

Farmington Public Schools

Structured Cabling

Request for Proposal (RFP)

December 2024

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GENERAL TERMS AND CONDITIONS

1 GENERAL REQUIREMENTS

1.1 INTENT

It is the intent of Farmington Public Schools (hereafter referred to as the “District”) to solicit proposals from qualified vendors for a structured cabling solution. This solution will consist of the following components:

- A. Structured cabling
- B. System will include:
 - Warranty services
 - Installation services
 - Integration services

The District reserves the right to proceed with the provider(s) deemed most suitable.

1.2 PROJECT DESCRIPTION

This project will consist of replacing the existing structured cabling, including fiber between wiring closets, as well as consolidating a number of wiring closets. The work will occur at the buildings identified in Appendix A (all District elementary schools, STEAM Academy, Farmington Central HS, Facilities and Transportation).

This RFP outlines the performance, operational, and administrative requirements the District is seeking. Detailed specifications for this project are included in **Section 2** of the RFP.

1.3 SCHEDULE OF EVENTS

EVENT	DATE
RFP issued	December 2 nd , 2024
Vendors' conference	December 9 th , 2024 at 11am EST Microsoft Teams (link) Meeting ID: 215 510 592 549 Passcode: 6Lj28PW9 Dial-in by phone 989-272-9774 Phone conference ID: 161 083 379#
Deadline for submittals of questions related to this RFP	December 10 th 2024 End of Day
Deadline for proposals (Due Date) and public proposal opening	January 9 th , 2025 at 1pm EST

EVENT	DATE
Anticipated award date	February / March 2025
Implementation schedule	School Buildings: June 16, 2025 – Aug. 15, 2025 Administrative Buildings: September 2025 <i>Note: there is a potential opportunity to begin work during the school year, after hours. See detailed schedule in section 2.</i>

1.4 PROPOSAL SUBMISSION

Each prospective vendor is responsible for the submission of its proposal. Proposals or proposal revisions received after the Due Date and time will not be accepted or considered. The District is not liable for any delivery or postal delays. All proposals received after the Due Date and time will remain unopened and made available to the respective vendor for pickup, at its sole cost and expense, for a period of two weeks.

Proposals shall be submitted as follows by the deadline indicated in **Section 1.3, Schedule of Events**:

- One printed bound signed original
- One thumb drive consisting of **only two** files:
 - a. One **single scanned PDF** file of the submitted printed signed complete proposal
 - b. **Appendix A** in Excel format

Mark with company name and deliver to:

Karla Swanson
Farmington Public Schools
33000 Freedom Road
Farmington, MI 48336

All proposals must be in a sealed package and contain the wording “**Farmington Public Schools Structured Cabling RFP**” on the package. The wording “**ORIGINAL**” is to appear on the outside of the binder containing the original signed proposal. If a bid bond or cashier’s check is used, an **original copy** of the bid bond must be submitted in the binder marked Original. Proposals **may not** be delivered via facsimile or email.

All proposals **MUST** include the Vendor Response Forms provided in **Appendix A**.

Proposals shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the vendor or any employee of the vendor and any member of the Board of Education or superintendent. The District shall not accept a proposal that does not include this sworn and notarized disclosure statement. The Non-Familial Form must accompany your bid proposal (see **Appendix A**).

In accordance with the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012, all vendors must execute the Iran Linked Business Affidavit and include it in their proposals (see **Appendix A**). Said forms are

included in the Vendor Response Forms. The District will not accept a proposal that does not include this sworn and notarized disclosure statement. The form must accompany your bid proposal (see **Appendix A**).

1.5 INTENT TO PROPOSE

Each vendor that intends to submit a proposal in response to this RFP should communicate its intent via email to Amy.Sasina@plantemoran.com with the subject line “**Vendor name-Structured Cabling RFP - Intent to Propose.**” Please refer to **Section 1.7, RFP clarifications and addenda**, for the contact information to address specific questions related to this RFP.

The response shall include the name of the vendor, the name of the contact person, and that person’s email address.

1.6 VENDORS’ CONFERENCE

A non-mandatory pre-proposal vendors’ conference will be held for this project. Refer to **Section 1.3** for details of this conference.

1.7 RFP CLARIFICATIONS AND ADDENDA

Please note that any addenda will be posted by the District to the bid site that housed the original RFP. Vendors are responsible for checking the site regularly to make themselves aware of any new addenda. When making requests for clarification, please identify the relevant section number (e.g., Section 2.3.1).

Requests for clarification shall be submitted by email only to:

Amy Sasina, Plante Moran PLLC
Amy.Sasina@plantemoran.com

1.8 PROPOSAL FORMAT

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

1.8.1 Executive summary

The executive summary should, at a minimum, include the following:

- Executive letter highlighting how the proposed solution achieves the objectives of the District. This letter is to be signed by an officer of the organization submitting the proposal.
- Organizational overview: A brief overview of the organization.
- Experience: Describe your company’s experience with similar projects.
- Address the following as it relates to your proposed solution:
 - How the solution aligns with the requested functional requirements
 - How the solution aligns with the requested technical requirements

- Any functional or technical requirements that the proposed solution cannot achieve
- Any assumptions and/or District resources required to complete the solution

1.8.2 Vendor Response Forms

Vendor Response Forms are supplied in this RFP (see **Appendix A**). In addition to requesting information on your company and the proposed solution, along with other required forms, you must clearly indicate whether you either comply or take exception to any of the sections in this RFP. All vendors **MUST** submit the **Comply/Exception Form** from **Appendix A**. Where applicable, an explanation to the exception must be provided.

1.8.3 Diagram of design

For each section or design presented, the vendor shall submit a diagram of its design, providing a pictorial representation of the proposed solution(s).

1.8.4 Project plan

The vendor will include an overview of its project plan in its response.

1.8.5 Project team

Indicate the level of qualification of the staff who will be assigned to this project. Qualification will be based on certifications and years of experience with the materials proposal in similar configurations. Also, describe the implementation team and their roles in ensuring a successful cutover. Names of staff need not be provided; however, the response in this section will indicate the minimum level of experience that will be provided. If necessary, please include additional categories to address additional levels of staff or staff with different certifications and years of experience.

1.8.6 Product information

The vendor must include copies of the technical specifications and/or data sheets for each product being proposed.

1.8.7 Electronic copy

An electronic format of the forms in **Appendix A** in a Microsoft Excel format **MUST** be included with your response. A PDF version of all other materials must also be included.

