GRAND RAPIDS PUBLIC SCHOOLS

Wide Area Network - Ethernet

Request for Proposal

November 2014
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SECTION I - GENERAL TERMS AND CONDITIONS
1. GENERAL REQUIREMENTS

1.1 INTENT

It is the intent of Grand Rapids Public Schools (hereafter referred to as “District”, also as “GRPS”) to solicit proposals from qualified vendors for:

- Wide Area Network - Ethernet

The purpose of this Request for Proposal (RFP) is to obtain an Ethernet wide area network (hereafter referred to as “wide area network” or “WAN”), functional characteristics, and associated costs.

Bidders may partner with other providers. If your response contains proposed services or equipment from multiple providers, all responding parties must be clearly identified and a synopsis of the partner relationship as well as the party that will serve as the prime Vendor/contact for the District must be detailed. Grand Rapids Public Schools reserves the right to "unbundle" the responses and proceed with the providers deemed most suitable.

1.2 NOTIFICATION OF INTENT TO PARTICIPATE

If you intend to participate, please send e-mail to Craig Ghareeb (ghareebc@grps.org) by Tuesday, December 2, 2014, acknowledging intent and providing a coordinating contact within your organization

1.3 DEADLINE FOR PROPOSALS

Three (3) copies of the vendor's proposal must be submitted by 2:00 PM EST, Friday, December 12, 2014. Copies shall be submitted to:

Ms. Sharol Hawley
Grand Rapids Public Schools
Purchasing Department
1331 Franklin SE
Grand Rapids, MI 49506

All proposals must contain the wording **Wide Area Network** on the package.
1.4 BID CLARIFICATIONS

All inquiries regarding this proposal must be written and shall be sent by mail or email to:

Craig Ghareeb  
Grand Rapids Public Schools  
1331 Franklin SE  
Grand Rapids, MI 49506  
ghareebc@grps.org

1.5 PROPOSAL FORMAT

To facilitate the comparison of vendor proposals, it is required that each proposal be organized into the following sections:

1.5.1 Bidder Response Forms

Supplied with the RFP are Bidder Response Forms. These forms provide the format for the response and must be completed and submitted for your base bid proposal to be considered. Exceptions to specifications shall be noted here. Add/Alternate designs may be quoted separately as an attachment.

1.5.2 System Literature and Brochures

The bid response is to include appropriate brochures and other manufacturer documentation to help illustrate and describe the system and its capabilities.

1.5.3 Cutsheets

Technical documentation (specification sheets) shall be included for all major components in vendor response to proposal.

1.5.4 Bill of Material

A complete bill of material must be included with the bid response. It shall be organized by system component to include:

A. System Component Name/Description. (Indicate if proprietary equipment)  
B. Quantity Quoted  
C. Unit Price  
D. Extended Price.

Be sure to include all costs for telecommunications service. Include a sample invoice, which lists all costs, for GRPS review.
1.5.5 Description of Technical Solution

For each section the bidder is responding to, there is to be a brief narrative explaining the proposed design and any unique strengths/weaknesses that those reviewing it shall be aware of.

1.5.6 Diagram of Design

For each section where requested, the bidder shall submit a diagram of their design providing a pictorial representation of their proposed solution.

1.5.7 Implementation Schedule

The bidders shall attach an anticipated schedule for implementation. All requests for time extensions shall be submitted to the person identified in Section 1.4.

1.5.8 Additional Information

Additional information may be provided at the Vendor's discretion including Add/Alternate designs.

1.6 CONFIDENTIAL INFORMATION

Information contained in the vendor's proposal which is company confidential must be clearly identified in the proposal itself. The District will be free to use all information in the vendor's proposal for the District's purposes.

1.7 RIGHT TO REQUEST ADDITIONAL INFORMATION

The District reserves the right to request any additional information, which might be deemed necessary after the completion of this document.

1.8 RIGHT OF REFUSAL

District reserves the right to refuse any or all proposals in their entirety, or to select certain equipment or software products from various vendor proposals, based on the best interests of the District and at the sole discretion of the District.

1.9 PROPOSAL PREPARATION COSTS

The Vendor is responsible for any and all costs incurred by the Vendor or his/her subcontractors in responding to this request for proposal. This includes any demonstration and/or interviews.

1.10 SYSTEM DESIGN COSTS

The successful Vendor shall be responsible for all design, information gathering, and required programming to achieve a successful implementation. This cost must be included in the base bid.
1.11 PRICING ELIGIBILITY PERIOD

All vendor proposal bids are required to be offered for a term not less than 410 calendar days in duration.

