GISD

GARLAND INDEPENDENT SCHOOL DISTRICT PURCHASING DEPARTMENT 501 S. Jupiter Garland, Texas 75042

REQUEST FOR PROPOSAL ON: Fiber Metropolitan Area Network Services (Rebid) PROPOSAL # 288-17

November 8, 2016

PLEASE SUBMIT PROPOSAL NO LATER THAN 10:30 A.M. LOCAL TIME ON November 29, 2016. Mark your sealed envelope in the lower left hand corner with RFP#, time, and due date, as noted above. (Should the district close for unforeseen reasons (force majeure) on the date the solicitation is due, the above referenced date should be changed to <u>10:30 A.M.</u> the first date the district is open to conduct business)

You are invited to submit a proposal to provide Fiber Metropolitan Area Network Services for the Garland Independent School District (GISD) from February 1, 2017 (or date of award) through February 1, 2018 with the District's options to renew annually through February 1, 2022.

This Request for Proposal includes Process Overview, Instructions to Proposer, Award/Evaluation of Proposals, Certifications, Terms and Conditions, Insurance Requirements, Supplier Questionnaire, Deviation Compliance Form, Certification for Criminal History Check, Confidential Information Form, Proposal Form/Specifications, Certification/Lobbying, Disclosure of Lobbying Activity, Certification/Debarment and Clean Air and Water Act. These provisions shall be considered as part of any resulting legal and binding contract/purchase order as if thereto attached or therein repeated.

THIS RFP WILL NOT BE OPENED OR READ PUBLICLY.

DELIVERY DATE IS	5	Business Days A
Company Name		
Address		
City	State	Zip
Authorized Representative Name		Title
Signature		
Printed Name	Email	Address
Telephone #	Fax #	

Mark a. Booker

Mark A. Booker Director of Purchasing

PROCESS OVERVIEW: This section outlines the steps in the procurement process.

Deadline for Questions	November 16, 2016	12:00 p.m.
Deadline for Response to Questions/Addendum(s)	November 18, 2016	12:00 p.m.
Proposals Due Date	November 29, 2016	10:30 a.m.

The District Purchasing Department and proposers enter into discussions and revisions of proposal, as necessary. Discussions/negotiations may be conducted with proposers who are deemed to be within the final competitive range; however, GISD reserves the right to award a contract without discussions/ negotiations. The competitive range and responsiveness of the proposal submitted will be determined by GISD's Director of Purchasing and the evaluation will include only those initial proposals that the Director determines have a reasonable chance of being awarded a contract. If discussions/negotiations are conducted, proposers will be required to submit a best and final proposal. The best and final proposal may be required as early as 24 hours after completion of negotiations/

NOTE: Designated GISD Purchasing Department personnel are the only individuals allowed to negotiate contract agreements/terms & conditions and/or pricing before an award is made as well as after an award has been made. Firms hereby agree that any negotiations regarding this Request for Proposal pertaining to agreements/terms & conditions and/or pricing shall be between proposing firm and the Purchasing Department ONLY throughout the term of the contract.

1. INSTRUCTIONS TO PROPOSERS

1.1 Submission of Proposals:

1.1.1. For clarification of the specification(s) of this Request For Proposal, proposer may contact:

Janet Curtis-Fuller, Buyer at bids@garlandisd.net or jcfuller@garlandisd.net

The individual listed above may be contacted for clarification of specification(s) only. No authority is intended or implied that specification(s) may be amended or alternates accepted prior to opening without written approval of the Garland ISD Director of Purchasing.

- 1.1.2. All addenda will be issued via the district website at (Current Bid List) http://www.garlandisd.net/connect/do-business/currentopportunities All addenda, if required, will be posted on the aforementioned website by November 18, 2016 at 12:00 p.m. It is the proposer's responsibility to check this website for addenda postings prior to submitting responses.
- 1.1.3. Questions pertaining to proposing procedures should be directed to Purchasing Department, Garland ISD. Proposers finding errors, requests for additional information, omissions, or corrections that need to be made in the specifications shall contact the Purchasing Department in writing by November 16, 2016, 12:00 p.m. You may submit this information via fax to 972-487-3097 or email to bids@garlandisd.net

1.1.4. PLEASE PROVIDE ONE (1) ORIGINAL AND ONE (1) COPY OF BID RESPONSE! ENSURE THE ORIGINAL AND COPY ARE CLEARLY LABELED.

1.1.5. Hand-carried proposals or proposals submitted via carrier service are to be delivered to:

Garland ISD Purchasing Department

501 S. Jupiter, Garland, Texas 75042

Proposals submitted via the U.S. Postal Service are to be mailed to:

Garland ISD Purchasing Department

P. O. Box 469026, Garland, Texas 75046-9026

Clearly mark all Proposal envelopes as instructed on the front page. Allow sufficient transit time.

NOTE: Delivery of Proposal envelope to other Departments within the Garland Independent School District is <u>not</u> considered as delivery to the Purchasing Department.

- 1.1.6. Once completed and signed, return your Proposal form to the Garland ISD Purchasing Department (as instructed above).
- 1.1.7. Proposals received at the GISD Purchasing Department after the time and date specified above will not be considered and will be filed unopened. The Garland ISD shall not be held liable for late proposals.
- 1.1.8. Oral or telegraphic proposals transmitted via the District's facsimile machine or by email are not acceptable. **DO NOT FAX OR EMAIL YOUR PROPOSALS.**
- 1.1.9. Proposals must be signed by an authorized individual to contractually bind their firm when submitting the Proposal. Failure to sign the Proposal will be considered as a "mistake in Proposal", and the Proposal will be rejected as "non-responsive".
- 1.1.10. Purchases made against this Request For Proposal are for District use and are exempt from State Sales Tax and Federal Excise Tax. Do not include these taxes in your Proposal.
- 1.1.11. All pages of this Request For Proposal are to be returned with your proposal. It is the proposer's responsibility to ensure the number of pages received is the same number listed on the front of this document. Proposer shall contact the Purchasing Department if discrepancies exist.
- 1.1.12. All prices must be typed or written in ink on the appropriate specification/pricing form(s). Proposals written in pencil <u>will not</u> be accepted. Changes may be crossed through and corrections inserted adjacent and initialed by the person preparing the Proposal. Should errors in multiplication or addition of a unit price against a total price occur, the unit price shall govern. All pricing proposed for products and/or services shall constitute entire consideration due.

- 1.1.13. No Proposal may be withdrawn prior to opening of proposals without written request (addressed to the Garland ISD Director of Purchasing) by an authorized agent of the proposing firm and upon written approval by the District. Proposals become the property of Garland ISD upon receipt.
- 1.1.14. The District's list of prospective proposers is being updated. To remain on Proposal lists you must either submit a proposal or return this Request For Proposal marked "NO BID". Failure to follow this procedure will result in your firm being removed from the mailing list!
- 1.1.15. Provide list of references on the Supplier Questionnaire School districts (comparable in size to GISD's A.D.A. of approx. 57,000 students) preferred, other state agencies, other customers, etc. will be evaluated with regard to the size and scope of product/service as bid. **NOTE: Proposers failing to submit at least 2 references may not be considered for award.**
- 1.1.16. The estimated value of this contract is <u>\$74,999</u>; however, this value reflects the District's estimated current requirements for one year (or time frame as otherwise specified). The District may elect to place several orders during the term of this Request for Proposal. Proposers must specify minimum order quantities if any and are required to hold proposed prices for the term of the contract.
- 1.1.17. Proposers desiring a bid tabulation sheet resulting from this Request For Proposal may visit our web site at http://www.garlandisd.net/connect/do-business/bid-tabulations The tabulations will be posted once the GISD Board of Trustees has approved the contract. If you are unable to download the information, please contact the Purchasing Department at 972-487-3009 and we will forward you a copy via email.
- 1.1.18. Any and all deviations to this competitive solicitation proposed by the bidder must be listed on the Deviation/Compliance Form, attached hereto not on a cover letter, catalog, etc.
- 1.1.19. Garland Independent School District is a public entity subject to the provisions of the Texas Public Information Act (Texas Government Code Chapter 552). Responses to this invitation may be subject to release as public information unless the response or specific parts of the response are accepted from public disclosure under such Act. Proposers should consult with their legal counsel regarding disclosure issues and take the appropriate precautions to safeguard trade secrets or any other confidential or proprietary information before responding to this invitation. The District assumes no liability or responsibility for release of any information not properly identified and documented in accordance with the enclosed Confidential Information Declaration & Copyright Authorization Form. The District assumes no liability or responsibility for release of any information that the Texas Attorney General or a court of law determines to be subject to release.

- 1.1.20. Proposals asserted to be copyright protected in their entirety may, in the District's sole discretion, be rejected as non-conforming. Proposers who submit copyrighted materials as part of their bid must review and complete the Confidential Information Declaration & Copyright Authorization Form. Proposers submitting copyrighted materials should consult with their legal counsel regarding copyright and disclosure issues. By submitting copyrighted materials and completing the Confidential Information Declaration and Copyright Authorization Form, bidders grant the District authorization to reproduce and provide copies of such information and agree to waive any and all claims against the District regarding the release of such copyrighted information including, but not limited to, any claim of copyright infringement when released in response to a valid request for information under the Texas Public Information Act, Texas Government Code Chapter 552. In the event a bidder is unable to grant such authorization and waiver, copyrighted materials must not be included in the bid.
- 1.1.21. A proposal that has been opened may not be changed for the purpose of correcting an error in the proposed price. Proposers submitting an erroneous proposed price may be given the option of either honoring the price as proposed or withdrawing the (erroneous) proposal [Local Government Code Subchapter B, Sec. 271.026].

1.2 Award/Evaluation of Proposals

- 1.2.1. The Garland Independent School District Board of Trustees reserves the right to accept or reject all or any part of any proposal, waive minor proposal formalities/technicalities and award the proposal deemed to be most advantageous to the District.
- 1.2.2. Proposal results will be presented to the GISD Board of Trustees for consideration (if total amount awarded exceeds \$75,000) at the earliest opportunity following the official opening date.
- 1.2.3. The Garland ISD shall not award a governmental contract to a proposer whose principal place of business is not in Texas, unless the nonresident underprices the lowest proposal submitted by a responsible resident proposer by an amount that is not less than the amount by which a resident Proposer would be required to underprice a nonresident proposer to obtain a comparable contract in the state in which the nonresident's principal place of business is located. [This requirement does not apply to a contract involving federal funds.]; Texas Government Code, Title 10, Section 2252.002.
- 1.2.4. The District reserves the right to award to a single proposer, multiple proposers, each line item separately or in any combination it determines to be in its best interest. Proposals shall cover the entire program as described herein. Proposers shall also include copies of any contracts/agreements required (by the proposing firm) and clearly identify/label it as such.

1.2.5. Tie proposals, which are equal in all respects, shall be resolved and awarded in accordance with Local Government Code (Texas) Para. 271.901. Otherwise proposals, which reflect a tie in price only, may be awarded pursuant to the permissible factors listed in Texas Education Code, Subchapter B, Sec. 44.031(b) and set forth in the factors and points below.

EVALUATION FACTORS

	EVALUATION CRITERIA	
1	The purchase price	
2	The reputation of the vendor and of the vendor's goods or services	
3	The quality of the vendor's goods or services	
4	The extent to which the goods or services meet the district's needs	
5	The vendor's past relationship with the district	
6	The impact on the ability of the district to comply with laws and rules relating to historically underutilized businesses	
7	The total long-term cost to the district to acquire the vendor's goods or services	
8	For a contract for goods and services, other than goods and services related to telecommunications and information services, building construction and maintenance, or instructional materials, whether the vendor or the vendor's ultimate parent company or majority owner:	
	A. has its principal place of business in this state	
	B. employs at least 500 persons in this state	
9	Per Texas Education Code, Subchapter B, Sec. 44.031(b) *ALL CONTENTS PROVIDED IN THIS SOLICITATION, WILL BE CONSIDERED AS AN EVALUATION FACTOR!	

- 1.2.6. In compliance with the provisions of Texas Government Code, Title 10, Subtitle D, Section 2155.074, Section 2155.075, Section 2156.007, Section 2157.003 and Section 2157.125, and Texas Administrative Code, Title 1, Chapter 113.6, information obtained from the Texas Building and Procurement Commission's Vendor Performance Tracking System may be used in evaluating responses to solicitations for goods and services to determine the best value for the Garland Independent School District. www.window.state.tx.us/procurement/prog/vendor performance.
- 1.2.7. Proposers and prospective proposers are encouraged to suggest improved product and/or services for future consideration by the District. Any literature/brochures regarding such products or services should be submitted separately from the proposal submitted in response to this Request for Proposal.
- 1.2.8. Each line item must be proposed using the same unit of measure as requested by this Request for Proposal. Any questions regarding unit of measure must be resolved between the prospective proposer and the Garland Independent School District Purchasing Department in accordance with 1.1.3. Failure to propose specified unit of measure may be cause for rejection of proposal for the specific item(s) in question. Any packaging proposed which differs from that specified in the item description must be identified on the Deviation/Compliance Form.
- 1.2.9. Upon notification of potential selections for award, the person or entity submitting this proposal must give notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in this conviction of a felony (this requirement does not apply to a publicly held corporation).
- 1.2.10. The District awards contracts to proposers as an alternate in case the primary proposer is unable to fulfill the contractual obligations as stated in the specifications/terms and conditions. (Refer to Supplier Questionnaire)

2. CERTIFICATIONS

- 2.1. By signing this Request For Proposal, the undersigned proposer affirms that its company, corporation, firm, partnership or individual has not prepared this proposal in collusion with any other bidder and that the contents of this proposal as to prices, terms, or conditions have not been communicated by the undersigned or by any employee or agent to any other person or firm engaged in this type of business prior to the official opening of this proposal.
- 2.2. The person whose signature appears on the cover page of this Request For Proposal hereby certifies (by signing this document) that the individual and/or firm on whose behalf this proposal is submitted is not listed on the Federal Government's "List of Parties Excluded from Federal Procurement and Non-procurement Programs" published by the U. S. General Services Administration (GSA) effective as of the date of opening of this proposal.