1.8.8 Equipment listing (BOM)

A bill of material must be included with the bid response identifying equipment models and quantities.

1.8.9 Unit pricing: Time and materials labor rate

The vendor will provide a time and materials labor rate that may be used by the District for any work not covered directly by the agreement in the corresponding section of **Appendix A**.

1.8.10 Additional information

Additional information may be provided at the vendor's discretion.

1.8.11 Mandatory and nonmandatory requirements

Unless specifically stated otherwise, using terms such as "optional," "desired," or "nonmandatory," the requirements in this RFP are to be considered mandatory requirements.

1.8.12 Additional components for completeness of solution

If the proposed solution requires any additional components from the District to meet the functional requirements of the solution not included in the proposal, the vendor must:

- Identify optimal requirements and their purpose
- Identify the estimated cost to the District for these components
- Specify exceptions to any of the requirements using the form in **Appendix A: Comply/Exception Form**

1.8.13 Comply/Exception Form

Failure to disclose additional components and estimated costs that are required to deliver the described functionality but not included as a part of your proposal will be grounds for disqualification of your proposal, or the vendor will be responsible for providing the missing components at no additional cost to the District.

1.9 BID BONDS

Every bid shall be accompanied by either a cashier's check on a solvent bank or by a bond executed by a surety company authorized to do business in the state of Michigan. A 5% bid bond or cashier's check shall be required. Such check or bond shall name the District as the recipient. The amount of such bid bond or cashier's check shall be forfeited as liquidated damages, costs, and expenses incurred by the District if the vendor, after given an award as a successful vendor, shall fail within 30 days after the notice of such award to enter into an appropriate contract with the District.

1.10 PERFORMANCE AND PAYMENT BONDS

The District WILL require the selected vendor(s) to provide a performance bond upon award of the contract. The associated cost of the performance bond is to be shown as a separate line item — do **NOT** include this cost in your base bid. This bond shall be equal in amount to the total price to the District of purchased hardware, software, cabling, and services. The surety of the bond shall remain in effect for one year after all acceptance of the entire project has been executed by the District. In the event that the vendor(s) fails to perform its obligations under any agreement between the vendor(s) and the District, the bond shall be paid to the District. The vendor(s) further agrees to save and hold harmless the District and agents from all liability and damages of every description in connection with any subsequent agreements. Payment bonds shall be required under the following conditions: project award exceeds \$50,000 **and** project involves

construction, alteration, or repair to the buildings. Vendors must include a letter from their bonding company within the proposal that states that they are bondable.

1.11 INSPECTION OF WORKSITE

If necessary, vendors can request access for site visits from District by contacting the individual identified in **Section 1.7, RFP clarifications and addenda**. We do not believe on-site access and review will be required prior to the project, and, therefore, requests may be denied.

1.12 MODIFICATION OF RFP

Vendors may not modify the RFP text to affect the terms, conditions, or specifications found in this document; this is forbidden and will subject the bid response to rejection. In the event any text is modified, the original text, as issued, will apply. This clause does not apply to the vendor response areas of the RFP where it is expected that vendors will enter their text.

1.13 CONFIDENTIAL INFORMATION

As a public entity, the District is subject to the Michigan Freedom of Information Act (FOIA). Information contained in proposals may be subject to FOIA requests.

1.14 RIGHT TO REQUEST ADDITIONAL INFORMATION

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

1.15 RIGHT OF REFUSAL

The District reserves the right to reject any or all proposals in their entirety, evaluate suggestions or exceptions, waive irregularities, or select certain equipment from various vendor proposals, based on the best interests of the District. The District reserves the right to reject any or all proposals for a specific section. The District reserves the right to award specific buildings to one or more vendors.

1.16 PROPOSAL PREPARATION COSTS

The vendor is responsible for any and all costs incurred by the vendor or its subcontractors in responding to this RFP.

1.17 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.

1.18 PERMITS

The successful vendor shall be responsible for complying with all local, state, and federal codes applicable to this installation. This includes the electrical permit required by the state of Michigan for low voltage installations. Include all costs associated with permitting in your base bid.

1.19 PRICING ELIGIBILITY PERIOD

All vendor proposal bids are required to be offered for a term not less than **120** calendar days in duration. A claim of mistake in computation of a proposal shall not void the proposals after they are opened and accepted.

1.20 ADDITIONAL CHARGES

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

1.21 TURNKEY SOLUTION

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

1.22 FEDERAL OR STATE SALES, EXCISE, OR USE TAXES

The District is a tax-exempt entity for all purposes, except if the project makes enhancements and/or additions to real property.

1.23 PURCHASE QUANTITIES

The District reserves the right to adjust upward or downward by 25%, the quantities of items purchased without altering the unit purchase price upon award and throughout the contract period.

1.24 AGREEMENT REQUIREMENTS

The District intends to use the agreement contained in **Appendix C** for this project. Please review this attached agreement and indicate whether the terms of the agreement are acceptable. Include all contract exceptions in your proposal, if any.

The District considers this RFP legally binding and will require that this RFP and the resulting vendor proposal be included as addenda to any subsequent contracts between the vendor(s) and the District. It should be understood by the vendor(s) that this means the District expects the vendor(s) to satisfy all requirements and reports listed herein. Exceptions should be explicitly noted in the vendor proposals. **Lack of listing all exceptions will be considered acceptance of all of the specifications as presented in this RFP.**

1.25 SURVIVAL CLAUSE

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

1.26 FORCE MAJEURE CLAUSE

See proposed agreement in **Appendix C**.

1.27 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 RFP and the vendor response to the RFP. Parties agree that where there is a conflict between the terms of the agreement and the information presented in the referenced documents, the agreement shall take precedence. The parties also agree that where there is not a conflict between the agreement and the information presented in the referenced documents, 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.

1.28 RISK DURING EQUIPMENT STORAGE AND INSTALLATION

Delivery shall be made in accordance with the implementation schedule referenced as part of the 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 when 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 of loss or damage to the equipment. In addition, the 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.