1.12 ADDITIONAL CHARGES

No additional charges or fees of any kind, other than those listed on the price breakdown sheets, shall be made. Prices quoted will include verification/coordination of order, all costs for shipping, delivery to all sites, unpacking, setup, installation, operation, testing, cleanup and training.

1.13 TURNKEY SOLUTION

All prices quoted must include all the components that will be necessary to make the system specified **fully operational as determined by the District**, for the intent, function and purposes stated herein.

1.14 FEDERAL OR STATE SALES, EXCISE, OR USE TAXES

District is exempt from applicable Federal and State taxes. District’s Michigan and Federal ID is 38-600-2019. All other taxes, fees, permits and shipping costs, etc. shall be included.

1.15 CONTRACT REQUIREMENTS

The District considers this RFP legally binding and will require that this Request for Proposal and the resulting Vendor Proposal be included as addenda to any subsequent contracts between the Vendor(s) and the District. It shall be understood by the Vendor(s) that this means that the District expects the Vendor(s) to satisfy substantially all requirements and reports listed herein. Exceptions shall be explicitly noted in the Vendor Proposals. Lack of exceptions listed on the “Compliance Exceptions” form in the RFP Compliance Summary Sheet will be considered acceptance of all of the specifications as presented in this RFP.

Minimally, the contract must contain the following language and respective components:

A. **Identification of Parties to the Agreement Clause** - Both the Vendor and District shall be clearly identified by name. Neither of the identified parties to the Agreement shall assign or encumber any of its rights, or delegate or subcontract any of its duties defined in the Agreement, in whole or in part, to other third parties unless the other party to the Agreement gives prior written consent. Subject to the foregoing covenant against assignment and delegation, the rights created by the Agreement shall pass to the benefit of the identified party and the duties and obligations resulting from the Agreement shall bind the identified party and their respective successors and assignees.

B. **Entire Agreement Clause** - This Agreement, including appendices and referenced attachments, constitutes the entire Agreement between the District and Vendor and supersedes all proposals, presentations, representations, and communications,
whether oral or in writing, between the parties on this subject.

C. **Agreement Extension and Modification Clause** - The Agreement may be modified or extended in accordance with the following procedures. In the event that all parties to the Agreement agree that such changes would be of a minor and nonmaterial nature, such changes may be effected by a written statement, which describes the situation and is signed, prior to the effectiveness, by all parties. In the event that the changes are determined by either or all parties to the Agreement to be of a major or complex nature, then the change shall be by formal amendment of the Agreement signed by the parties and made a permanent part of the Agreement.

D. **Term of the Agreement Clause** - The term of the support agreement shall be clearly identified in the contract, but shall not be for less than one (1) year from the effective date.

E. **Applicable and Governing Law Clause** - The Agreement shall be subject to all laws of the Federal Government of the United States of America and to the laws of the State of Michigan. All duties of either party shall be legally performable in Michigan. The applicable law for any legal disputes arising out of this contract shall be the law of (and all actions hereunder shall be brought in) the State of Michigan, and the form and venue for such disputes shall be of the appropriate District, county or justice court.

F. **Notices Clause** - All notices or communications required or permitted as a part of the Agreement shall be in writing (unless another verifiable medium is expressly authorized) and shall be deemed delivered when:

1) Actually received, or
2) Upon receipt by sender of a certified mail, return receipt signed by an employee or agent of the party, or
3) If not actually received, 10 days after deposit with the United States Postal Service authorized mail center with proper postage (certified mail, return receipt requested) affixed and addressed to the respective other party at the address set out in the section of the Agreement titled "Identification of the Parties to the Agreement" or such other address as the party may have designated by notice or Agreement amendment to the other party, or
4) Upon delivery by the District of the notice to an authorized Vendor representative while at District site.

Consequences to be borne due to failure to receive a notice due to improper notification by the intended receiving party of a new address will be borne by the intended receiving party.

1.16 **SURVIVAL CLAUSE**

All duties and responsibilities of any party which, either expressly or by their nature, extend into the future, shall extend beyond and survive the end of the contract term or cancellation of this Agreement.

1.17 **FORCE MAJEURE CLAUSE**
Timely performance is essential to the successful initial implementation and ongoing operation of the network described herein. However, neither the District or the Contractor/Vendor will be liable for delays in performing its obligations under this Agreement to the extent that the delay is caused by force majeure. All requests for time extensions shall be submitted to the person identified in Section 1.4.

1.17.1  **Force Majeure Requisites**

Force majeure shall not be allowed unless:

A. Within three (3) calendar days of the occurrence of force majeure, the party whose performance is delayed thereby shall provide the other party or parties with written notice explaining the cause and extent thereof, as well as a request for a time extension equal to the estimated duration of the force majeure events.

