

Lapeer Community Schools

250 2nd Street
Lapeer, MI 48446

Request for Proposals

Structured Fiber Cabling

Request For Proposal Year: 2024/2025

FY2024 E-Rate FORM 470 – 240011078

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REQUEST FOR PROPOSALS – STRUCTURED CABLING

1.0.0 INVITATION TO BID

1.1.0 **BID ACCEPTANCE**

Lapeer Community Schools, hereby known as “District”, will accept sealed responses (“Bids”) to this Request for Proposals (RFP) for Structured Cabling projects which comply with the Invitation to Bid, Bidder Instructions, General Conditions, Universal Service Fund (USF) Conditions, Scope of Work, Timeline Requirements, Awarded Contract Requirements, and Products and Services Specifications set forth below and submitted to the District at the following address:

**Lapeer Community Schools
Administration Building – Attention: Stephen Melchor
250 2nd Street
Lapeer, MI 48446**

1.2.0 **INTENT TO BID FORM**

All Bidders must complete and submit the Intent to Bid Form, Appendix A, no later than February 15, 2024. The Bidder shall be responsible for the timely delivery of the Intent to Bid Form. The Bidder shall make no additional stipulations on the Intent to Bid Form or qualify their Bid in any other manner.

1.3.0 **FACILITIES/BUILDING WALKTHROUGH**

All Bidders are encouraged to attend a walkthrough meeting at the facilities and buildings where the structured cabling will be installed. The walkthrough meeting will begin promptly at the time specified whereby any/or all questions regarding the structured cabling project will be answered by the District. The walkthrough meeting is scheduled for **2:00 PM on February 15, 2024 at Administration Building, 250 2nd Street, Lapeer, MI 48446**.

1.4.0 **ADDENDUM QUESTIONS**

All Bidders must complete and submit all major addendum questions by **February 15, 2024**.

2.0.0 BIDDER INSTRUCTIONS

2.1.0 **BID OPENING**

All Bid responses to this RFP must be in duplicate in a sealed opaque envelope labeled as follows: **Structured Cabling - FY2024 USF Bid** and “**March 08, 2024**”. *The bidder must also include an electronic copy of all bid materials on a flash drive as well as the paper copies.*

2.1.1 No oral, telephonic, telegraphic, e-mail or facsimile Bids will be considered.

2.1.2 No Bids will be considered after **2:00 PM, March 08, 2024**.

2.1.3 The Bidder shall be responsible for the timely delivery of the Bid; the District shall not be liable to any Bidder for any delivery or postal delays and postmarking to the bid opening date will not substitute for receipt of the Bid

2.1.4 All timely submitted Bids received by the District will be opened at the **Administration Building, 250 2nd Street, Lapeer, MI 48446** at **2:00 PM, March 08, 2024** for recommendation to the Board of Education at a future regularly scheduled meeting.

2.1.5 If the District is closed due to unforeseen circumstances on the bid opening date, Bids will be due on the next day that the District is open.

2.2.0 **BID BONDS**

The Bidder shall submit a five percent (5%) Bid Bond, of the total base Bid price, made payable to Lapeer Community Schools, with the sealed Bid. Any Bids received without a Bid Bond will be rejected by the District.

2.3.0 CLARIFICATIONS AND CORRECTIONS

Direct any and all questions regarding this RFP by email to: **Stephen Melchor**, at: **erate@lapeerschools.org**. The resulting answers, along with the questions shall be posted on USAC website.

2.4.0 GENERAL REQUIREMENTS

- 2.4.1 The District or its representatives shall not be held responsible for expenses incurred in the preparation or subsequent presentation of the Bid response.
- 2.4.2 This RFP for Structured Cabling is not an offer to enter into a contract, but rather a solicitation for Bids.
- 2.4.3 The Bidder shall supply, upon request, samples and/or brochures of the proposed materials and equipment with the Bid.
- 2.4.4 The District shall provide, upon request and at the Bidders' expense, blueprints and/or drawings associated with this project.
- 2.4.5 The District reserves the right to reject Bids submitted without a five percent (5%) Bid Bond, signed Bid Signature Page, Bill of Materials, Familial Disclosure Affidavit, Iran Linked Business Affidavit, and list of four (4) references.

2.5.0 BID IDENTIFICATION REQUIREMENTS

The Bid shall include the full legal name of the Bidder, its business address, telephone number, and a statement identifying the Bidder as a sole proprietorship, partnership, corporation, or other legal entity. A proprietorship shall state the full name of the proprietor, a partnership shall state the full names of the general partners, and a corporation shall identify the state in which it is incorporated. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract.

- 2.5.1 The Bidder shall complete and submit, along with the Bid, a Bid Signature Page, Appendix B, in long hand, in ink, by an authorized representative.
- 2.5.2 The Bidder shall complete and submit, along with the Bid, a Bill of Materials, Appendix C, summarizing the details of the Bid.
- 2.5.3 The submitted Bid shall include a Familial Disclosure Affidavit form, Appendix D, which is properly completed, signed by an authorized representative of the Bidder, and notarized with an affixed, raised notary seal.
- 2.5.4 The submitted Bid shall include a list of at least four (4) references, one (1) of which must be a school or school district, for similar work performed within the past three (3) years.
- 2.5.5 The Bid shall be accompanied by a sworn and notarized affidavit that represents and warrants that the bidder, including its officers, directors and employees, is not an "Iran Linked Business" within the meaning of the applicable Michigan Public Act No. 517 of 2012, and that in the event bidder is awarded a contract as a result of this RFP, the bidder will not become an "Iran Linked Business" at any time during the course of performing under the contract. The Board of Education will not accept a Bid that does not include the sworn and notarized Iran Linked Affidavit, Appendix E. Bids in non-compliance with this request are subject to rejection.

2.6.0 BLUEPRINTS AND DRAWINGS

Blueprints and/or drawings of the facilities will be made available to the Bidder by the District in the following manner:

- 2.6.1 The District shall provide drawings per request on the Intent to Bid Form. (Appendix A)

2.7.0 DEFINITIONS

The foregoing definitions are made available for the purpose of this Request for Proposals (RFP) only.

- 2.7.1 **District** – Lapeer Community Schools
- 2.7.2 **Bidder(s)** – Business Entities and/or Person(s) submitting the Bid.
- 2.7.3 **Bid(s)** – A complete and properly executed proposal to perform the Scope of Work, or designated portion thereof, for the sums stated within the Bid.

- 2.7.4 **Base Bid** – The sum stated in the Bid for which the Bidder offers to perform the Scope of Work wherein work may be added or subtracted for sums stated in the Alternate Bid, if any.
- 2.7.5 **Alternate Bid** – An amount stated in the Bid to be added or subtracted from the amount of the Base Bid, if said change in the Scope of Work, method of construction and/or materials is accepted by the District.
- 2.7.6 **Selected Vendor/Contractor** – The Bidder(s) receiving formal notice of acceptance of his/her Bid(s) and has been duly served by an officer *or* agent of the District duly authorized to give such notice.

3.0.0 GENERAL CONDITIONS

3.1.0 RIGHTS OF ACCEPTANCE OR REJECTION

The District’s Board of Education reserves the right to reject any and all Bids in whole, or in part, and accept any Bid or portion of the Bid that, in their opinion, best serves the interests of the District.