- 2.3. By signing this Request For Proposal, the proposer hereby certifies that it (or its firm hereby represented) is legally authorized to conduct business in Texas and has complied with any and all federal, state, or other laws or regulations applicable to any purchase resulting from this Request For Proposal, including, but not limited to, copyright and/or patent laws and anti-collusion law. Failure of proposer to sign their Proposal will render it null and void.
- 2.4. If the proposer professes to be the exclusive source of the item(s) or service(s) requested herein, the proposer must provide with its proposal a written statement to the fact that the sole source is due to one or more of the following (as applicable): a patent, copyright, secret process, or monopoly; a film, manuscript, or book; a utility service (electricity, gas, or water); or a captive replacement part or component for equipment. Such statements must be signed by the owner or corporate official of the firm submitting this proposal and must be notarized. This declaration shall not exempt the proposer from signing and submitting a signed proposal.
- 2.5. By submitting a response to this request, proposer represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code, Disclosure of Certain Relationships with Local Government Officers; Providing Public Access to Certain Information. A list of local government Officers may be obtained at http://www.garlandisd.net/content/conflict-disclosure Failure to comply with this provision may result in the bid being considered non-responsive.

3. TERMS AND CONDITIONS

- 3.1. Cash/prompt payment discounts offered will not be considered in determining the award but will be taken if earned.
- 3.2. Federal Acquisition Regulation (FAR) contract clauses, which may be required for orders placed using federal funds, are herein incorporated as follows:
 - 3.2.1. CFR Title 37: Patents, Trademarks, and Copyrights Part 401—Rights to inventions made by nonprofit organizations and small business firms under government grants, contracts, and cooperative agreements;
 - 3.2.2. Section 306 of the Clean Air Act of 1970 (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15).
 - 3.2.3. Energy Policy and Conservation Act of 1975 (Pub. L. 94–163, 89 Stat. 871).
 - 3.2.4. Certification Regarding Lobbying- Section 1352, Title 31, U.S. Code
 - 3.2.5. Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 3).

- 3.3. Purchase Orders will serve as the award instrument(s) against this Request for Proposal. Orders will be placed as items are approved for purchase and funds become available. Effective **immediately**, the Garland Independent School District will email purchase orders in lieu of facsimile transmission. In addition to purchase orders, all solicitation notices, and award notifications will be communicated by email.
- 3.4. The District and District's representative, without invalidating the contract, may make changes by altering, adding to, or deducting from the Purchase Order; the contract sum being adjusted accordingly. No extra work or change shall be made unless in pursuance of a written order from the District and any claim for an addition to the contract sum will not be valid unless so ordered. Changes and amendments will be communicated by sending a copy of the purchase order.
 IT IS THE PROPOSER'S RESPONSIBILITY TO TRACK PURCHASE ORDER NUMBER(S) & APPLICABLE REVISIONS. DOUBLE SHIPMENTS INCURRED
- 3.5. Payment will be made within 30 days after the later of, receipt of goods/services and a properly submitted invoice. The district considers an invoice properly submitted when the following conditions are met:
 - 3.5.1 Invoice is received at the address indicated on the purchase order
 - 3.5.2. Pricing on the invoice matches the price on the purchase order

WILL BE RETURNED AT THE PROPOSER'S EXPENSE.

- 3.5.3. Include a description of the goods or services furnished, the purchase order number, invoice number and any applicable cash discount.
- 3.5.4. Quantities on the invoice do not exceed those specified on the Purchase Order
- 3.5.5. Unique invoice number used for each billing
- 3.5.6. Merchandise has been shipped or service performed.
- 3.5.7. Description of goods and services on the invoice shall match the description on the Purchase Order.

NOTE: Awarded Companies are expected to ship goods and/or perform services in the same week in which they are invoiced. Invoicing procedures for each awarded company will be incorporated into the proposer's performance rating.

- 3.6. Quantities may be increased or decreased at the discretion of the District. ***Quantities listed herein are best estimates only and cannot be guaranteed.**
- 3.7. No smoking or use of any tobacco products is permitted on school property.

- 3.8. In the event that any one or more of the provisions contained in this Request For Proposal (or resulting purchase order) shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable, such provisions shall not affect any other provision hereof, and this Request For Proposal (or any resulting purchase order) shall be construed as if the invalid, illegal or unenforceable provision(s) had never been contained herein.
- 3.9. Successful proposer(s) hereby assigns to purchaser any and all claims for overcharges associated with any contract resulting from this Request For Proposal which arise under the antitrust laws of the United States, 15 USCA Section 1 et. seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, Section 15.01 et. seq.
- 3.10. Any assignment by Proposer of this contract or any part thereof without written consent of Garland ISD shall be void.
- 3.11. Funds are not presently available for fiscal year 2017-2018 and later (after August 31, 2016). Should the Garland ISD Board of Trustees not approve funds for this service, any contract resulting from this Request For Proposal will automatically terminate on the last day of the school fiscal year for which funds have been appropriated at no further cost or obligation to the District.
- 3.12. It is understood that in the performance of any services herein provided, for Contractor shall be, and is, an independent contractor, and is not an agent or employee of the District and shall furnish such services in its own manner and method, except as required by this contract. Further, Contractor has, and shall retain the right to exercise full control over the employment, direction, compensation, and discharge of all persons employed by Contractor in the performance of the services hereunder. Contractor shall be solely responsible for, and shall indemnify, defend, and save the District harmless, from all matters relating to the payment of its employees, including compliance with Social Security, withholding, and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.
- 3.13. The Garland Independent School District reserves the right to cancel any contract (purchase order) resulting from this Request For Proposal at any time, for any reason (or for no reason) with a thirty (30) day written notice to the contractor(s). Contractor may cancel any resulting contract, at any time for any reason, or for no reason with a sixty (60) day written notice. Any notice required or permitted to be delivered to the contractor(s) shall be deemed to be delivered when mailed by registered or certified mail, return receipt requested, postage prepaid, and addressed to the bidder's address appearing on the face of the Request For Proposal (or as subsequently revised or changed). Any compensation due the contractor(s) will be limited to items received and/or services performed and accepted by the District.
- 3.14. The Contract Document consisting of the purchase order(s) and the Specifications or any documents attached thereto or expressly incorporated therein constitute the entire agreement between the parties hereto with respect to the matters covered thereby. All prior negotiation representation and agreements, with respect thereto not incorporated in such Contract Documents, are hereby cancelled. This Agreement can be modified or amended only by a document duly executed on behalf of the parties hereto.
- 3.15. Upon request by Garland ISD, any duly authorized representative of Garland ISD shall, until three (3) years after final payment under this Agreement, have access to and right to examine

directly pertinent books, papers, documents, accounts, and records of Seller involving transactions related to this Agreement and to examine Seller's place of business as necessary to determine whether the terms of this Agreement are being carried out. This audit will be conducted at a location where those business documents are being held at the time of the audit request. Seller shall be required to maintain such records for three years after final payment.

- 3.16. Garland ISD shall have all remedies available at law or in equity to include reimbursement of attorneys' fees and all costs incurred in enforcing such rights. No modification of limitation of remedy shall be a part of this contract unless specifically agreed to in writing by Garland ISD's Purchasing Department.
- TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, SUPPLIER 3.17. AND ITS AGENTS, PARTNERS, EMPLOYEES, AND CONSULTANTS "INDEMNITORS") SHALL (COLLECTIVELY AND DO AGREE TO INDEMNIFY, PROTECT, DEFEND WITH COUNSEL APPROVED BY DISTRICT, AND HOLD HARMLESS THE DISTRICT, REPRESENTATIVES OF THE DISTRICT, AND ITS MEMBERS OF THE BOARD OF TRUSTEES. ADMINISTRATORS, OTHER EMPLOYEES AND AGENTS (COLLECTIVELY "INDEMNITEES") FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, JUDGMENTS AND EXPENSES, INCLUDING ATTORNEY FEES, OF ANY NATURE, KIND, OR DESCRIPTION "LIABILITIES") OF (COLLECTIVELY ANY PERSON OR ENTITY WHOMSOEVER ARISING OUT OF, CAUSED BY, OR RESULTING FROM THE PERFORMANCE OF SERVICES, OR PROVISION OF GOODS, BY PROPOSER PURSUANT TO THIS CONTRACT, OR ANY PART THEREOF, OR ANYONE FOR WHOSE ACTS IT MAY BE LIABLE EVEN IF IT IS CAUSED IN PART BY THE NEGLIGENCE OR OMISSION OF ANY INDEMNITEE, SO LONG AS IT IS NOT CAUSED BY THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY INDEMNITEE.

3.18. Criminal History Checks

During the term of this agreement, the firm's employees have the potential to have continuing duties and direct contact with students. Subsequently, the supplier is responsible for complying with Texas Education Code § 22.0834. Supplier may not commence work until all employees have been approved by the Purchasing Department.

At a minimum, the company recommended for award shall:

1. Obtain required criminal history record information, through the Department of Public Safety's Fingerprint-based Applicant Clearinghouse of Texas (FACT), regarding its employees assigned to work GISD premises. The following steps should be followed to complete the process:

If you are a sole proprietor (one person company) you must:

- 1.1 Contact GISD Purchasing Department to obtain FAST pass.
- 1.2 Follow instructions on the FAST Pass to arrange an appointment for employees to be finger printed. Employers may select the most convenient location to their zip code.

If there is not a convenient location based on your zip code, please enter 75042 and choose "Garland: Garland ISD" to schedule your fingerprint appointment.

1.3. After fingerprinting is completed, email Diane Fields, Administrative Assistant to Director of Purchasing at <u>Dfields@garlandisd.net</u> and provide the following: RFP number, full name and date of birth for all personnel assigned to work on site during the contract term. If it is not possible to verify an employee based on the name and date of birth, it may be necessary to provide a driver's license number or state identification card.

All other suppliers, contractors and subcontractors must:

1.1 Supplier will receive award letter or signed contract from the Purchasing Department.

Subcontractors will obtain an award letter or contract from the general contractor, before contacting DPS.

- 1.2 Contact the Department of Public Safety (DPS) at (512) 424-2474, select option 2, to establish a vendor account and obtain a FAST pass. This process can take up to seven to ten business days.
- 1.3 Follow instructions on the FAST Pass to arrange an appointment for employees to be finger printed. Employers may select the most convenient location to their zip code.

If there is not a convenient location based on your zip code, please enter 75042 and choose "Garland: Garland ISD" to schedule your fingerprint appointment.

- 1.4 After fingerprinting is completed, email Diane Fields, Administrative Assistant to Director of Purchasing at <u>Dfields@garlandisd.net</u> and provide the following: RFP number, full name and date of birth for all personnel assigned to work on site during the contract term. If it is not possible to verify an employee based on the name and date of birth, it may be necessary to provide a driver's license number or state identification card.
- 2. If an employee is arrested while under contract, you must contact Dana Knox, GISD Human Resource Specialist of Fingerprinting/Investigations at 972-487-3213. The incident must be reported within 3 business days of the arrest.
- 3. Notify GISD Purchasing Department if employees leave employment with the firm during the contract term or cease responsibilities on GISD property
 - 3.19. The Garland Independent School District requires that all individuals who perform services on GISD property pursuant to this Request For Proposal to have a criminal background check. Prior to the provision of services by any such individual, the proposer shall be responsible for providing to GISD a criminal background check that was completed and dated within (1) year of the proposed dates of service and that is sufficient to meet the standards determined by GISD in its sole discretion. Failure to provide an acceptable and up-to-date criminal background check for each individual providing services under this Request For Proposal shall be grounds for immediate termination of any contracts or agreements.

- 3.20. Insurance Requirements, apply to this Proposal Invitation and any resulting award. The Insurance Certificate is not required to be submitted with this bid; however, if bidder is to receive an award, the certificate must be submitted to the Garland ISD Purchasing Office prior to commencement of work on District Property within five (5) days of verbal or written request by the Purchasing Office (whichever is earlier). The certificate must be prepared correctly and submitted to the Garland Independent School District before award can be made.
- 3.21. Proposers awarded a contract shall not advertise, solicit, or publish, without Garland ISD's written consent, the fact that Proposer has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.
- 3.22. Garland ISD has implemented an Oracle iSupplier module and will require the successful supplier to utilize this application. iSupplier is a collaborative application that enables Garland ISD and the supplier to communicate. The system enables suppliers to have real-time access, through a standard internet browser, to information such as bids, purchase orders, invoice status, payments, and respond to Garland ISD with order acknowledgments and change requests. Oracle also allows the supplier to input invoices through the portal if permitted by Garland ISD.
 - 3.22.1. In addition to I-Supplier, Garland ISD has implemented iSourcing, which allows the supplier to receive and submit bids and quotes electronically.
 - 3.22.2. iSupplier and iSourcing are provided free to suppliers. Additional information regarding this Oracle application can be obtained at: <u>www.oracle.com/us/products/</u><u>applications/ebusiness/procurement/index.html</u>.
- 3.23. The Proposer is required to provide the name and contact information of the individual who will be the dedicated technical resource for performing the iSupplier and iSourcing responsibilities.