B. Within seven (7) calendar days after the cessation of the force majeure event, the party whose performance was delayed shall provide the other party written notice of the time at which force majeure ceased and a complete explanation of all pertinent events pertaining to the entire force majeure situation.

1.17.2  **120 Day Maximum**

Under no circumstances shall delays caused by a force majeure extend beyond one hundred-twenty (120) days from the scheduled delivery or completion date of a task, unless by prior [to the one hundred-twenty (120) days] written notice of permission of the other party. Failure to secure this written prior permission, even in the case of force majeure, shall constitute default by the party failing to meet the requirement.

1.17.3  **Right of Cancellation**

Either the District or the Contractor/Vendor shall have the right to cancel the contract Agreement if Force Majeure suspends performance of scheduled tasks by one or more parties for a period of one hundred-twenty (120) or more days from the scheduled date of the task. If a cancellation due to a Force Majeure occurs before title passes to the District, the Vendor may keep any parts of the system as it can salvage, but must remove same at its own expense. If cancellation occurs due to a Force Majeure after title passes to the District, the system shall remain with the District and the Vendor shall be entitled to any such payments as have accrued according to the payment schedule.

1.18  **INCORPORATION BY REFERENCE**

The Vendor shall supply equipment, wiring, technology, training, and other related services adequate to accomplish the requirements as set forth in the Request for Proposals and the Vendor response to the Request for Proposals. Parties agree that where there is a conflict between terms of this Agreement and the information presented in the referenced documents, this Agreement shall take precedence. The parties also agree that where there is not a conflict between this Agreement and the information presented in the referenced documents, that all terms, conditions and offers presented in the Vendor's proposal shall herein be referenced to the Agreement and shall be binding upon all parties to the Agreement.
1.19 **RISK DURING EQUIPMENT STORAGE AND INSTALLATION**

Delivery shall be made in accordance with the implementation schedule referenced as part of this Agreement. It will be possible to allow for minor variances from this implementation schedule as mutually agreed upon by both parties and confirmed by prior written notice. The equipment shall be installed and placed into good working order by representatives of the Vendor. During the time period where the equipment is in transit and until the equipment is fully installed in good working order, the Vendor and its insurer shall be responsible for the equipment and relieve the District of responsibility for all risk or loss or damage to the equipment. In addition, Vendor shall hold the District and agents harmless from any risk of loss or damage arising out of occurrences during the installation of the equipment.

1.20 **NON-WAIVER OF AGREEMENT RIGHTS**

It is the option of any party to the Agreement to grant extensions or provide flexibilities to the other party in meeting scheduled tasks or responsibilities defined in the Agreement. Under no circumstances, however, shall any parties to the Agreement forfeit or cancel any right presented in the Agreement by delaying or failing to exercise the right or by not immediately and promptly notifying the other party in the event of a default. In the event that a party to the Agreement waives a right, this does not indicate a waiver of the ability of the party to, at a subsequent time, enforce the right. The payment of funds to the Vendor by District shall in no way be interpreted as acceptance of the system or the waiver of performance requirements.

1.21 **PATENTS, COPYRIGHTS, AND PROPRIETARY RIGHTS INDEMNIFICATION**

The Vendor, at its own expense, shall completely and entirely defend the District from any claim or suit brought against the District arising from claims of violation of United States patents or copyrights resulting from the Vendor or the District use of any equipment, technology, documentation, and/or data developed in connection with the services and products described in this Agreement. The District will provide the Vendor with a written notice of any such claim or suit. The District will also assist the Vendor, in all reasonable ways, in the preparation of information helpful to the Vendor in defending the District against this suit.

In the event that the District is required to pay monies, in defending such claims, resulting from the Vendor being uncooperative or unsuccessful in representing the District's interest, or in the event that the District is ordered to pay damages as a result of a judgment arising out of an infringement of patents and/or copyrights, Vendor agrees to fully reimburse District for all monies expended in connection with these matters. The District retains the right to offset against any amounts owed Vendor any such monies expended by the District in defending itself against such claims. Should a court order be issued against the District restricting the District's use of any product of a claim, and should the Vendor determine not to further appeal the claim issue, at the District's sole option the Vendor shall provide, at the Vendor's sole expense, the following:

A. Purchase for the District the rights to continue using the contested product(s), or

B. Provide substitute products to the District which are, in the District's sole opinion, of
equal or greater quality, or

C. Refund all monies paid to the Vendor for the product(s) subject to the court action. The Vendor shall also pay to the District all reasonable related losses related to the product(s) and for all reasonable expenses related to the installation and conversion to the new product(s).