3.2.0 QUALIFICATION OF BIDDERS

For the purpose of assuring the District of the quality of workmanship, materials, products and/or services, the Board of Education will retain the right and has complete discretion to qualify or disqualify any Bidders on the basis of available information concerning the Bidder’s ability to perform as needed and the suitability of the products and/or services included in the Bid as described in sections 3.4.0 and 3.5.0. **Each Bidder, by submitting a Bid, represents that:**

- 3.2.1 The Bidder has read and understands all the Bid requirements, conditions and specifications contained herein.
- 3.2.2 The Bidder has the option to visit the District work site and familiarize themselves with the local conditions under which the work is to be performed.
- 3.2.3 The Bid is based upon the materials, systems and equipment described, without exception, in all Bid documents supplied by the District.

3.3.0 VARIANCE AND PRICE

Any variance from the specifications in section 8.0.0 of this RFP must be fully explained in writing by the Bidder. All prices quoted in the Bid must be on a unit price basis and include the total price. The price of an item or unit of a given product as promised in a Bid cannot be changed by the service provider regardless of whether the District changes the quantity of the item or unit needed.

3.4.0 MANUFACTURER(S) BRANDS/MODEL NUMBERS

The naming of a manufacturer(s), brand or model number will not be considered as excluding other brands or model numbers for purposes of later providing the products as promised in the Bid. Specifically, similar products with comparable construction, material and workmanship will be considered as equal. Notwithstanding, the Board of Education of the District has complete discretion to evaluate the merits of all Bids submitted and can take into consideration the brand and/or model numbers set forth in the Bids.

3.5.0 MANUFACTURER(S) SUBSTITUTIONS

Any substitution from the specified products and/or services by the manufacturer(s) is acceptable if at no additional cost to the District and approved by an authorized district representative prior to placing the order for said products and/or services. The District reserves the right to refuse any and all manufacturer(s) substituted products and/or services.

3.6.0 MANUFACTURER(S) DISCOUNTS

The District reserves the right to receive any and all manufacturer(s) price reductions, discounts or rebates that are received by the selected vendor/contractor for the specified products and/or services. The selected vendor/contractor agrees to pass any and all cost savings from the manufacturer(s) for the specified products and/or services to the District by way of a setoff of monies owed or refund of monies paid by the District.

3.7.0 CLEAN-UP

The selected vendor/contractor must, at all times, keep the premises free from accumulations of waste materials, caused by the work; and upon completing the work, must remove all work-related rubbish from and about the building(s) and must leave the work area broom clean, or its equivalent. In the case of a dispute, the District may remove the rubbish and charge the cost to the selected vendor/contractor.

3.8.0 ROYALTIES AND PATENTS

The selected vendor/contractor must pay for all royalties, copyright, trademark, and patents and must defend all suits for claims or infringements on copyrights, trademarks and/or patent rights and shall indemnify and hold the District harmless from any and all claims and/or loss related to claims and/or infringements on copyrights, trademarks and/or patent rights, including reasonable attorney fees and costs incurred by the District.

3.9.0 ADDENDA

Any clarifications or modifications to the specifications for the RFP will be issued by the District in the form of an addendum. Any addendum issued during the bidding time will become part of the specifications and a copy will be sent to all Bidders as set forth in section 2.3.0.

3.9.1 No verbal statements by the District will be considered as binding or enforceable against the District.

3.9.2 No requests for clarifications or modifications will be processed after the date listed in Section 1.4.0.

3.10.0 FEDERAL, STATE AND LOCAL TAXES

All products and/or services furnished by the selected vendor/contractor must comply with all applicable federal, state and local codes, and regulations. All Bids must include, and the selected vendor/contractor must pay, all taxes levied by the Federal, State, and Local Governments, on both labor and materials. The District reserves the right to require evidence of such tax payments prior to final payment of the contract. The District is exempt from Federal Excise and State Sales Taxes. To comply with these regulations, sales tax is not to be included in the Bid.

3.11.0 PROJECT IMPLEMENTATION

The selected vendor/contractor shall have sufficient resources in order to complete the project within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to fulfill the Timeline Requirements in section 6.0.0 of this RFP.

3.12.0 NO DISCRIMINATION

The selected vendor/contractor and their subcontractors are required not to discriminate against any employee or applicant for employment, to be employed in the performance of the Bid, with respect to hire, tenure, terms, conditions, or privileges of employment, because of race, color, religion, national origin, or ancestry or also because of age or sex, except based on a legitimate occupational qualification. Violation of this requirement may be regarded as a material breach of the Michigan Fair Employment Practices Act and may be subject to prosecution.

3.13.0 NO SMOKING POLICY

The District adheres to a mandatory no smoking policy on school premises and/or at school functions. All Bidders shall comply with this no smoking policy.

3.14.0 PRODUCTS AND SERVICES SPECIFICATIONS

It is the intent of the specifications in section 8.0.0 of this RFP to define the minimum acceptable quality of products and/or services. The product line must be of known quality from a nationally recognized manufacturer(s) who regularly advertises, promotes, and distributes products and services to the school market.

3.15.0 VARIATIONS FROM SPECIFICATIONS

All variations from the specified products and/or services, section 8.0.0, must be fully explained and included with the Bid. Manufacturer(s) Brands must be used in all cases.

3.15.1 The District reserves the right to increase or decrease quantities or modify the specifications.

3.15.2 The selected vendor/contractor shall agree to a written modification of the terms of its original Bid within five (5) business days of receiving written notification of the increase or decrease in quantities, or modification of the specifications.

3.16.0 PARTIAL BIDS

Partial Bids will be considered, where appropriate.

3.17.0 CANCELLATIONS

The District reserves the right of cancellation for non-performance of the terms specified in the awarded contract.

3.18.0 WITHDRAWAL OF BIDS

Upon presentation of proper identification, any Bidder may withdraw his/her Bid at any time prior to the scheduled Bid Opening date and time, section 2.1.0. No Bid shall be withdrawn for a period of ninety (90) days after the Bid Opening date and time.

3.19.0 BID EVALUATIONS

Considerations for awarding contracts will include price, product quality, service, delivery, and maintenance of products and/or services, adherence to specifications, past performance to the District, vendor/contractor reliability, warranties and familiarity with the projects and the facilities of the District.

3.19.1 It is the intent of the District to award the contract to the Bidder submitting the “best” cost effective Bid for the project; provided the Bid has been properly submitted and delivered, including all required documentation herewith, and considered reasonable in price.

3.19.2 Price being the primary factor, consideration, other than price alone, shall be used in determining the most successful Bid; technical experience, local service and support, and experience in educational environments are used to perform the District’s Bid evaluations.

3.19.3 The Board of Education of the District will evaluate the merits of all Bids submitted and reserves the right to accept or reject any or all Bids.

3.20.0 NOTICE OF AWARD

The Bidder will be deemed as having been awarded when the formal notice of acceptance of his/her Bid has been duly served upon the intended awardees by an officer, or agent, of the District duly authorized to give such notice.

4.0.0 UNIVERSAL SERVICE FUND (USF) CONDITIONS

4.1.0 IDENTIFICATION NUMBER

The service provider’s USF Service Provider Identification Number (SPIN) *must* be included in the Bid. 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.

4.2.0 FY2024 FUNDING REQUESTS

The specified products and/or services are to be provided for FY2024 (July 1, 2024-June 30, 2025) and must qualify for universal service discounts under the FY2024 universal service support mechanism, E-Rate. The *E-rate Modernization Order* permits applicants to seek support for Category 2 eligible non-recurring 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, 2024.

4.3.0 UNIVERSAL SERVICE DISCOUNTS

The service provider contract is conditional upon the District receiving universal service discounts under the FY2024 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.

4.4.0 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 Bid: Billed Entity Applicant Reimbursement (BEAR) *or* Service Provider Invoice (SPI).

4.5.0 ELIGIBLE PRODUCTS AND SERVICES

The USF eligible products and/or services identified on the USAC FY2024 Eligible Services List, which is incorporated herein by reference, must be identified separately from any and all “ineligible” products and/or services in the Bid.

4.6.0 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 Bid. In the event that E-Rate Funding is not available for the accepted Bid, District, in its discretion, may cancel and/or modify the Scope of Work (SOW) and subsequent purchases requested in this RFP.

4.7.0 LOWEST CORRESPONDING PRICE

Lowest Corresponding Price (LCP) is defined as the lowest price that a service provider charges to non-residential customers who are similarly situated to a particular E-rate applicant for similar services. Service Providers cannot charge E-rate applicants a price above the Lowest Corresponding Price (LCP) and must actually charge the rate that is the LCP, not just offer the LCP in the Bid. In addition, promotional rates offered by a Service Provider for a period of more than 90 days must be included among the comparable rates upon which the LCP is determined.

5.0.0 SCOPE OF WORK

5.1.0 GENERAL DESCRIPTION

The general description of the Scope of Work (SOW) for this project is to provide the District with Structured Cabling at six (6) school buildings. In addition to the forgoing SOW, all Bids must comply with all sections of this RFP and the Products and Services Specifications set forth in sections 8.0.0 through 11.0.0.

5.2.0 FACILITIES/LOCATIONS

Building Name	Address	City	State	Zip
Center for Innovation	170 Millville Road	Lapeer	MI	48446
Emma Murphy Elementary School	1100 Pratt Road	Metamora	MI	48455
Lapeer High School	933 South Saginaw Street	Lapeer	MI	48446
Rolland Warner Jr High	333 Demille Blvd	Lapeer	MI	48446
Turrill Elementary School	785 S. Elm	Lapeer	MI	48446
Zemmer Junior High School	1920 Oregon Road	Lapeer	MI	48446

5.3.0 VENDOR/CONTRACTOR RESPONSIBILITY

It shall be the responsibility of the selected vendor/contractor to provide the configuration and system quantities to all locations stated herein. The intentional or accidental omission of necessary component(s) or system(s) shall require the selected vendor/contractor to supply said missing component(s) or system(s) at no cost to the District. The District and any Consultants associated with this RFP are not responsible for any omission, failure to detect any requirement, or any other condition required to complete the Scope of Work. **The awarded Bidder shall:**

- 5.3.1. Meet jointly with representatives of the District to exchange information and agree on details of equipment arrangements and installation interfaces for a structured cabling project.
- 5.3.2. Have sufficient resources in order to complete the SOW within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to complete the SOW within the specified timeframe.
- 5.3.3. Furnish all labor, supervision, tooling, and miscellaneous mounting hardware and consumables for the structured cabling system installed at the District.
- 5.3.4. Furnish, install, and terminate data jacks at each location according to the Product and Services Specifications and as shown on the supplied existing blueprints/drawings.
- 5.3.5. Abate any existing cable in each building, where applicable, and will properly dispose of such cable at the Bidder's expense.
- 5.3.6. Install all cable in accordance with the Product and Services Specifications and/or manufacturer's recommendations and best industry practices.
- 5.3.7. Develop and submit for approval a labeling system for the cable installation. At a minimum, the labeling system shall clearly identify all components of the system; racks, cables, panels, and outlets.

- 5.3.8. Test (100%) all cables and termination hardware for defects in installation and to verify cable performance under installed conditions.
- 5.3.9. Install a fire stop system in accordance with the specifications and/or manufacturer’s recommendations which shall be completely installed and available for inspection by the local inspection authorities prior to cabling system acceptance.
- 5.3.10. Provide installation, administration, testing, and “As-Built” documentation required from and/or maintained by the selected vendor/contractor during the course of the entire cabling installation project.
- 5.3.11. Provide a written guarantee/warranty covering the installed cabling system against defects in workmanship, components, and performance, and follow-on support after project completion for a period of three (3) years.

5.4.0 FIBER CABLING QUANTITIES

All fiber runs will be placed in a metal raceway or may use existing conduit, where appropriate.

5.4.1. Fiber Cabling

The District is accepting Bids for a total of six (6) fiber cable runs between the building locations listed in the table below. The fiber must be capable of a minimum 10Gbps connection speed. The District is seeking to add fiber MUX at ZJHS MDF and LHS MDF with six (6) matched DWDM colored optics per side. This will remove the 10GB single link shared on all East-side buildings. The Bid shall include all necessary patch cables and materials to complete the fiber cabling project as well as the network electronics outlined in the table below. All splicing will be fusion and not mechanical. All ends will be SC type connectors. Any and all USF E-rate “ineligible” products and/or services must be listed separately in the Bid.

From	To	Description	Distance
Center for Innovation MDF	Center for Innovation IDF2	12 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~450’
Center for Innovation MDF	Center for Innovation IDF4	24 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~425’
Center for Innovation IDF4	Center for Innovation IDF5	12 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~350’
Rolland Warner Middle MDF	Rolland Warner Middle IDF1	12 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~350’
Rolland Warner Middle MDF	Rolland Warner Middle IDF2	12 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~350’
Zemmer Junior High School MDF	Zemmer Junior High School IDF1	12 strand 10GbE Single-Mode Armored Indoor Plenum Fiber (OS2)	~375’

Note: The 24ct run from Center for Innovation MDF to IDF 4 will require fusion splicing six (6) strands to the existing fiber run that goes to IDF 5. Splicing will be located at the FDP location in IDF 4. Leave six (6) strands as spare in the IDF 4 FDP.

5.4.2. Fiber Cabling Materials

Location	Description	Qty
For MDF and IDF Locations Above	Rack Mount FDP 1RU 12 count SC loaded	6
	Rack Mount FDP 1RU 24 count SC loaded	1
	Rack Mount FDP 1RU 36 count SC loaded	1
	Rack Mount FDP 1RU 48 count SC loaded	1
	OS2 LC to SC Single Mode Patch Cable 2 meter	18
	OS2 LC to SC Single Mode Patch Cable 1 meter	8

5.4.3. Fiber Cable Muxing Materials

An existing single pair of fiber strands run from Zemmer Junior High School to Lapeer High School. The District is seeking to add fiber Muxing at ZJHS MDF and LHS MDF with six (6) matched DWDM colored optics per side. This will remove the 10GB single link shared on all East-side buildings.

Location	Manufacturer	Part Number	Description	Qty
Zemmer Junior High School MDF	Fiber Store (or equivalent)	FMU-D162136EM3	16 Channels DWDM Mux Demux	1
	Fiber Store Brocade (or equivalent)	DWDM-SFP10G-40	Brocade C21 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C22 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C25 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C26 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C29 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C30 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		OS2-SCLC-SM-2M	OS2 LC to SC Single Mode Patch Cable 2 meter	7
Lapeer High School MDF	Fiber Store (or equivalent)	FMU-D162136EM3	16 Channels DWDM Mux Demux	1
	Fiber Store Brocade (or equivalent)	DWDM-SFP10G-40	Brocade C21 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C22 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		OS2-SCLC-SM-2M	OS2 LC to SC Single Mode Patch Cable 2 meter	5
		OS2-LCLC-SM-2M	OS2 LC to LC Single Mode Patch Cable 2 meter	2

Location	Manufacturer	Part Number	Description	Qty
Turrill Elementary MDF	Fiber Store Brocade (or equivalent)	DWDM-SFP10G-40	Brocade C25 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C26 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		OS2-SCLC-SM-2M	OS2 LC to SC Single Mode Patch Cable 2 meter	2
Murphy Elementary MDF	Fiber Store Brocade (or equivalent)	DWDM-SFP10G-40	Brocade C29 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		DWDM-SFP10G-40	Brocade C30 10G-SFPP-ZRD-1560.61 Compatible 10G DWDM SFP+ 100GHz 1560.61nm 40km DOM Duplex LC SMF Transceiver	1
		OS2-SCLC-SM-2M	OS2 LC to SC Single Mode Patch Cable 2 meter	2

6.0.0 TIMELINE REQUIREMENTS

6.1.0 PROJECT TIMELINE

The selected vendor/contractor shall have sufficient resources in order to complete the SOW, section 5.0.0, within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to fulfill the timeline requirements for completing the entire project. The District is expecting the project to be completed in accordance with the following Project Timeline:

- RFP available on-line or for pickup** [February 08, 2024]
- Drawings are included as part of this RFP**..... [February 08, 2024]
- Walk Thru**..... [2:00 PM]..... [February 15, 2024]
- Sealed Bids Due** [2:00 PM]..... [March 08, 2024]
- Sealed Bids Opened** [2:00 PM]..... [March 08, 2024]
- Sign Contracts/approve Implementation Schedule** [April 12, 2024]
- Installation Begins** [July 01, 2024]
- Installation Complete** [September 30, 2024]

6.2.0 SCOPE OF WORK SCHEDULES

If and when the school buildings specified in the SOW are occupied with students and school is in session, the selected vendor/contractor is expected to perform the project after school hours and without any additional costs to the District. Areas of the school buildings that are otherwise unoccupied with students and whereby instruction is not disturbed, the selected vendor/contractor may perform the SOW with prior written authorization from the District.

6.3.0 PROJECT IMPLEMENTATION SCHEDULES

All Bidders shall provide the District with a project implementation schedule that adheres to the timeline requirements stated above, section 6.1.0. Further, the project implementation schedule must demonstrate that the selected vendor/contractor has the means and capability to complete the SOW without disruption to school building instruction, activities, and meetings. This said project implementation schedule must be agreed upon by both the vendor/contractor and the District and shall be incorporated as part of the awarded contract.

7.0.0 AWARDED CONTRACT REQUIREMENTS

7.1.0 CONTRACT EXECUTION

The Bidder shall render, deliver and execute the awarded contract within ten (10) days of being notified that the Bid is accepted and that the selected vendor/contractor is awarded a contract to perform the SOW in accordance with all terms and conditions contained herein. The awarded contract must be SIGNED and DATED by both the District and the awarded vendor/contractor prior to start of any work and in compliance with section 4.6.0.

7.2.0 SEPARATE CONTRACTS

The District reserves the unrestricted right to award different portions of the project, as broken out in the Bill of Materials, Appendix C, to separate vendors/contractors as separate contracts. Said separate contracts shall be based on the District's evaluation and interpretation of the "most cost effective" means for the District to complete the SOW for this project.

7.3.0 CHANGES TO SCOPE OF WORK

The District, without invalidating the Contract, may order changes within the SOW consisting of additions, deletions, and/or modifications, the Contract Sum and the Contract Time being adjusted accordingly. All said changes in the SOW shall be authorized by written "Change Order(s)", signed by the District, and will be executed under applicable condition of contract documents.

7.3.1 The Contract Sum and The Contract Time may be changed only in writing.

7.3.2 The cost or credit to the District from all "Change Order(s)" shall be determined by mutual, written, agreement.

7.3.3 The District will not pay invoices for work performed by verbal authorization.

7.4.0 PERFORMANCE BOND REQUIREMENTS

The Bidder shall furnish a Performance Bond covering the faithful performance of the awarded contract and a labor and material payment Bond in the TOTAL amount of the Bid in such form and with such sureties as the District shall approve, which such approval will not be unreasonably withheld. If the selected vendor/contractor defaults, neglects or fails to perform any provisions of the awarded contract, the District may, at its discretion, and after seven (7) days written notice to the selected vendor/contractor, notify the bonding company that the selected vendor/contractor is in default.

7.4.1 The selected vendor/contractor shall provide, and present with the sealed Bid, a bid bond or cashier's check in the amount equaling five percent (5%) of the Bid total.

7.4.2 The selected vendor/contractor shall provide, and maintain in force, a bond with surety, and on forms approved by the District in the amount of one-hundred percent (100%) of the contract amount that the selected vendor/contractor shall promptly and faithfully perform all obligations under the awarded contract.

7.4.3 The selected vendor/contractor shall provide and maintain, in force, a bond with Surety and on forms approved by the District that selected vendor/contractor shall make payment to all claimants for all labor and material used or reasonably required for use in the performance of the awarded contract.

7.4.4 Final Bid price may not exclude costs to secure or hold performance or bid bonds.

7.5.0 TERMINATION OF AWARDED CONTRACTS

If the selected vendor/contractor defaults or neglects to carry out the SOW and sections referenced therein, in accordance with the awarded contract and/or fails to perform any provision of the awarded contract, the District may, after seven (7) days' written notice to the selected vendor/contractor and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the selected vendor/contractor or, at its option, may terminate the awarded contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the selected vendor/contractor and may finish the project by whatever method it may deem expedient. If such expense exceeds such awarded contract price, the selected vendor/contractor shall pay the difference to the District.

7.6.0 EMPLOYMENT PRACTICES

The selected vendor/contractor, by signing a contract, agrees to comply with the provision of the State of Michigan policy regarding "Non-Discrimination of Employment", section 3.12.0.

The selected vendor/contractor shall also:

- 7.6.1 Provide all selected vendor/contractor employees with picture ID.
- 7.6.2 Upon arrival and departure, have all employees sign in and out at the main office for each school building location.
- 7.6.3 Supply the District, by email, weekly work schedules no later than the Wednesday of the preceding week. Failure to do so may result in the schedule being rejected by the District.

7.7.0 SELECTED VENDOR/CONTRACTOR PERFORMANCE

The selected vendor/contractor will be responsible for construction means, methods, techniques, sequences or procedures, and safety precautions and programs in connection with the SOW, section 5.0.0, and the Timeline Requirements, section 6.0.0. **The selected vendor/contractor shall also:**

- 7.7.1 Provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for proper execution and completion of the SOW.
- 7.7.2 At all times enforce strict discipline and good order among its employees and shall not employ any unfit person or anyone not skilled in the tasks assigned to them.
- 7.7.3 Give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work performed.
- 7.7.4 Be responsible for the acts and omissions of all his employees and all Subcontractors, if any, their agents and employees and all other persons performing any of the work under a contract with the selected vendor/contractor.

7.8.0 SUBCONTRACTOR PERFORMANCE

A Subcontractor is a person, firm, company, or corporation who has a contract with the Bidder to perform any work for completing the project. The awarded Bidder shall be responsible for the actions, inactions, and work performed by the subcontractor. Contracts between the Bidder and the subcontractor shall be in accordance with the terms of the awarded contract by the District to complete the SOW, section 5.0.0. The selected Bidder shall furnish to the District, in writing, a list of any/all subcontractors proposed to perform any part or portion of the SOW to complete the project. The selected Bidder shall not employ any subcontractor to whom the District objects and may withdraw their Bid or submit an acceptable substitute.

7.9.0 SUPPLEMENTAL INFORMATION REQUESTS

The Bidder shall be prepared to provide the District, within ten (10) days of being notified of the awarded contract, the names of the suppliers for the equipment and materials used to complete the work. **The District may request any and all Bidders to also submit, within ten (10) days of being notified, the following:**

- 7.9.1 The Bidder's performance record(s).
- 7.9.2 An itemized list of the Bidder's equipment, plant, and personnel.
- 7.9.3 The Bidder's financial statement(s).
- 7.9.4 A description of any project, which the Bidder has completed in a satisfactory manner.
- 7.9.5 Any additional information that will satisfy the District that the Bidder is adequately situated and able to fulfill the terms of the proposed contract.
- 7.9.6 A description of any other project(s) that will be performed simultaneously with the District's project(s).
- 7.9.7 A statement regarding any past, present, or pending litigation for contracted products and services.

7.10.0 INSPECTIONS

The District and its agents have the right to inspect the selected vendor/contractor’s work periodically to determine that proper materials were used and that the progress and quality of work completed is in accordance with the contract.

- 7.10.1 Prior to the start of the projects, the selected vendor/contractor will have materials on site and available for inspection by the District’s designated authorized representative.
- 7.10.2 All equipment used for the project must be in compliance with the specified part numbers contained in the successful Bid.
- 7.10.3 Prior to completion of the work, all ceiling tiles will be left open until the District has inspected the work. After said inspections, the selected vendor/contractor will replace all ceiling tiles.

7.11.0 INVOICE/PAYMENT REQUIREMENTS

Invoicing for payment(s) will be made 100% upon completion of the SOW and acceptance by the District. All invoices must be in compliance with the USF E-Rate Conditions, section 4.6.0. No invoices will be DATED or PAID before July 1, 2024. **Payments will be paid NET 30 days AFTER:**

- 7.11.1 Acceptance by the District of “AS-BUILT” diagram(s) in **both** paper and electronic copy, preferably Microsoft Visio.
- 7.11.2 The selected vendor/contractor will submit proof of performance by submitting to the District, in both paper and electronic copy, cable certification testing results. Certification testing will be performed and documented using appropriate electronic tester.
- 7.11.3 When applying for payments, the selected vendor/contractor shall submit to the District an itemized invoice based upon the installation schedule and supporting documentation required herein.
- 7.11.4 The project shall be considered complete when the SOW has been completed, accepted by the District and the following items are furnished; a) required guarantees, b) waivers of lien submitted showing all payrolls, material bills and other indebtedness connected with the project have been paid. The selected vendor/contractor must submit both a) and b) before the final payment is requested.
- 7.11.5 Payment may be withheld by the District for; a) defective work not remedied, b) claims filed and unresolved, c) failure of the selected vendor/contractor to properly pay for labor, materials or equipment, or proper payment to Subcontractors, and/or d) damages to the District or another Contractor.

7.12.0 GUARANTEES

The selected vendor(s)/contractor(s) must furnish the District a written guarantee of the services and/or products provided to the district for, at least, three (3) years after the final payment covering all workmanship and materials specified in the contract. Any defects in workmanship or materials for which a claim is submitted by the District within the three (3) year period must be corrected or replaced within thirty (30) days.

7.13.0 WARRANTIES

The selected vendor/contractor(s) must furnish the District written warranty documentation. This warranty documentation shall include cable and connectivity components and have one (1) point of contact person for all cabling system issues, where applicable.

- 7.13.1 The selected vendor/contractor must warrant that all materials and supplies incorporated within the Bid, is new, unless otherwise specified, and that all work performed will be of good quality, free from faults and defects, and in adherence to the Product and Services Specifications in this RFP.
- 7.13.2 The warranty shall provide a complete system warranty to guarantee an end-to-end high-performance cabling system that meets the system application requirements. The cabling system shall be warranted under this provision for three (3) years.
- 7.13.3 If the manufacturer repairs any product under the warranty, they may use new or reconditioned replacement parts. If the manufacturer replaces the product under the warranty, they may replace it with a new or reconditioned product of similar or same design.
- 7.13.4 Any such repairs or replacement by the manufacturer will be warranted for either a) ninety (90) days or b) the remainder of the original three (3) year warranty period, whichever is longer.

7.14.0 CORRECTION OF WORK

The selected vendor/contractor shall correct any work that fails to conform to the requirements of the awarded contract where such failures or any defects is due to faulty materials, equipment or workmanship which appear within a period of three (3) years from the date of completion of the contract *or* within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract. These provisions apply to all work performed by employees of the selected vendor/contractor and any Subcontractors.

7.15.0 RIGHT TO REJECT OR STOP THE WORK

The District may reject work which does not conform to the Bid or awarded contract specifications. If the selected vendor/contractor fails to correct any defective work or fails to supply labor, materials, or equipment in accordance with the specifications of the awarded contract, the District may order the selected vendor/contractor to stop all work, or any portion thereof, until the cause for such order has been eliminated.

7.16.0 INDEMNIFICATION

The selected vendor/contractor shall indemnify and hold harmless the District and its agents and employees from and against all claims, damages, losses and expenses including attorneys' fee arising out of or resulting from the performance of the project; provided that any such claim, damage, loss or expense is attributable to a) bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting from and b) is caused in whole or in part by any act or omission of the selected vendor/contractor, and/or Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. In any and all claims against the District or any of its agents or employees, by any employee of the selected vendor/contractor, and/or Subcontractor, anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitations on the amount or type of damages, compensation or benefits payable by or for the selected vendor/contractor and/or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.

7.17.0 FORCE MAJEURE

Except for the District's obligation to pay the selected vendor/contractor, neither party shall be liable for any failure to perform its obligations under the awarded contract or any SOW if prevented from doing so by a cause or causes beyond its control, including without limitations, acts of God or public enemy, failure of suppliers to perform, fire, floods, storms, earthquakes, riots, strikes, war, and restraints of government.

7.18.0 LIABILITY REQUIREMENTS

The selected vendor/contractor shall be responsible for initiation, maintaining, and supervising all safety precautions and programs in connection with the project. The selected vendor/contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to 1) all employees on the project and other persons who may be affected thereby, 2) all the SOW and all materials and equipment to be incorporated therein, and 3) other property at the site or adjacent thereto.

7.18.1 The selected vendor/contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss.

7.18.2 All damage or loss to any property caused in whole or in part by the selected vendor/contractor, any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the selected vendor/contractor, except damage or loss attributable to the fault or negligence of the District.

7.19.0 INSURANCE REQUIREMENTS

No work connected with this project may start until the selected vendor/contractor has submitted a Certificate of Insurance executed by the selected vendor/contractor's insurance carrier showing required insurance coverage **and Lapeer Community Schools is named as additional insured on said policy**. An endorsement or statement waiving the right of cancellation or reduction in coverage, unless thirty (30) days prior written notice is given to the District by registered or certified mail, shall be included. **As a condition of performing work as a vendor/contractor, you must provide the District with satisfactory evidence of insurance coverage as follows:**

- 7.19.1 Workers Compensation and Employer's Liability Insurance covering your statutory obligations in the State of Michigan.
- 7.19.2 Automobile Liability Insurance with a limit of \$1,000,000 per accident covering your owned, non-owned and hired automobiles.
- 7.19.3 Commercial General Liability Insurance written on an OCCURRENCE policy form includes coverage for your operations, personal injury, XCU (explosion, collapse and underground), independent Contractors, contractual and products-completed operations with limits of liability as follows:
 - 7.19.3.1 If your policy is written on the 1986 ISO Simplified form, minimum limits are as follows:
 - \$1,000,000 Occurrence
 - \$2,000,000 General Aggregate
 - \$2,000,000 Product-Completed Operations AggregateIf your policy's general aggregate is per job, then a \$1 million limit of liability is acceptable for the general aggregate and the products-completed operations aggregate.
 - 7.19.3.2 If your policy is written on a form other than the 1986 ISO Simplified form, minimum limits are as follows:
 - \$1,000,000 Occurrence (bodily injury & property damage combined)
 - \$1,000,000 Aggregate (applicable to products-completed operations only)
 - 7.19.3.3 Products-completed operations liability must be maintained for not less than one (1) year after acceptance of completion of your work.
- 7.19.4 Evidence of your insurance coverage, required herein, is to be provided to the District on Accord Certificate form 25 or 25-S and must indicate the following:
 - 7.19.4.1 That your Commercial General Liability insurance policy includes coverage for items specified in 7.19.3 above.
 - 7.19.4.2 A "Best" rating for each of your insurance carriers at B+ VII or better.
 - 7.19.4.3 That the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed.
 - 7.19.4.4 That Lapeer Community Schools are additional insured on the General Liability policy certificate.
 - 7.19.4.5 Any deviations in coverage provided by the Standard 1986 ISO Simplified General Liability policy form, and any deductible over \$1,000 applicable to any coverage.
 - 7.19.4.6 General Liability and Auto Liability limits may be attained by individual policies or by a combination of underlying policies with umbrella and/or excess policies.
 - 7.19.4.7 The District does not carry theft, glass breakage, or builders risk insurance. The selected vendor/contractor will make arrangements if these coverages are desired. The selected vendor/contractor must provide an Installation Floater for the value of the contract to protect the District. The selected vendor/contractor must furnish to the District, a binder certifying each insurance policy required.

7.20.0 MISCELLANEOUS CONTRACT PROVISIONS

The awarded contract will be governed by the laws of the State of Michigan. The selected vendor/contractor shall not assign the contract or sublet it or portions thereof without the written consent of the authorized District representative.

PRODUCTS AND SERVICES SPECIFICATIONS

8.0.0 STRUCTURED CABLING SPECIFICATIONS

8.1.0 INTRODUCTION

These Product and Services Specifications provide the Bidder with the structured cabling requirements for all **fiber-optic** data/low voltage projects requested by the District in this RFP. The intent of the structured cabling specifications is to provide relevant information that allows the Bidder to bid the labor, supervision, tooling, materials, and miscellaneous mounting hardware and consumables to install a complete structured cabling system.

8.1.1 The selected vendor/contractor is responsible for proposing any and all items required for a complete structured cabling system even though it may not be identified in the specifications incorporated herein, drawings and/or Bill of Materials attached with the Bid.

8.1.2 The successful Bidder shall meet or exceed all requirements for the cabling system described in this RFP and any Bid attachment documents provided by the District.

8.1.3 If, for any reason, any Bid attachment document is in conflict with the details in the specifications herein this RFP, the forgoing written specification shall take precedence.

8.2.0 APPLICABLE DOCUMENTS

The structured cabling system described within the specifications is derived, in part, from the recommendations in industry standard manuals and documents. The Bidder is responsible for determining and adhering to the most recent release of applicable documents when developing their proposal for the structured cabling installation. The following list of applicable documents has influence on the desired cabling infrastructure and is incorporated herein by reference.

- 8.2.1**
- 1) All technical specification and associated drawings provided by the District
 - 2) Local Building and Fire Codes
 - 3) BICSI's Information Transport Systems Installation Manual (ITSIM) latest edition
 - 4) BICSI's Telecommunications Distribution Methods Manual (TDMM) latest edition
 - 5) National Fire Protection Agency (NFPA) - 70, National Electrical Code (NEC) *latest edition*

8.2.2 If a conflict exists between the applicable documents, then the aforementioned numeric list of applicable documents shall dictate the order of precedence in resolving such conflicts. This order of precedence shall be maintained unless a lesser order document has been adopted as code by a local, state, or federal entity. If a conflict further exists, documents adopted as code shall take precedence.

8.2.3 If the specifications incorporated herein and any of the aforementioned applicable documents are in conflict with each other, then the more stringent requirement shall apply. All applicable documents listed are, to the best of the District's knowledge, considered to be the most current releases of said documents.

8.3.0 PURPOSE AND BIDDER RESPONSIBILITIES

The intent of these structured cabling specifications is to make available to all Bidders a standard specification for cabling installation(s) in all K-12 educational facilities identified in the SOW, section 5.0.0.

8.3.1 The structured cabling specifications identify the minimum performance criteria for the components and sub-systems encompassing a complete structured cabling system that shall accommodate the District's Infrastructure Requirements, section 5.3.0.

8.3.2 The product specifications, general design considerations, and installation guidelines are incorporated herein this RFP.

8.3.3 Quantities of data outlets, typical installation details, cable routing and outlet types for the specific educational facilities will be provided by the District.

8.3.4 The successful Bidder is required to furnish all labor, supervision, tooling, and miscellaneous mounting hardware and consumables for the structured cabling system installed at the District.

8.3.5 The forgoing specifications define the cabling system and subsystem components including cable, termination hardware, supporting hardware, and miscellany required to furnish and install a complete cabling infrastructure supporting data and fiber.

8.4.0 CABLING INFRASTRUCTURE REQUIREMENTS

Only fiber optic cable will be allowed in all horizontal structured cabling systems. The selected vendor/contractor shall adhere to all of the following cabling infrastructure specifications.

8.4.1 Facilities Environment - Each building identified in the SOW, section 5.0.0, has one (1) Main Distribution Facility (MDF) room. All fiber optic cable will be rack mounted in these MDF locations.

8.4.2.1 It is recommended that each Bidder visits each facility to confirm the SOW conditions.

8.4.2.2 Bidders may request, from the District, a copy of the blueprints and/or drawings, per section 2.6.0.

8.4.2.3 The selected vendor/contractor will abate any existing cable in each building, where applicable, and will properly dispose of such cable at the selected vendor/contractors' expense.

9.0.0 HORIZONTAL DISTRIBUTION SUBSYSTEM

9.1.0 CABLE INSTALLATIONS

All cable shall be installed in accordance with manufacturer's recommendations and best industry practices.

9.1.1 Cable raceways shall not be filled greater than the NEC maximum fill for the particular raceway type.

9.1.2 Cables shall be installed in continuous lengths from origin to destination with no splices unless specifically addressed in this document as a transition from horizontal to backbone fiber strands within the IDF and/or MDF. Where cable splices are allowed, they shall be in accessible locations and housed in an enclosure intended and suitable for the purpose.

9.1.3 The cable's minimum bend radius and maximum pulling tension shall not be exceeded.

9.1.4 If a J-hook or trapeze system is used to support cable bundles all horizontal cables shall be supported at **a maximum of four-foot intervals**. At no point shall cable(s) rest on acoustic ceiling grids or panels.

9.1.5 Horizontal distribution cables shall be bundled in groups of, no more than, forty (40) cables as cable bundle quantities in excess of forty (40) cables may cause deformation of the bottom cables within the bundle.

9.1.6 Cable shall be installed above fire-sprinklers and/or systems and shall not be attached to the fire-sprinkler system and/or any ancillary equipment or hardware of same. The cabling system and support hardware shall be installed so that it does not obscure any valves, fire alarm conduit, boxes, or other control devices.

9.1.7 Cables shall not be attached to ceiling grid or lighting support wires. Where lightweight supports for drop cable legs are required, the selected vendor/contractor shall install clips and/or wire to support the cabling.

9.1.8 Any cable damaged or exceeding recommended installation parameters during installation shall be replaced by the selected vendor/contractor prior to final acceptance at no cost to the District.

9.1.9 A self-adhesive label in accordance with the System Documentation section of this RFP shall identify all installed cables. The cable label shall be applied to the cable behind the faceplate on a section of cable that can be accessed by removing the cover plate.

9.1.10 The fiber-optic cable shall be installed so that there are no bends less than four times the cables outside diameter (4 X cable O.D.) at any point in the run and at the termination field.

9.1.11 Pulling tension on fiber-optic cables shall not exceed 25-pounds for a single cable or cable bundle.

9.1.12 No variations will be allowed to the planned termination positions of the horizontal and backbone cables and grounding conductors unless approved in writing by the District.

9.2.0 TERMINATION HARDWARE INSTALLATION

Copper termination and management hardware shall be installed in the following manner:

- 9.2.1** Cables shall be dressed and terminated in accordance with the manufacturers' recommendations, and/or best industry practices.
- 9.2.2** Bend radius of the cable in the termination area shall not exceed 4 times the outside diameter of the cable.
- 9.2.3** Cables shall be neatly bundled and dressed to their respective panels or blocks. Each panel or block shall be fed by an individual bundle separated and dressed back to the point of cable entrance into the rack or frame.
- 9.2.4** The cable jacket shall be maintained as close as possible to the termination point.
- 9.2.5** Each cable shall be clearly labeled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties. Cables labeled within the bundle, where the label is obscured from view, will not be accepted.

9.3.0 CABLING SYSTEM TESTING

All cables and termination hardware shall be 100% tested by the selected vendor/contractor for defects in installation and to verify cable performance under installed conditions. All conductors of each installed cable shall be verified useable by the selected vendor/contractor prior to system acceptance. Any defect in the cabling system installation including but not limited to cable, connectors, feed through couplers, patch panels, and connector blocks shall be repaired or replaced in order to ensure 100% useable conductors in all cables installed.

- 9.3.1** All cables shall be tested in accordance with the specifications contained herein and/or best industry standards and practices.
- 9.3.2** If any of these specifications are in conflict, the selected vendor/contractor shall be responsible to bring any discrepancies to the attention of the project team for clarification and/or resolution.
- 9.3.3** Continuity - Each pair of installed cable shall be tested using a continuity test set that shows opens, shorts, polarity, and pair-reversals. Shielded/screened cables shall be tested with a device that verifies shield continuity in addition to the above stated tests. The test shall be recorded as pass/fail as indicated by the test set in accordance with the manufacturers recommended procedures and referenced to the appropriate cable identification number and circuit or pair number. Any faults in the wiring shall be corrected and the cable re-tested prior to final acceptance.
- 9.3.4** Length - Each installed cable shall be tested for installed length using a TDR type device. The cables shall be tested from patch panel to patch panel, block to block, patch panel to outlet or block to outlet as appropriate. The cable length shall conform to the maximum distances in accordance with manufacturer's specifications. Cable lengths shall be recorded, referencing the cable identification number and circuit or pair number.
- 9.3.5** Performance Verification – Fiber optic cable shall be performance verified using an automated test set. This test set shall be capable of testing for the continuity and length parameters defined above and provide results for the following tests: Near End Cross-Talk (NEXT) Attenuation Ambient Noise Attenuation to Cross-Talk Ratio (ACR). Test results shall be automatically evaluated by the equipment, using the most up-to-date criteria from the manufacturer's specifications. and the result shown as pass/fail. Test results shall be printed directly from the test unit or from a download file using an application from the test equipment manufacturer. The printed test results shall include all tests performed, the expected test result and the actual test result achieved.
- 9.3.6** Testing Documentation - Test documentation shall be provided in a three-ring binder(s) according to the System Documentation specifications, 10.0.0, within (3) three weeks after completing the structured cabling project.

9.4.0 FIRE STOP SYSTEMS

A fire stop system is comprised of the item or items penetrating the fire rated structure; the opening in the structure and the materials and assembly of the materials used to seal the penetrated structure. Fire stop systems comprise an effective block for fire, heat, vapor, and pressurized water stream.

- 9.4.1** All penetrations through fire rated building structures (walls and floors) shall be sealed with an appropriate fire stop system. This requirement applies to through penetrations (complete penetration) and membrane penetrations (through one side of a hollow fire rated structure).
- 9.4.2** Any penetrating items i.e., riser slots and sleeves, cables, conduit, cable tray, and raceways, etc. shall be properly fire stopped.
- 9.4.3** Fire stop systems shall be UL Classified to ASTM E814 (UL 1479) and shall be approved by a qualified Professional Engineer (PE) licensed in the state where the work is to be performed. A drawing showing the proposed fire stopped system, stamped/embossed by the cognizant PE shall be provided to the District's Technology Director prior to installing the fire stop system(s).
- 9.4.4** All fire stop systems shall be installed in accordance with the manufacturer's recommendations and shall be completely installed and available for inspection by the local inspection authorities prior to cabling system acceptance.

10.0.0 SYSTEM DOCUMENTATION

The following sections describe the minimum installation, administration, testing, and as-built documentation required from and/or maintained by the selected vendor/contractor during the course of the entire cabling installation project.

10.1.0 CABLING SYSTEM LABELING

The selected vendor/contractor shall develop and submit for approval by the authorized District representative a labeling system for the cable installation. The District will negotiate an appropriate labeling scheme with the selected vendor/contractor. At a minimum, the labeling system shall clearly identify all components of the system: racks, cables, panels, and outlets.

- 10.1.1** The labeling system shall designate the cables' origin and destination and a unique identifier for the cable within the system. Racks and patch panels shall be labeled to identify the location within the cabling system infrastructure and as follows:
- 10.1.2** Provide location and labeling plan in frame with clear plastic cover in each MDF and/or IDF, where applicable.
- 10.1.3** All labeling information shall be recorded on the "As-Built" diagrams and all test documents shall reflect the appropriate labeling scheme.
- 10.1.4** All label printing will be machine generated using indelible ink ribbons or cartridges.
- 10.1.5** Self-laminating labels will be used on cable jackets, appropriately sized to the OD of the cable, and placed within view at the termination point on each end.
- 10.1.6** Each cable shall be clearly labeled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties.
- 10.1.7** Each outlet shall be labeled on the space provided on the fiber patch panel.

10.2.0 “AS-BUILT” DIAGRAM(S)

The District shall provide the selected vendor/contractor with blueprints and/or drawings at the start of the proposed project. One (1) set of said blueprints and/or drawings will be designated as the “master set” and kept at a designated location within the district for documenting all “As-Built” information as it occurs during project configuration and installation.

10.2.1 The master set will be maintained by the selected vendor/contractor’s foreman on a daily basis and will be available to the District’s authorized representative upon request during the course of the project.

10.2.2 The selected vendor/contractor shall add (mark up) any changes and/or deviations from the original master set to the “As-Built” diagrams as needed. The marked up master set will accurately depict the “As-Built” status of the system including termination locations, cable routing, and all administration labeling for the cabling system.

10.2.3 The selected vendor/contractor shall provide the master set and “As-Built” diagram(s) to the District at the conclusion of the project. These said “As-Built” diagram(s) will be submitted to the District in **both** paper and electronic copy, preferably Microsoft Visio.

10.2.4 The District shall require a narrative that describes any areas of difficulty encountered by the selected vendor/contractor during the installation that may potentially cause future problems with the cabling system.

10.3.0 TESTING DOCUMENTATION

Test documentation shall be provided in a three-ring binder(s) within (3) three weeks after completing the project. This said binder(s) shall be clearly marked on the outside front cover and spine with the words “Test Results”, Project Name, and Completion Date (month and year). The binder(s) shall be divided by two (2) major heading tabs, Horizontal and Backbone.

10.3.1 The test equipment by name, manufacturer, model number and last calibration date will also be provided at the end of the binder(s). Unless a more frequent calibration cycle is specified by the manufacturer, an annual calibration cycle is anticipated on all test equipment used for this installation.

10.3.2 The testing documentation shall detail the test method(s) used and the specific settings of the equipment during the test(s). When repairs and re-tests are performed, the problem found and corrective action taken shall be noted, and both the failed and passed test data shall be co-located in the binder(s).

10.3.3 All testing results shall be printed on 8-1/2” x 11”. Handwritten test results will NOT be accepted by the District.

10.4.0 WARRANTY DOCUMENTATION

The selected vendor(s)/contractor(s) must furnish the District written warranty documentation. The warranty documentation shall include cable and connectivity components and have one (1) point of contact person for any/all structured cabling system issues, where applicable.

10.4.1 The warranty shall cover the installed structured cabling system against defects in workmanship, components, and performance, and follow-on support after project completion for a period of three (3) years from the date of the system installation acceptance by the District.

10.4.2 The warranty shall cover all labor and materials necessary to correct any/all failed portion(s) of the structured cabling system and to demonstrate performance within the original installation specifications after repairs are accomplished.

10.4.3 The selected vendor/contractor shall provide said structured cabling system warranty at no additional cost(s) to the District.

APPENDIX A – INTENT TO BID FORM

If the Bidder intends to submit a Bid for the Structured Cabling project at Lapeer Community Schools, this Intent to Bid Form must be completed and returned via mail, fax or email to the District no later than February 15, 2024.

Please complete and return to:

**Lapeer Community Schools
Stephen Melchor
250 2nd Street
Lapeer, MI 48446**

Phone: 248.520.8914

Email: erate@lapeerschools.org

I will attend the scheduled walkthrough meeting at **2:00 PM on February 15, 2024.**

Yes No (Check one)

I would like a copy of any building maps or documentation associated with this RFP.

Yes No (Check one)

Name of Company: _____

Address: _____

City, State, Zip _____

Contact Name: _____

Title: _____

Telephone Number: _____

Fax Number: _____

Email Address: _____

Date: _____

APPENDIX B – BID SIGNATURE PAGE

I have examined the RFP Bid conditions and specifications herein and agree that if my company is awarded a contract to provide any of the products and/or services sought in this RFP, my company will provide the District with the products and/or services according to the Invitation to Bid, Bidder Instructions, General Conditions, Universal Service Fund (USF) Conditions, Scope of Work, Timeline Requirements, Awarded Contract Requirements, and Products and Services Specifications of this RFP and the Bid submitted herewith. Any and all deviations from the RFP Bid specifications are in writing and attached.

Submitted By:

Company Name: _____

Company Address: _____

City, State & Zip: _____

Telephone: _____

Fax: _____

Email: _____

Representative Name: _____

Title: _____

Signature: _____

Date: _____

Do not write below this line: For District Use Only

The following items are enclosed and/or included on the Bid:

- Proposal(s) (in duplicate)
- Bid Bond/Cashier’s Check (5% of Bid)
- USF E-Rate SPIN
- Four (4) references, one (1) of which is a school or school district
- Intent To Bid Form (Appendix A)
- Bid Signature Page (Appendix B)
- Bill of Materials (Appendix C)
- Familial Disclosure Affidavit (Appendix D)
- Iran Linked Business Affidavit (Appendix E)

APPENDIX C – BILL OF MATERIALS TOTALS

I/we, the Bidder, hereby propose to furnish, deliver, and install the items listed below for the unit price indicated in accordance with the terms, conditions and specifications included in the Request For Proposals – Network Electronics.

NOTE: The Bidder must complete the Appendix C spreadsheet provided with this RFP. See sample below. The Bidder must include a separate Excel spreadsheet for each RFP section number they are bidding on. For example, bidding on section 5.4.1 and 5.4.2 would require two spreadsheets. Please only provide the total count for each unique part number rather than separating them by location or any other allocation. The Bidder may attach additional pages for Bill of Materials as needed. Appendix C is in addition to any other pricing documentation the Bidder may provide to the District by building and closet locations. Failure to attach the Appendix C spreadsheet(s) may be grounds for disqualification of any submitted bid.

BASE BID - Network Electronics Sample (Must include all components and installation cost totals)

Appendix C - Bill of Materials										
Service Provider Name: ABC Inc.										
SPIN: 1234567										
Date: 10/01/2021										
District Name: ABC Schools										
RFP Section Number: 8.4.X										
Part Number	Manufacturer	Model	Item Description	Eligible Cost	Ineligible Cost	Labor Cost	Quantity	Total Cost	Total Eligible Cost	
123SFP+	Switches R Us	CorePowerFiberMax	48P 750W SFP+ Switch	\$ 500.00	\$ 100.00	\$ 50.00	5	\$ 2,750.00	\$ 2,250.00	
123SFPT.IC	Switches R Us	License for CPTM	Switch License Terms	\$ 75.00	\$ -	\$ -	5	\$ 375.00	\$ 375.00	
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Grand Totals:				\$ 575.00	\$ 100.00	\$ 50.00	\$ 10.00	\$ 3,125.00	\$ 2,625.00	

APPENDIX D - FAMILIAL DISCLOSURE AFFIDAVIT

All Bids shall be accompanied by a sworn statement disclosing any familial relationship that exists between the owner(s) or any employee of the Bidder and any member of the Board of Education of the District and/or the Superintendent of the District.

The undersigned, owner or authorized officer of _____ (the Bidder), pursuant to the familial disclosure requirement provided in the Lapeer Community Schools Universal Service Fund Request for Proposals, hereby represent and warrant, except as provided below, that no familial relationships exist between the Bidder or any employee of the Bidder, and any member of the Lapeer Community Schools Board of Education and/or the Superintendent.

The following are the Bidder’s familial relationship(s) with the Lapeer Community Schools:

	Bidder/Employee	Name Related to:	Relationship
1.	_____	_____	_____
2.	_____	_____	_____

(Attach additional pages if necessary to disclose all familial relationships.)

There is no familial relationship that exists between the Bidder and/or any employee of the Bidder and any member of the Lapeer Community Schools Board of Education and/or the Superintendent.

Bidder:

(Company Name)

By:

(Signature)

(Title)

This instrument was acknowledged before me, a Notary Public, in and for _____
County, _____ on this ___ day of _____, 20__.

(Notary Public Signature) **SS:**

My Commission expires: _____

Acting in the County of: _____

APPENDIX E - IRAN LINKED BUSINESS AFFIDAVIT

All Bids shall be accompanied by a sworn statement disclosing any Iran Linked Business relationship that exists within the owners, including its officers, directors, and employees.

The undersigned, owner or authorized officer of _____ (the bidder), pursuant to Michigan Public Act No. 517 of 2012, the “Iran Linked Business” requirement provided in the Lapeer Community Schools Universal Service Fund Request for Proposals hereby represents and warrants that the bidder, including its officers, directors and employees, is not an “Iran Linked Business” within the meaning of the applicable Public Act, and that in the event bidder is awarded a contract as a result of this RFP, the bidder will not become an “Iran Linked Business” at any time during the course of performing under the contract. The bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the District investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on future Requests for Proposals (RFPs) for three (3) years from the date that it is determined that the person has submitted the false certification.

There is not an “Iran Linked Business” that exists within the bidder and/or owner, officers, directors, and employees.

Bidder: _____
(Company Name)

By: _____
(Signature)

(Title)

This instrument was acknowledged before me, a Notary Public, in and for

_____ County, on this ____ day of _____, 20 __,

(Notary Public Signature)

SS:

My Commission expires: _____

Acting in the County of: _____