Name of responsibl	le party:
Phone Number:	
E-mail Address:	

3.24. UPON NOTICE OF AWARD, Garland ISD requires suppliers to provide price lists and catalogs in a format capable of being uploaded electronically by the district's E-Commerce Specialist. Utilizing a prescribed format, the supplier shall provide, at a minimum, information for the required data fields for the entire catalog.

Please refer to the pdf document titled "Instructions for completing Oracle Bulk Load Catalog" and the Excel Spreadsheet/Electronic Price List titled "Oracle Bulk Load Catalog" located at the GISD Purchasing website http://www.garlandisd.net/sites/default/files/revised instru http://www.garlandisd.net/sites/default/files/revised instru http://www.garlandisd.net/sites/default/files/revised instru ctions for filling out the electronic price lis 1.pdf This information should be submitted on a flash drive or CD-ROM with your submittal or via e-mail to bids@garlandisd.net.

Data Field	Content
Supplier Item	Your company Part # (each item # must be unique and match your company's published catalogs)
Description	Description of the item from your database (no more than 25 characters)
Unit	Unit of Measure (i.e., EA for Each)
Unit Price	Unit price offered to GISD, No percentages
Lead Time	Numbers of days to deliver ARO
Long Description	Additional description information
*Comments	Any shipping information
*Manufacturer	Name of the Manufacturer
*Model	Manufacturer Model #
*Optional Fields	

The data below outlines the highlighted items on the worksheet:

*Optional Fields

AS CHANGES IN PRICE AND/OR PRODUCTS OCCUR DURING THE TERM OF THIS CONTRACT, IT IS THE RESPONSIBILITY OF THE SUPPLIER TO UTILIZE I-SUPPLIER FOR UPDATING AND MAKING CHANGES TO THEIR CATALOG(S) OR ELECTRONIC PRICE SHEET. Otherwise, PO's will not be updated and payment will not be processed. From there the information will be shared with the appropriate buyer before accepting the change(s).

It is the responsibility of the supplier to contact the Buyer on the contract or the E-Commerce Specialist for access to Supplier Authoring which gives access to the supplier's current loaded price list. This access allows suppliers to enter new items, change pricing and end-date items. Please note if a substantial number of items require change, supplier may submit an entirely new price list to Garland ISD for loading. <u>It is important to note that invoices submitted with prices that have not been updated by the supplier in the electronic price list will not be paid at the higher rate.</u>

Does your company commit to participate in Oracle iSupplier and Oracle iSourcing? Yes \square No \square THIS WILL BE CONSIDERED ADDITIONAL EVALUATION CRITERIA.

FAILURE TO PROVIDE THIS DATA MAY NEGATIVELY AFFECT THE CONSIDERATION OF YOUR PROPOSAL.

3.25. Garland ISD has implemented two initiatives to streamline the procure-to-pay process and enable strategic partners to exchange information electronically via **Oracle iSupplier Portal** and **Oracle Supplier Network (OSN)**.

The district has enabled electronic communication of bid notices. Notifications will not be mailed after this date. Therefore, make sure you carefully select appropriate products and services and keep contact information updated to ensure that your firm is notified of upcoming bids/contracts.

Oracle Supplier Network (OSN) enables GISD and supplier the ability to electronically communicate purchase order data to the supplier utilizing a supplier network provided by Oracle.

Suppliers experienced with iSupplier shall include references indicating the date of implementation and contact information for the company.

3.26. FORCE MAJEURE CLAUSE

Proposer shall not be liable for delay in delivery or performance or for failure to give notice of delay when such delay is due to factors beyond its control, including, but not limited to, fires, strikes, explosions, governmental regulations, court orders or decrees, or acts of nature such as flood, wind, earthquake, tornado or hurricane. If the Proposer is unable to perform any of its obligations as a result of force majeure, proposer shall immediately give written notice to the District of the date of inception of the force majeure condition and the extent to which it will affect performance.

END OF SECTION

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 1)

Garland Independent School District (GISD) currently has a private fiber network referred to as the Metropolitan Area Network (MAN). The District is requesting pricing for moves, additions, changes, and ongoing maintenance on the MAN network.

The entire MAN was built underground and there are no above ground installations except for 2 bridge attachments. This fiber network was built using Systimax products including all outside plant cable and fiber terminating hardware at the Equipment Rooms. This network has been certified by Systimax & all work or additions to the current network must be certified by Systimax. The MAN consists of the following:

- 84 Buildings are currently connected to the fiber optic network, see attachment A.
 - o 7 High Schools
 - 13 Middle Schools
 - o 47 Elementary Schools
 - 1 Curtis Culwell Center
 - o 2 Stadiums
 - o 7 Administrative Facilities
 - o 7 Special Service Facilities
- Fiber Network (see Attachment B)
 - o 100 plus Miles outside plant fiber connecting all district facilities.
 - o 90 OSP splice locations
 - All fiber in public right-of-way or on Garland ISD property
 - The size of OSP fiber cable ranges from 12 to 252 strands.
 - All fiber optic cable is Systimax TeraSpeed constructed with light armor.
 - 499 Handholes
 - 30" wide x 48" long x 36" deep
 - 36" wide x 60" long x 36" deep
 - 24" wide x 36" long x 48" deep
 - 30" wide x 48" long x 48" deep

Garland ISD is fully dependent on the MAN/WAN fiber optic network for data, video, voice,

instructional technology, and security. With the fiber optic plant being underground we are susceptible to cable damage via the various type of construction such as backhoes, auger trucks, post hole diggers, etc. The bidding contractor must have the capability to respond quickly to emergencies 24 hours a day 7 days a week.

The project work shall include:

- a. Provision and delivery of required materials: fiber cable, handholes, connectors, splicing hardware, fiber patch panels, fiber racks, hardware, software (if any), miscellaneous materials/accessories (including freight/handling) and Inside plant.
- b. System design
- c. Configuration
- d. Installation
- e. Labeling
- f. Testing
- g. Permitting / License agreements / Surveying
- h. As -Built Documentation
- i. Cable maintenance and emergency restoration

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 2)

District Responsibilities

GISD will provide the following materials to be kept at contractor's yard in case of emergency restoration:

- 1. GISD will provide 2000 ft of 252 strand single mode fiber optic cable TeraSpeed
- 2. GISD will provide 2000 ft of 96 strand single mode fiber optic cable TeraSpeed
- 3. GISD will provide 2000 ft of 24 strand single mode fiber optic cable TeraSpeed
- 4. Coyote Splice enclosure 6" x 22" (2)
- 5. Coyote Splice enclosure 8.5" x 22" (2)
- 6. Splice tray kits (10)
- 7. 1.5" HDPE SDR 11 Duct 2500 ft.
- 8. Hand holes 30"W x 48"L x 48"D w/20K traffic lid (2)

For maintenance purposes, District shall permit Contractor access to buildings during regular building hours. Special arrangements will be made at times outside of regular building hours.

The district will provide GISD Badges, Access cards and keys for contractor to access GISD facilities. District shall provide a single point of contact (with at least one back-up) for Contractor.

Supplier Responsibilities

Personnel

The point of contact & any job site foreman or supervisor must be Systimax certified with current credentials. (see attachment C)

It is preferred that the point of contact be BICSI certified.

Engineering Support

It is preferred the vendor have Outside Plant specialist on staff to verify that all proposed & completed installations meet industry & BICSI standards.

Systimax Requirements

All outside plant work must be completed under the guidelines of the ComScope Broadband Applications and Construction Manual. (see attachment D)

Must comply with OSP Installation Acceptance – Underground. (see attachment E)

Must comply with OSP Installation Acceptance – Entrance Facility/Equipment room. (see attachment F & attachment G)

Financials

A positive financial position is desired.

Quality Assurance

Must work with Systimax to obtain a Systimax certified warranty for all work completed. This will be requested on a monthly or quarterly basis as needed.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 3)

Identification

The vendor will identify to the district any work necessitating cutting into or through any part of the building structure such as girders, beams, concrete, tile floors or partition ceilings or excavating on district property.

Ceiling Tiles

Provide for the removal and re-installation of all ceiling tiles required for the installation of all above ceiling wire.

Change Order

All changes for scheduled work must be approved before proceeding.

Uniforms

Vendor will have technicians wear company logo shirts with a GISD badge.

Non-cataloged items

Vendor shall ensure all items not included in this RFP shall be cataloged with the purchasing department prior to ordering. (This is due to technology changes)

Ordered items

Vendor will keep track of all ordered items, labor hours, and any other information on request as needed for trend analysis and information

Clean Up

Upon completion of the work each day, the vendor must remove all tools, equipment, rubbish and debris from the right-of-ways and or premises and must leave the premises clean and neat. If equipment & materials need to be left in place there must be prior approval from the governmental entity or school district.

Subcontractors/Partners

Identify all subcontractors or partners used for any purposes. Failure to disclose subcontractors/partners may lead to disqualification. Include separate sheet(s) labeled "Subcontractors/Partners" if necessary.

Every subcontractor shall be bound by the applicable terms and provisions of the contract documents. Further information about subcontractors may be requested prior to award.

Business Name	Years Exp.	Function

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 4)

Permits, Fees & Associated Documents

The contractor must be registered, bonded, insured and current with annual license fees for the cities of Garland, Rowlett, Sachse and City and County of Dallas.

The Contractor shall be responsible for preparing and submitting application and all associated drawings or documents for the building and right-of-way permits. The Owner shall pay the municipality directly for the permits and all other development "impact" fees, if any. The Contractor shall continue to be responsible for payment of other permits, governmental fees, licenses, and inspections necessary for proper execution of the contract and which are legally required when proposals are received.

The Contractor shall pay directly all temporary utility charges, tap charges, and water meter charges.

Point of contact

Contractor must provide a point of contact that is experienced in all phases of outside & inside plant construction. Point of contact will initiate all meetings with the minumum being bi-weekly. This point of contact must be able to attend all scheduled meetings & provide all necessary project updates. This point of contact shall at all times maintain job records, including, but not limited to, scopes of work, quotes, invoices, payment records, daily reports, logs, diaries, and job meeting minutes, applicable to the project(s). Contractor shall make such reports and records available for inspection by the Owner upon request. At the completion of each project, the contractor (point of contact) shall submit one (2) complete set of as-built drawings in hard copy & electronic format.

Emergency Restoration

Requirements for Fiber Repair and Maintenance:

- 1. Contractor shall provide the District a single point of contact and a progression "call out list" if the initial point of contact is not available. The points of contact must be reachable on a 24 x 7 basis. Contractor shall immediately notify the District of any changes to the initial point of contact or others on the "Call Out List".
- 2. In emergency situation (such as cable cuts/damages) contractor management shall arrive on-site within two (2) hours maximum after notification by District. Contractor shall notify all necessary construction personnel of possible dispatch.
- 3. After contractor management arrival on-site & within a total of four (4) hours the Contractor's Management shall complete diagnosis of problem, initiate a plan of action & dispatch all necessary personnel, within four (4) hours of the initial phone call with the District. Contractor shall notify District and provide an estimated time to final resolution.
- 4. Final resolution shall be accomplished within eight (8) hours from time of diagnosis, assuming no extenuating circumstances.
- 5. GISD will provide the following materials to be kept at contractor's yard in case of emergency restoration:
 - GISD will provide 2000 ft of 252 strand single mode fiber optic cable TeraSpeed
 - GISD will provide 2000 ft of 96 strand single mode fiber optic cable TeraSpeed
 - GISD will provide 2000 ft of 24 strand single mode fiber optic cable TeraSpeed
 - Coyote Splice enclosure 6" x 22" (2)
 - Coyote Splice enclosure 8.5" x 22" (2)
 - Splice tray kits (10)
 - 1.5" HDPE SDR 11 Duct 2500 ft.
 - Hand holes 30"W x 48"L x 48"D w/20K traffic lid (2)

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 5)

- 6. In all cases, Contractor shall notify District immediately upon resolution of the issue.
- 7. District reserves the right to have cable repairs certified by an outside party.
- 8. Typical procedures that must be followed during a cable emergency.
 - a) Cable damage reported or detected.
 - b) What schools and services are impacted?
 - c) Put Contractor on notice that damage has occurred.
 - d) Notify Risk Management and start documentation for their files.
 - e) Call Garland ISD Security.
 - f) Get Technology personnel on site to meet Contractor and investigate.
 - g) Start documentation immediately. (see attachment H)
 - h) Pictures of damage
 - i) Access how we can restore service temporarily so that the classroom and the security of the kids are minimally impacted.
 - j) Temporarily restore services.
 - k) Start accessing what the complete picture of the damage is.
 - 1) Was the cable severed?
 - m) Was the cable in adjacent holes kinked?
 - n) How far back into the sheath of the cable was the glass shattered.
 - o) How much cable will be required to replace.
 - p) Can we repair the damage by setting a hand hole over the damage and adding a splice point?
 - q) If we add a splice point what impact will the additional db loss have on the network? If there is an impact the entire section of cable may be required to replace...splice to splice.
 - r) Network Engineers engaged at this point.
 - s) After Contractor completes testing the entire cable with an OTDR (Optical Time Domain Reflector) all plans may change depending on the extent of the damage.
 - t) Develop plan to restore MAN/WAN fiber optic cable facilities back to "as new".
 - u) If excavation is required begin looking and preparing the required permits:
 - v) City Permits
 - w) State Permit
 - x) Federal Permits
 - y) County Permits
 - z) Water District Permits
 - aa) OSHA
 - bb) Permits deeper than 20' must be registered.
 - cc) Note: approval for permits range anywhere from 5 days to 1 year.
 - dd) After all permits have been secured begin scheduling Contractor.
 - ee) Start restoration of fiber optic cable.
 - ff) Once excavation and the new cable have been put into place Contractor is scheduled to begin splicing, testing, and documentation. This work will be performed normally at night after 6:00 pm and/or on weekends to keep from disrupting the classroom and other services such as security.
 - gg) Notify Schools, Security, Energy Management, Oracle users, Gradebook, and any other users that will be affected by downtime so they can arrange their schedule. We normally give one weeks' notice to these users.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 6)

- hh) Take down the network and splice and test the repairs. Every strand is tested and documented.
- ii) Inspect all work and OTDR test results.
- jj) Document changes such as added splices, cable size changes, etc. on permanent Garland ISD records.
- kk)Assemble all costs of repair both temporary and permanent. Contractor provides itemized bill so that Risk Management can try to recover our costs of damage.

