1. **Chippewa Valley Schools Administration Building** - 19120 Cass Ave., Clinton Twp., MI 48038
 - 2. **Community Education Center** - 19230 Cass Ave., Clinton Twp., MI 48038
 - 3. **Maintenance Department** - 42278 Romeo Plank Road, Clinton Twp., MI 48038
 - 4. **Cherokee Elementary** - 42900 Rivergate Dr., Clinton Twp., MI 48038
 - 5. **Cheyenne Elementary** - 47600 Heydenreich, Macomb, MI 48044
 - 6. **Clinton Valley Elementary** - 1260 Mulberry, Mt. Clemens, MI 48043
 - 7. **Erie Elementary** - 42276 Romeo Plank Road, MI 48038
 - 8. **Fox Elementary** - 17500 Millstone Drive, Macomb, MI 48044

9. **Huron Elementary** - 15800 Terra Bella, Clinton Twp., MI 48038
 10. **Miami Elementary** - 41290 Kentvale, Clinton Twp., MI 48038
 11. **Mohawk Elementary** - 48101 Romeo Plank Road, Macomb, 48044
 12. **Ojibwa Elementary** - 46950 Heydenreich, Macomb, MI 48044
 13. **Ottawa Elementary** - 18601 Millar, Clinton Twp., MI 48036
 14. **Sequoyah Elementary** - 18500 24 Mile Road, Macomb, MI 48044
 15. **Shawnee Elementary** - 21555 Vesper, Macomb, MI 48044
 16. **Little Turtle Preschool** - 50375 Card Rd., Macomb, MI 48044
 17. **Iroquois Middle School** - 48301 Romeo Plank Road, Macomb, MI 48044
 18. **Algonquin Middle School** - 19150 Briarwood Lane, Clinton Twp., MI 48036
 19. **Seneca Middle School** - 47200 Heydenreich, Macomb, MI 48044
 20. **Wyandot Middle School** - 39490 Garfield, Clinton Twp., MI 48038
 21. **Chippewa Valley High School** - 18300 Nineteen Mile Road, Clinton Township, MI 48038
 22. **Chippewa Valley 9th Grade Center** - 42755 Romeo Plank Road, Clinton Township, MI 48038
 23. **Dakota High School** - 21051 Twenty-One Mile Road, Macomb, MI 48044
 24. **Dakota 9th Grade Center** - 21055 Twenty-One Mile Road, Macomb, MI 48044
 25. **Mohegan High School** - 19230 Cass Ave., Clinton Twp., MI 48038
- A. Technology work provided by others.
1. None.

1.04 GENERAL REQUIREMENTS

- A. Contractors are encouraged to visit the job site(s), examine and field verify the conditions at each site where the installation(s) will take place prior to submitting a Bid Proposal.
- B. The Contractor is required to provide all services necessary to design, engineer, procure, construct and verify the Project as specified within the bid package. These services shall conform to manufacturer specifications and applicable industry standards.
- C. All material(s) and equipment shall be furnished with all accessories necessary for a complete system.
- D. All material(s) and equipment shall be new and standard manufactured products.
- E. Any proposed material(s) and equipment with a known end of manufacture date shall be called-out within the Contractor's Bid Proposal.
- F. Contractor(s) is/are to provide all applicable permits, licenses, inspections, approvals, and fees required for a complete solution as part of their bid proposal.
- G. Contractor(s) shall utilize plenum rated cable and ties throughout this Project.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. The Contractor's base Bid Proposal shall utilize products and materials from the manufacturers listed in the applicable specification sections. In addition, the Contractor may include equipment and design variations to the base Bid Proposal as a voluntary alternate. Voluntary alternates are to be submitted to the Technology Designer at least two weeks prior to the Bid Proposal Due Date.

PART 3 – EXECUTION

3.01 PROJECT MANAGER/ENGINEER

- A. The awarded Contractor will provide a Project manager/engineer who will act as a single point of

- contact for all activities regarding this Project.
- B. The Project manager/engineer will be required to make on-site decisions regarding the scope of the work and any changes required by the work.
 - C. The Project manager/engineer must be on the job at any time work is being performed or workers are present.
 - D. The Project manager/engineer will be totally responsible for all aspects of the work and shall have the authority to make immediate decisions regarding implementation or changes to the work.

3.02 EXAMINATION

- A. The Contractor(s) shall choose the appropriate mounting method(s), products, and materials for each location based on manufacturer's specifications and requirements based on building structure, type of wall, etc.

3.03 INSTALLATION

- A. Perform all work in a neat and workmanlike manner in accordance with the latest edition of the National Electrical Code, the ANSI/NECA/BICSI-568-2005 Standard for Installing Commercial Building Telecommunications Cabling and Equipment and all ANSI/TIA/EIA standards documents relevant to this Project.
- B. Federal, state, and local codes, rules, regulations, and ordinances governing the work, are as fully part of the specifications as if herein repeated or hereto attached. If the Contractor should note items in the Drawings or the Specifications, construction of which would be code violations, promptly call them to the attention of the Technology Designer in writing. Where the requirements of other sections of the Specifications are more stringent than applicable codes, rules, regulations, and ordinances, the Specifications shall apply.
- C. Protect equipment during transit, storage, and handling to prevent damage, theft, soiling, and misalignment.
- D. Coordinate with the Technology Designer for secure storage of equipment and materials. The Owner is not required to provide a secure storage area.
- E. Do not store equipment where conditions fall outside manufacturer's recommendations for environmental conditions.
- F. Do not install damaged equipment; remove from site and replace damaged equipment with new equipment.

3.04 RETROFIT/CUTOVER/DEMOLITION/EQUIPMENT REMOVAL

- A. Furnish equipment, materials, labor and services, and perform operations required to retrofit/cutover existing systems. Removals shown are general indications and may not indicate full extent of removals which may be required to complete the scope of work.
- B. Furnish equipment, materials, labor and services, and performing operations required to enable continued functioning of existing system until cutover to new system.
- C. Remove wiring, punch blocks, cabinets, outlets, raceways, and equipment not required for new system.
- D. Provide removals, relocations, and alterations to existing systems, equipment, and materials. Perform the scope of work in neat and workmanlike manner in accordance with the latest edition of the National Electrical Code, the ANSI/NECA/BICSI-568-2005 Standard for Installing Commercial Building Telecommunications Cabling, the BICSI Information Transport Systems Installation Manual, and all ANSI/TIA/EIA standards documents relevant to this Project.
- E. Existing equipment or material shall not be reused without specific approval of the Owner except as noted.
- F. Equipment and materials to be removed and not desired by the Owner shall be removed from District promptly.
- G. All equipment to be removed must be disposed of according to EPA and DOD standards. All owner tags are to be removed and the Contractor shall provide certification of disposal per

EPA/DOD standards.

- H. All equipment removed shall be recorded by Type, Manufacturer, Model, Asset Tag Number and Serial Number.
- I. Equipment and material to be removed and that is desired by the Owner shall be moved to an on-site storage location as directed by the Owner.

3.05 REMOVAL AND REPLACEMENT OF EXISTING CEILING TILES

- A. Carefully remove existing ceilings as required to perform the work. Store removed tiles in an area designated by the Owner. Modify and augment existing suspension systems as necessary. Restore ceiling systems to their original finish on a daily basis.
- B. Repair any damage to ceilings due to modifications, removal, and replacement of same. Replace damaged ceiling tiles, including tiles with holes or openings left as a result of demolition, with materials of like kind.

3.06 CUTTING AND PATCHING

- A. Provide openings, cutting, coring, and patching of openings in existing building construction as required. Patching includes openings and voids left in existing construction as a result of demolition.
- B. The Work shall include necessary assemblies and materials to maintain required fire ratings.
- C. Perform cutting as to not impair structural stability of building construction and systems. Do not drill holes or weld attachments to beams and other structural members without prior written approval from the Owner.
- D. The Work shall be done by craftspersons skilled in the particular trades affected.
- E. Patching materials shall match existing materials in type and quality. Patching shall be done in a manner to match appearance of adjacent surfaces.

3.07 CLEANING

- A. Cleaning shall occur on a daily basis in order to maintain a clean, orderly job site.
- B. Cleaning shall be performed to the satisfaction of the Owner.
- C. Unless otherwise indicated, clean shall mean free of dust, dirt, mud, debris, oil, grease, residues, and contamination. Acceptability shall be determined by sight, touch, and wiping with a clean soft cloth and suitable cleaning agent.

3.08 SLEEVES

- A. If not provided by the electrical Contractor, the Contractor is required to provide their own sleeves (including nylon bushings) for new conduit and cable penetrations of building construction.
- B. Use electrical metallic tubing sleeves for penetrations through exterior masonry/concrete walls and foundations, concrete floor slabs on grade and above grade, and concrete-filled decks
- C. Use only fire-rated listed assemblies for the type of sleeve being installed through CMU walls or gypsum walls for communications penetrations. Sleeve type shall be electrical metallic tubing.
- D. Secure sleeves firmly in place using filling and patching materials that match with surrounding construction.
- E. In floor penetrations, extend sleeve 4" above finished floor unless noted otherwise. In wall penetrations, cut sleeves flush with wall surface and use metal escutcheon plates in finished interior areas.
- F. Seal voids between sleeves and building construction with joint sealants. Make allowances for and coordinate the Work with installation of firestopping, conduit insulation, and waterproofing, as applicable.

3.09 PENETRATIONS OF BUILDING SURFACES

- A. If not provided by the electrical Contractor, the Contractor is required to provide their own building penetrations.
- B. Provide through-penetration firestop systems for penetrations through fire-rated walls, floors, and other partitions of building construction.
- C. Above Grade Level or Non-Waterproof Areas
 - 1. Seal each annular space between conduits or cable and building surfaces. Pack space with Oakum, other rope packing, or backer rod materials and cover with fire-resistant sealant or other protection materials.
 - 2. Provide sleeves as specified in "Sleeves" section above for conduit and cable penetrations. Seal each space between conduit or cable and sleeve.
- D. Waterproof Areas (Above and Below Grade)
 - 1. In new and existing construction for penetrations through concrete below grade, ground water level or in other waterproof areas, provide through-wall and floor seals having galvanized fittings, sealing assemblies, and sleeves as specified.
 - 2. In existing construction when core bore drilled openings are used for conduit penetrations below grade, ground water level, or in other waterproof areas, provide sealing.

3.10 CONTINUITY OF SERVICES

- A. Take no action that will interfere with, or interrupt, existing building services unless previous arrangements have been made with the Technology Designer. Arrange the work to minimize shutdown time.
- B. Owner's personnel will perform shutdown of operating systems. The Contractor shall give five (5) days' advance notice for systems shutdown.

3.11 PAINTING

- A. Touch up marred and bared surfaces of primed, galvanized, and finish painted equipment, materials, and accessories installed.
- B. Restore patched surfaces as close to the original condition and finish as reasonably possible. Where patching occurs in smooth painted surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received two coats of primer and two coats of finished paint.

3.12 COMPLIANCE WITH LAWS AND REGULATIONS

- A. The awarded Contractor's performance shall comply with all applicable federal, state, and local laws, rules and regulations.
- B. The awarded Contractor shall give required notices, shall procure necessary governmental licenses and inspection, and shall pay all fees and charges in connection to the required notices, licenses, and inspections.
- C. Federal Communications Commission
 - 1. Any equipment requiring FCC registration or approval shall have received such approval and shall be appropriately identified.
- D. Codes, Standards, and Ordinances
 - 1. All work performed on this Project will be installed in accordance, but not limited to, with the following guidelines:
 - a. The current edition of the National Electrical Code® 568-2005 Edition.
 - b. The ANSI/NECA/BICSI 568-2005 Standard for Installing Commercial Building Telecommunications Cabling.
 - c. The current edition of the BICSI Telecommunications Distribution Methods Manual.
 - d. The current edition of the BICSI Cabling Installation Manual.
 - e. The latest issue of the ANSI/TIA/EIA Standards as published by Global Engineering Documents as ANSI/TIA/EIA Telecommunications Building Wiring Standards.
 - f. Infocomm/BICSI – AV Design Reference Manual.
 - g. All local codes and ordinances.

3.13 SAFETY:

- A. All Contractors shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the work.
- B. The Contractor shall at all times comply with the regulations set forth by federal, state, and local laws, rules, and regulations concerning "OSHA" and all applicable state labor laws, regulations, and standards.

End of Section 17000

Section 17100 Low Voltage Cable Infrastructure

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to other Sections of Division 1, General Requirements, which are hereby made a part of this Section.
- B. Related Specification Sections:
 - 1. 17000 – General Technology Requirements
 - 2. 17200 – Network Infrastructure Equipment
 - 3. 17570 – Wireless Local Area Network (WLAN)

1.02 PROJECT SUMMARY

- A. The following buildings are part of this project:
 - 1. **Chippewa Valley Schools Administration Building** - 19120 Cass Ave., Clinton Twp., MI 48038
 - 2. **Community Education Center** - 19230 Cass Ave., Clinton Twp., MI 48038
 - 3. **Maintenance Department** - 42278 Romeo Plank Road, Clinton Twp., MI 48038
 - 4. **Cherokee Elementary** - 42900 Rivergate Dr., Clinton Twp., MI 48038
 - 5. **Cheyenne Elementary** - 47600 Heydenreich, Macomb, MI 48044
 - 6. **Clinton Valley Elementary** - 1260 Mulberry, Mt. Clemens, MI 48043
 - 7. **Erie Elementary** - 42276 Romeo Plank Road, MI 48038
 - 8. **Fox Elementary** - 17500 Millstone Drive, Macomb, MI 48044
 - 9. **Huron Elementary** - 15800 Terra Bella, Clinton Twp., MI 48038
 - 10. **Miami Elementary** - 41290 Kentvale, Clinton Twp., MI 48038
 - 11. **Mohawk Elementary** - 48101 Romeo Plank Road, Macomb, 48044
 - 12. **Ojibwa Elementary** - 46950 Heydenreich, Macomb, MI 48044
 - 13. **Ottawa Elementary** - 18601 Millar, Clinton Twp., MI 48036
 - 14. **Sequoyah Elementary** - 18500 24 Mile Road, Macomb, MI 48044
 - 15. **Shawnee Elementary** - 21555 Vesper, Macomb, MI 48044
 - 16. **Little Turtle Preschool** - 50375 Card Rd., Macomb, MI 48044
 - 17. **Iroquois Middle School** - 48301 Romeo Plank Road, Macomb, MI 48044
 - 18. **Algonquin Middle School** - 19150 Briarwood Lane, Clinton Twp., MI 48036
 - 19. **Seneca Middle School** - 47200 Heydenreich, Macomb, MI 48044
 - 20. **Wyandot Middle School** - 39490 Garfield, Clinton Twp., MI 48038
 - 21. **Chippewa Valley High School** - 18300 Nineteen Mile Road, Clinton Township, MI 48038
 - 22. **Chippewa Valley 9th Grade Center** - 42755 Romeo Plank Road, Clinton Township, MI 48038
 - 23. **Dakota High School** - 21051 Twenty-One Mile Road, Macomb, MI 48044
 - 24. **Dakota 9th Grade Center** - 21055 Twenty-One Mile Road, Macomb, MI 48044
 - 25. **Mohegan High School** - 19230 Cass Ave., Clinton Twp., MI 48038
- B. The Contractor is responsible for all labor, products, and materials necessary to install a complete plenum rated structured cabling system required for the wireless network.
- C. Electrical systems, if required, will be provided by others.

1.03 SUBMITTALS

- A. Manufacturer's technical data, specification sheets, maintenance manuals, and material safety data sheets (as outlined in Section 01340) must be provided within the Contractor's Bid Proposal

- for the products listed below:
1. Wire and Cable
 2. Outlets, Termination Jacks, Faceplates, and Connectors
 3. Terminal Blocks and Patch Panels
 4. Enclosures, Racks and Equipment Housings
 5. Firestopping Material
- B. Bill of materials, noting long lead time items.
- C. Project schedule
1. Contractors shall provide a detailed project schedule within their Bid Proposal, including all major work components that materially affect any other work within the project and projected building completion timeframes.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. The following manufacturers are acceptable for the required equipment within this section.
1. Plenum Rated Cable Plant (Category 6, 4 pair, UTP Cable, Color: Green)
 - a. Commscope
 2. Patch Panels
 - a. Hubbell NEXTSPEED® Universal Patch Panels, Category 6 (24 or 48-port as required per wiring closet)
 3. Termination Jacks
 - a. Hubbell XCELERATOR™ Jacks, Category 6
 4. Patch Cables
 - a. Hubbell NEXTSPEED® Universal Patch Cables, Category 6 (Color: Green), or
 - b. CommScope Media 6 (UNC6-VL-1F) (Color: Green)
 5. Faceplates
 - a. Contractor shall furnish and install blanks as required in each faceplate where ports are unused.
- B. The data cable shall contain numbers on the jacket illustrating the footage marks, at 10' intervals.
- C. All UTP cable, termination jacks, patch panels, and patch cords must be supplied from one manufacturer.

2.02 FIRESTOPPING MATERIALS

- A. Materials may be in the form of caulk, putty, strip, sheet, or devices that shall be specifically designed to fill holes, spaces, and voids at communications penetrations.
- B. In addition, firestopping materials shall also provide adhesion to substrates and maintain fire and smoke seal under normal expected movements of substrates, conduits, and cables.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. The awarded Contractor must perform a walkthrough of the job sites prior to beginning installation. The walkthrough will be completed in conjunction with the Owner and Technology Designer.

3.02 INSTALLATION

- A. All Category 6 cabling must meet the ANSI/TIA/EIA T568B cabling specifications. All layouts and preparation of shop drawings and installation supervision shall be performed by a certified cable installer of the proposed solution.
- B. All Category 6 cabling must be continuous from the telecommunication room to the end location. Any splices in data cabling are strictly prohibited.
- C. The Contractor shall provide all necessary galvanized bridle rings and/or J-hooks. The bridle rings and J-hooks shall be connected to the building structure. Bridle rings and J-hooks should be placed no farther than four (4) feet apart.
- D. Category 6 cabling shall be installed above the ceiling. The data cable must be installed independently from the ceiling grid and/or other support systems.
- E. The Category 6 cable shall not be installed with a bend radius greater than the manufacturer's specifications.
- F. The Contractor shall ensure that data cables are not kinked, bent, overloaded, crushed, etc.
- G. Data cables must be kept 5", at a minimum, from power lines and fluorescent lights.
- H. The Contractor shall provide a 15' service loop at the end of each data cable.
- I. Each data and voice cable shall be labeled with the following information: telecommunication room, patch panel, and port number. For example: IDF3-B-12 would reference telecommunication room 3, patch panel B, and port number 12.
- J. Patch panels shall be labeled sequentially.
- K. The awarded Contractor is required to supply and install 1' Category 6 patch cables from the patch panel to the network switch.
- L. The awarded Contractor is to provide and install cable tray or ladder rack.

3.03 PROJECT DOCUMENTATION

- A. Submit three (3) copies of the following required items within one (1) month of the conclusion of the project:
 - 1. Approved shop drawings and submittals.
 - 2. Completed field installation drawings (in hard copy and electronic). These drawings should illustrate cable routes from telecommunication room to each location (as-built). In addition, each location shall identify the telecommunication room, patch panel, and port number. For example: IDF3-B-12 would reference telecommunication room 3, patch panel B, and port number 12.
 - 3. The awarded Contractor is responsible for updating the Owner's current set of as-built drawings. This includes the updates of Visio drawings for each cabinet, update of the CAD as-built drawings with cable pathways, and updating the spreadsheet indicating the information below.
 - 4. Electronic spreadsheet detailing the following information: location, telecommunication closet, data/voice panel #, data/voice port #, switch stack # ID, switch IP, and switch port #.
 - 5. Any system manuals that are provided by the manufacturer.
 - 6. Warranty documents for products listed within this section.
 - 7. Cable certification test results (in hard copy and electronic).

3.04 WARRANTY

- A. Unless otherwise specified, unconditionally guarantee in writing the materials, equipment, and workmanship for a period of not less than twenty (20) years from date of Final Acceptance by the Owner. The Owner shall deem acceptance as beneficial use.
- B. Transfer manufacturer's warranties to the Owner in addition to the General System Guarantee. Submit these warranties on each item in list form with shop drawings. Detail specific parts within equipment that are subject to separate conditional warranty. Warranty proprietary equipment and systems involved in this contract during the guarantee period. Final payment shall not relieve the Contractor of these obligations.

End of Section 17100

Section 17200 Network Infrastructure Equipment

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to other Sections of Division 1, General Requirements, which are hereby made a part of this Section.
- B. Related Specification Sections:
 - 1. 17000 - General Technology Requirements
 - 2. 17100 - Low Voltage Cable Infrastructure
 - 3. 17570 – Wireless Local Area Network (WLAN)

1.02 PROJECT SUMMARY

- A. The following buildings are part of this project:
 - 1. **Chippewa Valley Schools Administration Building** - 19120 Cass Ave., Clinton Twp., MI 48038
 - 2. **Community Education Center** - 19230 Cass Ave., Clinton Twp., MI 48038
 - 3. **Maintenance Department** - 42278 Romeo Plank Road, Clinton Twp., MI 48038
 - 4. **Cherokee Elementary** - 42900 Rivergate Dr., Clinton Twp., MI 48038
 - 5. **Cheyenne Elementary** - 47600 Heydenreich, Macomb, MI 48044
 - 6. **Clinton Valley Elementary** - 1260 Mulberry, Mt. Clemens, MI 48043
 - 7. **Erie Elementary** - 42276 Romeo Plank Road, MI 48038
 - 8. **Fox Elementary** - 17500 Millstone Drive, Macomb, MI 48044
 - 9. **Huron Elementary** - 15800 Terra Bella, Clinton Twp., MI 48038
 - 10. **Miami Elementary** - 41290 Kentvale, Clinton Twp., MI 48038
 - 11. **Mohawk Elementary** - 48101 Romeo Plank Road, Macomb, MI 48044
 - 12. **Ojibwa Elementary** - 46950 Heydenreich, Macomb, MI 48044
 - 13. **Ottawa Elementary** - 18601 Millar, Clinton Twp., MI 48036
 - 14. **Sequoyah Elementary** - 18500 24 Mile Road, Macomb, MI 48044
 - 15. **Shawnee Elementary** - 21555 Vesper, Macomb, MI 48044
 - 16. **Little Turtle Preschool** - 50375 Card Rd., Macomb, MI 48044
 - 17. **Iroquois Middle School** - 48301 Romeo Plank Road, Macomb, MI 48044
 - 18. **Algonquin Middle School** - 19150 Briarwood Lane, Clinton Twp., MI 48036
 - 19. **Seneca Middle School** - 47200 Heydenreich, Macomb, MI 48044
 - 20. **Wyandot Middle School** - 39490 Garfield, Clinton Twp., MI 48038
 - 21. **Chippewa Valley High School** - 18300 Nineteen Mile Road, Clinton Township, MI 48038
 - 22. **Chippewa Valley 9th Grade Center** - 42755 Romeo Plank Road, Clinton Township, MI 48038
 - 23. **Dakota High School** - 21051 Twenty-One Mile Road, Macomb, MI 48044
 - 24. **Dakota 9th Grade Center** - 21055 Twenty-One Mile Road, Macomb, MI 48044
 - 25. **Mohegan High School** - 19230 Cass Ave., Clinton Twp., MI 48038
- B. Proposed “Turnkey” Solution
 - 1. Procure, install, integrate and configure a new Network Infrastructure Equipment included within this section.
 - 2. All cabling and patch cords within the IT closets will be provided by the awarded vendor to complete the entire system. It is also the intent that the vendor provides all the correct cabling to enable stacking each closet for both IP and Power (PoE) purposes.
 - 3. Additional power, if required, will be provided by others.
 - 4. Placement of equipment will be verified at a post-award walk-through.

- C. Existing Environment
 - 1. It is expected that the awarded Contractor will remove all existing equipment being replaced and provide a credit, if applicable, as part of the base bid to this project.
- D. Work Hours
 - 1. Work within the buildings is expected to be performed during the Owner's regular business hours, Monday thru Friday. Any additional work hours desired and-or needed must be coordinated with the Technology Designer.

1.03 SUBMITTALS

- B. Manufacturer's technical data, specification sheets, maintenance manuals, and material safety data sheets (as outlined in Section 01340) must be provided within the contractor's bid proposal for the products specified herewith.
- C. Bill of materials, noting long lead time items.
- D. Project schedule
 - 1. Contractors shall provide a detailed project schedule within their Bid Proposal, including all major work components that materially affect any other work within the project and projected building completion dates. This project is expected to begin early June 2019 with completion in August 2019.

PART 2 – PRODUCTS

2.01 NETWORK INFRASTRUCTURE EQUIPMENT:

- A. THE FOLLOWING CISCO EQUIPMENT, OR APPROVED EQUIVALENT, IS REQUIRED FOR THIS PROJECT:

Part Number	Description	Qty
<u>TO BE ISSUED IN ADDENDUM #1</u>		

2.02 ASSET TAGGING

- A. The awarded Contractor will be required to install asset tags on all major pieces of equipment
- B. The Owner will provide asset tags.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. The Owner and Technology Designer reserve the right to require Contractor or staffing changes if deemed to be beneficial to the completion of the Project.
- B. The awarded Contractor must perform a walkthrough of the job site prior to beginning installation. The walkthrough will be completed in conjunction with the Owner and Technology Designer.
- C. All cardboard boxes and shipping containers must be disposed of off-site. Disposal of these items within the Owner's dumpsters are strictly prohibited. Disposal must take place on a daily basis.
- D. Network Core Installations:
 - 1. The Contractor shall carefully follow the specified manufacturer's best practices for design and installations through-out this project.
 - 2. All firmware found in the products shall be the latest and most up-to-date provided by the manufacturer. If in the event that a newer firmware revision is released by the manufacturer, during the project but prior to "final" acceptance, the awarded Contractor will be required to deploy the latest firmware to the components/products.
 - 3. The Contractor will be required to review current configurations and design the new systems to integrate into the remaining network WAN and LAN. If there is any re-work of existing equipment, it will be the awarded Contractor's responsibility to update any configurations on existing equipment.
 - 4. All equipment requiring users to log on using a password shall be configured with user/site-specific password(s). No system/product default passwords shall be allowed.
 - 5. The awarded Contractor is to label all new equipment and create as-built drawings detailing port usage and show unused ports on the new equipment at time of close-out.

3.02 FIELD QUALITY CONTROL

- A. All installation, configuration, setup, program, and related work shall be performed by technicians trained by the manufacturer in the installation and service of the equipment provided.
- B. The awarded Contractor shall maintain a consistent Project team during the duration of the Project.

3.03 DEMONSTRATION AND KNOWLEDGE TRANSFER

- A. End User Knowledge Transfer - The awarded Contractor will be required to provide two (2) four (4) hour training sessions to a minimum of 4 end users on the use of all systems deployed through this RFP.

3.04 PROJECT DOCUMENTATION

- A. All the items below must be included in a three-ring binder that will be presented to the Owner at the "close out" meeting. All documentation must also be in electronic non-pdf formats.
- B. Inventory spreadsheet will include the following information for all equipment:
 - 1. Manufacturer
 - 2. Model Number
 - 3. Description
 - 4. Serial Number
 - 5. Location
 - 6. Asset Tag Number
- C. Documentation (including contact information) on the equipment warranties, technical support, and applicable software assurance.
- D. Manufacturer specification/cut sheets for the systems and equipment installed.

E. Installation and programming manuals (3) per book, for all hardware and software components.

3.05 WARRANTY

A. A **5 (five) year warranty** end-to-end for labor and materials shall be included as part of the Bid Proposal (refer to Section 01800).

End of Section 17200

Section 17570 Wireless Local Area Network (WLAN)

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Attention is directed to Division 0, Bidding and Contract Requirements, and to other Sections of Division 1, General Requirements, which are hereby made a part of this Section.
- B. Related Specification Sections:
 - 1. 17000 – General Technology Requirements
 - 2. 17100 – Low Voltage Cable Infrastructure
 - 3. 17200 – Network Infrastructure Equipment

1.02 PROJECT SUMMARY

- A. Procure, install, integrate and configure a new Wireless Infrastructure system, Network Infrastructure Equipment and all associated Low Voltage Cabling at Chippewa Valley Schools (District Wide). Project also includes removal of existing Cisco equipment for credit and labeling and creating new as-built documentation. The following buildings are part of this project:
 - 1. **Chippewa Valley Schools Administration Building** - 19120 Cass Ave., Clinton Twp., MI 48038
 - 2. **Community Education Center** - 19230 Cass Ave., Clinton Twp., MI 48038
 - 3. **Maintenance Department** - 42278 Romeo Plank Road, Clinton Twp., MI 48038
 - 4. **Cherokee Elementary** - 42900 Rivergate Dr., Clinton Twp., MI 48038
 - 5. **Cheyenne Elementary** - 47600 Heydenreich, Macomb, MI 48044
 - 6. **Clinton Valley Elementary** - 1260 Mulberry, Mt. Clemens, MI 48043
 - 7. **Erie Elementary** - 42276 Romeo Plank Road, MI 48038
 - 8. **Fox Elementary** - 17500 Millstone Drive, Macomb, MI 48044
 - 9. **Huron Elementary** - 15800 Terra Bella, Clinton Twp., MI 48038
 - 10. **Miami Elementary** - 41290 Kentvale, Clinton Twp., MI 48038
 - 11. **Mohawk Elementary** - 48101 Romeo Plank Road, Macomb, MI 48044
 - 12. **Ojibwa Elementary** - 46950 Heydenreich, Macomb, MI 48044
 - 13. **Ottawa Elementary** - 18601 Millar, Clinton Twp., MI 48036
 - 14. **Sequoyah Elementary** - 18500 24 Mile Road, Macomb, MI 48044
 - 15. **Shawnee Elementary** - 21555 Vesper, Macomb, MI 48044
 - 16. **Little Turtle Preschool** - 50375 Card Rd., Macomb, MI 48044
 - 17. **Iroquois Middle School** - 48301 Romeo Plank Road, Macomb, MI 48044
 - 18. **Algonquin Middle School** - 19150 Briarwood Lane, Clinton Twp., MI 48036
 - 19. **Seneca Middle School** - 47200 Heydenreich, Macomb, MI 48044
 - 20. **Wyandot Middle School** - 39490 Garfield, Clinton Twp., MI 48038
 - 21. **Chippewa Valley High School** - 18300 Nineteen Mile Road, Clinton Township, MI 48038
 - 22. **Chippewa Valley 9th Grade Center** - 42755 Romeo Plank Road, Clinton Township, MI 48038
 - 23. **Dakota High School** - 21051 Twenty-One Mile Road, Macomb, MI 48044
 - 24. **Dakota 9th Grade Center** - 21055 Twenty-One Mile Road, Macomb, MI 48044
 - 25. **Mohegan High School** - 19230 Cass Ave., Clinton Twp., MI 48038
- A. The Contractor is responsible for all labor, products, and materials necessary to furnish and install the wireless network equipment specified herewith.
- B. The Owner will be responsible for ensuring that LAN switch ports are available to support the newly deployed access points.
- C. The proposed solution must include all components necessary for a fully functioning wireless

network meeting the specifications described in this RFP. The following sections provide the detailed technical specifications for the system.

1.03 SUBMITTALS

- A. Manufacturer’s technical data, specification sheets, maintenance manuals, and material safety data sheets must be provided within the Contractor’s Bid Proposal for the products listed below:
 - 1. Wire and Cable
 - 2. Outlets, Termination Jacks, Faceplates (stainless steel), Labeling and Connectors
 - 3. Terminal Blocks and Patch Panels
 - 4. Enclosures, Racks and Equipment Housings
 - 5. Firestopping Material
- B. Bill of materials, noting long lead time items.
- C. Project schedule
 - 1. Contractors shall provide a detailed project schedule within their Bid Proposal, including all major work components that materially affect any other work within the project and projected building completion dates.

PART 2 – PRODUCTS

2.01 MERAKI CLOUD CENTRALIZED MANAGEMENT, OR EQUIVALENT

- A. Contractors are to include all necessary enterprise cloud licensing for a fully functioning system, including all hardware, in their proposal for a **FULL 10 (TEN) YEAR TERM**. The cost of the licensing shall be included in the unit cost per new access point included in this request for proposal.

2.02 MERAKI MR42 ACCESS POINT (WAVE 2 CLASSROOM/GENERAL DENSITY), OR EQUIVALENT

- A. As part of their base Bid Proposal, Contractors are to propose Meraki MR42, or equivalent, in the quantities indicated below. Each access point is required to include all hardware necessary for normal operation and installation.
- B. Actual quantities of access points to be ordered will be determined after award of Bid. It is required that the awarded Contractor walk through each building and locate existing access points, test cabling and complete a predictive wireless pre-survey with recommendations related to locations and quantities based on density and coverage.

2.03 MERAKI MR52 ACCESS POINT (WAVE 2 HIGH DENSITY), OR EQUIVALENT

- A. As part of their base Bid Proposal, Contractors are to propose Meraki MR52, or equivalent, in the quantities indicated below. Each access point is required to include all hardware necessary for normal operation and installation.
- B. Actual quantities of access points to be ordered will be determined after award of Bid. It is required that the awarded Contractor walk through each building and locate existing access points, test cabling and complete a predictive wireless pre-survey with recommendations related to locations and quantities based on density and coverage.

Building	Existing AP's (to be removed)	Additional AP's	Total New AP's	Total New Meraki MR42 AP's	Total New Meraki MR52 AP's	New Data Cabling Required
Administration Building	30	10	40	35	5	20
Cherokee Elementary	49	15	64	54	10	32

Cheyenne Elementary	57	15	72	62	10	36
Clinton Valley Elementary	34	15	49	39	10	25
Erie Elementary	36	15	51	41	10	26
Fox Elementary	39	15	54	44	10	27
Huron Elementary	36	15	51	41	10	26
Miami Elementary	36	15	51	41	10	26
Mohawk Elementary	41	15	56	46	10	28
Ojibwa Elementary	60	15	75	65	10	38
Ottawa Elementary	27	15	42	32	10	21
Sequoyah Elementary	64	15	79	69	10	40
Shawnee Elementary	58	15	73	63	10	37
Little Turtle Preschool	4	10	14	10	4	7
Iroquois Middle School	64	30	94	79	15	47
Algonquin Middle School	39	30	69	54	15	35
Seneca Middle School	73	30	103	88	15	52
Wyandot Middle School	65	30	95	80	15	48
Chippewa Valley High School	131	30	161	141	20	81
Chippewa Valley 9th Grade Center	67	15	82	72	10	41
Dakota High School	133	30	163	143	20	82
Dakota 9th Grade Center	52	15	67	57	10	34
Mohegan High School	20	10	30	25	5	15
Total	1215	420	1635	1381	254	824

2.04 DATA CABLING FOR ACCESS POINTS

- A. Structured cabling is required to provide the necessary infrastructure between the wireless access points and the network electronics in the MDF/IDF locations. Although the actual quantity of drops will be determined prior to install, Contractors are to provide initial pricing based on the quantities provided following Sections 2.02 and 2.03 above. For the purpose of their base Bid Proposal, Contractors are to assume a 250-ft. length for each new data drop. Actual data drop length is to be determined by the awarded Contractor prior to installation.
- B. Refer to Section 17100 – Low Voltage Cable Infrastructure in this specification for additional requirements.

2.05 FIRESTOPPING MATERIALS

- A. Materials may be in the form of caulk, putty, strip, sheet, or devices that shall be specifically designed to fill holes, spaces, and voids at communications penetrations.
- B. In addition, firestopping materials shall also provide adhesion to substrates and maintain fire and smoke seal under normal expected movements of substrates, conduits, and cables.

PART 3 – EXECUTION

3.01 DEPLOYMENT AND CONFIGURATION SERVICES

- A. The awarded Contractor will be required to provide deployment and configuration services for the wireless network as specified in this section. Additionally, manufacturer representative engineers are required to be present for assistance throughout the duration of the installation.

3.02 NETWORK DESIGN / WIRELESS SURVEY

- A. The awarded Contractor will be required to conduct a wireless survey to ensure coverage is adequate in the required areas. It will be the Contractor's responsibility to suggest any necessary modifications to placement of access points to ensure coverage.

3.03 ACCESS POINT INSTALLATION

- A. The awarded Contractor will be required to install all wireless access points (above the existing drop ceilings, gyp board ceilings, or wall mounted). The awarded Contractor is required to provide all necessary and appropriate mounting hardware for the required installation.

3.04 PROJECT PLAN & WORK HOURS

- A. The Contractor shall provide a full installation schedule showing the work flow using a graphical representation. The Contractor's installation schedule should indicate the size of each crew working in the building on a daily basis, along the timelines for building project completion.
- B. Work hours will be determined at the project kick-off meeting.

3.05 PROJECT DOCUMENTATION

- A. All of the items below must be included in a three-ring binder that will be presented to the Owner at the "close out" meeting. All documentation must also be in electronic non-PDF formats.
- B. Inventory spreadsheet will include the following information for all equipment:
1. Manufacturer
 2. Model Number
 3. Description
 4. Serial Number
 5. Location
 6. Asset Tag Number
- C. Documentation (including contact information) on the equipment warranties, technical support, and applicable software assurance.
- D. Manufacturer specification/cut sheets for the systems and equipment installed.
- E. Installation and programming manuals (3) per book, for all hardware and software components.

3.06 DEMONSTRATION AND KNOWLEDGE TRANSFER

- A. End User Knowledge Transfer - The awarded Contractor will be required to provide two (2) four (4) hour onsite training sessions to a minimum of 4 end users on the use of the new system deployed within this RFP.

3.07 WARRANTY

- A. A **5 (five) year warranty** end-to-end for labor and materials shall be included as part of the Bid Proposal.

End of Section 17570