1.29 STORED MATERIALS:

Vendors are NOT to bill for stored materials UNLESS specifically requested and approved prior to billing. If the District chooses to allow for billing of stored materials, vendors must provide the following:

- Photos of the equipment properly stored
- Packing/inventory lists
- Affidavit indicating that the equipment belongs to the District
- Proof of insurance, naming the District as an additional insured, in the limits indicated in **Section 1.40** below

1.30 SHIPPING OF EQUIPMENT

All shipping and insurance costs to and from the site shall be included in the vendor's proposal. All payments to shipping agents and for insurance fees shall be made directly by the vendor. The District shall

make no payments to any firm concerning the shipment, installation, and delivery of equipment that is not a part of the agreement and for which exact payments are not described. The vendor shall be responsible for all arrangements for the shipment and receipt of equipment to the District's prepared site. The vendor shall provide all properly trained representatives to unpack all items of equipment and place this equipment in the proper locations. The vendor shall also be responsible for removal of all debris and packing materials from the site resulting from the installation of the equipment.

1.31 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 the District should in no way be interpreted as acceptance of the system or the waiver of performance requirements.

1.32 GENERAL INDEMNIFICATION

See proposed agreement in **Appendix C**.

1.33 PATENTS, COPYRIGHTS, AND PROPRIETARY RIGHTS

See proposed agreement in **Appendix C**.

1.34 NONDISCRIMINATION BY VENDOR OR AGENTS OF THE VENDOR

See proposed agreement in **Appendix C**.

1.35 SUBCONTRACTORS

See proposed agreement in **Appendix C**.

1.36 EFFECT OF REGULATION

See proposed agreement in **Appendix C**.

1.37 PROJECT MANAGEMENT STAFF DESIGNATION

The vendor understands that the successful installation, testing, and operation of the system that is the subject of this document shall be accomplished by a cooperative effort. To most effectively manage this process, the vendor shall designate a single representative to act as project manager, who shall have the authority to act on behalf of the vendor on all matters pertaining to the agreement. The project manager will be responsible for meeting regularly with the District in order to coordinate the activities associated with bringing the project to successful completion.

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 15 days, fill this representative vacancy as described above. Regardless of whom the vendor has designated as the representative, the vendor organization remains the ultimate responsible party for performing the tasks and responsibilities presented in the agreement.

1.38 ASSIGNMENTS

The District and the vendor each bind themselves, their partners, successors, and other legal representatives to all covenants, agreements, and obligations contained in the agreement.

1.39 VENDOR AS INDEPENDENT CONTRACTOR

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

1.40 INSURANCE

1.40.1 Workers' compensation coverage

The vendor shall procure and maintain, during the life of the agreement, workers' compensation insurance, including employer's liability coverage, in accordance with all applicable statutes of the state of Michigan.

1.40.2 Commercial general liability insurance

The vendor, at the vendor's sole cost and expense, shall procure and maintain, during the life of the agreement, commercial general liability insurance on an "occurrence basis" with limits of liability not less than \$1 million per occurrence and/or aggregate combined single limit, personal injury, bodily injury, and property damage. Coverage shall include the following features: (A) contractual liability; (B) products and completed operations; (C) independent contractors coverage; (D) broad form general liability extensions or equivalent; (E) deletion of all explosion, collapse, and underground (XCU) exclusions, if applicable; and (F) per contract aggregate.

1.40.3 Motor vehicle liability

The vendor, at the vendor's sole cost and expense, shall procure and maintain, during the life of the agreement, motor vehicle liability insurance, including applicable no-fault coverages, with limits of liability of not less than \$1 million per occurrence combined single limit bodily injury and property damage. Coverage shall include all owned vehicles and all hired vehicles.

1.40.4 Additional insured

The following shall be named additional insureds: Farmington Public Schools, including all elected and appointed officials; all employees and volunteers; and all boards, commissions, and/or authorities and their board members, employees, and volunteers.

This coverage shall be primary to the additional insureds and not contributing with any other insurance or similar protection available to the additional insureds, whether other available coverage is primary, contributing, or excess.

1.40.5 Notice of cancellation or change

Workers' compensation insurance, commercial general liability insurance, and motor vehicle liability insurance, as described above, shall include an endorsement stating the following: "Sixty (60) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to: Farmington Public Schools, 33000 Freedom Road, Farmington, MI 48336."

1.40.6 Proof of insurance coverage

The vendor shall provide the District, at the time the agreements are returned for execution, certificates of insurance, and/or policies, acceptable to the District, as listed below:

- A. Two copies of the certificate of insurance for worker's compensation insurance
- B. Two copies of the certificate of insurance for commercial general liability insurance
- C. Two copies of the certificate of insurance for vehicle liability insurance
- D. Original policy, or binder pending issuance of policy, for owners and contractors protective liability insurance
- E. If so requested, certified copies of all policies shall be furnished

1.40.7 Continuation of coverage

If any of the above coverages expire during the term of the agreement, the vendor shall deliver renewal certificates and/or policies to Farmington Public Schools at least 10 days prior to the expiration date.

1.40.8 Failure to comply

Failure to comply with the insurance requirements contained in the agreement shall constitute a material violation and breach of contract and may result in termination of the agreement.

1.41 WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE

The District has presented detailed technical specifications of the particular purpose for which the solution is intended. The District has provided detailed descriptions and criteria of how the system can be defined to accomplish this 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 the agreement is in force, has reason and opportunity to know (1) 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 that 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.

1.42 WARRANTY

See **Section 2** for specific warranty requirements.

1.42.1 Manufacturer's and workmanship warranty

The manufacturer's warranty for all materials shall be passed on to the District. A minimum five-year materials and workmanship warranty on all equipment, cabling, software, and any other materials and services included in the section response.

1.43 FINAL ACCEPTANCE OF THE SYSTEM

The system proposed shall be defined to be finally accepted by the District after all components of this RFP and all approved change orders have been installed completely, plus the items identified in **Section 2.7**. The District or the District's representative shall be the sole judge of whether all conditions for final acceptance criteria have been met.

1.44 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: subcontractor, franchise, warranty agreements, maintenance contracts, and support agreements.

1.45 NONCOLLUSION 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 the agreement. The vendor certifies that its proposal is made without any previous understanding, agreement, or connection with any person, firm, or corporation making a proposal for the same services and is, in all respects, fair, without outside control, collusion, fraud, or otherwise illegal action.

1.46 ADVERTISEMENT

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

1.47 SELECTION CRITERION

The District intends to enter into a contract 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 in K-12, 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. Finally, there must be a good fit between the vendor's staff and the District's staff to assure a good working relationship.

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

- E-rate Eligible Costs
- Adherence to Specifications & Timeline
- Prior Experience
- Past Performance
- Understands Needs
- Personnel Qualifications
- Management Capabilities
- Financial Stability

1.48 FINALITY OF DECISION

Any decision made by the district, including the vendor selection, shall be final.

1.49 RELEASE OF CLAIMS

Each vendor, by submitting its proposal, releases the district from any and all claims arising out of, and related to, this RFP process and selection of a vendor(s).

1.50 VENDOR BEARS BID COSTS

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

1.51 IRREVOCABILITY OF PROPOSALS

All proposals submitted shall not be withdrawn and shall be irrevocable for a minimum period of 120 calendar days following the due date for receipt of proposals set forth above.

1.52 PROJECT PLAN

The vendor shall provide a full installation schedule showing the workflow using a graphical representation (e.g., Gantt chart or similar tool). The vendor's installation schedule should indicate the size of each crew

working in the building on a daily basis, along with timelines for building project completion. All punch list items associated with this project must be completed by the noted completion date.

1.53 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.

1.54 PAYMENT TERMS

See proposed agreement in **Appendix C**.

1.55 CRIMINAL BACKGROUND SCREENING

The District is committed to assuring a safe environment for students, employees, and District visitors. Accordingly, the District requires criminal background certification compliance from vendors and subcontractors who perform work at any District facility. Each vendor or subcontractor shall certify that all legally required criminal history and criminal record checks, electronic fingerprint scans (Michigan and FBI), and/or any other background check requirements are conducted in accordance with applicable provisions within Sections 380.1230, 380.1230a-h, 380.1236a of the Michigan Revised School Code, and all other applicable federal and state laws concerning background checks. These results must be sent directly to the District. Additionally, the vendor must certify that no owner, employee, agent, representative, vendor, and/or other personnel of the vendor will be on any District premises if they are a registered criminal sexual offender under the Sex Offenders Registration Act, Public Act 295 of 1994, or have been convicted of a "Listed Offense" as defined under Section 722 of the Sex Offenders Registration Act, MCL 28.722. The vendor shall also require employees, if and as applicable, to comply with the reporting requirements of Section 1230d of the Revised School Code and shall promptly forward any information so obtained to the District.

1.56 NEW MATERIALS

All equipment quoted by the vendor shall be new. The solution requests that the vendors propose a completely new solution that balances cost, performance, and technology.

1.57 MANUFACTURER EQUIVALENT

It is District's intent that this RFP promotes 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, devices, or products requested in this RFP are specified by patent, proprietary name, or 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 District, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent devices/brands submitted by the vendor meet the specifications contained in this RFP and

possess equivalent and/or better qualities. It is the vendor's responsibility to notify the District in writing if any specifications or suggested comparable equivalent devices/brands require clarification by the District on or before the deadline for written requests for clarifications.

1.58 IMPLEMENTATION CONSIDERATIONS

1.58.1 Construction Coordination and meetings

Periodic construction meetings MAY be held for buildings undergoing construction or renovations. The vendor is required to attend weekly or biweekly progress meetings held by the construction team, as well as any additional relevant construction-related meetings. Additionally, the vendor is required to communicate directly with construction superintendents as it relates to issues that impact low voltage trades and the timeline of this project. The vendor is expected to regularly check in with the construction superintendents to determine what stage construction is at and when they need to be on-site.

If necessary for the successful implementation and integration of the proposed solutions, the vendor will directly coordinate with the other vendors or trades (e.g., electrician, etc.) that will be performing services at the District in conjunction with construction.

1.58.2 Work hours

Any work scheduled inside buildings or on the building premises must be coordinated with the District. Arrangements must be made through the District for additional work hours if needed. Work performed during the summertime can be carried out during standard working hours. Work performed while the school is in session must start after the end of the last period of classes, on Monday through Friday. Overtime or weekend work will be coordinated with the District as needed.

The installation schedule for summer working hours is 7 a.m. to 11 p.m. The installation schedule for school year working hours is 4 p.m. to 11 p.m., Monday through Friday. Installation hours will also need to work around building events (selected vendor to work with District to review schedules). Weekend work hours MAY be permitted. The District will work with the vendor and the District facilities teams to provide appropriate access for each building. Please note that schedules are subject to change with short notice or no notice.

1.58.3 Lift equipment

In the event a lift is required, the District **does not have** a lift available, although it is recommended the vendor provides a scissor lift that can be driven for the project. The vendor must coordinate with each building to validate requirements for floor coverings or proper lift delivery.

1.58.4 Site cleanliness

The vendor will ensure all work areas are free from debris caused by work performed under this project scope. At the end of each day, the site must be left in a clean and neat condition prior to completing work for that day, with debris properly disposed of in an efficient manner. Materials must be consolidated into an agreed upon space that is not obstructing any pathways within the respective buildings. Vendor may be

asked to wear protective foot coverings or supply drop cloths to minimize impact to newly finished surfaces. Failure to properly clean may result in another contractor performing the cleanup work and back charging it to the vendor.

1.58.5 Change order control

Once selected, the vendor shall submit all change orders to the District's designated representative for approval. The District will not be responsible for work performed beyond the contract scope without a signed change order.

1.58.6 Safety considerations

The awarded vendor is solely responsible for the installation method and integrity of all installations. The vendor shall be responsible for ensuring the safety of the proposed installation in all cases. A minimum five-year warranty on workmanship is required.

1.59 UNIVERSAL SERVICE FUND (USF) CONDITIONS

This project will be submitted for E-Rate discounts through the Universal Service Fund (USF). Vendors shall meet all requirements, complete all forms as required of vendors by the USF, and make all accommodations necessary for USF eligibility and funding. All services proposed as part of this specification will be contingent upon the District securing the USF discounts. All vendors must be USF aware and clearly identify eligible versus ineligible components of each service proposed as defined per documentation available at the official USF website.

1.59.1 Identification Number

The vendor's USF vendor Identification Number (SPIN) must be included in the proposal. Direct all questions regarding the USF requirements in this RFP to the Universal Service Administrative Company (USAC), Schools and Library Division (SLD) at (888) 203-8100.

1.59.2 FY25 funding requests

The specified products and/or services are to be provided for FY2025 (July 1, 2024, to June 30, 2025) and must qualify for universal service discounts under the FY2025 universal service support mechanism, E-Rate. The E-Rate Modernization Order permits applicants to seek support for Category 2-eligible nonrecurring services purchased on or after April 1, three months prior to the start of the funding year on July 1. No invoices to USAC/SLD will be DATED or PAID before July 1, 2025.

1.59.3 Universal service discounts

The vendor contract is conditional upon the District receiving universal service discounts under the FY2025 universal service support mechanism, E-Rate. The District reserves the unrestricted right to reduce the contract amount by reducing the amount of services and/or products in order to meet budget requirements in the event the level of the universal service discounts is reduced. Any such reductions to the contract

amount will be taken prior to the start of the specific work being reduced or eliminated on a given building and/or project.

1.59.4 Universal service discount implementation

The District reserves the unrestricted right to specify the filing option for the universal service discounts for each product and/or service offered within a proposal: Billed Entity Applicant Reimbursement (BEAR) or Service Provider Invoice (SPI).

1.59.5 Eligible products and services

The USF-eligible products and/or services identified on the USAC FY2025 Eligible Services List, which is incorporated herein by reference, must be identified separately from any and all *ineligible* products and/or services in the proposal.

1.59.6 Project funding requirements

This project is entirely conditional upon receiving written notification in the form of a Funding Commitment Decision Letter from the USAC/SLD that the District has been approved for E-Rate Funding. If the District receives less than the full E-Rate Funding for which it applies, the District has the unrestricted right to reduce the number of units and services in the accepted proposal. In the event that E-Rate Funding is not available for the accepted proposal, the District, at its discretion, may cancel and/or modify the scope of work and subsequent purchases requested in this RFP.

1.59.7 Lowest corresponding price

The lowest corresponding price (LCP) is defined as the lowest price that a vendor charges to nonresidential customers who are similarly situated to a particular E-Rate applicant for similar services. Vendors cannot charge E-Rate applicants a price above the LCP and must actually charge the rate that is the LCP, not just offer the LCP in the proposal. In addition, promotional rates offered by a vendor for a period of more than 90 days must be included among the comparable rates upon which the LCP is determined.

STRUCTURED CABLING

2 STRUCTURED CABLING

The District intends to upgrade and replace the cabling districtwide over the next two years. This RFP includes replacing the cabling at the elementary schools, STEAM Academy, Facilities, Farmington Central HS, Transportation, and Facilities. This work will occur primarily in the summer of 2025. Structured cabling is required, as indicated in **Appendix A** and on the prints in **Appendix B**.

NOTE: the base bid does not include cabling for the majority of wireless access points, video surveillance cameras, nor the AV locations. These were recently run and are CAT6. The exceptions to this are locations where closets are moved and cabling to those closets must either be pulled back and reterminated or have new cables run (see **Appendix B** prints for locations). Additionally, all drops at Facilities and Transportation must be new.

2.1 GENERAL REQUIREMENTS

Structured cabling is required as indicated in **Appendix A** and on the prints in **Appendix B**. All cabling will be installed in either existing or construction trade-provided raceway and conduits and must meet the required specifications as identified below. Vendors are required to provide turnkey cabling. Each cable run will terminate at the location identified on the prints in **Appendix B** and will have a **minimum of a 10-foot service loop** at the device end and on the closet end to potentially relocate the cable drop if necessary. Vendors are required to provide unit pricing for additional cable runs. This unit pricing may be used for any additions (or deductions) that may be necessary after the installation has begun. All pricing is to include **CAT6** UTP (unshielded twisted pair) cable, patch panels, closet and end-user patch cables, termination jack/connector, cable support, and labor based on the specifications detailed in this section.

2.1.1 Acceptable manufacturers

The District is seeking products from reputable structured cabling equipment manufacturers (e.g., Panduit, Legrand, CommScope, Belden, Leviton, Hubbel). The acceptance of a solution will be at the discretion of the District.

2.1.2 Preinstallation walkthrough/site review

The selected vendor shall be responsible for performing building walkthroughs with the District to do the following:

- Confirm the final location for data cabling
- Verify cable requirements, and any unique installation issues
- Identify and document any items that are outside the project scope or not listed in the specifications as unit price items – all items not noted shall become the vendor's responsibility to install at no additional cost

2.1.3 Asbestos Precautions

Asbestos may be present in the buildings. The District has contracted with an environmental engineer to evaluate the asbestos. Those reports will be provided to the awarded vendor. Where the asbestos exists, it is typically limited to the floor mastic, as well as pipe insulation.

In areas that may contain asbestos, it is imperative that all work is conducted with extreme care to ensure the safety of all parties involved. Given the potential presence of asbestos in the building, the vendor must adhere to the following precautions:

- The contractor shall avoid disturbing any asbestos or suspected asbestos-containing material.
- If the contractor encounters asbestos or suspects building materials containing asbestos, and if a method of installation to avoid asbestos areas cannot be determined, the contractor shall request guidance from the District as to how to proceed.
- All work must comply with federal, state, and local regulations regarding asbestos handling and abatement.
- The vendor must implement all necessary safety measures to protect workers, students, staff, and visitors from asbestos exposure. This includes the use of personal protective equipment (PPE) and containment procedures in locations where asbestos exists.
- All personnel involved in the project must be trained in asbestos awareness and safe handling procedures.

Additionally, during the project kickoff, the district's environmental engineer, Nova, will provide an overview of the asbestos in the district and how it should be handled.

2.2 SCHEDULING

The District has established a schedule that accounts for summer programming in the various buildings, as well as teacher PD time at the end of the summer. Please review the tentative schedule below and indicate if you have any concerns in **Appendix A**. Note that we anticipate that you will need 3-4 crews onsite at a time.

Building	Implementation timing	Summer Programming
Kenbrook	June 16 – July 4	July 28 – August 8
Gill	June 16 – July 4	
Farmington Central HS	June 16 – July 4	
STEAM Academy	July 7 - 25	
Lanigan	July 7 - 25	
Longacre	July 7 - 25	
Wood Creek	July 7 - 25	
Beechview	July 28 – Aug 15	June 16 – July 12
Hillside	July 28 – Aug 15	June 16 – July 18
Forest	July 28 – Aug 15	June 16-July 18

Building	Implementation timing	Summer Programming
Facilities	September	
Transportation	September	

2.3 CABLING SPECIFICATIONS

The cabling infrastructure shall employ a copper medium, referred to as UTP (unshielded twisted pair) cabling, commonly employed in commercial voice and data networks. To this extent, the finished infrastructure, in total, shall comply with the installation procedures used for such voice and data infrastructure builds as specified under TIA/EIA 568B standards concerning the same. With regard to the preceding, the finished infrastructure initially shall serve to deploy an IP-based signaling format in the future without any substantial changes to the infrastructure as-built. To that end, TIA/EIA stipulations to cable distances, methods, and manners shall require strict adherence. This infrastructure shall also meet the following specific criteria:

- i. The cabling infrastructure shall be **CAT6 plenum rated** cable. Horizontal UTP drop cabling shall be **plenum** rated with four unshielded twisted pairs under a common sheath, and that sheath shall be tested and approved for the environment into which it will reside.
- ii. Horizontal drop cabling to the device (access points) shall be in a closet-based *star* topology.
- iii. Horizontal UTP cabling from closet to device shall not exceed 90 meters (295 feet) in length.
- iv. All new cable (UTP) shall be supported using existing cable support infrastructure (J-hooks, not bridle rings). If an existing support structure is not available, new supports (J-hooks, not bridle rings) shall be installed where needed. The cable shall not lay on ceiling tiles nor be tied to ceiling grid support wires.
- v. Zip ties shall not be used anywhere in the install.
- vi. Cable shall be supported every 5 feet.
- vii. Failure to comply with cable support methods will result in a written warning. Failure to correct or repeated infractions may result in the vendor being terminated from the project.
- viii. To the degree possible, the vendor shall use existing cores. For areas where coring is necessary, vendor is responsible for neatly coring and sleeving through walls, floors, or ceilings as necessary to route cable into hallways, tech closets, or other areas as required.
- ix. The cable must be certified by the manufacturer to support 802.3af (POE) , 802.3at (POE+), and 802.3bt (POE++, Type 4).
- x. The vendor is responsible for coring, sleeving, and firestopping penetrations through walls, floors, or ceilings as necessary to route cable into hallways ER/TR, or other areas. Any firewalls penetrated or used to facilitate the routing of communication wiring shall, upon completion of that wiring, be firestopped using approved methods as outlined in the National Electric Code, and all applicable state, county, and city ordinances. The contractor shall be **responsible for firestopping all penetrations** used for routing the contractor's cable, regardless of who made the penetration access.

- xi. The vendor is responsible for providing all necessary documentation to show that the firestopping meets all applicable federal, state, county, and city ordinances, including a copy of the fire marshal approval and any necessary permitting.
- xii. Horizontal UTP drop cabling shall be terminated via an IDC (insulation displacement connection) to a 110-type jack in the patch panel.
- xiii. While the defined system is preferred under a single-source manufacturer/supplier, for the purposes of meeting specification, the component parts of the infrastructure may be from multiple manufacturer sources. The unshielded twisted pair (UTP) — a base proposal of CAT6 installation shall — be part of a manufacturer's certified program to include a minimum 15-year warranty on the entire channel. Minimally, the UTP installation must include a manufacturer's performance certification and a minimum 15-year warranty on all materials and labor. The certification may be through a single manufacturer that supplies all cabling and connectors or through a joint program (one manufacturer's cable combined with another manufacturer's connectors).
- xiv. The vendor is responsible for applying for the performance warranty, as well as providing documentation of that warranty to the District.
- xv. The cable specified shall be in the conduit or raceway between the device and the wiring closet (MDL/IDL) in areas where the cable is exposed and not run behind walls or suspended above the ceiling. Cables tied to electrical conduits or laid on ceiling tiles will not be accepted.
- xvi. The cable installers will be certified by the manufacturer on the cable and components used.
- xvii. The vendor must comply with all EIA/TIA specifications as well as local building codes.
- xviii. Cabling & jack colors are as follows:
 - Data cabling: Blue
 - Wireless cabling: Blue
 - Video surveillance cabling: purple
 - AV cabling: Orange
 - Data outlet: Blue
- xix. Cabling shall be labeled as follows:
 - Closet number - patch panel letter – port number
 - Example: 00 – AA – 01

2.3.1 Patch panels base bid

The vendor will supply and install CAT6 patch panels at the MDL and at each of the IDLs as required to support the cable count as well as any required panels at the other buildings (to be added via unit cost as needed during installation). The vendor will supply unit pricing for additions (or deductions) that may be necessary after the installation has begun.

2.3.2 Device end termination

The vendor will terminate the device end cable in a standard 8P8C connector at the device end. A cable identification label will be placed on the cable at the device end. Each communications outlet shall be labeled (to be clearly visible). All labels should be placed under a clear plastic cover to provide a tamper-resistant solution. All labeling must meet TIA/EIA standards. Each horizontal UTP cable shall be labeled at

each end with an adhesive-backed designation strip. The strips must be designed to withstand the heat of the closets they are terminated into without peeling off. All labeling must meet TIA/EIA standards.

For all other cabling drops, the vendor must provide the following:

- One-foot cord for the closet side
- Six-foot cord for the end-user side
- Faceplate for the raceway or junction box – exact faceplate part to be identified as part of the walkthrough after award; this will vary by building

2.3.3 Add/Alternate 1: CAT6A cabling

Provide CAT6A cabling upgrade costs as an alternative. This must include all cabling as part of the base bid, as well as new cabling for the wireless access points, video surveillance cameras, the interactive flat panel (IFP) and flat panel locations. It also must include cabling demolition for those locations.

2.4 CABLING DEMOLITION

Vendors must demolish all existing abandoned cabling and cabling that is being abandoned as part of this project at buildings as they are re-cabled. Additionally, the vendor will be required to remove all existing low-voltage cabling that is abandoned (UTP, coax) including cabling above the ceiling and cabling within the raceway/conduits. Where cabling was demoed and a location completely abandoned, vendor must provide and install a blank faceplate.

For locations demoed or abandoned, vendors will need to remove the data/voice cabling from the jack back to the wiring closet and remove patch panels that become completely freed up. All cabling, patch panels, etc., must be disposed of in an environmentally appropriate manner and meet any local/state/federal requirements. Vendors cannot use the District's dumpsters, and they must provide their own method of disposal and removal from the property.

Any holes in the visible walls, visible hard ceiling, furniture, or junction boxes that will not be reused must be covered by the vendor. For such purpose, the vendor can provide and install metallic plates, the same material that the surfaces are made of, or an alternative element that is both deemed functionally and aesthetically adequate by the District and is compliant with pertinent codes and regulations. Such repairs, as appropriate, should be primed and painted by the vendor using paint that is provided by the vendor and matches the existing paint in the room.

For the purposes of the proposal, vendors should assume the following:

- There is likely some abandoned cabling that is in the ceiling and not dropped down to raceway (e.g. old computer labs).
- Quantities of existing cabling are estimates and there may be additional cabling that needs to be demoed.
- Vendors are not to demo AV, wireless or video surveillance cabling as part of the base bid, unless noted otherwise.

- There is backbone coax in every building and that there is likely one coax cable going to each room (above ceiling, likely no longer in raceway).
- 50% of the buildings have phone cables run to the room that need to be demoed from jack back to the closet.
- The entirety of the Facilities building cabling needs to be demoed, with the potential exception of any clock cabling.
- Existing Cat5 and Cat5e cabling is typically orange or white, but vendors should still review locations to confirm, as some newer cabling may also be those colors.

Vendors will also provide unit pricing in **Appendix A** for additional demolition work that may be required during the execution of the project in the case substantially different or unforeseen circumstances exist or arise.

2.5 NETWORK CLOSETS

The vendor is responsible for the reconfiguration of each MDL and IDL to support the new structured cabling infrastructure. All existing racks/cabinets will be removed/replaced as part of this project. Types and quantities of network equipment racks/cabinets required are included in **Appendix A**. All equipment shall be supplied with appropriate screws, shelves, mounting brackets, rails, etc. Unit pricing for installation and equipment of the following rack types are requested (see **Appendix A** for cabinet/rack specifications):

- Floor-mounted cabinet
- Two-post rack
- Floor-mounted wall cabinet
- Wall Mounted Half Cabinet

The vendor will be responsible for securing the District-provided equipment racks to the floor/wall. The equipment racks must be properly affixed to prevent unwanted movement of the equipment racks. The vendor must coordinate timing with Oakland Schools / FPS IT for rack replacement, as they will be removing / reinstalling the network components that are currently installed in the rack.

Pricing must include the removal of the existing equipment racks/cabinets.

2.5.1 Cable management

Each patch panel installed into the cabinet shall receive a horizontal wire management panel/trough installed below it. This will include front and rear wire management. The rear is for routing of cable until it is terminated on the back of the patch panel. There shall be hinged covers that hide the patch cables when routed within. Both rails in a rack or cabinet shall be equipped with vertical wire management modules extending from the base to the top of the unit, on both sides. Vendors shall provide a cut sheet with your proposed solution.

The vendor is also responsible for providing wire mesh cable trays above the provided equipment racks. The vendor will be responsible for neatly routing cables from the entry point to the equipment racks. The cable trays should be a minimum of 12" wide with 4" depth. Where applicable, cable trays shall conform to ANSI/TIA/EIA-607 requirements for bonding.

2.5.2 Bonding

The vendor is responsible for bonding all installed equipment to the bus bar provided in each closet. Bonding shall meet the appropriate requirements and practices of applicable authorities and/or codes. Additionally, all bonding shall conform to ANSI/TIA/EIA-607 requirements. Daisy chaining components for bonding will not be acceptable. A grounded bus bar will be provided for bonding.

2.6 BACKBONE CABLING

The vendor will replace the in-building backbone fiber to connect MDL to each IDL as indicated in **Appendix A**. The vendor is responsible for the estimation of distances for each fiber run. The vendor must provide fiber patch cables to the District-provided equipment. The fiber optic cable infrastructure for the backbone connection shall meet the following specific criteria:

- All installation procedures outlined in NEC, ANSI/TIA/EIA 526, 568A-C, 568B.1-.3, 569, TSB 67, BICSI ITSIM, and BICSI TDMM shall be followed.
- All local building and fire codes must be adhered to.
- The cabling will have no bends with a radius smaller than 20 times the outside diameter of the enclosing sheath
- All new fiber-optic cabling shall be supported using new cable support infrastructure (J-hooks). If new supports (e.g., cable tray) are provided by other trades (e.g., construction), those pathways may be used in lieu of J-hooks with approval from the District. Cable shall not lay on ceiling tiles nor be tied to ceiling grid support wires.
- The cabling shall be supported every 5 feet and will have no more than 6 inches of sag at any point.
- Building backbone fiber, if not pre-terminated, must be field terminated with fusion splice connectors

2.6.1 Single-mode fiber optic cabling

Single-mode fiber optic cabling must meet (or exceed) the specific criteria found in **Appendix A**.

2.6.1.1 Fiber enclosure

The vendor is responsible for providing a fiber enclosure to terminate in-building fiber optics. The panel in the MDL must be sized to accommodate 12 terminated strands from each IDL. The panel at each IDL will be sized to accommodate 12 terminated strands. All panels will have bulkhead inserts that accommodate six fiber terminations. In addition, all fiber terminated within the enclosure should be labeled on both the cable and fiber enclosure according to the standard established by the District. The fiber enclosure must meet (or exceed) the specific criteria found in **Appendix A**.

2.7 RELOCATED IDLS

A number of IDLs are being relocated as part of this project. Refer to the prints in **Appendix B** for the current and new locations. As part of this, some cabling will have to be pulled back and reterminated, and some may have to be run anew. Refer to **Appendix A** for these quantities. Unit costs will be utilized for additional drops that either need to be moved or pulled anew and are not noted on the prints.

Additionally, the vendor must follow all items in section **2.4 Network Closets** and section **2.5 Backbone Cabling** for these new locations.

2.8 DOCUMENTATION

The vendor shall provide a single complete set of system documentation, as detailed below, electronically. Documentation shall include vendor contact information, including names of the account representative, design engineer, supervisor, and project manager; vendor mailing address; voice numbers; fax numbers; and email address.

2.8.1 As-built drawings

The vendor will prepare complete field installation drawings. The drawings will show the location of all cabling and equipment. As-built drawings should be documented on the District-provided architectural blueprints/building floor plans. The vendor will work with the District to develop a symbol set to be used on the drawings. The vendor shall document the following:

- The location of all cabling and equipment
- Cable ID at end-user location
- Pathways from IDL locations back to the MDL location (including fiber optic strand counts where applicable)
- All core locations (including core size and whether they are through a wall or a floor)
- Fire stop system drawings for each type of wall, floor, or ceiling penetration

The vendor will provide all as-built information on District-provided electronic files (PDF format) in electronic copies.

2.8.2 Equipment records

This section is not required for cabling only projects.

2.8.3 Warranty documentation

The vendor shall provide warranty documentation for all equipment/cabling installed.

2.8.4 Permit documentation

The vendor shall provide proof of applicable successful inspections that are necessary to meet local, state, or federal codes and requirements.

2.8.5 Documentation turnover

The vendor shall provide an inventory of all documentation (including test results) submitted to the District and shall obtain the signature of the recipient. This shall be delivered within two weeks of completion of each building.

- a. All as-built drawings
- b. All equipment records
- c. All system manuals/specification sheets
- d. All warranty documentation
- e. All permit documentation
- e. All testing results (system performance test)
 - CAT6 test results for each horizontal UTP cable – results must be presented in electronic format for each cable tested
 - CAT6 tester manufacturer, model, serial number, hardware version, and software version
 - Fiber test results – results must be presented in electronic format for each cable tested
 - Fiber tester manufacturer, model, serial number, hardware version, and software version

2.9 ACCEPTANCE/TESTING CRITERIA

Initial acceptance testing shall take place prior to the start of the school year. Systems must be operational for 45 days during the school year prior to acceptance.

2.9.1 Testing: Submission of results

Test results are to be submitted to the District or District's representative.

2.9.2 Cabling testing

The cable shall be tested after installation and meet all testing and installation requirements compliant with CAT6 based in part or all of the following standards:

- ANSI/TIA/EIA 568-B
- ANSI/TIA/EIA 569-B
- ANSI/TIA/EIA 606-A
- ANSI/TIA/EIA 607-A
- All applicable ANSI/TIA/EIA standards
- NFPA 70, National Electrical Code (NEC 2014)
- All cabling must be plenum rated

Additionally, all cabling shall comply with the following requirements:

- The conductors of the pairs will be of solid copper construction
- The cable type shall be plenum rated with 100% FEP for all areas within the building

- The cable shall possess the ratings by Underwriter's Laboratory CMP as it applies to the cable type and insulation

Approved enhanced CAT6 UTP plenum cable product shall be manufactured by reputable structured cabling equipment manufacturers (e.g., Panduit, Legrand, CommScope, Belden, Leviton), and must be tested by ETL Intertek Testing Services and/or approved by Underwriters Laboratories.

2.9.3 Backbone fiber: Power meter testing

The testing of fiber shall be performed prior to system acceptance. Power meter testing provides documentation of the amount of attenuation across a span on a single fiber. All single mode fiber shall undergo bi-directional attenuation testing with an optical meter at: both 1310nm, 1383 nm and 1550 nm wavelength (reference ANSI/TIA-568-3-D, ISO/IEC 11801, ANSI/ICEA S-83-596)

All tests must be conducted from end to end. This must be performed with a light source and power meter to measure the complete link (including optical fiber, splices, and connectors). All tests must conform to specifications (follow recommended procedures stated in the ANSI/TIA-568-3-D, ISO/IEC 11801, ANSI/ICEA S-83-596 standards). Electronic copies of the testing results shall be provided.

2.9.4 Fiber optic connector loss values

The maximum loss values for patch panels and patch cords shall not exceed the manufacturer's specified values. At no point shall the following loss values be exceeded:

- Splice (Mechanical): 0.30 dB
- Splice (Fusion): 0.30 dB
- Connector (mated pair): 0.75 dB
- Cross-Connect (two mated pairs): 1.50 dB

2.9.5 Completion and punch lists

Installation must be complete by the date indicated in **Section 1.3**. Note that for phased implementations, this section applies to each phase/building. After installation and vendor testing is complete, the vendor shall notify the District in writing that they are ready for the final acceptance review. For each day the installation and vendor testing is not completed after that date, the vendor shall be charged \$200 per business day. If completion is not done prior to the start of the school year, the vendor shall be charged \$400 per calendar day. The District will perform acceptance testing and then provide a punch list to the vendor. The vendor shall have 10 business days to remedy the punch list. For each day it is not completed after that date, the vendor shall be charged \$200 per business day. The District shall review the punch list items reported by the vendor to be resolved within a mutually agreed upon negotiated timeline. If any items remain after the vendor has indicated they were cleared, vendor shall be charged \$500 for each subsequent visit by the District to review punch list items until the punch list is cleared. All vendor charges will be included in the contract as part of a change order.

2.9.6 Final acceptance

The vendor shall demonstrate that all work is complete, free from physical and electrical defects or deficiencies, and in satisfactory operating condition. The District shall be allowed to inspect and test the work performed and to notify the vendor of any deficiencies. The District will be the sole judge as to whether the work has been completed properly. All material or equipment that is deemed not to comply with this RFP will be replaced by the vendor, at no charge to the District, prior to final payment. Final acceptance MAY occur in phases, by building.

In accordance with the payment terms, the vendor will submit a final AIA Document G702 Application and Certificate for Payment. The District will present signoff/closeout documents to the vendor for signatures and provide a copy of the document to the vendor.

System warranty for products and workmanship will not commence until project closeout. The system warranty includes any manufacturer's warranty and additional extended warranties that may be purchased.

2.10 SYSTEM WARRANTY

2.10.1 Structured cabling

Unshielded twisted pair (UTP), a base proposal of CAT6 installation, shall be part of a manufacturer's certified program to include a minimum 15-year warranty on the entire channel. Minimally, the UTP installation must include a manufacturer's performance certification and a minimum 15-year warranty on all materials and labor. The certification may be through a single manufacturer that supplies all cabling and connectors or through a joint program (one manufacturer's cable combined with another manufacturer's connectors).

The vendor is responsible for applying for the performance warranty as well as for providing documentation of that warranty to the District.

2.10.2 Backbone fiber

Fiber installation shall be part of a manufacturer's certified program to include a minimum 15-year warranty on the entire channel. Minimally, the fiber installation must include a manufacturer's performance certification and a minimum 15-year warranty on all material and labor. The certification may be through a single manufacturer that supplies all cabling and connectors or through a joint program (one manufacturer's cable combined with another manufacturer's connectors).

The vendor is responsible for applying for the performance warranty as well as for providing documentation of that warranty to the District.

2.11 COSTS

Each vendor will respond on the Bidder Response Form that is included in **Appendix A** and provide all costs associated with the equipment and services specified. Each vendor will provide the following information:

- A complete, itemized equipment list
- Your base bid cost for the complete project; if any miscellaneous costs need to be included, be sure to identify and explain them
- Warranty period and terms

The base bid is to include the following:

- Cabling
- Cabling support
- Cabling demolition
- Backbone fiber
- Backbone fiber support
- All required labor and miscellaneous materials

2.11.1 Other costs

If any costs are associated with your proposed service that have not been identified in prior sections, they must be detailed in the other costs section under each price form. Any such charges will be clearly identified, and all nonrecurring and monthly costs provided. These other costs, if any, must be shown for each category requested.

APPENDICES (provided separately)

Appendix A: Bidder Response Forms

Appendix B: District Drawings

Appendix C: Sample Agreement