OUTSIDE PLANT INSTALLATION & MATERIAL REQUIREMENTS

(A) Directional Boring Operations (refer to section K on pricing sheet)

All directional boring operations are subject to the following conditions:

- 1. The machine operator shall follow all current OSHA regulations, including the use of grounding mats and other safety measures.
- 2. The machine operator shall have control over the direction of the boring tool.
- 3. The bore crew must have, in their possession, a copy of the permit authorizing the company to perform work, and a copy of the approved drawing and specifications for the bore work location.
- 4. When possible, the Proposer shall mark the proposed running line and bore head location. Mark the proposed running line every 5' to 10', using a longitudinal line; mark the actual location with a paint spot at the end of each stem push. Only white paint is approved for this use.
- 5. The bore is not allowed to deviate more than six (6) inches from the proposed marked running line and the ends of the bore must be at the designated depth.
- 6. Slurry use shall be kept at a minimum and only used for head lubrication and/or spoils return. The Proposer shall calculate anticipated slurry use and monitor slurry use during the bore operation to determine slurry loss into the surrounding soil.
- 7. Slurry must be contained during the bore operation and must be removed prior to backfilling, with dry dirt.
- 8. During pull back the mandrels shall be not more than two inches larger than the diameter of the duct or casing.
- 9. Shallow bores, misdirected bores, or other unsuccessful bores shall be abandoned and filled at the discretion of the owner.
- 10. If a bore is unsuccessful, future attempts may be made only with the approval of the owner.
- 11. The bore operation shall be stopped if any damage occurs to a road surface and it shall remain inactive until corrective measures are taken at the direction of the owner. The Proposer is liable for any damage done to the right-of-way or structures.
- 12. Auger heads are not allowed more than six inches ahead of the casing being inserted.
- 13. Bore stems and cutting heads may have to be left in the ground if they cannot be retrieved through the bore hole. Retrieving parts is allowed with the approval of the governmental agency that controls the right-of-way.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 7)

14. When boring near creeks and streams, silt fences will be properly installed to prevent disturbed soil from flowing into the waterways and remain in place after the bore has been completed.

(B) Excavation and Trenching Requirements (refer to section K on pricing sheet)

- 1. Make trench sides as nearly vertical as practical except where sloping of sides is allowed.
- 2. Remove all rock, boulders, hard material, unstable material, and yielding and unsatisfactory materials within the limits indicated for trench excavation and dispose of off the site. Notify the Owner's Representative immediately in writing if it becomes necessary to remove such materials beyond the trench limits. Where excavations are deeper or wider than the trench limits in order to remove unsuitable materials, they shall be refilled with approved borrowed material.
- 3. Existing concrete or granite curb encountered in excavation shall be temporarily supported or replaced in kind. Bituminous lip curb shall be disposed and replaced in kind.
- 4. Excavation operations adjacent to and below existing structures and utilities shall be done manually. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Owner's Representative. Report damage to utility lines or subsurface construction immediately to the Owner's Representative.
- 5. Place "Road Closed" signs on temporary barricades at approaches to work or uncovered trenches.
- 6. Keep excavated materials and construction equipment and materials a safe distance back from the edge of excavations to avoid overloading the sides of the trench and to prevent slides or cave-ins.
- 7. Grade areas around trench as necessary to prevent surface water from flowing into excavations.
- 8. Walkway and grassed areas left not backfilled at the end of the workday shall be enclosed with snow fence until restored to grade. Roadway trenches shall not be re-opened to traffic unless either a road plate capable of sustaining HS-20 loading is in place or temporary gravel is placed to bring the trench area to finish grade.

(C) Cutting Pavement (refer to section K on pricing sheet)

- 1. Where trench excavation occurs in paved areas, saw cut existing pavement to obtain sound, vertical edges one foot wider than the indicated trench width on each side of the trench. When the saw cut is within two feet of an existing joint or curb, remove pavement to the existing joint or curb.
- 2. Existing pavements and base course beyond the indicated lines for trench excavation which have been disturbed, damaged or undermined shall be restored or replaced by the Proposer to match existing pavements and base course, as directed, at no additional expense to the Owner.

(D) Back filling (refer to section K on pricing sheet)

1. Construct backfill in two operations (initial and final) as indicated and specified in this section. Initial backfill shall be select backfill material placed in 6-inch maximum loose lifts to one foot above conduit or duct unless otherwise specified. Bring up evenly on each side and along

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 8)

the full length of the conduit or duct structure. Ensure that no damage is done to the conduit or duct structure, or its protective coating.

- 2. Place the remainder of the backfill (final backfill) in 9-inch maximum loose lifts to the bottom of the sub grade, unless otherwise specified. Compact each loose lift before placing the next lift. Do not backfill where the material in the trench is muddy, except as authorized.
- 3. Provide a minimum cover from final grade of 2-1/2 feet for telephone ducts unless otherwise indicated on the Drawings.
- 4. Where settlement occurs in trenches and pits due to improper compaction, excavate to the depth necessary to rectify the problem, then backfill and compact the excavation as specified herein and restore the surface to the required elevation.
- 5. Coordinate back filling with testing of utilities. Testing for the following shall be complete before final back filling: water distribution, sanitary sewer, steam compressed air, fuel oil, and refrigeration systems.

(E) Compaction (refer to section K on pricing sheet)

Use hand-operated, plate-type, vibratory or other suitable hand tampers in areas not accessible to larger rollers or compactors. Avoid damaging pipes and protective pipe coatings. Compact material in accordance with local code unless otherwise specified. If necessary, alter, change, or modify selected equipment or compaction methods to meet compaction requirement.

(F) Protection of Existing Utilities and Structures and New Work (refer to section K on pricing sheet)

- 1. Excavation, backfill and compaction operations shall be done in such a manner to prevent cave-ins of excavations or the undermining, damage or disturbing of existing utilities and structures or of new work. Backfill shall be placed and compacted so as to prevent future settlement or damage to existing utilities and structures and new work.
- 2. Any damage due to excavation, back filling or settlement of the backfill, or injury to persons or damage to property occurring as a result of such damage shall be the responsibility of the Proposer. All costs to repair such damage, in a manner satisfactory to the Owner's Representative, shall be borne by the Proposer at no additional expense to the Owner.
- 3. Protect newly back filled areas and adjacent structures, slopes, or grades from traffic, erosion settlement, or any other damage. Repair and re-establish damaged or eroded grades and slopes and restore surface construction prior to acceptance. Protect existing storm drain inlets from water-borne soil.

(G) Restoration (refer to section K on pricing sheet)

Successful proposer is responsible for repairs to any streets, sidewalks, grass areas, etc., which must be trenched or otherwise disturbed in the process of installation. In areas owned by GISD, the District has final determination whether such repairs are acceptable.

All sidewalks, streets, alleyways and landscaping shall be replaced to its original condition or better.

NOTE: All environmental conditions have been videotaped prior to construction activities to provide information of pre-existing conditions.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 9)

Grassed Areas

After completion and acceptance of all conduit, excavation, and backfilling work in a given area, the Proposer shall place an appropriate amount of turf sod to cover all disturbed areas. The Proposer may choose to cut and remove turf prior to the area being disturbed. This would be used to place back over the disturbed area.

Sidewalks

Footpath Crossings

If the proposed trench crosses sidewalks or paved footpaths, the sidewalk shall be replaced in kind using an eight-inch gravel borrow sub base and a two-inch bituminous surface or a four-inch cement concrete sidewalk, as applicable. If part of a walk is disturbed due to a longitudinal trench (less than 30 degrees skew between the sidewalk alignment and the trench direction), the entire width of the sidewalk shall be replaced. If a length of sidewalk exceeding 100 feet is disturbed, it shall be replaced with similar materials to a width of eight feet.

Roadside Sidewalks

Any disturbed roadside sidewalks shall be replaced for their entire width.

Road Restoration

- 1. After completion and acceptance of conduit excavation, and back filling of road trench areas, 12 inches of compacted Gravel Borrow Sub base course shall be placed to a level three inches below the finish road grade. A temporary surface of Bituminous Surface Course Type I-1 shall be placed.
- 2. After allowing 6 months for settlement of the road sub base, the Proposer shall place a saw cut of the pavement 12 inches beyond the limits of the temporary patch. Bituminous binder course shall be placed to within

1-1/2 inches of the finish road grade and a final course of bituminous Surface Course Type I-1 shall complete the roadwork. Reflectorized pigment pavement markings specially manufactured for roadway use shall be placed to restore any pavement striping that had been in place prior to this contract.

(H) Duct for OSP Installation (refer to section K on pricing sheet)

- 1.5" to 6" High-Density Polyethylene (HDPE) ducts shall be smooth wall with silicone coating and rated at SDR 11. These duct shall be manufactured to ASTM D2447, ASTM D3035 AND NEMA TC7 Specifications. These ducts shall contain a measured pull tape. The pull tape shall be a minimum of 1800lbs in tensile strength and be pre-lubricated with silicone to reduce the frictional forces applied during cable installation. The primary method of installation of the HDPE is directional boring. The ducts shall be joined at the "tie-in" locations using metal couplers designed to thread the two ends of HDPE conduits together. These couplers shall provide a pull-proof connection of the duct.
- 2. Proposer shall leave a pull tape in the conduit with the cable after installation.
- 3. HDPE duct shall be products manufactured by Arnco, Carlon, Dura-Line, or other equivalent products, which meet these specifications.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 10)

(I) Duct Depth (refer to section K on pricing sheet)

1. The depth at which buried duct shall be placed will vary with local conditions along with the requirements of Cities, State and Railroads. HDPC duct should be buried a minimum depth of:

Location	Depth
Minimum cover in soil	42 in.
Minimum cover under draining ditches	42 in.
Minimum cover under Railroads	60 in below top of rail or as required by Railroad specifications
Minimum cover at roadway crossing	60 in.
Minimum cover in rock	42 in.

- 2. When crossing unimproved roads, streets and alleys that may later be paved or hard surfaced, the cable should be placed at a depth that retains sufficient cover following permanent grading of the road.
- 3. When crossing major highways and railroads the duct shall be placed in a casing required by that entity.
- 4. Proposer shall proof all conduit sections prior to installation of the fiber cable to ensure conduit integrity. After proofing of the duct, measurements will be taken to verify the length of the installed conduit.

(J) Cable Slack

- 1. Proposer shall provide seventy-five feet (75') of cable slack at all splice locations along the buried fiber route, for the purpose of removing the splice case from the handhole and placing it inside a controlled environment for accessing the interior of the case and exposing the splice.
- 2. All other handholes, used for installation assistance shall contain 50' of cable slack. Cable slack of one hundred feet (100'), shall be provided on one side of all creeks or rivers, major intersections or highway crossings, railroad crossings and bridge attachments.
- 3. Proposer shall provide a minimum of fifteen feet (15') of cable slack at each termination point in the buildings. The cable slack shall be stored in a fashion as to protect it from damage and be secured to a wall or building structure.

(K) Wall penetration above the inside ceiling height. (refer to section F on pricing sheet)

 Building Entrance Facilities shall consist of NEMA-rated metallic pull boxes 18"x 18"x 6", galvanized steel 2" conduit, 1.5" High Density Polyethylene conduit and as a minimum 30"x48"x36" handholes as required to complete the pathway from the public right-of-way to the school or building location.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 11)

- 2. The NEMA box shall be attached to the outside wall with masonry anchors and unistrut material. The penetration shall be sealed around the galvanized steel pipe (sleeve) used for entrance into the building to prevent water or other material from leaking into the structure around the metal sleeve.
- 3. Rigid Galvanized Steel Conduit shall be installed on the exterior wall, secured with unistrut material and clamps, from the NEMA box down the wall and connect with a 90 degree bend of the same material to a depth of 42". The steel pipe shall be connected to the HDPE conduit at this point and extended across the campus area to the handhole placed in the public right-of-way adjacent to the building. The HDPE shall be buried to a depth of 42" across the campus unless otherwise directed by the District. Please refer to the drawings for external building penetration.

(L) Underslab penetration (refer to section F on pricing sheet)

- 1. This method is an underground installation that penetrates the interior floor. Galvanized steel and HDPE conduits are to be used in a same manner as an external entry except the conduits will approach under the slab and footing of the building and enter through a core made in the concrete floor of the building. All efforts will be made to enter into small closets or rooms where the conduit can be hidden from sight. Proposer is responsible to coordinate these activities with the District personnel.
- 2. After installation of the conduit under the building footing and slab, proposer shall replace the excavated material with a cement-stabilized material to prevent settling or erosion from around the building foundation due to the excavation.
- 3. Please refer to the drawings for an underslab building penetration.

(M) Work within Buildings (refer to section F on pricing sheet)

- 1. All cable taken into a school or building shall be terminated and grounded within fifty feet (50') of the point of entry into the structure, or EMT conduit attached to the building entrance facilities shall be extended to the Main Communications Closet (MER/MDF).
- 2. Any cable that is gel-filled must be properly sealed and tested at building entrance.
- 3. At each building entrance, a maintenance loop of fiber 4 feet in diameter and 10 to 15 feet in length must be installed.
- 4. The cable shall be lubricated at the entrance point to the conduit during installation.

(N) Conduits/Sleeves and Fittings (refer to section F on pricing sheet)

- 1. Proposer shall furnish and install sleeves, conduits, supports and fittings to complete cable pathways as indicated on the drawings and in the specifications.
- 2. Provide sleeves for all cables that pass thru walls, concrete slabs, concrete columns or concrete bridging. Provide sleeves whether or not specifically indicated on project drawings.
- 3. Provide sleeves passing thru walls, slabs, beams, bridging, or columns, which are 1/2 inch greater in inside diameter than external diameter of the materials passing through the sleeves.
- 4. Sleeves through walls shall extend full thickness of wall, cut flush with finished surface.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 12)

- 5. Conduits and sleeves shall be sizes as indicated on the drawings.
- 6. Conduits shall be installed as follows:
 - a. Rigid threaded steel conduit shall be hot dip galvanized as manufactured by the Wheatland Tube Co., Republic Steel, Allied Tube or an approved equal. Rigid steel conduits shall conform to Federal Specification WVV-C-581d.
 - b. Electrical Metallic Tubing (EMT) shall be manufactured by the Wheatland Tube Co., Republic Steel, Allied Tube or approved equal, conforming to Federal Specification WW-C-563.
- 7. EMT Conduit Fittings
 - a. Bushings shall be of the non-metallic insulating type and consist of an insulating insert molded into the metallic body of the fitting.
 - b. Garland ISD requires threaded couplings only. Compression couplings will not be allowed or approved.
 - c. Indent type connectors are not permitted.
 - d. Die-cast or pressure-cast zinc-alloy fittings or fittings made of pot metal are not permitted
- 8. The conduit products shall be Allied, Republic, Wheatland, Alflex, Carlon or Robroy. Or other approved products, which meet these specifications.

(O) Conduit Installation (refer to section F on pricing sheet)

- 1. Installation shall be in accordance with U.L., N.E.C. as shown on the drawings and specified herein.
- 2. Route conduit parallel and perpendicular to walls and adjacent piping and do not obstruct headroom or walkways.
- 3. Maintain minimum 6-inch clearance between conduit and piping. Maintain 12-inch clearance between conduit and heat sources such as flues, steam pipes, and heating appliances.
- 4. Conduit shall be supported and clamped using hardware intended for the purpose.
- 5. Conduit bends shall be made with standard conduit bending tools. Conduit deformed or flattened during bending shall be removed and replaced.
- 6. Conduits cut in the field shall be coated with galvanized hot stick or galvanized spray approved for the purpose.
- 7. Supports shall be provided every five (5) feet for conduits wherever possible, and within three (3) feet of boxes or fittings, the points of support to be determined in the field. The supports shall consist of approved types of clamps or straps secured by screws, bolts on wood or steel framework and decking, or expansion bolts in concrete, and brickwork. In no instance shall supporting bolts or screws protrude to the outside of building walls or roof.
- 8. The complete raceway system shall become metallically continuous throughout its entire length and the entire system shall be electrically continuous and shall be thoroughly grounded in accordance with the N.E.C.
- 9. Vapor seals shall be installed at locations required by the National Electrical Code.

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(P) Cutting and Patching (refer to section F on pricing sheet)

- 1. Where it is necessary to do any cutting and patching, no cutting of beading walls, beams, etc., shall be done without the approval of the Owner's Representative. All patching, finishing, etc., shall match the surroundings. All cutting and patching shall be done by workmen skilled in the trades.
- 2. Holes through concrete and masonry in new and existing structures shall be cut with a diamond core drill or concrete saw. Pneumatic hammer, impact electric, hand or manual hammer type drills shall not be allowed, except where permitted as required by limited working space.
- 3. Holes shall be located so as not to affect structural sections such as beams.
- 4. Holes shall be laid out in advance. The Owner's Representative shall be advised, prior to drilling through structural sections, for determination of proper layout.
- 5. Structural Penetrations: Where conduits, wire ways, bus duct, and other electrical raceways pass through fire partitions, fire walls or walls and floors; install a firestop that provides an effective barrier against the spread of fire, smoke and cases. Firestop material shall be packed tight, and completely fill clearances between raceways and openings.
- 6. Floor, exterior wall and roof seals shall be watertight. Walls and floors that are cored for installation of conduit shall be sleeved with steel tubing, grouted, and the space between the conduit and sleeve filled as specified herein.
- 7. Conduits shall extend one-inch minimum above finished floor.

(Q) Fire Stopping (refer to section F on pricing sheet)

- 1. The Proposer is responsible for applying fire-stopping material in and around any openings that it creates or are created for it where code or good engineering practice suggests or requires the use of fire stopping material. The Proposer shall ensure that all fire-stopping materials meet appropriate codes and are applied according to good engineering practice.
- 2. All penetrations of firewalls must be approved by the Owner before any penetrations are made. Proposer shall provide satisfactory sleeving and fire caulking both inside and outside of that sleeving. If existing sleeving is to be utilized, it will be the responsibility of the Proposer to fire caulk inside the sleeving.
- 3. The Proposer is responsible for adhering to the following standards:
 - a. Conduit penetrations through fire-rated or smoke walls: Completely seal around the conduit penetration with Hilti FS 601 fire-rated sealant or equal Tremco or 3M.
 - b. Conduit sleeves through fire-rated or smoke wall: Completely seal around the conduit penetration with Hilti FS 601 fire-rated sealant or equal Tremco or 3M. Completely seal inner opening of the conduit sleeve with fire wool packing and Hilti FS 611A in tumescent firestop sealant.
 - c. Cable bundles through fire-rated or smoke walls (with out sleeves): Completely seal openings with Hilti FS 611A intumescent firestop sealant, or equal Tremco or 3M.
 - d. Cable tray penetrations through fire-rated or smoke walls: Completely seal openings with Hilti FS 635 (trowelable type) or equal Tremco or 3M.

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e. A submitted response to this RFP assumes that all firestopping will be provided as specified. The firestop manufacturer's specifications and instructions shall be submitted with the final documentation.

(R) Support and Anchors (refer to section F on pricing sheet)

- 1. The Proposer shall exercise judgment when supporting equipment. If support methods are questionable or not available, the Proposer shall call it to the attention of the Owner prior to installation.
- 2. Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using expansion anchors, beam clamps, spring steel clips.
- 3. Install hangers and supports, sleeves and fasteners in accordance with approved printed manufacturers' installation procedures, and as specified.
- 4. Individual conduit hangers shall be designed for the purpose, and have pre-assembled closure bolts and nut and provisions for receiving hanger rod.

a. Pipe Straps: Fed. Spec. FF-S-760, type 1, Style A or B.

b. Solid Masonry and Concrete Anchors: Fed. Spec. FF-S-325. Anchors shall be self-drilling expansion shields, or machine bolt expansion anchors.

5. Install hangers and supports, and attachments to properly support raceways, equipment and accessories from building structure.

(S) Boxes and Fittings (refer to section F on pricing sheet)

- 1. Malleable iron or steel insulating bushings shall be O-Z Electrical Manufacturing Company "B", and/or type "BLG" or an approved equal.
- 2. Rigid steel conduit fittings shall be of the malleable iron threaded type. EMT fittings shall be set screw steel insulator type. Die cast fittings shall not be installed. Split-threaded connectors will not be acceptable. Fittings shall be as manufactured by Crouse-Hinds, Killark, Appleton, T&B Companies or an approved equal.
- 3. All supports, clamps, and anchors shall be galvanized steel or malleable iron.
- 4. Provide electrical boxes as required for cable pulling, and code compliance.
- 5. Boxes shall be secured to conduit by means of conduit hubs if coded hubs are not provided on this box.
- 6. Support boxes independently of conduit except for cast boxes that are connected to two rigid metal conduits, both supported within 12 inches of boxes.

(T) Systimax G1/G2 Fiber Optic Shelf (24/48 Port) (refer to section B on pricing sheet)

- 1. Fiber Optic shelf shall be low profile and enable termination and splicing for up to 48 individual fibers.
- 2. The fiber optic shelf shall be designed to accommodate ether Building Cable or Outside Plant (OSP) cables.
- 3. The fiber optic shelf shall be capable to accommodate 48 fusion splices using optional splice trays.
- 4. The connector panels shall accept fiber distribution modules equipped with SC connectors.

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- 5. The patch panels shall be accessible from the front and rear.
- 6. The fiber optic shelf shall feature a sliding tray for front access and installation of fibers
- 7. The sliding tray shall ride on two self-locking nylon slides used for pulling the shelf away from the frame for front access to fibers and have two storage drums and two openings with liquid-tight cable fasteners.
- 8. All unused ports shall be covered with a blank panel.
- 9. The fiber optic patch panels shall be equipped with:
 - a. Hinged front doors constructed of black polycarbonate.
 - b. Front Cable Management Trough
 - c. Top Cover Panel.
 - d. Universal shelf mounting brackets for 19", 23" or ETSI frame mounting.
 - e. Water-Tight Cable Entry Conduit Connectors
 - f. Blank labels for identifying fiber splices and terminations.
- 10. The Patch panels shall be Systimax-600G2-2U-MOD-SD1U Splice Equipped /W with a fusion splice tray kit. All shelf products are to be Systimax only.

(U) Systimax G4 Fiber Optic Shelf (72 Port) (refer to section C on pricing sheet)

- 1. Fiber Optic shelf shall be equipped with SC connectors and enable termination and splicing for up to 72 individual fibers.
- 2. The fiber optic shelf shall be designed to accommodate ether Building Cable or Outside Plant (OSP) cables.
- 3. The fiber optic shelf shall be capable to accommodate 72 fusion splices using optional splice tray that slides out and pivots for easy access.
- 4. The connector panels shall accept fiber cartridges equipped with SC connectors.
- 5. The fiber optic shelf shall be accessible from the front and rear.
- 6. The fiber optic shelf shall feature a sliding tray for front access and installation of fibers.
- 7. All unused ports shall be covered with blank panels.
- 8. The fiber optic shelves shall be equipped with:
 - a. Hinged front doors constructed of black polycarbonate.
 - b. Front Cable Management Trough
 - c. Top Cover Panel.
 - d. Universal shelf mounting brackets for 19", 23" or ETSI frame mounting.
 - e. Blank labels for identifying fiber splices and terminations.
 - f. Cable Entry Protectors for incoming Building fiber or OSP fiber.
 - g. Fiber jumper bend limiters
- 9. The fiber optic shelves shall be Systimax-4U Combo –MOD. All shelf products are to be Systimax only.

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(W) G2 Modular Cassettes (refer to section D on pricing sheet)

- 1. Each SC fiber cartridge shall accommodate 6 fibers.
- 2. Fiber cartridges shall snap into panel
- 3. Fiber slack trays shall attach to the rear of the cartridge providing slack storage and proper bend radius of fibers. The fiber slack trays and modules shall be front removable.
- 4. The pigtail must have the same optical characteristics as the cable being spliced to. The length of the pigtail is to be a minimum of 3 meters and a maximum of 5 meters.
- 5. The fiber cartridges for UPC polished SC Connectors shall be Systimax-# MOD-SC-6PC-A-E/W fiber colors 1-6,.
- 6. The fiber cartridges for UPC polished SC Connectors shall be Systimax-# MOD-SC-6PC-B-E/W fiber colors 7-12,.
- 7. The fiber cartridges for APC polished SC Connectors shall be Systimax-# MOD-SC-6APC-A-E/W fiber colors 1-6,.
- 8. The fiber cartridges for APC polished SC Connectors shall be Systimax-# MOD-SC-6APC-B-E/W fiber colors 1-6,
- 9. The hybrid fiber cartridges consisting of 4 UPC polished and 2 APC polished SC Connectors, shall be Systimax-# MOD-SC-4PC-2APC-E/W..
- (X) Equipment Racks and Wire managers
 - 1. At the Main Equipment Room in the core sites, Fiber Racks shall be furnished and installed by the Proposer to house fiber patch panels and splice trays.
 - 2. The fiber rack system shall feature superior vertical cable management system that ensures 1.5" minimum bend radius for the fiber cable and patch cords.
 - 3. The vertical cable management system shall be supplied with bend radius limiters installed throughout the rack as to allow an orderly routing of optical fiber jumpers from the patch panels to the customer provided network equipment.
 - 4. Open cabling section on the rear of the vertical cable management system shall be 10" wide and enable easy access and routes cable bundles feeding into the back of patch panels.
 - 5. The vertical cable management system shall feature and 1 RMU cable guides on the front designed for fanning and managing patch cords.
 - 6. Fiber racks shall be bonded grounding bars utilizing mechanical connectors manufactured specifically for this purpose.
 - 7. Fiber racks shall be manufactured by CPI, or other equivalent products, which meet these specifications.

(Y) Splice Points

- 1. In order to reach a splicing vehicle, each splice point should include cable slack.
- 2. At handholes, cable slack should be placed horizontally in the hole. In the case of a buried splice point, the slack should be coiled and buried vertically (in line with the cable route).

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- 3. This excess slack shall provide added cable for restorations or reconfigurations without digging up large parts of the cable system.
- 4. All splicing shall be made using fusion-splicing technology. All splices shall be single strand fusion splices. All splices shall be placed in a trays

(Y) Splice Closures

- 1. A fiber optic splice closure and associated hardware shall be used to restore the mechanical and environmental integrity of an optical fiber cable following a splicing operation. In addition, a splice closure shall provide the necessary facilities for organizing and storing optical fiber and splices.
- 2. The fiber optic splice closures should be designed for use in direct buried application and meet the following requirements:
 - a. Suitable for either but or in-line cable entry configurations.
 - b. Please refer to sizes in section I of the pricing spread sheet.
 - c. Accommodate and store up to 288 fiber splices.
 - d. House 6 pre-molded cable entry ports
 - e. Contain a neoprene gasket and lock-tape sealant, applied to the inside surfaces and around the entry ports of the end plate for airtight waterproof seal.
 - f. Re-enterable for system expansions and repair. Closing hardware shall be captive to ensure a simple closing and re-entry.
 - g No stress shall be placed on finish splices within trays.
 - h. Accommodate fiber bend radii 1.5 inches.
 - i. Accommodate bonding/ grounding

The fiber optic splice enclosure shall be Coyote, or other approved Preformed Line Products (PLP). Garland ISD requires that approval must be obtained before using Splice Closures other than PLP Coyote.

(Z) Indoor Splice Centers

- 1. Where splice center is outside of a telecommunication room, it shall be wall mounted. If splice center located in a telecommunication rooms, it shall be rack mounted. The splice centers shall be available in 144, 96, and 48 fiber splice capacity. The following requirements have to be met:
 - a. Minimum of 144-fiber splice capacity.
 - b. Individual tray access.
 - c. Multiple cable entrances to accommodate custom design specifications.
 - d. Front panel easily removed for full access.
 - e. Cable strain-relief provisions.
 - f. Labels provided for administrative documentation.

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- 2. Splice centers shall accommodate splice kits to splice the pigtails to OSP cable fibers. The splice kit for the splice panel shall consist of a heat shrink fusion splice tray with splice chips.
- 3. The splice tray shall feature 12 splice positions and two splice chips. It shall offers efficient means of fiber splice protection and fiber storage.
- 4. Rack mounted splice centers shall be Systimax Part #LSSU-144/7.
- 5. Splice trays shall be Systimax Part # LT1A.

(AA)Underground Enclosures (see attachment I, attachment J, attachment K, attachment L, attachment M)

- 1. Handholes shall be placed at strategic splice and installation assistance locations or as required by environmental and/or existing topographical conditions. The handholes shall be placed when the bends exceed 90 –degree or the section length of conduit exceeds 1000 feet. The four sizes of boxes to be used are: 24"W x 36"L x 48"D, 30"W x 48"L x 48"D, 30"W x 48"L x 36"D, 36"W x 60"L x 36"D.
- 2. These boxes shall be constructed of a fiberglass-reinforced polymer material and have the same strength rating as concrete handholes of the same proportions.
- 3. The boxes shall:
 - a. Be flush-mounted to the existing grade and constructed with a load rating of AASHTO H-20.
 - b. Be equipped with a locking mechanism specific to the District.
 - c. Be equipped with cable racks, conduit entrances and strut inserts.
 - d. Not be equipped with a solid bottom.
- 4. The larger double lid handholes are designed for use as splice and cable slack storage locations. The small single lid holes are designed to assist in the cable placing operation and slack storage.
- 5. The location of the handholes shall be away from traffic conditions and be easily accessible for maintenance. Installation of the handholes shall be such that water drainage will continue after installation.
- 6. The boxes shall be placed on 6-inch deep rock/gravel bottom contained by wire mesh that allows drainage from the box and secures the rock/gravel in place to solidify the base of the handhole.
- 7. Ground rods shall be installed in all handholes that will contain fiber cable splices.
- 8. All conduits entering or exiting the handholes will be scaled to prevent the movement of water through the duct.
- 9. All conduits entering the handholes will be place through the sides of and not through the open bottom. The handhole must be mechanically core drilled for each pipe that enters the handhole and the void between the pipe and the core drilled walls will be sealed with an approved sealant.
- 10. The underground enclosure shall be new basis only.

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(BB) Buried Warning Tape

When trenching is involved or required by certain conditions i.e., customer or citizen request, topographical reasons or as directed by the District. The use of a warning tape is required. A bright orange (preferably "ULCC" orange) warning tape with a minimum width of three inches shall be buried approximately one foot below the existing grade. As a minimum, the tape should be marked "WARNING-OPTICAL CABLE". The tape shall be placed directly above the conduit to alert any excavator of the presence of an underground facility.

(CC) Curb Markers (see attachment N)

Curb markers will be permanently on the lid of each hand hole. The markers will be placed permanently on the curb or street every 400 feet or where the Garland ISD fiber and/or duct turns. These curb markers are $1-\frac{1}{2}$ " in diameter, orange with black text. The curb marker has been designed by Garland ISD. The marker will have the Garland ISD logo, text with "Garland Independent School District shown", text with "CAUTION Fiber Optic Cable Below Call Before Digging 1-800-344-8377."

(DD)Test Station (see attachment M, attachment O & attachment P)

- 1. The Flush Fink® test station shall be design to monitor electrical currents and potentials associated with locating of fiber optic cables. The Flush Fink® shall maintain its structural integrity during usage and shall be suitable for installation in asphalt. The Flush Fink® test station shall be flush mounted to the ground.
- 2. Street Fink® test station shall be 7-3/4" Diameter x 5" height and shall fits 4" schedule 40 pipe
- 3. Lid, Terminal Board and Housing shall be made from Makroblend® polycarbonate.
- 4. The test station's termination hardware shall be made of nickel plated brass.
- 5. The test station shall feature up to 9 terminals that shall be accessible from both sides of the board.
- 6. The test station shall be Cott Manufacturing Company Part # 406-B5-ORG, or other equivalent products, which meet these specifications.

(EE) Bonding and Grounding (see attachment M & O)

- 1. In underground plant construction, all standards regarding grounding shall be maintained.
- 2. All metallic cable elements at splice points and building entrances must be properly bonded and grounded.
- 3. Minimum copper wire AWG #6 shall be used.

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(FF) Fiber Optic Connector (The fiber optic connectors shall be Systimax)

- 1. The Fiber Optical Connector shall be SC-type.
- 2. The Fiber Optical Connector ferrule shall be ceramic or glass-in-ceramic. The optical fiber within the connector ferrule shall be secured with an adhesive.
- 3. The attenuation per mated fiber optic connector pair shall not exceed 0.35-dB. Fiber optic connector shall sustain a minimum of 200 mating cycles per EIA/TIA-455-21 without violating specifications (get with Systimax on these specifications).
- 4. At each building 2 stands of the fiber optic cable shall be terminated on 8°-angled fiber optic connector. Guaranteed Return Loss for these connectors shall be 65dB.
- 5. The fiber optic connectors used for remaining single mode fiber strands shall be ultra PC polished. Guaranteed Return Loss for single mode connectors shall be 50dB.
- 6. The fiber optic connector shall meet the following performance criteria:

Test Procedure

Max. Attenuation Change

Cable Retention (FOTP-6)	0.2-dB 0.2-dB
Durability (FOTP-21) Impact (FOTP-2)	0.2-dB
Thermal Shock (FOTP-3) Humidity (FOTP-5)	0.2-dB 0.2-dB

(GG)Armored fiber optic cable (refer to section E on pricing sheet)

(see attachment Q)

- 1. Armored Fiber Optic Cable shall incorporate a corrugated Steel Armor Tape to provide for resistance to rodent attack and all other cable materials shall be all dielectric (no conductive materials).
- 2. Armored Fiber Optic Cable shall be filled with a water-blocking compound.
- 3. The outer sheath shall be marked with the manufactures name, words identifying the cable type (e.g. "Optical Cable" or "Fiber Optic Cable"), year of manufacture, and sequential length markings. The actual length of the cable shall be within -0/+1% of the length markings. The marking shall be in a contrasting color to the cable jacket.
- 4. Temperature Range:

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Storage: -40 to +70C (no irreversible change in attenuation)
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Operating: -40 to +70C

- 5. Humidity Range: 0 to 100%
- 6. Maximum Tensile Strength:

During Installation: 2700 Newton (600 lb. force) (no irreversible change in attenuation)

Lone Term: 890 N (200 lb. force)

7. Bending Radius:

During Installation: 20 times cable diameter No Load: 10 times cable diameter

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- 8. The maximum pulling tension shall be 2700 N (608 lbf) during installation (short term) and 890 N (200 lbf) long term installed.
- 9. The armored optical cable shall be Systimax TeraSPEED products only.

Part Number Construction	
Fiber Count	Product Description
2-288	D-XXX-LA-XY-FZZNS

(HH)Single Mode Optical Fibers

The single mode fiber shall be dispersion-unshifted, fiber which meets the ITU-T G.652c requirements. The fiber cable shall be fully capable of handling existing and legacy single mode applications which traditionally operate in the 1310nm and 1550nm regions. The fiber cable shall be designed to handle the new and emerging applications that utilize the "Extended" E-band, 1360-nm to 1460nm.

The fiber cable shall also be designed to provide optimum performance from 1265nm to 1625nm making it suitable for 16-channel Course Wavelength Division Multiplexing applications.

The fiber shall meet the following specifications:

- a. Fiber Type Single mode; doped silica core surrounded by a concentric glass cladding.
- b. Core Diameter: 8-9 □m. All fibers shall be of the same nominal core diameter and profile.
- c. Cladding Diameter: $125 + 0.7 \Box m$.
- d. Core-to-Cladding Offset: $< 0.5 \square m$.
- e. Cladding Non-Circularity: < 1.0%.
- f. Coating Diameter: $245 + 10 \square m$.
- g. The coating shall be mechanically strippable without damaging the optical fiber
- h. Cutoff Wavelength (cabled fiber; $\Box ccf$) <1260-nm.
- i. Mode field diameter: 9.2+0.4 \Box m at 1300-nm; 10.4+0.5 \Box m at 1550 -nm
- j. Zero Dispersion Wavelength ($\Box o$) 1302< $\Box o$ < 1322nm.
- k. Zero Dispersion Slope (S0): <0.092 ps/nm2*km
- l. Fiber Attenuation:

@ 1383-nm ≤0.4 dB/km

@ 1550-nm $\leq 0.3 \text{ dB/km}$ (Get with Systimax on these specs)

The average change in attenuation at extreme operational temperature (-40 C to +70 C) shall not exceed 0.05 dB/km at 1550 nm. The magnitude of the maximum attenuation change of each individual fiber shall not be greater than 0.05 dB/km at 1550 nm.

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m. Fiber Dispersion (maximum): 1285-1330-nm < 3.2-ps/nm*km</p>

- @ 1625-nm < 22-ps/nm*km
- n. No single mode optical fiber shall show a point discontinuity greater than 0.05 dB at the specified wavelengths. Such a discontinuity or any discontinuity showing a reflection at that point shall be cause for rejection of that fiber by the owner.

(II) Installation Practices for Fiber Optic Cable

- 1. Fiber optic cable is a high-capacity transmission medium with qualities and characteristics, which can be degraded when it is subjected to excessive pulling tension, sharp bends, and crushing forces.
- 2. The maximum pulling tension for armored cable is 2,700 Newtons (600 lbs).
- 3. Maximum long-term crush forces for armored cable are 100N/cm (57.1 lb. /in).
- 4. The minimum bend radius for an armored cable during installation and following installation over the life span of the cable must be 20 times (20 x) the cable diameter.
- 5. The minimum diameter required for pull wheels or rollers should be double the minimum bend radius. The proposer will be responsible to check manufacturer's specifications for the cable feed-chute, to make sure that the chute's critical dimensions and clearances are compatible with the placing cable. The chute must have a 20-inch minimum radius.

(JJ) Grounding of Armored Cables

The metal components of the armored cables must be grounded as close as possible to the point of building entry.

Copper #6 stranded insulated ground wire must be used.

(KK) Testing

The fibers utilized in the installed cable shall be traceable to the manufacturer. Upon request by the Owner, the Proposer shall provide cable manufacturer's test report for each reel of cable provided. These test reports shall include (1) manufacturer's on reel attenuation test results at the specified wavelengths for each optical fiber of each reel prior to shipment from the manufacture and (2) on-the-reel bandwidth performance as tested at the factory.

Proposer is responsible for supplying all equipment and personnel necessary to conduct the acceptance tests.

Proposer shall conduct acceptance testing according to a schedule coordinated with the Owner. Representatives of the Owner may be in attendance to witness the test procedures. The Proposer shall offer adequate advance notice to the Owner as to allow for such participation.

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Pre-Installation Cable Acceptance (Tested with OTDR in one direction)

- 1. The proposer shall utilize bare fiber adapters or other approved means to test all fibers for attenuation loss using and OTDR set to 2-point loss measurement parameters prior to installation (on the reel).
- 2. Marker points shall be placed at the beginning and end of each backscatter signature recorded by the OTDR. The manufacturer instructional guide can determine proper placement of these markers.
- 3. The OTDR display shall be recorded on computer diskettes or CD-ROM with identification and numbering sequences to be pre-approved by GISD. The stored trace shall allow full manipulation of the trace when viewed with the PC emulation software.
- 4. Worst-case wavelength testing will be applied to all fibers. Proper pulse width selection is required to minimize attenuation dead zone effect.

Tests after Installation

Upon completion of cable installation and termination, the Fiber Optic cabling shall be tested to include:

- 1. Optical Attenuation ("Insertion Loss" Method)
- 2. Verification of Link Integrity (OTDR)
- 3. Optical return loss (ORL)

Optical Attenuation Testing

- 1. Optical Attenuation shall be measured on all terminated optical fibers in both directions of transmission using the "Insertion Loss" method. Measurement shall be inclusive of the optical connectors and couplings installed at the system endpoints. Access jumpers shall be used at both the transmit and receive ends to insure that an accurate measurement of connector losses is made.
- Single mode fibers shall be tested in accordance with the TIA/EIA 526-7-1998. Method A.1. Testing shall be at 1300±20 nm. And 1500±10 nm
- 3. Attenuation of optical fibers shall not exceed the values calculated as follows: Attenuation (max.) = 2*C+L*F+S dB

Where C is the maximum allowable Mated Connector Loss O0.35 dB, L is the length of the run (in kilometers) and F is the maximum allowable fiber loss (in dB/km). S is the total splice loss (# of splices * max. attenuation per splice).Maximum attenuation per splice shall be O0.1 dB

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- 4. Documentation of the insertion loss testing for each fiber run shall be provided to the District to include a record of
 - a. Wavelength
 - b. Fiber type
 - c. Fiber and cable number
 - d. Measurement direction
 - e. Test equipment model and serial number
 - f. Operator
- 5. Test documentation must be stored in a floppy disk and printed as a hard copy with all test results labeled.
- 6. All testing is to be done through connectors.
- 7. Any fiber that fails testing must have appropriate corrective action taken to rectify the situation.

Verification of Link Integrity (OTDR Testing)

- All links shall be tested with an OTDR that are 330 feet (100 m) or longer. (Proposer shall supply the OTDR meter see below.) Multi-mode fibers shall be tested at 850/1300-nm (nominal). Single mode fibers shall be tested at 1300/1500-nm (nominal). OTDR testing shall be in one direction following worst-case wavelength selection when there are no splice points or interconnect points in the link.
- 2. Any link, which is longer than 330 feet (100 m) and has splice points or interconnect points in said link, shall be tested bi-directionally using worst-case wavelengths.
- 3. The OTDR(s) shall incorporate high-resolution optics optimized for viewing of short cable sections. Lunch cables of adequate length shall be used to allow viewing of the entire length of the cable, including the connectors at the launch and receive end.
- 4. OTDR's used as part of these testing specifications shall be calibrated to sheath (jacket) length, not optical length by adjusting the unit's index of refraction.
- 5. All OTDR traces shall maximize both the vertical and horizontal scales to the greatest extent possible and still fit the entire cable link trace on the screen with optimum resolution.
- 6. Testing shall be performed in accordance with the following requirements. Failure of a link at any part of the testing shall result in the proposer having to repair the problem and retest the installation. Cost for any required repairs and re-testing shall be borne solely by the proposer.
- 7. Reflective and non-reflective events shall be marked by OTDR, and the data for each event must be retrievable.
- 8. OTDR traces revealing a point discontinuity greater than 0.2-dB in a multi-mode fiber, or 0.1-dB in a single mode fiber at any of the tested wavelengths or any discontinuity showing a reflection at that point shall be a valid basis for rejection of that fiber by the Owner.

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- 9. OTDR traces revealing a "Ghost" shall also be a valid basis for rejection of that fiber by the Owner.
- 10. The installation of that cable shall be reviewed in an effort to solve any problems that may be causing the fault. If such efforts do not remove the fault, that cable and the associated terminations shall be replaced at the expense of the Proposer.
- 11. All fiber shall be tested for attenuation loss using an OTDR set to 2-Point loss measurement parameters. Marker points shall be placed at the beginning and end of each backscatter signature recorded by the OTDR. The manufacturer's instructional guide can be used to determine proper placement of these markers.
- 12. Links that contain splice points or interconnect points shall also contain an additional "Events Display Table" to accompany the OTDR trace. This display shall show the distance to the events, distance between multiple events, each events loss in db, and a description of the event (reflective event, non-reflective event, gains and cable end). All attenuation event loss readings shall be in the LSA (Least Square Average) mode of the OTDR. 2-Point attenuation measurements at events are not acceptable.
- 13. Proper pulse width selection is required to minimize attenuation dead zone effect.
- 14. Fiber links that are shorter than 600 feet requires pulse width to set to 10ns. That equals to MM dead zone=23 feet (7 m), SM dead zone = 33 feet (10 m)
- 15. The OTDR display shall be recorded on computer diskettes with identification and numbering, sequences to be pre-approved by the Engineer. Each trace must contain as a minimum:
 - a. cable/sheath length (not optical fiber length)
 - b. 2-point db loss, attenuation in db/mile (db/km)
 - c. fiber type
 - d. wavelength used
 - e. pulse width selection
 - f. And fiber/cable identification.
- 16. The stored fiber trace shall allow full manipulation of the trace when viewed with the PC emulation software. Both a hard copy print out and diskette copy of each trace shall be submitted to GISD for approval.
- 17. Documentation of the OTDR signature traces displaying the entire length of the cable run shall be provided to the District to include a record of
 - a. Wavelength
 - b. Fiber type
 - c. Fiber and cable number
 - d. Measurement direction
 - e. Test equipment model and serial number
 - f. Operator
- 18. Fiber lengths less than the cable run length and point discontinuities greater than 0.1 dB shall be brought to the attention of GISD.

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 26)

Optical Time Domain Reflectometer (OTDR)

The proposer shall supply an optical time domain reflector (OTDR) for the fiber optic tests. The OTDR shall meet Bellcore GR-196-Core Generic Requirements for OTDR equipment. The OTDR shall include the following features as a minimum:

- 1. Measure overall (end-to-end) optical loss
- 2. Measure section loss
- 3. Measure splice loss
- 4. Measure reflectance of connectors.
- 5. Field interchangeable source modules for single mode and multi-mode fiber analysis of optical links from 300 feet (100 m) to15, 000 feet (5 km) in length.
- 6. Minimum of 6 user selectable pulse widths per wavelength
- 7. Source pulse width setting on OTDR shall range from 10ns to 20ms
- 8. Dynamic range shall be measured at 1310nm with pulse width of 20ms and be 45dB as a minimum
- 9. Auto mode button for one button testing
- 10. Auto mode or simplified mode for trace naming and storing
- 11. Dual trace analysis mode
- 12. Event table display
- 13. Internal hard drive for trace storage
- 14. Peripheral support for keyboard, mouse, VGA monitor and printer
- 15. 10. Individual and batch printing modes
- 16. PC based emulation software for Windows XP or DOS (to be included with OTDR)
- 17. System shall be software upgradeable
- 18. Internal Battery with AC adapter/batter charger
- 19. Internal or external printer

Optical Return Loss (ORL) Testing

- 1. All connectors at single mode fiber links shall be tested for optical return loss (ORL) using OTDR. The OTDR shall be capable to measure connector spike with respect to the backscatter signal on the OTDR. This technique shall be accomplished by software embedded in the instrument.
- 2. The launch cords must be kept clean and periodically repolished to insure as perfect a surface finish as possible to match UPC polishing on connectors.
- 3. The single-mode connector's optical return loss shall be not less than 55 dB.
- 4. Test documentation must be stored in a floppy disk and printed as a hard copy with all test results labeled.

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(LL) **Documentation**

Drawing Records

The following requirements apply to all record drawings:

- 1. They shall be maintained at the Proposer's expense.
- 2. All such drawings shall be provided as necessary for clarification.
- 3. The record as-built drawings shall be in 1"to 50'scale
- 4. The Proposer shall indicate on the as-builts, the conduit and fiber optic cable location with the distance to back of curbs or edge of street. If back of curb or edge of street is not available then landmarks will be used. (like sidewalks, fire hydrants, building walls) This must be documented on the as-builts at a minimum of every 100 feet.
- 5. The proposer will indicate on the as-builts, the depth of the conduit and fiber optic cable at a minimum of every 100 feet.
- 6. All hand hole locations must have GIS coordinates documented on the as-builts.
- 7. The Proposer shall submit a detail as-built splicing diagram for each splice point. The diagram shall include records for each fiber strand at a splice point
- 8. The as-built drawings shall be returned to GISD on completion of the work and are subject to the approval of GISD.

The record drawings shall be submitted in the following formats:

- 1. Electronic copy at a minimum of AutoCAD 2008.
- 2. 1 copy of the master drawing on 11" x 17" size paper.

Labeling

A labeling plan must be submitted to and approved by district prior to installation, and the completed labeling must meet the approval of the district. EIA 606 standards are to be met.

- a) Cable: All cable must be clearly labeled by the cable Proposer at the TC and MC location (Brady marker or similar).
- b) Patch panels: All SC connectors connected to patch panels must also be labeled on patch panel.

Test Records

The following records must be submitted to and approved by the district or its agent before the project is considered complete.

- a) Test readings shall be recorded along with the annotation that these are postinstallation readings.
- b) Two electronic copies (on CD) and two printed copies of these readings shall be provided to the district upon completion of the project.

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c) Records are to include date of testing, name of technician, and readings of all abovedescribed test results.

(MM) Fiber Optic System Acceptance

The fiber optic outside plant system will be accepted by GISD when:

- 1. All of the work has been completed in accordance with the contract and specifications.
- 2. The system operates in conformance with manufacturer's published specifications.
- 3. The system has completed a successful performance period. The performance period will begin on the day following the cutover and must continue for 30 consecutive days during which time the system will operate at an average effectiveness level of 99 percent or more. If for any reason this level cannot be maintained, a new 30-day performance period will be initiated. It is not necessary that one 30-day period expire before another performance period begins.
- 4. The Proposer has certified in writing to GISD when the cable is installed, operational in accordance with these specifications, and ready for use.
- 5. The final step in accepting buried cable installation will be a thorough inspection of the entire route from start to finish. The "as-built" drawings must be submitted to the district one week prior to final inspection. The drawings will be examined by GISD personnel and involved parties for conformance to the plans, codes and regulations.

The construction area above ground will be inspected to ensure the following:

- a. Restoration has been accomplished.
- b. Permanent markers have been installed immediately beside the cables.
- c. Road bores, if used, are properly completed and will not collapse a portion of the road.
- d. Debris and trash have been removed from the site.
- e. Other instructions specific to the installation have been completed to the project manager's specifications.
- f. All test results should be submitted in hard copy and in usable (MS Word) electronic format.

Inside Plant Installation and Requirements

Install the wire, cable, and associated hardware in accordance with the manufacturer's specifications,

The T568B configuration is required.

Entire wiring system should use only one standard communications outlet

configuration of TIA-568, T568B.

There shall be no splicing of the horizontal communications cable.

The successful bidder shall be thoroughly familiar with the cabling methods set forth in the latest release of the BICSI TDMM's (Building Industry Consulting Services International Telecommunications Distribution Methods Manuals) and Systimax Installation Guidelines or unless otherwise specified, shall supervise the installation in accordance with the recommendations and best practices outlined in the latest release of the BICSI Telecommunications Cabling Installation Manual.

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Tests and Expectations

- > All testing must comply with Systimax warranty specifications.
- > All testing equipment for certification must be provided by the proposer.
- > All testing equipment must be calibrated on manufacture's recommended schedule.
- > All tests must be provided in an organized manner in electronic version and hard copy.

Copper cable testing:

- Testing must be conducted using at the minimum, level 3 test equipment. (DTX 1800 test)
 - After installation is complete, a cable test will be performed, then A Fluke LINK Runner must be used to obtain an ip address from the switch to ensure an active drop.

Fiber optic cable testing:

- Testing must be conducted using an optical time domain reflector (OTDR) and power meter.
- Conduct tests and inspections after installation has been completed.

Labeling and other guidelines

All labeling must be electronic. Such as Brothers, P-Touch etc...

All labeling must conform to Industry standards and best practices.

All labeling schemes, labeling types and methods shall be coordinated with GISD Technology staff prior to installation.

Here are some examples of the labeling:

Room Drop: Wallplate in the room – MDF/IDF# / room# / drop # Patch panel per port – room# / drop#

Projector Drop: Room# / drop # MDF/IDF / Switch # / Port #

Example: 302-2/MDF/SW2/Port32

Wireless Drop: Labeling Access Points Campus Mnemonics / IDF# / Room # / Access point # Example - BEAV-MDF1-RM1-AP1 Labeling Switch port and Access Point Campus Mnemonic-IDF#-Rm#-AP# Example: Beav-IDF1-222-AP1 (service loop at both ends)
KRONOS Time Clocks: MDF/IDF TC room # on the patch panel At the clock MDF/IDF (info needed)

Reference documents / Standards / Organizations / Regulations & codes

All installations must comply with the following industry standards. Materials and equipment shall be manufactured, installed and tested as specified in the latest editions of applicable publications, standards, rulings and determinations of:

(all current versions should apply to the following)

GARLAND INDEPENDENT SCHOOL DISTRICT PROPOSAL FORM/SPECIFICATION (Page 30)

- 1. TIA TSB-140, Additional Guidelines for Field-Testing Length, Loss and Polarity of Optical Fiber Cabling Systems
- 2. ANSI/EIA/TIA-455-61 Measurement of Fiber or Cable Attenuation Using An OTDR
- 3. ANSI/TIA/EIA-526-7 Measurement of Optical Power Loss of installed Single Mode Fiber Cable
- 4. ANSI/TIA/EIA-526-14A Optical Power Loss Measurement of installed Multi-Mode Fiber Cable Plant
- 5. ANSI/TIA/EIA-568 Commercial Building Telecommunications Cabling Standard
- 6. TIA/EIA568-B.1 Commercial Building Telecommunications Cabling Standard Part 1: General requirements, April 1, 2001
- TIA/EIA568-B.1-1 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements - Addendum 1 - Minimum 4-Pair UTP and 4-Pair ScTP Patch Cable Bend Radius, July 1, 2001
- 8. TIA/EIA568-B.1-2 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements - Addendum 2 – Grounding and Bonding Specifications for Screened Balanced Twisted Pair Horizontal Cabling, February 2003.
- TIA/EIA568-B.1-3 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements - Addendum 3 – Supportable Distances and Channel Attenuation for Optical Fiber Applications by Fiber Type, February 2003
- TIA/EIA568-B.1-4 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements - Addendum 4 - Recognition of Category 6 and 850 nm Laser-Optimized 50/125 μm Multimode Optical Fiber Cabling, February 2003
- TIA/EIA568-B.1-5 Commercial Building Telecommunications Cabling Standard Part 1: General Requirements - Addendum 5 – Telecommunications Cabling for Telecommunications Enclosures, March 2004
- 12. TIA/EIA568-B.2 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted Pair Cabling Components, April 1, 2001
- TIA/EIA568-B.2-1 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted Pair Components - Addendum 1 - Transmission Performance Specifications for 4-Pair 100 Ohm Category 6 Cabling, June 1, 2002
- 14. TIA/EIA568-B.2-2 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling Components - Addendum 2, December 1, 2001
- TIA/EIA568-B.2-3 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling - Addendum 3 - Additional Considerations for Insertion Loss and Return Loss Pass/Fail Determination, March 1, 2001

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- TIA/EIA568-B.2-5 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling - Addendum 5 – Corrections to TIA-568-B.2, January 2003.
- TIA/EIA568-B.2-3 Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling - Addendum 6 – Category 6 related component test procedures, December 2003.
- 18. TIA/EIA568-B.3 Optical Fiber Cabling Components Standard, March 1, 2000
- TIA/EIA-568-B.3-1 Optical Fiber Cabling Components Standard Addendum 1 Additional Transmission Performance Specifications for 50/125µm Optical Fiber Cables, April 1, 2002
- 20. TIA/EIA862 Building Automation Systems Cabling for Commercial Buildings, April 11, 2002
- 21. TIA/EIA569 Commercial Building Standard for Telecommunications Pathways and Spaces.
- 22. ANSI/TIA/EIA-606 The Administration Standards for the Telecommunications Infrastructure of Commercial Building
- 23. ANSI/TIA/EIA-607 Commercial Building Grounding and Bonding Requirements for Telecommunications
- 24. TIA/EIA758-A Customer-owned Outside Plant Telecommunications Infrastructure Standard, May 2005
- 25. ANSI/TIA/EIA-TSB-67 Telecommunications System Bulletin
- 26. TIA/EIA Telecommunications Industry Association/Electronics Industry Alliance.
- 27. International Standards Organization/International Electrotechnical Commission (ISO/IEC) IS 11801, 2000.
- 28. FCC Federal Communications Commission
- 29. FCC Part 15 (addresses electromagnetic radiation).
- 30. FCC Part 68 (connection of premises equipment and wiring to the network).
- 31. Underwriters Laboratories (UL®) Cable Certification and Follow Up Program.
- 32. National Electrical Manufacturers Association (NEMA).
- 33. NEC National Electric Code
- 34. National Electrical Safety Code Handbook. (NESC)
- 35. NFPA-70 National Fire Protection Association
- 36. American Society for Testing Materials (ASTM).
- 37. Institute of Electrical and Electronic Engineers (IEEE).
- 38. IEEE Emerald Book: IEEE Recommended Practice for Powering and Grounding Electronic Equipment

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- 39. UL Testing Bulletin.
- 40. American National Standards Institute
- 41. ANSI/ICEA Insulated Cable Engineers Association
- 42. (ANSI) X3T9.5 Requirements for UTP at 100 Mbps.
- 43. SYSTIMAX Solutions SYSTIMAX[®] Structured Connectivity Solutions, Performance Specifications, (and Addendum) Latest Issue.
- 44. SYSTIMAX Solutions, Components Guide, Latest Issue.
- 45. SYSTIMAX Solutions Generic Specifications: Fiber Optic Outside Plant Cable, Latest Issue.
- 46. SYSTIMAX Solutions Design & Installation Guidelines, Latest Issue
- 47. BICSI-TDMM Manuals-Building Industry Consulting Service International-Telecommunications Distribution Methods Manuals
- 48. BICSI Cabling Installation Manual
- 49. ComScope Broadband Applications and Construction Manual

END OF PROPOSAL FORM/SPECIFICATION SECTION

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 1)

Proposer shall read and understand the following sections for completing the pricing spreadsheet for all items listed below, as these section numbers correspond with those listed on the Excel spreadsheet

Garland ISD reserves the right to provide/purchase materials elsewhere and issue a purchase order for service only.

THE PRINTED COPY OF THE COMPLETED SPREADSHEET MUST BE SUBMITTED WITH <u>RFP RESPONSE!</u> (This may be an additional evaluated factor)

SPREADSHEET:

Vendors are required to complete an electronic price sheet in Excel format and submit a printed copy and an electronic copy with submittal. Electronic media should be clearly labeled to identify the vendor. Price Sheet to be completed may be found at this link: <u>http://www.garlandisd.net/connect/do-business/current-opportunities</u>

Please fill out the pricing spreadsheet for the following items:

Section A. Equipment Racks, Cabinets, Shelves, Wire Managers (refer to items A-1 through A-3 for pricing on spreadsheet)

A-1 7' CPI relay rack with 19" rails 55053-X03

A-2 CPI 7'H x 3.65" W VCS Series Vertical Cable Manager 30161-703

A-3 CPI 7'H x 6" W VCS Series Vertical Cable Manager 30162-703

Section B G1 / G2 2U Fiber Shelves & Accessories

B-1 Systimax G2 Shelves - 1U sliding, accommodates 4 G2 Modules- (Labor and Materials) 600G2-1U-MOD-SD

B-2 Systimax G2 Shelves - 1U sliding, accommodates 4 G2 Modules- (Labor and Materials) 360G2-1U-MOD-SD

B-3 Systimax G2 Shelves - 2U sliding, accommodates 8 G2 Modules- (Labor and Materials) 600G2-2U-MOD-SD

B-4 Systimax G2 Shelves - 2U sliding, accommodates 8 G2 Modules- (Labor and Materials) 360G2-2U-MOD-SD

B-5 Small Diamater Cable Fitting. Cables OD 0.07 -.25" 600- SRF

B-6 Mounting Bracket for 23" Frame 600-23BRKT

B-7 Rear Fiber Management Kit FOC-MGMT-KIT

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B-8 Rear Mounted Bracket for Six 1/2"Glands RMB-6-1/2

B-9 Rear Mounted Bracket for six 3/8"Glands RMB-6-3/8

B-10 Rear Mounted Bracket for five 3/4"Glands RMB-5-3/4

B-11 Faceplate, G2 1U Shelf, Accepts 4 G2 Modular Cassettes 600G2-1U-UP

B-12 Faceplate, G2 1U Shelf, Accepts 4 G2 Modular Cassettes 360G2-1U-UP

B-13 Kit, includes 2 Fiber Drums and Installation Hardware 600G2-Fiber Drum Kit

B-14 Kit, includes 2 Fiber Drums and Installation Hardware 360G2-Fiber Drum Kit

B-15 Plexiglass Cover for G1 and G2 Shelves

B-16 Fusion Splice Trays, 16 Splices per Tray, Pack of 10 1AMF1-16LG

B-17 Mass Fusion Splice Tray, 6 Splices per Tray, Pack of 10 1AMF1-6LG

B-18 Fusion Splice Sleeves 60MM (Pkg of 50)

B-19 Fusion Splice Sleeves 40MM (Pkg of 50)

Section C G2 4U Fiber Shelves & Accessories

C-1 Systimax 1000G2 4U Sliding Modular Cassette Shelf, accepts 12 MODG2 Cassettes 1000G2-4U-M0D-SD

C-2 Systimax 360G2 4U Sliding Modular Cassette Shelf, accepts 12 MODG2 Cassettes 360G2-4U-M0D-SD

C-3 Cable Protector Kit for 4U G2 Shelf 1000G2-CPB

C-4 Expanded Cable Protector Kit for 4U G2 Shelf 1000G2-XCPB

C-5 Smoked Front Door, 4U G2 Shelf 1000G2-SFDA

C-6 Shelf Mounted Bracket for Eight 1/2" Cable Glands SMB-8-1/2

C-7 Shelf Mounted Bracket for Four 3/4" Cable Glands SMB-4-3/4

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 3)

Section D G2 Modular Cassettes Fiber optic connectors

D-1G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard MODG2-6SC-SM-PT-A-4MSU

D-2G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-SC-SM-BL pigtails A

D-3 G2 "A" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-LC-SM-BL pigtails A

D-4G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard MODG2-6SC-SM-PT-B-4MSU

D-5 G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-SC-SM-BL pigtails B

D-6 G2 "B" SM Modular Cassettes, w/6 SC UPC - TeraSPEED Extended Pigtails - Standard 360G2 cartridge 6-LC-SM-BL pigtails B

<u>Section E</u> Systimax Outside Plant Fiber Optic Cable (see attachment Q) E-1 Systimax TeraSPEED Lt. Armored Fiber Optic- 12 (Materials & labor pulling through duct) D-012-LA-XY-FZZNS

E-2 Systimax TeraSPEED Lt. ArmoredFiber Optic- 24 (Materials & labor pulling through duct) D-024-LA-XY-FZZNS

E-3 Systimax TeraSPEED Lt. ArmoredFiber Optic- 36 (Materials & labor pulling through duct)D-036-LA-XY-FZZNS

E-4 Systimax TeraSPEED Lt. ArmoredFiber Optic- 48 (Materials & labor pulling through duct) D-048-LA-XY-FZZNS

E-5 Systimax TeraSPEED Lt. ArmoredFiber Optic- 60 (Materials & labor pulling through duct) D-036-LA-XY-FZZNS

E-6 Systimax TeraSPEED Lt. ArmoredFiber Optic- 72 (Materials & labor pulling through duct) D-060-LA-XY-FZZNS

E-7 Systimax TeraSPEED Lt. ArmoredFiber Optic- 84 (Materials & labor pulling through duct) D-084-LA-XY-FZZNS

E-8 Systimax TeraSPEED Lt. ArmoredFiber Optic- 96 (Materials & labor pulling through duct) D-096-LA-XY-FZZNS

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 4)

E-9 Systimax TeraSPEED Lt. ArmoredFiber Optic- 108 (Materials & labor pulling through duct) D-108-LA-XY-FZZNS

E-10 Systimax TeraSPEED Lt. ArmoredFiber Optic- 120 (Materials & labor pulling through duct) D-120-LA-XY-FZZNS

E-11 Systimax TeraSPEED Lt. ArmoredFiber Optic- 132 (Materials & labor pulling through duct) D-132-LA-XY-FZZNS

E-12 Systimax TeraSPEED Lt. ArmoredFiber Optic- 156 (Materials & labor pulling through duct) D-156-LA-XY-FZZNS

E-13 Systimax TeraSPEED Lt. ArmoredFiber Optic- 168 (Materials & labor pulling through duct) D-168-LA-XY-FZZNS

E-14 Systimax TeraSPEED Lt. ArmoredFiber Optic- 180 (Materials & labor pulling through duct) D-180-LA-XY-FZZNS

E-15 Systimax TeraSPEED Lt. ArmoredFiber Optic - 228 (Materials & labor pulling through duct) D-228-LA-XY-FZZNS

E-16 Systimax TeraSPEED Lt. ArmoredFiber Optic- 252 (Materials & labor pulling through duct) D-252-LA-XY-FZZNS

Section F Inside Building Duct

F-1 10' x 2" EMT Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-2 2" EMT 30 degree bend Threaded - Include supporting hardware (Labor and Material)

F-3 2" EMT 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-4 2" EMT 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-5 10' x 4" EMT Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-6 4" EMT 30 degree bend Threaded - Include supporting hardware (Labor and Material)

F-7 4" EMT 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-8 4" EMT 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-9 10' x 2" IMC Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-10 2" IMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 5)

F-11 2" IMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-12 2" IMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-13 10' x 4" IMC Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-14 4" IMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)

F-15 4" IMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-16 4" IMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-17 10' x 2" RMC Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-18 2" RMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)

F-19 2" RMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-20 2" RMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-21 10' x 4" RMC Duct Threaded Include supporting hardware such as all-thread (Labor and Material)

F-22 4" RMC 30 degree bend Threaded - