

December 18, 2020

Request for Proposal

**Virtual Infrastructure
Storage Area Network
TSD Bid #9914**

For

**Troy School District
4400 Livernois
Troy, Michigan 48098**

Prepared by

Convergent Technology Partners, LLC

6197 Miller Rd., Suite 4
Swartz Creek, MI 48473
810.720.3820

www.ctpartners.net

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

TABLE OF CONTENTS

SECTION 1 – BIDDING REQUIREMENTS AND BID FORMS

TABLE OF CONTENTS.....	1
INSTRUCTIONS TO BIDDERS	2
SCHEDULE OF EVENTS.....	11
BID PROPOSAL FORM.....	12
SUPPLEMENTAL A – Cost Analysis Worksheet	15
SUPPLEMENTAL B – Bill of Material	16
SUPPLEMENTAL C – Mandatory Alternates	17
SUPPLEMENTAL D – Voluntary Alternates	18
SUPPLEMENTAL E – Familial Disclosure Affidavit.....	19
SUPPLEMENTAL F – Iran Affidavit	20

SECTION 2 - SPECIFICATIONS

SITE SPECIFIC REQUIREMENTS	1
PROJECT MANAGEMENT AND QUALITY ASSURANCE	2
NETWORK OVERVIEW	5
NETWORK EQUIPMENT AND SERVICES.....	8
INSTALLATION, TESTING AND ACCEPTANCE	11
TRAINING	15
WARRANTY AND SUPPORT	16

ATTACHMENT 1 – Networking Hardware Configuration

ATTACHMENT 2 – SAN Hardware Configuration

ATTACHMENT 3 – Server Hardware Configuration

ATTACHMENT 4 – Backup Appliance Configuration

ATTACHMENT 5 – Scope of Work

ATTACHMENT 6 – Equipment for Trade-in

VIRTUAL INFRASTRUCTURE AND STORAGE AREA NETWORK

1

INSTRUCTIONS TO BIDDERS

1. PROPOSAL SUBMISSION DUE DATE AND REQUIREMENTS

A. PROJECT

Request for Proposal for Virtual Infrastructure and Storage Area Network (SAN) (“RFP”). Bidders shall provide, install, configure and commission a fully operational Virtual Infrastructure and SAN serving all School District buildings. Documents may be obtained from the District website at www.troy.k12.mi.us.

B. DUE DATE

On or before the date and time listed in the Schedule of Events, the Owner will receive Bid Proposals for the Project. The School District will not consider or accept a Bid Proposal received after the Due Date for Bid Proposal submission. All Bid Proposals received after the Due Date will be returned by making them available to the respective Bidder, unopened, for said Bidder to pick-up at their sole cost and expense. Bid Proposals shall be submitted to:

Todd Hensley, Purchasing Supervisor
C/O John Foster
Convergent Technology Partners
6197 Miller Rd, Suite 4
Swartz Creek, Michigan 48473

C. PROPOSALS

Three (3) HARD copies and One (1) digital copy of the proposals are to be submitted in sealed envelopes, clearly marked: **“Virtual Infrastructure and Storage Area Network”** for Troy School District and shall be identified with the Bidder’s name and address and the date and time of the Bid Proposal opening. The School District is not responsible for any postal or delivery delays. No email, facsimile or other electronic Bid Proposals will be accepted.

D. OPENING

Proposals will be opened publicly immediately following the Due Date of the Proposals. This will be a virtual Opening.

Microsoft Teams meeting
Join on your computer or mobile app
[Click here to join the meeting](#)

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

Or call in (audio only)

+1 734-412-4950,,27685268# United States, Ann Arbor

Phone Conference ID: 276 852 68#

E. SECURITY

Each Bid Proposal must be accompanied by Bid Security in the form of a certified check or Bid Bond in the amount not less than 5% of the Bid Proposal amount, made payable to Troy School District or naming Troy School District as the obligee. Bid Bonds shall be issued by a company licensed to do business in the State of Michigan.

F. FAMILIAL DISCLOSURE AFFIDAVIT

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

G. RESERVATION OF RIGHTS

The School District reserves the right, in its sole and absolute discretion (for this provision and all other provisions contained in this RFP), to accept or reject, in whole or in part, any or all Bid Proposals with or without cause, to waive any irregularities or informalities in this RFP process or any Bid Proposal, and to award the Contract to other than the low bidder, when in the opinion of the School District, such action will best serve the School District's interests.

H. WITHDRAWAL OF BID PROPOSALS

All Bid Proposals submitted shall not be withdrawn and shall be irrevocable for a minimum period of ninety (90) calendar days following the Due Date for receipt of Bid Proposals set forth above.

I. REQUESTS FOR CLARIFICATION

Bidders may request that the School District clarify information contained in this RFP. All such requests must be made in writing via email to Mr. John Foster, Convergent Technology Partners, at jfoster@ctpartners.net. Requests for Clarifications and inquiries may only be made via email.

J. RESTRICTIONS ON COMMUNICATION

From the issue date of this RFP until a Contractor is selected and the Contract is awarded a prospective Contractor shall not communicate about the subject of this RFP or a Contractor's

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

Bid Proposal with the School District, its Board of Education, or any individual member, administrators, faculty, staff, students, or employees, except for additional requests for clarification in accordance with the paragraph above.

K. RELEASE OF CLAIMS

Each Bidder by submitting its Proposal releases the School District from any and all claims arising out of, and related to, this RFP process and selection of a Contractor.

L. PROPOSAL COSTS

A recipient of this RFP is responsible for any and all costs incurred by it or others acting on its behalf in preparing or submitting a Bid Proposal, or otherwise responding to this RFP, or any negotiations incidental to its Bid Proposal or this RFP.

M. COLLUSIVE BIDDING

All Bidders certify that its Bid Proposal is made without any previous understanding, agreement or connection with any person, firm or corporation making a Bid Proposal for the same Project and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

2. DEFINITIONS

- A. Bid Documents are defined as the Advertisement To Bid, Instructions to Bidders, Schedule of Events, this RFP, including all Appendices, Specification, Drawings and Addenda and the Contract.
- B. Addenda are written or graphic instruments issued prior to the Due Date of Bid Proposals which modify or interpret the Bid Documents by additions, deletions, clarifications or corrections. All Addenda issued to Bidders prior to the Due Date of Bid Proposals shall become part of the Bid Documents and all Bid Proposals are to include the Project/Work therein described. Each Bid Proposal submitted shall list all Addenda that have been received prior to the Due Date of Bid Proposals.
- C. As used in these Instructions to Bidders, the term "Bid Proposal" means a bid proposal prepared and submitted in response to this RFP.
- D. As used in these Instructions to Bidders, the term "PSC" refers to the Professional Service Contractor and means Convergent Technology Partners and its assigned representative.
- E. Throughout this RFP and Contract, the "Owner" or "School District" will be used to refer to Troy School District and bidders submitting Bid Proposals will be referred to as "Bidders" or "Vendors" and a successful Bidder or Vendor will be referred to as a "Contractor".

3. BIDDER'S REPRESENTATION

- A. Each Bidder, by submitting a Bid Proposal, represents that the Bidder has read and understands the Bid Documents and is familiar with the local conditions under which the Project is to be performed. Bidders will be held to have compared the Sites with Bid Documents and have satisfied themselves to all conditions affecting the execution of the Work/Project.

4. EXAMINATION OF BID DOCUMENTS AND SITE OF WORK - ALL AREAS

- A. Before submitting a Bid Proposal, each Bidder shall examine the Drawings carefully and shall read the Specifications and the Bid Documents. Each Bidder shall gather complete information prior to bidding as to existing conditions and limitations under which the Work/Project is to be performed, and shall include in its Bid Proposal a sum to cover the cost of items necessary to perform the Work/Project as set forth in the Bid Documents.
- B. No allowance or additional fees will be made to a Bidder because of lack of such examination or knowledge. The submission of a Bid Proposal will be considered as conclusive evidence that the Bidder has made such examination. An on-site-inspection of the Sites during the Bidder's Conference will be for all Bidders and their subcontractors, if any. Vendors may use subcontractors in connection with the Work/Project performed under this RFP provided the Owner has approved the subcontractors. In using subcontractors, the Vendor agrees to be responsible for all their acts and omissions to the same extent as if the subcontractors were employees of the Vendor.
- C. Bidders may make written request to the PSC for interpretation or correction of any ambiguity, inconsistency or error in the Bid Documents that are discovered. These questions shall be submitted to the PSC no later than five (5) business days prior to the Due Date of Bid Proposals. Only a written interpretation or correction by Addendum shall be binding on Bidders. No explanations or interpretations requested or made orally will be considered binding. All questions will be responded to in writing.

5. SUBSTITUTIONS

- A. Each Bid Proposal shall be based upon the materials and equipment described in the Bid Documents.
- B. In addition to the Base Bid, the submission of voluntary alternates is acceptable. If a voluntary alternate is submitted for consideration, it shall be expressed on the Bid Form as an add or deduct amount from the Base Bid. If a voluntary alternate is submitted, the Bidder shall also submit sufficient information in the form of drawings, specifications, a complete description of the proposed substitute, the cost savings or advantages, the name of the material or equipment for which it is substituted, drawings, cuts, performance and test data and any other data or information necessary for a complete evaluation, sufficient for analysis of the

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

alternate. The Owner reserves the right to unilaterally accept or reject, in whole or in part, any voluntary alternates.

6. BIDDING PROCEDURES

- A. All Bid Proposals must be submitted, in triplicate, on the Bid Proposal Forms provided as part of the Bid Documents and in accordance with the Advertisement To Bid and Instructions to Bidders. Bidders must provide a complete list of proposed subcontractors (one per discipline) as indicated on the Bid Forms. Listing two or more subcontractors per discipline will be grounds for disqualification.
- B. Prior to the Due Date for Bid Proposals, any Addenda will be mailed or delivered to each person or firm recorded by the Owner as having received the Bid Documents and will be available for inspection wherever the Bid Documents are kept available for that purpose. No Addendum will be issued later than three (3) days prior to the Due Date for Bid Proposals. Each Bidder shall ascertain prior to submitting a Bid Proposal that he/she has received all Addenda issued and shall acknowledge their receipt in their Bid Proposal Form.
- C. All Bids must be signed as follows:
 - 1. Corporations: Signature of an officer of the firm who is authorized to bind the corporation.
 - 2. Partnerships: Signature of one partner who is authorized to bind the firm and all of its Partners.
 - 3. Bids submitted by Joint Ventures shall be signed by one of the Joint Ventures and shall be accompanied by a certified copy of the Power of Attorney authorizing the individual signing to bind all the Joint Ventures. If a certified copy of the Joint Venture's certificate submitted with the Bid Proposal indicates that all Joint Ventures have signed, no authorization is required.
 - 4. Individuals signing on own behalf: No authorization is required.
 - 5. Individual signing on behalf of another: Power of Attorney or comparable evidence of authority shall accompany Bid.
- D. Bid Proposals shall be prepared on unaltered Bid Forms which are a part of this RFP. Bidders shall make no additional stipulations on the Bid Form nor qualify the Bid Proposal in any other manner. Unauthorized conditions, limitations, or provisions attached to the Bid Proposal will be cause for rejection of the Bid Proposal. If alterations by erasure or interlineations are made for any reason, explain over such erasure or interlineations with a signed statement from the Bidder. No additional charges, other than those listed on the Bid Proposal Form and Bid Supplemental Forms, shall be made. Prices quoted will include verification/coordination of order, all costs for shipping, delivery to all Sites, insurance, payment and performance bonds,

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

unpacking, setup, installation, operation, testing, cleanup, training and all other requirements contained in the Bid Documents.

- E. Bids shall be submitted in a sealed envelope. Identified on the face of the envelope:
 - 1. Project name: **“Virtual Infrastructure and Storage Area Network Bid #9914”**
 - 2. Name and address of Bidder
 - 3. Data and time of Bid Proposal opening
- F. No responsibility shall attach to the PSC, the Owner, or the authorized representatives of either one, for the premature opening of any Bid Proposal which is not properly addressed, delivered and/or identified. In such event, that Bid Proposal will not be considered, and the Bidder will be automatically disqualified from consideration.
- G. Negligence in preparation, improper preparation, errors in and/or omissions in the Bid Proposal shall not relieve the Bidder from fulfillment of any and all applicable obligations and requirements of contained in the Bid Documents.
- H. The Owner or PSC in making copies available of the Bid Documents to Bidders do so only for the purpose of obtaining Bid Proposals on the Project and do not confer a license or grant of use to a Bidder for any other purpose.
- I. All Bidders must complete, sign and return the attached “FAMILIAL DISCLOSURE AFFIDAVIT” as well as the “IRAN SANCTION AFFIDAVIT” with their Bid Proposal.
- J. The Owner considers this RFP legally binding and will require that this Request For Proposal and the Bid Proposal be incorporated by reference into any subsequent Contract between the Contractor and the Owner. It should be understood by the Bidder that this means that the Owner expects the Bidder to satisfy all of the requirements and specifications contained in the RFP. Any exceptions to the RFP must be explicitly noted in the Bid Proposal. Lack of listing all exceptions will be considered acceptance of all of the specifications as presented in this RFP.

7. CONSIDERATION OF BIDS

- A. The Bidder acknowledges the right of the Owner to accept or reject any or all Bid proposals, in whole or in part, with or without cause, to waive any irregularities or informalities in this RFP process or any Bid Proposal, and to award the Contract to other than the low bidder. In addition, the Bidder recognizes the right of the Owner to reject a Bid Proposal:
 - 1. If the Bidder fails to furnish any required Bid Security, or to submit the data required by the Bid Documents; or

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

2. If the Bid Proposal is in any way incomplete or irregular; or
 3. If the Bidder's performance was unsatisfactory under a prior contract for the installation, repair, modification, or demolition of a system with the Owner, or a contractor in privity of contract with the Owner, which was funded, directly or indirectly, by the Owner;
 4. If the Bidder was an employer of construction mechanics working on the construction of facilities funded, directly or indirectly, by the Owner through contracts under 1984 PA 431, MCL 18.1101 et seq; MSA 3.516 (101) et seq, and was determined by the Michigan Department of Labor to have failed to comply with a contractual provision requiring the payment of Department of Labor's prevailing wage or the maintenance of Department of Labor's prevailing wage or the maintenance of Department of Labor's apprentice-journeyman ratio determinations for construction mechanics for that facility.
- B. The Owner shall have the right to accept Alternates in any order or combination and to determine the lowest responsible Bidder on the basis of the sum of the Base Bid and the Alternates accepted.
- C. Once the Contract is awarded to the Contractor, the Contract is contingent upon School District Board of Education approval and the Contractor providing the PSC with any and all documents required by the RFP prior to commencement of the Work/Project (i.e. insurance Certificates, Labor and Material Payment Bond and Performance Bond, etc.). Further, the School District reserves the unrestricted right to reduce the Contract amount by reducing the scope of Work/project and/or components in order to meet Bond budget requirements. Any such action will be taken before specific work on a building or on a project component has commenced. Contract amount shall be reduced or increased based on the unit pricing values.
- D. Bidders to whom an award of a Contract is under consideration shall submit to the Owner upon his/her request a properly executed Contractor's Qualification Statement, AIA Document A305 or other information format specified by the PSC.

8. BID SECURITY

- A. The Bid Proposal shall be accompanied by a Bid Security of a certified check or cashier's check payable to the Owner or by a satisfactory Bid Bond naming the Owner as the obligee and executed by the Bidder and a surety company authorized to do business in the State of Michigan, in an amount identified in the Instructions To Bidders. The check or amount of Bid Bond shall be forfeited to the Owner upon failure of the Contractor to enter into the Contract. The Contractor's Bid security will be retained until the Contractor has signed the Contract and has furnished the required Certificates of Insurance and other required Bonds and documents required by the RFP. Bonds signed by an Attorney-In-Fact must be accompanied by a certified and effectively dated copy of their Power of Attorney.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

- B. The Owner reserves the right to retain the Bid security of all Bidders until the Contractor enters into the Contract or until ninety (90) days after bid opening, whichever is later. If the Contractor refuses to enter into the Contract, the Owner may retain their Bid Security as liquidated damages but not as a penalty.

9. PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS

- A. At or prior to delivery of the signed Contract, the Owner will require the Contractor to secure and post a Labor and Material Payment Bond and a Performance Bond including bonding for all subcontractors, each in the amount of 100% of the Contract Sum including bonding for all subcontractors. Surety shall be a company incorporated in the United States and must appear on the U.S. Treasury Departments approved surety list and be adaptable to the Owner. The Contractor shall obtain such bonds in a manner consistent with Michigan law.

10. TAXES

- A. Installation services for the tangible personal property purchased by the Owner is not subject to sales taxation. Moreover, the Owner is exempt from taxation on all tangible personal property purchased by the Owner for its use and consumption; however this exemption would not apply to any materials required under the Bid Documents that are deemed to be a component of a construction/improvement project to the Owner's Sites/Facilities. All prices submitted on the Bid proposal Form shall be inclusive of any and all applicable taxes.

12. WITHDRAWAL OF BIDS

- A. A Bidder may withdraw its Bid Proposal by written request from an authorized Bidder representative, at any time prior to the Due Date of Bid Proposals.
- B. No Bidder may withdraw a Bid Proposal for a period of ninety (90) calendar days, following the Due Date for receipt of Bid Proposals, and all Bid Proposals shall be subject to acceptance by the Owner during this ninety (90) day period.

13. EXECUTION OF CONTRACT

- A. The Contractor to whom the Contract is awarded shall, within ten (10) calendar days after Notice of Award and receipt of the Contract from the Owner, execute and deliver required copies to the Owner.
- B. At or prior to delivery of the executed Contract, the Contractor to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Bid Documents and such Labor and Materials Payment Bonds and Performance Bond as are required by Owner and any other documents required by this RFP.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

- C. The Owner shall approve the provided Bonds and Certificates of Insurance before the Contractor may proceed with the Work/Project. Failure or refusal to provide Bonds, Certificates of Insurance or any other documents required by this RFP in a form(s) satisfactory to the Owner shall subject the Contractor to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

14. POST BID INFORMATION

- A. Bid Form(s) shall be submitted as indicated in the Bid Documents. The Bid Form(s) requires all proposed subcontractors for the Project to be named; no more than one per discipline.

15. TIME OF COMPLETION

- A. The Bidder agrees to complete the Work within the timeframes listed in the Schedule of Events.

15. EQUAL OPPORTUNITY

- A. The Contractor and all of its subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

SCHEDULE OF EVENTS

The following is a projected schedule of events for this Project. The schedule may change depending upon the results of the responses and a final schedule will be negotiated with the awarded vendor. All dates and times are local time to the district.

EVENT	DATE
Bid Release	December 18, 2020
Final Date and time for Questions – 5:00 PM	January 13, 2021
Final Addendum	January 18, 2021
Bid Due Date/Time and Virtual Public Opening – 2:30 PM	January 27, 2021
Short List Interviews (if required)	February 3, 2021
Contract Award	March 16, 2021
Project Start Date	T.B.D.
Hardware and Installation Services Complete	T.B.D.
Training Complete	T.B.D.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

BID PROPOSAL FORM

OWNER: Troy School District
4400 Livernois
Troy, Michigan 48098

PROJECT: Virtual Infrastructure and Storage Area Network

BID OF: \$ _____
_____(Dollars)

The Bid Proposal amount shall be shown in both words and figures. In the case of discrepancy, the amount shown in words shall govern.

BASE BID: The undersigned, having examined the Bid Documents and examined the conditions affecting the Work/Project, hereby proposes and agrees to furnish all of the labor, materials, and equipment and perform all work necessary to complete the Work/Project as required by the Bid Documents for the stipulated sum identified above and detailed in Bid Proposal Form **Supplement A** (Cost Analysis Worksheet). The Bid Documents set forth the terms and conditions upon which the Bidder will provide a "turnkey" solution for the installation and operation of the project for use by the Owner. The Bidder agrees that it will provide a "Turnkey Solution" to the Owner and represents and warrants that the design, operation and functionality of the Project are in accordance with the Bid Documents. All prices provided by the Bidder on this Bid Proposal Form must include all cables, connectors, equipment etc. that are necessary to make the Project fully operational for the intent and purpose stated in the Bid Documents

BID SECURITY

Enclosed herewith find (Certified Check)/(Bid Bond) in the amount of \$ _____ being five percent (5%) of the maximum Bid Proposal herein, made payable to Troy School District or naming Troy School District as obligee. The proceeds of which are to remain the property of Troy School District, if the Bidder does not, within ten (10) days after notice of the acceptance of Bid Proposal, enter into the Contract.

TAXES

Please identify the amount, if any, of this Bid Proposal that has been attributed to sales or use tax. If an amount has been attributed to such tax, please identify which components of the Bid to which the tax has been attributed.

VIRTUAL INFRASTRUCTURE AND STORAGE AREA NETWORK

SUBCONTRACTORS

Bidders must provide attach complete list of proposed subcontractors (one per discipline), if any are proposed to be utilized on the Project. Listing two or more subcontractors per discipline will be grounds for disqualification.

EXCEPTIONS

Any Exceptions to the terms and conditions contained in the RFP or Contract are identified below:

ADDENDA

This RFP incorporates the following Addenda:

Addendum No. ____ Dated _____ Addendum No. ____ Dated _____

Addendum No. ____ Dated _____ Addendum No. ____ Dated _____

Addendum No. ____ Dated _____ Addendum No. ____ Dated _____

BID PROPOSAL FORM SUPPLEMENTS:

The following Bid Form Proposal Supplements are attached hereto and are considered an integral part of this Bid Proposal Form:

- BID SUPPLEMENTAL A - COST ANALYSIS WORKSHEET
- BID SUPPLEMENTAL B - BILL OF MATERIAL
- BID SUPPLEMENTAL C - MANDATORY ALTERNATES
- BID SUPPLEMENTAL D - VOLUNTARY ALTERNATES
- BID SUPPLEMENTAL E - FAMILIAL DISCLOSURE AFFIDAVIT
- BID SUPPLEMENTAL F - AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

BIDDER NAME: _____

ADDRESS: _____

DATE: _____

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

TELEPHONE: _____

EMAIL ADDRESS: _____

If award is made to our firm based upon our Bid Proposal, we agree to enter into the form of Contract with the School District in accordance with this Request For Proposal, the Contract and our Bid Proposal.

My signature certifies that the Bid Proposal as submitted complies with all terms and conditions as set forth in this Request For Proposal, unless specifically enumerated as an exception as part of this Bid Proposal Form.

I hereby certify that I am authorized to sign as a Representative for the Firm:

(Authorized Signature)

(Title)

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

SUPPLEMENTAL A

COST ANALYSIS WORKSHEET

OWNER: Troy School District
4400 Livernois
Troy, Michigan 48098

BIDDER: _____

ADDRESS: _____

BASE BID BREAKDOWN

Component	Cost
Physical Server	
Storage Area Network	
Backup Appliance	
Network Switching	
Installation Services	
Performance Bonds	
Trade-in Credit	
Total	

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

SUPPLEMENTAL B
BILL OF MATERIAL

All Bid Proposals shall include a detailed Bill of Materials that notes each item, part number, and unit price.

Provide this Bill of Materials, attached to and submitted with the Bid Proposal. These unit costs, which shall be considered firm pricing during the Contract period and not subject to change, will be used to determine costs for additions and deletions during the Contract period. The Owner reserves the right to adjust any or all quantities at any time.

SUPPLEMENTAL C
MANDATORY ALTERNATES

MANDATORY ALTERNATE 1:

Specify an air-gapped solution that extends the backup solution proposed. This solution can be on-site, or cloud based. If there are any ongoing charges, include them for a 5-year period.

Add/Deduct/No Change

_____ Dollars (\$_____)

MANDATORY ALTERNATE 2:

Quote a secondary backup device, which would be housed remote to the primary backup device and should be a mirror image of the primary backup device.

Add/Deduct/No Change

_____ Dollars (\$_____)

MANDATORY ALTERNATE 3:

Quote a cabinet for the solution as follows:

- A. Server Cabinet - UL 2416 Listed
 1. Manufacturer: Hubbell H3S series or approved equivalent
 2. Dimensions: 47U x 85.4”H x 23.3”W x 44.2”D
 3. Constructed of cold rolled steel with black powder coated finish with removable half-height solid lockable side panels of 14-gauge steel, one-piece mesh single front and two-piece mesh rear locking doors
 - a. All cabinet locks and all cabinets shall be keyed alike
 - b. Adjustable 12-gauge steel vertical #12-24 rails with EIA/ECA-310-E universal mounting pattern, rack units individually numbered
 4. Provide with (1) 110vac fan kit – 460 CFM
 5. Provide two (2) full height PDUs, one per side, in the rear of the cabinet

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

6. Provide hardware to attach adjacent cabinets together (“ganging”)
7. Provide with (2) 36” vertical ground bars
8. Features:
 - a. Removable top panels with hole cutouts for cable entry
 - b. Adjustable leveling feet and casters
 - c. One vertical cable manager included, installed on the rear rails
 - d. Threaded bonding studs located on rear side of welded frame
 - e. Doors can be swapped from left hinge to right hinge without additional hardware
 - f. 3,000-pound weight capacity

Add/Deduct/No Change

_____ Dollars (\$_____)

SUPPLEMENTAL D
VOLUNTARY ALTERNATES

VOLUNTARY ALTERNATE 1:

Add/Deduct/No Change

_____ Dollars (\$_____)

VOLUNTARY ALTERNATE 2:

Add/Deduct/No Change

_____ Dollars (\$_____)

VOLUNTARY ALTERNATE 3:

Add/Deduct/No Change

_____ Dollars (\$_____)

VIRTUAL INFRASTRUCTURE AND STORAGE AREA NETWORK

SUPPLEMENTAL F

AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

The undersigned, the owner or authorized officer of the below named applicant (the “Applicant”), pursuant to the compliance certification requirement provided in the Troy School District (the “District”) Request For Proposals for Virtual Infrastructure and Storage Area Network (the “RFP”), hereby certifies, represents and warrants that the Applicant (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 Applicant is awarded a contract as a result of the aforementioned RFP, the Applicant will not become an “Iran linked business” at any time during the course of performing the Work or any services under the contract.

The Applicant 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 it is determined that the person has submitted the false certification.

APPLICANT:

Name of Applicant:

By:

Title:

Date:

STATE OF Michigan

COUNTY OF _____)

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

_____, Notary Public _____ County, _____

My Commission Expires: _____

Acting in the County of: _____

SECTION 2 – SPECIFICATIONS

SITE SPECIFIC REQUIREMENTS

PART 1 GENERAL

- A. The Owner Sites are both instructional and administrative facilities that provide year-round services to their students, staff and the community. As such, activities in all buildings are critical to the provisioning of services to the students, staff and the community and shall not be interrupted by the Contractor's Work activities without prior scheduling.

PART 2 EXECUTION

- A. The server and storage systems associated with this Work will not be taken off-line or removed from service at any time without coordination of the Owner's IT department and the staff of affected buildings. Arrangements must be made by the Contractor to coordinate any such activities.
- B. The Contractor will be required to work around all of the conditions listed above, as well as working with the Owner's staff to minimize disruptions to normal school district activities.
- C. Installation Guidelines
 - 1. All Work performed on this Project will be installed in accordance with the current edition of the National Electrical Code®, the current edition of the National Electrical Safety Code®, the current edition of the BICSI Telecommunications Distribution Methods Manual, the current edition of the BICSI Cabling Installation Manual, the latest issue of the ANSI/TIA/EIA Standards as published by Global Engineering Documents as TIA/EIA Commercial Building Telecommunications Standard, and all local codes and ordinances.

END OF SECTION

PROJECT MANAGEMENT AND QUALITY ASSURANCE

PART 1 GENERAL

A. Project Manager

1. The Contractor will provide a full-time Project Manager who will act as a single point of contact for all activities regarding this Project.

B. Quality Assurance

1. The Contractor is wholly responsible to meet or exceed all codes, standards, regulation, manufacturer installation standards and industry best practices.

C. PSC

1. When the Owner is referred to in this section of the RFP relative to inspections, the Owner has designated the PSC as the party to perform such inspections on behalf of the Owner. Notwithstanding the above, the Owner may also perform such inspections along with the PSC.

PART 2 EXECUTION

A. Project Manager

1. The Project Manager is required to attend necessary technology configuration and installation meetings for coordination before Work is started and during the Work in progress.
2. The Project Manager will be required to make on-site decisions regarding the scope of the Work and any changes required by the Work.
3. The Project Manager 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.
4. The Project Manager must be a management employee and will not be involved in personally performing craft installation Work.

B. Compliance with Laws and Regulations

1. The Contractor performance of the Work shall comply with all applicable federal, state, and local laws, rules, and regulations and School District policies, procedure, rules and regulations. The Contractor shall give required notices, shall procure necessary governmental licenses and inspections, and shall pay without burden to the Owner, all fees and charges in connection therewith unless specifically provided otherwise. In the

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

event of violation, the Contractor shall pay all fines and penalties; including attorney's fees and other defense costs and expenses in connection therewith.

C. Codes, Standards, and Ordinances

1. All connectivity Work shall conform to the latest edition of the National Electrical Code®, the Building Code, and all local codes and ordinances, as applicable. ANSI/TIA/EIA-568-B and ANSI/TIA/EIA-569-A shall be adhered to during all installation activities. Methodologies outlined in the latest edition of the BICSI Telecommunications Distribution Methods Manual shall also be used during all installation activities. Should conflicts exist with the foregoing, the authority having jurisdiction for enforcement will have responsibility for making interpretation.

D. Safety

1. The Contractor shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the Work. 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. The Contractor shall indemnify and hold harmless the Owner from and against all liabilities, suits, damages, costs, and expenses (including attorney's fees and court costs) that may be imposed on the Owner because of the Contractor, or its subcontractor, or supplier's failure to comply with the regulations stated herein.

E. Inspection, Acceptance, and Title

1. Inspection and Acceptance will be upon successful installation unless otherwise provided. Title to/or risk of loss or damage to all items shall be the responsibility of the Contractor until acceptance by the Owner, unless loss or damage results from negligence by the Owner. If the materials or services supplied to the Owner are found to be defective or do not conform to the specifications, the Owner reserves the right to cancel the Contract upon written notice to and return products at the Contractor's expense, based upon the terms of the Contract.
2. The Owner shall at all times have access to the Work wherever it is in preparation or progress and shall provide proper facilities for such access and for inspection.

F. Status Reports, Meetings and Service Coordination.

1. It shall be the Contractor's responsibility to provide the Owner with written weekly project status reports while actively engaged in craft work and a summary report at the beginning of periods of inactivity between phases or construction delays noting status at that time and expected date of return to work in addition to the requirements listed below. These reports are required and shall include, but not be limited to:
 - a. Project completion percentage.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

- b. Any and all problems that were encountered.
 - c. Any foreseeable problems that may arise.
 - d. General status of the Project
 - Resources that may be required from the Owner
2. The Owner reserves the right to hold additional status meetings on a regular basis with the Contractor's Project Manager.

END OF SECTION

NETWORK OVERVIEW

PART 1 GENERAL

- A. Troy School District is soliciting proposals to purchase servers, storage equipment, backup appliance, installation, service, and support for a complete turnkey virtual environment with disaster recovery.
- B. The virtual environment at the Troy School District Data Center (Troy Service Center) will consist of virtual host servers, a Storage Area Network, and a single backup appliance.
- C. The Owner has an existing Microsoft Windows Server, and Linux environment running on VMWare vSphere 6.0. It shall be the Contractor's responsibility to migrate the existing virtual machines to the new virtual environment.
- D. The Contractor shall provide all equipment specified in the bid requirements including any wire management, cables, miscellaneous parts and labor for a complete and operational network that may or may not be included in the specified list of materials.
- E. Physical Server/SAN configuration and virtual environment configuration shall follow equipment manufacturer's best practices, the requirements of the Specifications, and all current edition or revisions of all applicable codes and standards as previously listed.
- F. Owner provided asset tags must be placed in a visible area on all equipment.
- G. Awarded Contractor will provide a detailed testing methodology used to ensure the system/Project is functioning to manufacture specifications with its response. Other tests, specific to installed equipment, may be required to ensure functionality.
- H. Bidders must include a Bill of Material (BOM), along with line item pricing for all components proposed, including, but not limited to, access points, electronics, peripherals, maintenance and support with the total listed where indicated in the Bid Proposal Forms. Failure to provide the BOM with line item pricing will result in disqualification of the Bid proposal.
- I. All Bidders must provide a proposal for the Base Bid that meets or exceeds the specifications set forth in this RFP. However, all Bidders may suggest Alternates if it is felt that the alternate proposal better suits the intent of this RFP. Any Alternate must be listed as such with separate pricing sheets. Any variance of the feature/functionality of the Base Bid must be identified in any Alternates proposed.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

J. Bidder Qualifications

1. A Contract to provide the storage area network and virtual infrastructure will only be entered with a Contractor qualified by experience and financial stability.
2. The Contractor doing this Work shall be a reputable firm regularly doing this type of work with skilled, fully trained technicians and equipment capable of performing a first-class installation in accordance with standard industry practices. All Contractor's technicians shall be factory certified for the Data Systems that they are to install and/or maintain.
3. The Contractor shall be a company that has installed medium to large virtual infrastructures for at least five years. All Bidders shall submit verifiable references including names and phone numbers of projects of a similar nature.

K. Manufacturer Affiliation

1. Bidder shall either be the manufacturer of the equipment proposed or a factory authorized distributor/contractor.
2. If not the manufacturer, the Bidders shall have a proven close and long-standing relationship with the manufacturer in order to demonstrate the Bidder's commitment to supporting the products proposed. Proof shall be supplied with the Bid Proposal in the form of a written guarantee from the manufacturer, stipulating that the manufacturer will provide support for the system if the Bidder is either unwilling or unable to do so at any time within 10 years of the installation of the LAN. This may also include documentation as to the number of years supplying the product, size of inventory, test and training center support, and etc.

PART 2 SUMMARY OF WORK

A. The intent of the RFP is to provide the following:

1. A storage area network with 100% SSD drives at the Troy School District Data Center that will provide Tier 0 storage to various virtual servers that will be running in a VMWare Virtual Environment.
2. A backup appliance for the purpose of agent level backups of mission critical district services. Virtual Host level backup with Virtual Machine file level restore capabilities.
3. Install and configure VMWare host servers to run the virtual environment.
4. Migration of current Virtual Machines from the existing VMWare Virtual Environment to the newly installed environment.

PART 3 PRODUCTS

- A. The Owner will accept Bid Proposals from the following manufacturers:
 - 1. Server and SAN hardware: Dell EMC, IBM, and Hewlett Packard.
 - 2. Network Switching Hardware: Cisco, Aruba, Juniper, and Extreme.
- B. Vendors proposing products other than these listed must contact the PSC for approval.
- C. Notwithstanding the above, the School District expects all supplies, materials equipment or products proposed by a Bidder to meet or exceed the Specifications set forth in this RFP. Further, it is the School District’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, equipment or products 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 School District, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent products/brands submitted by Bidder meet the Specifications of this RFP and possess equivalent and/or better qualities. It shall be the Bidder’s responsibility to notify the School District in writing if any Specifications or suggested comparable equivalent products/brands require clarification by the School District prior to the Due Date for Bid Proposals.

PART 4 EXECUTION

- A. Provide all equipment, materials, labor, and services, not specifically mentioned or shown, which may be necessary to complete or perfect all parts of the installation. Ensure that they are in compliance with requirements stated or reasonably inferred by the Bid Documents.

END OF SECTION

NETWORK EQUIPMENT AND SERVICES

PART 1 GENERAL

- A. Provide and install all equipment for a complete and operational network. To include all cabling for connecting the solution together, as well as, the connections into the current network.
- B. Attachments are for reference only, please include your own BOM/SOW as appropriate.
- C. All equipment shall use NEMA 5-15R outlets.
- D. If there is an opportunity for Trade-In discounts, please consider “Attachment 6 – Trade-in Equipment” for this purpose.

PART 2 PRODUCTS

- A. Networking
 - 1. Redundant Top of Rack Ethernet networking to consist of the following:
 - a) Two (2) identical switches.
 - b) All components must mount into nineteen-inch cabinet/racks.
 - c) Manufacturer support and maintenance must include a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.
 - d) These redundant switches are to connect all hardware in this solution at 10G and uplink into redundant existing datacenter switches at 40Gb (4x10Gb connections).
 - e) Manufacturer or reseller must provide a minimum on-site “over the shoulder” training/knowledge transfer.
 - 2. Redundant Fibre Channel Switches to consist of the following:
 - a) Two (2) identical switches.
 - b) All components must mount into nineteen-inch cabinets/racks.
 - c) Manufacturer support and maintenance must include a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

d) These switches will redundantly connect the six (6) servers and SAN at 16Gb.

3.The Network basis of design is Cisco and shall meet or exceed the hardware configuration found in “Attachment 1 – Networking Hardware Configuration”

4.Any and all network cabling for this solution is to be provided but is not listed in this or accompanying documents.

B. Virtual Infrastructure

1. Host Servers must consist of the following:

- a) Six (6) identical Host Servers VMWare Virtual environment.
- b) All components of the VMWare Virtual infrastructure must mount into nineteen-inch cabinet/racks.
- c) Manufacturer support and maintenance must include at a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.
- d) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.

2. The Host servers Basis of Design is the Dell PowerEdge and shall meet or exceed the hardware configurations found in “Attachment 3 – Server Hardware Configuration”.

C. Storage Area Network

1. Storage Area Network must provide the following features and functionality:

- a) The SAN infrastructure will include a SAN at Troy School District Data Center (Troy Service Center) that will provide storage for the district’s virtual infrastructure.
- b) The SAN must utilize 16Gb Fibre Channel connectivity, the manufacturer must specify the count and type of ports to be provided by the district. The current FC switches will be utilized for connection.
- c) Individual hardware components of the SAN must be hot swappable.
- d) All components of the SAN infrastructure must mount into nineteen-inch cabinet/racks.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

- e) Manufacturer support and maintenance must include at a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.
 - f) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.
2. Specifications for the Storage Area Network are as follows. The “Basis of Design” is Dell EMC Unity, found in “Attachment 2 – SAN Hardware Configuration”. All equipment shall meet or exceed the basis of design.

D. Backup Appliance

1. Backup Appliance must provide the following features and functionality:
- a) System must provide Active Directory Agent backups of all domain controllers.
 - b) Vendor must configure file system backups of all domain controllers.
 - c) Vendor must configure SharePoint Agent backups of all SharePoint Servers listed in this bid.
 - d) Vendor must configure SQL Agent Backups of all Microsoft SQL Servers listed in this bid.
 - e) Vendor must work with Owner’s technical staff to configure alerts for backup jobs.
 - f) Manufacturer support and maintenance must include at a minimum 24x7 phone support and mission critical on-site support for a minimum of 5 years.
 - g) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.
2. Specifications for the Backup Appliance are as follows. The “Basis of Design” is Dell EMC IDPA, in Attachment 4 – Backup Appliance Configuration. All equipment shall meet or exceed the basis of design.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

PART 3 EXECUTION

- A. The hardware and initial software installation should follow Attachment 5 example statement of work. The vendor is to create their own SOW to be included with their proposal.
- B. Provide and install new patch cables for all required connections for the new equipment.
- C. Provide configuration and setup on all equipment to integrate into the existing network.

END OF SECTION

INSTALLATION, TESTING AND ACCEPTANCE

A. GENERAL

- a. This Section covers the installation, testing and acceptance required for the new equipment.
- b. Awarded Contractor will provide all materials, equipment and labor necessary to install, test, and cut-over the system/Project and ancillary equipment. This includes, but is not limited to, delivery, unloading, storage, installation, inspection and testing of the system and components, and management of all Awarded Contractor and any subcontractor personnel.
- c. Any equipment proposed in response to this RFP must be installed and tested at least five working (business) days prior to the scheduled cut-over date.
- d. If any proposed equipment must interface to existing installed equipment, the Awarded Contractor must agree to be responsible for providing any necessary interface requirements to the installed equipment.
- e. Notwithstanding the written certification by the Awarded Contractor that the equipment has been installed and ready for use, the equipment will not be deemed installed within the terms of the Contract until such installation is confirmed by the Owner through successful performance.
- f. Awarded Contractor must make arrangements for access to the Owner's facilities outside of the normal business hours, or on days when the Owner's offices are closed, by contacting the Information Services Office or the Owner's designated Project Manager or PSC. Operations that disrupt service must be performed outside of normal working hours ONLY.

B. VENDOR RESPONSIBILITIES DURING INSTALLATION

- a. Make all reasonable efforts to minimize disruption to normal Owner activities. The Owner reserves the right to determine if the Awarded Contractor's Work is causing undue disruption to the Owner's normal business operations, and, if so, arrange with the Awarded Contractor alternate times and/or methods for completing the Work causing the disruption.
- b. Awarded Contractor will provide weekly (or as requested) Project status reports to the Owner as to the progress and performance of all portions of the Work. Awarded Contractor will cooperate fully to ensure that the Owner's identified critical facilities and services are maintained through the installation and minimal disruption is incurred when cut-over to the new system.
- c. Awarded Contractor will designate a Project Manager for the Contract, who will submit and coordinate a schedule of installation activities with the Owner's

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

designated Project Manager. The Project Manager will be the prime point of contact with the Owner and will provide regular status update reports and attend coordination meetings with the Owner.

C. TESTING AND ACCEPTANCE

- a. All Bidders will provide in the narrative section a complete detailed acceptance test procedure covering the offered equipment, services and any peripherals in their response to this RFP.
 - i. Installation Tests
 1. During the installation, the Awarded Contractor will perform all tests necessary to insure that the portions of the system/Project being installed are ready.
 - ii. Acceptance Tests
 1. After cut-over of any portion of the system/Project, the Awarded Contractor will conduct acceptance tests consistent with factory system performance specifications to be supplied with the system prior to installation.
 2. Performance and reliability tests will be conducted, demonstrating acceptable performance over a full fourteen (14) day period after cut-over.
 3. Acceptance of the system/project will be granted after all equipment has passed the tests set forth by this RFP or the Contract, as well as all manufacturer recommended testing, and has been in operation fourteen (14) consecutive days without a major failure. The Owner and/or PSC shall be the sole judge of whether all conditions for final system/Project criteria have been met.
 4. Due to the critical nature of the service being affected by this cut-over, the Awarded Contractor will be required to validate that the system/Project is performing at the levels required to support quality services. This includes the performance of all services and applications migrated and running on the new environment.

D. DOCUMENTATION

- a. Prior to final system/Project acceptance, the awarded Contractor will provide complete documentation formatted per the direction of the Owner, inventorying all hardware, to include but not limited to Model, location, MAC address, IP address. The exact format must receive sign off from the Owner. The Documentation package

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

must provide the Owner with a comprehensive guide(s) for all operation, warranty, maintenance procedures for the “As-Built” system/Project.

END OF SECTION

TRAINING

A. GENERAL

- a. Awarded Contractor will provide, prior to cut-over, initial training in the use of the equipment for the network administrative staff. The cost of this initial training must be included in the Bid Proposal price.
- b. Training will be provided as part of the testing of the new system installation and configuration.
- c. Training will be required for approximately two of the Owner's employees on the operation and configuration of the equipment.
 1. Training provided outside of the new installation and configuration shall be no less than 4 hours.

END OF SECTION

WARRANTY AND SUPPORT

PART 1 GENERAL

- A. All manufacturer warranty information for each system shall be provided to the Owner upon job completion.
- B. Provide support and pricing as described herein.
- C. The Owner desires high quality maintenance services, parts, materials and workmanship so as to sustain peak operating service.
- D. The goal of the Owner is prompt resolution of problems, not merely prompt response to calls for service. This RFP does not specify response times to service calls as measurements because time limits for problem resolution are difficult to prescribe. The Contractor must strive for resolution of problems as promptly as possible under all conditions.

PART 2 GENERAL WARRANTY REQUIREMENTS

- A. The Contractor must warrant at a minimum that on the cut-over date the equipment shall be in good working order and installed in a workmanlike manner, shall be free of defects, shall be installed and conform to manufacturer's official published specifications, and shall be installed and operate in full compliance with this RFP.
- B. The Contractor shall provide system technicians/personnel who have been fully trained and qualified on the equipment to be serviced and/or certified by the equipment manufacturer.
- C. The Contractor must warrant at a minimum that the equipment shall be free of all defects in material and workmanship for a minimum period of five (5) years from the Cut-over Date (the Warranty Period). Vendor must identify any warranty periods in excess of one year.
 - 1. Any costs for Warranty service must be included in the Bid Proposal price.
- D. During the Warranty and Maintenance Periods, the Contractor shall provide the necessary labor, parts, material, and transportation to maintain all equipment in good working order and in compliance with the equipment manufacturer's specifications.
 - 1. The Contractor shall not be held responsible for repairs or replacements made necessary by misuse, negligence, accident, theft or unexpected loss, abuse, connection to foreign electrical current, fire, water, flood, windstorms, lightning, and any acts of God or public enemy, failure to provide and maintain a suitable operating environment, unauthorized attachments or modification, or improper software changes, wiring, installation, repair or alteration by anyone other than the Contractor. If the Owner requests the Contractor to perform repairs necessitated by any of the above causes, the Contractor will perform said repairs at the Contractor's then prevailing rates for similar services and material.

PART 3 GENERAL MAINTENANCE REQUIREMENTS

- A. The Contractor must provide full maintenance logistical support, including performance of all tests, system documentation, spare parts inventory, special tools, and test equipment required to promptly and properly perform the work.
- B. During the Warranty and Maintenance Periods, the Contractor shall provide the necessary labor, parts, material, and transportation to maintain all equipment bid in good working order and in compliance with the equipment manufacturer's specifications.
- C. The Contractor shall not be held responsible for repairs or replacements made necessary by misuse, negligence, accident, theft or unexpected loss, abuse, connection to foreign electrical current, fire, water, flood, wind storms, lightning, and any acts of God or public enemy, failure to provide and maintain a suitable operating environment, unauthorized attachments or modification, or improper software changes, wiring, installation, repair or alteration by anyone other than the Contractor. If the Owner requests the Contractor to perform repairs necessitated by any of the above causes, the Contractor will perform said repairs at the Contractor's then prevailing rates for similar services and material.
- D. Each Bidder shall provide, with their Bid Proposal, a complete escalation plan for maintenance situations that includes names, addresses, titles, and phone numbers of the people to be contacted, in ascending order, in the event of a maintenance crisis. This plan shall also include descriptions of the circumstances and procedures to be used under various maintenance scenarios including, but not limited to, catastrophic failure, major failures, and major and minor failures that regular maintenance personnel are unable to resolve in a timely manner.
 - 1. The Contractor shall provide personnel who have been fully trained and qualified on the equipment to be serviced and/or certified by the equipment manufacturer. The Owner desires that the Contractor directly employ such personnel. Contractor must state whether any installation personnel or maintenance technicians that are to be used to perform the Contract are employed by subcontractors or other third party companies. Bidders must provide the number of Bidder-employed technicians in the area that are factory-certified to work on the proposed equipment. The Bidder must provide the name and a summary of qualifications of the lead maintenance technicians that will be responsible maintenance at the Owner's Sites.

PART 4 GENERAL SUPPORT REQUIREMENTS

- A. After the cut-over date and as long as the Contractor is obliged to perform maintenance services, the Contractor shall make all additions, deletions, moves and other changes of equipment, materials or software as the Owner may reasonably request.
- B. The Contractor shall make changes only upon receipt of a change form signed by such person or persons as the Owner may from time to time designate in writing, or upon oral requests from such person as the Owner may from time to time designate in writing.

Troy School District
Virtual Infrastructure and Storage Area Network – Bid 9914

END OF SECTION

Attachment 1
Networking Hardware Configuration

Part#	Description	Quantity
Ethernet Section		
N3K-C3524P-10GX	Nexus 3524x, 24 10G Ports	2
SFP-10G-SR	10GBASE-SR SFP Module	8
N3548-24P-LIC	Nexus 3524 Factory Installed 24 port license	2
N3K-C3064-ACC-KIT	Nexus 3K/9K Fixed Accessory Kit	2
NXA-FAN-30CFM-F	Nexus Fan, 30CFM, port side exhaust airflow	8
NXOS-9.3.4	Nexus 9500, 9300, 3000 Base NX-OS Software Rel 9.3.4	2
N3548-BAS1K9	Nexus 3500 Base License	2
N3524-LAN1K9	Nexus 3524 Layer 3 LAN Enterprise License	2
CON-ECMU-N35243LA	SWSS UPGRADES Nexus 3524 Layer 3 LAN Enterprise License	2 for 60 mo(s)
N2200-PAC-400W	Nexus 400W AC Power Supply, Std airflow (port side exhaust)	4
CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	4
CON-SNTP-3524P10X	SNTP-24X7X4 Nexus 3524x, 24 10G	2 for 60 mo(s)
Fibre Channel Section		
DS-C9132T-8PMISK9	MDS 9132T 32G FC switch, w/ 8 active ports + 8x16G SW Optics	2
CON-SNTP-9132T8PM	SNTP-24X7X4 MDS 9132T 32G FC swi	2
DS-CAC-650W-I	MDS 9132U 650W AC PSU Port side Intake	2
DS-CAC-650W-I	MDS 9132U 650W AC PSU Port side Intake	2
CAB-C15-CBN	Cabinet Jumper Power Cord, 250 VAC 13A, C14-C15 Connectors	4
DS-C32S-FAN-I	MDS 9132 FAN tray, port side Intake	4
DCNM-SAN-M91-K9	DCNM for SAN Adv. License for MDS 9100 Server-Based	2
CON-ECMU-SM91K	SWSS UPGRADES DCNM for SAN License for MDS 9100	2
M9132T-PL8	MDS 9132T 32G FC switch 8-Port upgrade license	2
DS-9132T-KIT-CSCO	MDS 9132T Accessory Kit for Cisco	2
DS-32S-FAN-BLANK	Filler card for Blank FAN Slot	4
DS-32S-BLANK	Filler card for Blank Expansion Module Slot	2
M91S6K9-8.4.1	MDS 9132T NX-OS version 8.4(1)	2

Attachment 2
SAN Hardware Configuration

Part#	Description	Quantity
210-ASON	AppSync Unity AF	1
658-BEJW	AppSync Bsc for Unity 400F/450F/480F=IC	1
900-9997	On-Site Installation Declined	1
821-BBDV	ProSupport Plus Mission Critical AppSync Basic	1
210-ATUP	Storage M&R for Unity XT	1
528-BTYG	Storage M&R for Unity XT =IC	1
487-BBHX	ProSupport Plus Mission Critical Storage Monitoring/Reporting Software	1
900-9997	On-Site Installation Declined	1
709-BBJN	Parts Only Warranty 12 Months	1
883-BBBB	No Warranty Upgrade	1
450-AIPD	CAB POWER CORD PAIR US TWISTLOCK AF	2
210-ATUQ	RecoverPoint for Unity XT AF	1
528-BNHM	RP Basic for Unity 380F/480F/680F/880F=IC	1
900-9997	On-Site Installation Declined	1
487-BBID	ProSupport Plus Mission Critical RecoverPoint Basic Software	1
210-ASLK	Unity 480F DPE 25x2.5" Dell EMC Rack	1
528-BISY	Unity AFA Base Software+ D@RE=IC	1
406-BBMX	Unity 2X4 Port Card 10GbE Twinax AF	1
403-BCCS	Unity 2x4 Port SAS EXP DELL RCK AF	1
709-BBJN	Parts Only Warranty 12 Months	1
865-BBUI	Prosupport Plus and 4Hr Mission Critical Initial	1
865-BBUJ	Prosupport Plus and 4Hr Mission Critical Extension	1
487-BBBE	ProSupport Plus Mission Critical Software Support	1
900-9997	On-Site Installation Declined	1
400-BFUN	Unity F 1.92TB ALL FLASH 25X2.5 SSD	25
565-BBHZ	Unity 2x4 Port IO 16Gb FC AF	1
379-BDOI	Pair of C13/14 or C19/C20 Power Cords Included with DPE	1

Attachment 3
Server Hardware Configuration

Part#	Description	Quantity
210-ALZH	PowerEdge R540 Server	6
329-BFBK	PowerEdge R540 MLK Motherboard V2	6
461-AADZ	No Trusted Platform Module	6
321-BCUJ	3.5" Chassis with up to 12 Hot Plug Hard Drives	6
405-AAOM	Internal PERC	6
340-BSID	PowerEdge R540 Shipping	6
340-COSN	PowerEdge R540 Shipping Material V2	6
389-DSXI	PowerEdge R540 CE CCC BIS Marking	6
338-BRVH	Intel Xeon Gold 5218 2.3G 16C/32T 10.4GT/s 22M Cache Turbo HT (125W) DDR4-2666	6
338-BRVH	Intel Xeon Gold 5218 2.3G 16C/32T 10.4GT/s 22M Cache Turbo HT (125W) DDR4-2666	6
379-BDCO	Additional Processor Selected	6
370-ADNU	2666MT/s RDIMMs	6
370-AAIP	Performance Optimized	6
780-BCDI	No RAID	6
405-AAOE	PERC H730P RAID Controller 2GB NV Cache Adapter Low Profile	6
403-BCHI	BOSS controller card + with 2 M.2 Sticks 240G (RAID 1) LP	6
619-ABVR	No Operating System	6
385-BBKT	iDRAC9 Enterprise	6
379-BCQY	DRAC Group Manager Disabled	6
379-BCSF	iDRAC Factory Generated Password	6
379-BCQX	iDRAC Service Module (ISM) NOT Installed	6
330-BBHQ	1xFH 4xLP 2CPU	6
542-BBBP	On-Board LOM	6
429-AAIQ	No Internal Optical Drive	6
450-AGRD	Dual Hot-plug Redundant Power Supply (1+1) 1100W	6
325-BCHV	PowerEdge 2U LCD Bezel	6
350-BBKV	Quick Sync 2 (At-the-box mgmt)	6
384-BBBL	Performance BIOS Settings	6
770-BBBR	ReadyRails Sliding Rails With Cable Management Arm	6
631-AACK	No Systems Documentation No OpenManage DVD Kit	6
815-4328	Dell Hardware Limited Warranty Plus On-Site Service	6
815-4394	ProSupport Plus Mission Critical: 4-Hour 7x24 On-Site Service with Emergency Dispatch 3 Years	6
815-4398	ProSupport Plus Mission Critical: 4-Hour 7x24 On-Site Service with Emergency Dispatch 2 Years Extended	6
815-4399	ProSupport Plus Mission Critical: 7x24 HW/SW Technical Support and Assistance 5 Years	6
975-3462	Dell Limited Hardware Warranty Plus Service Extended Year(s)	6
900-9997	On-Site Installation Declined	6
370-ADNF	32GB RDIMM 2666MT/s Dual Rank	72
400-BCQD	480GB SSD SAS Mixed use 12Gbps 512e 2.5in with 3.5in HYB CARR PM5-V	12
421-5736	No Media Required	6
540-BBHQ	Intel X710 Quad Port 10GbE Direct Attach SFP+ Adapter PCIe Full Height	6
403-BBMB	Emulex LPE 31002 Dual Port 16Gb Fibre Channel HBA PCIe Low Profile	12
492-BBDI	C13 to C14 PDU Style 12 AMP 6.5 Feet (2m) Power Cord North America	12

Attachment 4
Backup Appliance Configuration

Part#	Description	Quantity
210-AWPV	Granular Recovery	1
528-BFNZ	C Granular Recovery Microsoft MID=CA	1
487-BEKS	ProSupport Plus Mission Critical EMC Granular Recovery Microsoft Software Support-Maint	1
900-9997	On-Site Installation Declined	1
210-ARZC	Recover Point for Virtual Machine	1
900-9997	On-Site Installation Declined	1
900-9997	On-Site Installation Declined	1
528-CJZP	RP4VM 5VM Starter Pack for DP4400	1
487-BEKE	ProSupport Plus Mission Critical RP4VM Starter Pack Software Support-Maintenance	1
210-AWOH	IDPA DP4400 24TB 8X10G SFP	1
321-BFRG	IDPA DP4400 24TB 8X10G SFP	1
329-BDWH	PSNT Info	1
350-BBSU	IDPA DP4400 Branding	1
709-BBON	Parts Only Warranty 12 Months	1
199-BBBF	ProSupport Plus and 4Hr Mission Critical Initial	1
199-BBBG	ProSupport Plus and 4Hr Mission Critical Extension	1
528-CKBD	IDPA BU App Enabler ENTRY=IA	1
528-CKBE	Federated Reporting Server ENTRY=IA	1
528-CKBF	IDPA Target Protocol Enabler ENTRY=CA	1
528-CKBG	vRealize Enabler ENTRY=IA	1
528-CKBH	IDPA BoostFS Enabler ENTRY=IA	1
528-CKBI	IDPA BU Search Enabler ENTRY=CA	1
528-CKBJ	Analytics Enabler ENTRY=CB	1
528-CKBM	Data Protection Central for DPD=CA	1
487-BEJW	ProSupport Plus Mission Critical ENV Enablers Software Support-Maintenance	1
800-BBSN	IDPA DP4400 Platform Hypervisor	1
800-BBSL	IDPA DP4400 Platform HPVSR MAINT 5YR	1
528-BEHL	IDPA DP4400 Cloud Tier 5TB Starter Pack	1
487-BEIT	ProSupport Plus Mission Critical Cloud Tier Starter Pack Software Support-Maintenance	1
528-CJZM	IDPA DP4400 Cloud DR 5TB Starter Pack	1
487-BEJP	ProSupport Plus Mission Critical Cloud DR Starter Pack Software Support-Maintenance	1
825-8623	Certified Deployment Partner T1 or Distributors	1
658-BDZK	IDPA DP4400 Software Factory Installed	1
350-BBXS	IDPA DP4400 2U 14G Bezel	1
340-CHLV	IDPA DP4400 Shipping	1
389-DSWP	PowerEdge R740 CE CCC BIS Marking	1
385-BBNZ	iDRAC9 Enterprise	1
461-AAEM	Trusted Platform Module 2.0	1
340-CORZ	PowerEdge R740 Shipping Material	1
528-CJZD	IDPA DP4400 SW 12TB EXPN	2
487-BEIM	ProSupport Plus Mission Critical Capacity Expansion Pack 12TB Software Support-Maintenance	2
528-CJZE	IDPA DP4400 ENV CONFIG 12TB	4
487-BEHC	ProSupport Plus Mission Critical ENV CONFIG 12TB Software Support-Maintenance	4
492-BBDI	C13 to C14 PDU Style 12 AMP 6.5 Feet (2m) Power Cord North America	2

**Attachment 5
Scope of Work**

Planning and Discovery	
	The Primary function of the System Engineering & Planning phase is to conduct design session between Contractor and Troy School District. During these design meetings, the following elements will be identified, reviewed and/or defined:
	Conduct data center floor locations / rack locations for equipment
	<ul style="list-style-type: none"> • Power Requirements for proposed hardware • Rack and floor space requirements
	Network Diagrams and Device Configurations
	Physical installation of data center hardware within the data center
	<ul style="list-style-type: none"> • Physical installation will include hardware racking, power connections and basic network and storage connections
	Storage Area Network Design:
	<ul style="list-style-type: none"> • Host zoning and configuration • LUN Provisioning • Replication Settings and configuration
	Server Design:
	<ul style="list-style-type: none"> • IP Addresses and necessary VMWare configuration information
	VMWare Cluster Design:
	<ul style="list-style-type: none"> • Review configuration of existing VMWare Environment • Migration Strategies from current Storage Array to new Storage Array
Implementation and Testing	
	Contractor will configure and implement and test the following:
	Storage Area Network
	Rack and Stack the array including:
	<ul style="list-style-type: none"> • Verify order against BOM • Power on self-test and best practice hardware test • Upgrade firmware if required • Configure the array per the design document • Zone up to six (6) hosts to array • Configure storage volumes • Present storage volumes to hosts • Install and configure any vendor specific support options • Install and configure storage monitoring and reporting
	Servers
	Rack and Stack the servers at each location including:
	<ul style="list-style-type: none"> • Verify order against BOM • Power on self-test and best practice hardware test • Upgrade firmware if required • Configure the servers per the design document
	VMWare vSphere Hypervisor (ESXi) 7.0
	Install vSphere Hypervisor:
	<ul style="list-style-type: none"> • Configure Basic Networking • VMWare vCenter Server Appliance • One Virtual Machines is needed • Configure VMWare environment per the design document
	Back-up Appliance
	Rack and Stack the appliance:
	<ul style="list-style-type: none"> • Verify order against BOM • Power on self-test and best practice hardware test • Upgrade firmware if required • Configure the device per the design document
Training and Knowledge Transfer	
	The Contractor will provide no less than 4 hours of instruction to staff to explain the settings and day-to-day management for the solution covering:
	<ul style="list-style-type: none"> • Unisphere Navigation • VMWare changes from current environment to be highlighted • Any other topics customer may request in regards to the deployment and administration of the environment
	<i>Troy School District is anticipating active participation by the it's technical staff. During this involvement, the Contractor will provide knowledge transfer on the configuration and maintenance of the equipment installed as part of the project.</i>
Migration / Go Live / Cutover	
	<ul style="list-style-type: none"> • Migrate Virtual Machines from existing VMWare environment to new VMWare environment (Currently ~120 Virtual Machines using ~45 TB of space)

Attachment 6
Items for Trade-in Discount

Product Description	Model	S/N	Drive Type/Qty	Service Tag	SubModel
Data Domain	DD2500	FCNSD150300097	3TB X 12 - 7.2k Drives		
Avamar Data Store	Avamar Media Access Node	ARWAV121503505	2TB x 12 - 7.2k Drives		
Avamar Data Store	ADS M1200 Gen4s	FC6CH131601035	2tb X 6 - 7.2K Drives		
		FC6AV131600278			
		QSGR30400818			
Avamar Data Store	Avamar Data Store Gen4	ARWAV121202857	2tb X 6 - 7.2K Drives	9YNKKS1	PowerEdge R710
Avamar Data Store	Avamar Data Store Gen4	ARWAV114103335	2tb X 6 - 7.2K Drives	CMFD6S1	PowerEdge R710
Avamar Data Store	Avamar Data Store Gen4	ARWAV114103329	2tb X 6 - 7.2K Drives	1MFD6S1	PowerEdge R710
Avamar Data Store	Avamar Data Store Gen4	ARWAV114103328	2tb X 6 - 7.2K Drives	4MFD6S1	PowerEdge R710
Avamar Data Store	Avamar Data Store Gen4	ARWAV114003051	300GB X 2 SAS 15K	CSXSYR1	PowerEdge R710
XtremeIO		FNM00150700703	30.489tb		
Data Domain		APM00154528721	35.90tb		
Data Domain		FLA22151800069	23.89tb		
Dell FX2 Chassis (qty 2)					
FC630 blade units (qty 6)					



Convergent Technology Partners
 6197 Miller Rd, Suite 4
 Swartz Creek, MI 48473
 810-720-3820
 Fax 810-720-3886

E-mail: info@ctpartners.net
 Website: www.ctpartners.net

ADDENDUM

Client / Address	Troy School District 4420 Livernois, Troy MI	Project / Location	Server – SAN Infrastructure
Date Issued	January 18, 2021	Project Number	9914

A1-1 NOTICE: The bid documents are amended herein which adds to and/or supersedes conflicting or additional information in the Request for Proposal.

1. Work covered by this Addendum shall be subject to the Introduction, Terms and Conditions and Technical Specifications.
2. Acknowledge this Addendum on the Cost Analysis Worksheet and include the cost of the work herein specified in the Bid.
3. Notice: The required electronic copies of the proposal must be in every way a duplicate of the hard copy. Provide the electronic copy in separate PDFs by tabular section as required by the hard copy. Failure to provide a duplicate of all information in both formats will be grounds for non-compliance and disqualification.

A1-2 Questions and Answers

- 1.) Mandatory Alternate 3 – We are asked to provide two (2) full height PDUs one per side, in the rear of the cabinet. Is this cabinet and PDU used for the equipment in this RFP?
Yes, it is for the equipment in this RFP.
 - a. If Yes, what power connector would you like in this PDU?
For bidding purposes, provide L5-30P connectors. This may change depending on final location of cabinet.
- 2.) Part 2 Products – 2.) Redundant Fibre Channel Switches to consist of the following:
 - a. Do you want the Switches to be 32GB Capable but with only 16GB optics?
Yes, that is what we are requesting.
- 3.) Part 3 Execution – B. Provide and install new patch cables for all required connections for the new equipment
 - a. 10GB Connectivity will be provided in the BOM. What is the Cable Lengths for these 10GB connections you would like provided?
 - b. Do you want us to include 1GB Ethernet Cables in the BOM?
 - i. If Yes, what is the cable lengths for these 1 GB Ethernet Cables you would like?
 - ii. If Yes, CAT 5 or Cat6?
All 10G and all 1G copper shall be 20 meters in length.

End of Addendum 1