1.22 NONDISCRIMINATION BY VENDORS OR AGENTS OF VENDOR

Neither the Vendor nor anyone with whom the Vendor shall contract shall discriminate against any person employed or applying for employment concerning the performance of the Vendor responsibilities under this Agreement. This discrimination prohibition shall apply to all matters of initial employment, tenure and terms of employment, or otherwise with respect to any matter directly or indirectly relating to employment concerning race, color, sex, religion, age, national origin, or ancestry. A breach of this covenant may be regarded as a default by the Vendor of this Agreement.

1.23 SUBCONTRACTORS

Vendors may use subcontractors in connection with the work performed under this Agreement. When using subcontractors, however, the Vendor must obtain written prior approval from the District for activities or duties to take place at the District site. 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.

1.24 EFFECT OF REGULATION

Should any local, state, or national regulatory authority having jurisdiction over the District enter a valid and enforceable order upon the District which has the effect of changing or superseding any term or condition of this Agreement, such order shall be complied with, but only so long as such order remains in effect and only to the extent actually necessary under the law. In such event, this Agreement shall remain in effect, unless the effect of the order is to deprive the District of a material part of its Agreement with the Vendor. In the event this order results in depriving the District of materials or raising their costs beyond that defined in this Agreement, the District shall have the right to rescind all or part of this Agreement (if such a rescission is practical) or to end the Agreement term upon thirty (30) days written prior notice to the Vendor. Should the Agreement be terminated under such circumstances, the District shall be absolved of all penalties and financial assessments related to cancellation of the Agreement.

1.25 PROJECT MANAGEMENT STAFF DESIGNATION

The Vendor understands that the successful installation, testing, and operation of the system that is the subject of this Agreement shall be accomplished by a cooperative effort. To most effectively manage this complicated process, the Vendor shall designate a single representative to act as an ex-officio member of the District project management team and who shall have the authority to act on behalf of the Vendor on all matters pertaining to this Agreement. In the event that an employee of the Vendor is, in the opinion of the District, uncooperative, inept, incompetent, or otherwise unacceptable, the Vendor agrees to remove such person from
responsibility in the project. In the event of such a removal, the Vendor shall, within fifteen (15) days, fill this representative vacancy as described above. Regardless of who the Vendor has designated as the representative, the Vendor organization remains the ultimate responsible party for performing the tasks and responsibilities presented in this Agreement.

1.26 ASSIGNMENTS

District and the Vendor each binds themselves, their partners, successors, and other legal representatives to all covenants, agreements, and obligations contained in this Agreement.

1.27 VENDOR AS INDEPENDENT CONTRACTOR

It is expressly agreed that the Vendor is not an agent of District but an independent Contractor. The Vendor shall not pledge or attempt to pledge the credit of District or in any other way attempt to bind the District.

1.28 INSURANCE

The Vendor must have adequate insurance, for damage or loss, for all equipment and other valuables, until such time as the District receives good and clear title. In defining insurance coverage, the Vendor shall secure full replacement value for the system without the requirement that the District be responsible for any payments or deductibles. In the event that it is necessary to make a claim under this policy, any funds received by the Vendor shall be used to secure replacement equipment for the District.

The Vendor agrees to hold harmless and defend the District and its agents, officials and employees from any liability, claim or injury, related to or caused by fault or negligence of Vendor employees or subcontractors. The insurance policy shall make clear this coverage of the District installation. The insurance policy shall be initiated prior to the installation of the system and maintained until final acceptance of the system by the District according to the prescribed procedures. Prior to beginning work, the Vendor shall furnish to the District a copy of the insurance policy and all subsequent changes or updates.

In order to demonstrate this responsibility, the successful bidder shall provide from insurance companies licensed and “admitted” to do business with the State of Michigan, insurance certificates or minimum insurance coverage as follows:

<table>
<thead>
<tr>
<th>COMPREHENSIVE GENERAL LIABILITY</th>
<th>Each Occurrence</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodily Injury Liability</td>
<td>$ 500,000</td>
<td>$ 1,000,000</td>
</tr>
<tr>
<td>Property Damage</td>
<td>$ 500,000</td>
<td>$ 1,000,000</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bodily Injury &amp; Property Damage Combined</td>
<td>$ 1,000,000</td>
<td>$ 2,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AUTOMOBILE LIABILITY</th>
<th>Each Occurrence</th>
<th>Aggregate</th>
</tr>
</thead>
</table>
Each Occurrence Aggregate

Bodily Injury (Per Person) $500,000
Bodily Injury (Per Accident) $1,000,000
Property Damage $1,000,000

OR

Bodily Injury & Combined Damage $2,000,000

EXCESS LIABILITY

Each Occurrence Aggregate

True Commercial Umbrella Coverage $1,000,000 $2,000,000

WORKER’S COMPENSATION & EMPLOYER’S LIABILITY

Each Accident $500,000
Disease – Policy Limit $500,000
Disease – Each Employee $500,000

The following language shall be indicated on all certificates of insurance from successful bidders:

“The Grand Rapids Public School District, its elected or appointed officials, employees and volunteers are included as insured with regards to damages and defense claims arising from: (a) activities performed by or on behalf of the named insured, (b) products and completed operations of the named insured, or (c) premises owned, leased, or used by the named insured”.

1.29 WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE

The District has presented detailed technical specifications of the particular purpose for which the telecommunications system is intended. The District has provided detailed descriptions and criteria of how the system can be defined to accomplish particular purpose. The District has also defined the exact procedures and techniques to be employed in testing whether the system has achieved the defined performance of this particular purpose. Given this advanced preparation concerning, and documentation about the District's particular purpose, the Vendor at the time this Agreement is in force has (1) reason and opportunity to know the particular purpose for which products are required, and (2) that the District is relying on the Vendor's experience and knowledge of these products to provide those which are most suitable and appropriate. Therefore, the Vendor warrants that the system is fit for the purposes for which it is intended as described in this document.

1.30 FINAL ACCEPTANCE OF THE SYSTEM

The system proposed shall be defined to be finally accepted by District after the installation of the equipment, training, and successful completion of the following performance examinations: system hardware examination, performance examination, system functional competence
examination, system capacity examination, full-load processing capacity examination, system availability examination, training, and system documentation. The District and its consultants shall be the sole judge of whether all conditions for final acceptance criteria have been met.

1.31 STANDARD FORMS AND CONTRACTS

Any forms and contracts the Vendor(s) proposes to include as part of any agreement resulting from this bid between the Vendor(s) and the District must be submitted as part of the proposal. Any forms and contracts not submitted as part of the bid and subsequently presented for inclusion may be rejected. This requirement includes, but is not limited to, the following types of forms: subcontractors, franchise, warranty agreements, maintenance contracts, and support agreements.

1.32 NON-COLLUSION COVENANT

The Vendor hereby represents and agrees that it has in no way entered into any contingent fee arrangement with any firm or person concerning the obtaining of this Agreement. In addition, the Vendor agrees that a duly authorized Vendor representative will sign a non-collusion affidavit, in a form acceptable to District, that the Vendor firm has received from District no incentive or special payments, or considerations not related to the provision of automation systems and services described in this Agreement (see Bidder Response Form).

1.33 ADVERTISEMENT

The laws of the State of Michigan, District purchasing policies and the legal advertisement for contractors and purchases, are made a part of any agreement entered into the same respect as if specifically set forth in that agreement.

1.34 SELECTION CRITERION

District intends to enter into a long term relationship with a well-established vendor whose products, features, design philosophy and support policies come closest to meeting the District's needs. The selected vendor must be a well-established, financially stable firm committed to technology for school Districts, will have a commitment to attracting and retaining an excellent staff of technical and product support personnel, and will have a proven track record of support from installation planning through implementation and ongoing use. There shall also be evidence of responsiveness to clients' suggestions for improvements. Finally, there must be a good fit between vendor staff and the District's staff to assure a good working relationship.

The Vendors will be evaluated based on the following selection criteria:

1.34.1 Compliance to Specifications
   a) Technical Requirements
   b) Proposal Requirements
      1. Submission deadline compliance
      2. Proposal format
      3. Bid summary
      4. Completeness of information supplied
5. Complete "bill of material"
6. Completeness of solution

1.34.2 Availability of Quality Systems
a) Hardware
   1. Flexible
   2. Robust
   3. Works well with other systems
b) Availability of Future Enhancements (ex: additional DIDs in a single exchange)

1.34.3 Implementation Support
a) Commitment of Local Personnel
b) Implementation Time Frame
c) Technical Training
d) User Training

1.34.4 Operations Support
a) Availability of Support Personnel
   1. Local support
   2. Proven responsiveness
   3. Response time guarantees
b) Operational Guarantees
   1. Overall system availability
   2. Real-time response time
c) Internal Organization
   1. Size
   2. Reputation
   3. Specialization
   4. Financial viability
d) Availability of Comprehensive Documentation
   1. User procedures
   2. System administration
   3. System documentation

1.34.5 Experience
a) Overall Experience
b) Local Experience
c) Vertical Market Experience
d) Turnkey Solution

1.34.6 Cost
a) Initial System Price and Implementation Fees
b) Annual Support Fees
c) Ongoing Operation
d) Maintenance Costs
e) Payment Terms

1.35 SPECIAL NOTES

Failure to include in the proposal all information outlined above may be cause for rejection of the proposal.

The District reserves the right to accept the Vendor's replacement of any component if it is considered equal or superior to the specifications. Such acceptance will be in writing.

1.36 UNIVERSAL SERVICE FUND/eRATE

It is the District's intent to apply for Universal Service Fund/eRate (USF/eRate) discounts for the project specified in this RFP. Vendors shall meet all requirements, complete all forms as required of Vendors by the Universal Service Administrative Company/Schools and Libraries Division (USAC/SLD), and make all accommodations necessary for USF/eRate eligibility and funding. Vendors must provide their Service Provider Identification Number (SPIN) on the Bidder Response Form.

Costs associated with administrative work required by the vendor(s) to maintain USF/eRate eligibility and/or receive USF/eRate discounts must be included in the base bid.

In accordance with eRate program rules:
1. Initiation of installation cannot take place any earlier than January 1, 2015.
2. The service start date cannot be prior to July 1, 2015.
3. No invoices can be issued prior to July 1, 2015.

The vendor must adhere to these and all other applicable eRate program rules, even if not explicitly listed in this RFP.

1.37 PAYMENT TERMS

Include a copy of all documents the District will be required to sign, including a copy of the maintenance agreement.
SECTION II – WIDE AREA NETWORK
2. **VENDOR PROFILE**

Respond on the Bidder Response Form.

3. **REFERENCES AND SUBCONTRACTORS**

Respond on the Bidder Response Form.

4. **SERVICE RATES AND RESPONSE**

Respond on the Bidder Response Form. Bidders are to include service rates and response times for non-warranty work.

5. **WIDE AREA NETWORK SPECIFICATIONS**

5.1 **INTRODUCTION**

The District's is currently using a service provider wide area Ethernet network that provides a 1 Gbps Ethernet connection to each affected school location. As the end of term for the current agreement approaches, the district is interested in soliciting bids from competitive service providers for a similar network.

5.2 **SYSTEM SCOPE**

Network devices housed at the Franklin Administrative Campus’ Library Building serve as the logical center to the Wide Area Network. The scope of Wide Area Network, therefore, will include a minimum of a 1 Gbps throughput connection between the Franklin Administrative Campus Library Building and each GRPS location. Information about the GRPS locations needing wide area network service is shown in the table below. Please see Section 5.3.9, 5.3.10, and 5.3.11 for additional information on site-specific requirements.
<table>
<thead>
<tr>
<th>LOCATIONS</th>
<th>LOCATION ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen Elementary</td>
<td>928 Aberdeen NE</td>
</tr>
<tr>
<td>Alger Middle</td>
<td>921 Alger SE</td>
</tr>
<tr>
<td>Beckwith</td>
<td>2405 Leonard NE</td>
</tr>
<tr>
<td>Blandford School</td>
<td>3143 Milo NW</td>
</tr>
<tr>
<td>Brookside Elementary</td>
<td>2505 Madison SE</td>
</tr>
<tr>
<td>Buchanan Elementary</td>
<td>1775 Buchanan SW</td>
</tr>
<tr>
<td>Burton Elementary/Middle</td>
<td>2133 Buchanan SW</td>
</tr>
<tr>
<td>CA Frost K-8</td>
<td>1460 Laughlin NW</td>
</tr>
<tr>
<td>Central High</td>
<td>421 Fountain NE</td>
</tr>
<tr>
<td>Cesar E. Chavez Elementary</td>
<td>1205 Grandville SW</td>
</tr>
<tr>
<td>City Middle/High</td>
<td>1720 Plainfield NE</td>
</tr>
<tr>
<td>Covenant House Academy</td>
<td>50 Antoine SW</td>
</tr>
<tr>
<td>Coit Elementary</td>
<td>617 Coit NE</td>
</tr>
<tr>
<td>Congress Elementary</td>
<td>940 Baldwin SE</td>
</tr>
<tr>
<td>Covell Elementary</td>
<td>1417 Covell NW</td>
</tr>
<tr>
<td>Dickinson Elementary</td>
<td>448 Dickinson SE</td>
</tr>
<tr>
<td>East Leonard Elementary</td>
<td>410 Barnett NE</td>
</tr>
<tr>
<td>Franklin Administration Campus</td>
<td>1331 Franklin SE</td>
</tr>
<tr>
<td>Library Building*</td>
<td></td>
</tr>
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<td>Gerald R. Ford Middle</td>
<td>851 Madison SE</td>
</tr>
<tr>
<td>GRPS University</td>
<td>1400 Fuller NE</td>
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<td>Harrison Elementary/Middle</td>
<td>1440 Davis NW</td>
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<td>John Ball Zoo School</td>
<td>1300 W. Fulton</td>
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<td>KEC Beltline</td>
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<td>KEC Mayfield</td>
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<td>KEC Oakleigh</td>
<td>2223 Gordon NW</td>
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<tr>
<td>Ken-O-Sha Campus</td>
<td>1353 Van Auken SE</td>
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<tr>
<td>Kent Hills Elementary</td>
<td>1445 Emerald NE</td>
</tr>
<tr>
<td>Lincoln Campus</td>
<td>860 Crahen NE</td>
</tr>
<tr>
<td>MLK Leadership Academy</td>
<td>419 Henry SE</td>
</tr>
<tr>
<td>Montessori Elementary</td>
<td>159 College NE</td>
</tr>
<tr>
<td>Mulick Park Elementary</td>
<td>1761 Rosewood SE</td>
</tr>
<tr>
<td>North Park Elementary</td>
<td>3375 Cheney NE</td>
</tr>
<tr>
<td>Nutrition Center</td>
<td>1130 Race NE</td>
</tr>
<tr>
<td>Ottawa Hills High</td>
<td>2055 Rosewood SE</td>
</tr>
<tr>
<td>Palmer Elementary</td>
<td>309 Palmer NE</td>
</tr>
<tr>
<td>Pine Grove Learning Center</td>
<td>2101 52nd SW</td>
</tr>
<tr>
<td>Ridgemoor ECC</td>
<td>2555 Inverness SE</td>
</tr>
<tr>
<td>Riverside Middle</td>
<td>265 Eleanor NE</td>
</tr>
<tr>
<td>Service Building</td>
<td>900 Union NE</td>
</tr>
<tr>
<td>Shawmut Hills Elementary</td>
<td>2550 Burritt NW</td>
</tr>
<tr>
<td>Sherwood Park</td>
<td>3859 Chamberlain SE</td>
</tr>
<tr>
<td>Sibley Elementary*</td>
<td>947 Sibley NW</td>
</tr>
<tr>
<td>Southeast Academic</td>
<td>1250 Sigsbee SE</td>
</tr>
<tr>
<td>Southeast Career Pathways</td>
<td>1356 Jefferson SE</td>
</tr>
<tr>
<td>Southwest Community Campus</td>
<td>801 Oakland SW</td>
</tr>
<tr>
<td>Stocking Elementary</td>
<td>863 Seventh NW</td>
</tr>
<tr>
<td>Straight</td>
<td>850 Chatham NW</td>
</tr>
</tbody>
</table>
Turning Point Academy at Grand Rapids Community College Sneden Hall
Union High
University Prep Academy
Wellerwood ECE
Westwood Middle

* See Sections 5.3.9, 5.3.10, and 5.3.11 for specific requirements at these sites

### 5.3 SYSTEM SPECIFICATIONS

#### 5.3.1 Design

Please provide logical and physical diagrams describing Wide Area Network design, including all interconnection and demarcation points.

#### 5.3.2 Topology

The Wide Area Network should consist of a logical star topology, with each site’s individual non-blocking 1 Gbps connection reaching directly to the Franklin Administration Campus Library Building. Dependence on other GRPS sites or devices should be minimized and detailed in the design response.

#### 5.3.3 Fault Tolerance

Because the Wide Area Network supports all administrative and academic areas of the network, and is critical to the safety and security of students and personnel, a failure that would prevent or slow access to services would constitute a crisis. Fault tolerance is therefore a concern. This concern, however, relates to probable points of failure, not possible points of failure. Fault tolerance is of higher importance for core devices than edge devices. Areas in which the District is concerned with fault tolerance are:

- Power supplies of core switches
- Interfaces between core switches
- Any unmanageable or unmonitorable device
- Switch processors of core devices
- Traffic blocking due to load
- Interfaces between edge switches and the core
- Processors on edge switches

The speed at which the network recovers from a fault is as important as having the redundant components and paths. In the event of a failure of either a path or a switch processor module, the network will need to rebuild paths between destinations, rebuild tables, rebuild VLANs, and any other components quickly, with minimal loss of communications.

#### 5.3.4 Monitoring and Notification

Monitoring of connectivity to each of the GRPS sites should be done 24x7x365. Reporting of unplanned service interruption must be conducted by message transmission to all of these targets: email, voicemail, and mobile text message.
5.3.5 Usage Measurement

Reporting of bandwidth utilization, traffic volume, and downtime by each of the GRPS sites should be provided monthly, and be available in electronic form on-demand.

5.3.6 Customer Premise Equipment (CPE)/Handoff

Please specify and provide technical detail and/or cutsheets for all customer-premise or co-located equipment.

Please detailed CPE site requirements for any/all power, mounting, grounding, environmental, or other attributes.

5.3.7 Layer 1 Requirements

Each Ethernet Wide Area Network customer interface should be 50µm multimode fiber-optic with either LC (preferred) or SC termination.

5.3.8 Layer 2 Requirements

The Ethernet Wide Area Network must meet these minimum requirements:
   a. Allow 802.1q vlan tagged frames to traverse the WAN unencumbered
   b. Allow for 512 unique 802.1q vlan tags in the range of 1-512.
   c. Allow and honor DSCP marking for packet prioritization
   d. Allow Cisco’s CDP and VTP frames to traverse the WAN unencumbered

5.3.9 Layer 3/Core Network Requirements

GRPS provides Layer 3 processing primarily at the Franklin Administrative Campus Library Building site, but also maintains backup Layer 3 processing at the Sibley Elementary site.

In addition to the 1 Gbps Ethernet connections to the sites listed in the table in 5.2, the network must also provide additional connections for GRPS equipment that will perform layer 3 functions and provide handoffs to other core equipment.

One (1) 10-Gigabit Ethernet connection must terminate at the Franklin Administration Campus Library Building.

One (1) 10-Gigabit Ethernet connection must terminate at Sibley Elementary.

5.3.10 Network Core Connectivity Fault Tolerance

As the Franklin Administrative Campus Library Building serves as the network core for all critical operations, GRPS requires that the design for media installation at the Franklin Administrative Campus Library Building be such that no single failure or damage of a cable, path, pole, conduit, capsule, enclosure, or other physical attribute be able to cause its disconnection from the WAN.
5.3.11 Layer 3 Processing Fault Tolerance

In the event of an outage or disconnection of the Franklin Administrative Campus Library Building from the WAN, at least 75% of the total number of other WAN sites should still be able to maintain connectivity to Sibley Elementary.

5.3.12 Cost

Please provide a per-location cost for implementation.
Please provide a per-location cost of ongoing fees.

5.3.13 Phone Support

GRPS maintains systems that operate twenty-four hours a day, seven days a week. As a result, GRPS needs to be able to rectify network problems quickly. In support of diagnosing network problems, telephone access to the manufacturer/integrator/carrier’s technical support staff around the clock and on weekends, is also an important requirement.

5.3.14 Product Longevity

GRPS is concerned about the life cycle of all products that are part of this solution. GRPS is looking for a solution that will support future capabilities without “forklift” upgrades. GRPS expects many of the upgrades to be performed through software enhancements, requiring only a simple file transfer and reboot of the device. In addition, future upgrades to available bandwidth should be able to be completed without complete replacement of equipment, but instead by interface and/or processor upgrade. This type of upgrade is very attractive to the District.

Because products do eventually become discontinued, GRPS feels it is important that the products in the proposed solution be at the beginning of their life cycle. It is equally important that the manufacturer/integrator/carrier can demonstrate a history of long life cycles in their products, and a history of continued support for products no longer in production.

5.3.15 Planned Maintenance

As uptime of the system is critical to the District, proposed solutions are required to meet 99.9% or higher uptime. Any planned maintenance or outages must be described in detail, including the scope, impact, and timeline of such work, and must be communicated to the District no less than fourteen (14) working days prior to the start of such work.

5.4 SYSTEM SERVICE AND SUPPORT

Rates for the following services.
• Service call for repair of trouble located on the Vendor side of the demarcation point or from the demarcation point to the Vendor service source.
• Service call for repair of trouble located on the District side of the demarcation point.
• Other Service Charges:
  A. Feature addition charges
  B. Service change processing charges
  C. Any other services charged or available and not shown above, including installation charges
5.5 BILLING AND FEES

District’s billing requirements:
- Electronic billing with predefined and customer defined reports
- Vendor fees
- Contract fees

5.6 OTHER INFORMATION

Provide additional information related to the following topics.
- Network reliability statistical history, nature and root cause of outages, reliability guarantees, etc.
- Network performance and sound quality
- 24-hour customer service
- Ownership of the lines used for service

5.7 IMPLEMENTATION SCHEDULE

The winning bidder will be asked to implement their solution upon a signed contract, but not prior to January 1, 2015. Completion, handoff, and the start of related service billing must be no earlier than July 1, 2015 and must be no later than December 1, 2015. Please indicate the implementation time line and milestones for installing the solution. Please see section 1.36 for additional timeline restrictions.

5.8 NEW FACILITY INSTALLATION

Describe the process, time line, and costs to install wide area network service at an additional facility at a future date after the initial system implementation.

5.9 CONSOLIDATING LOCATIONS

Describe the process, time line, and costs to remove wide area network service from a GRPS site once established.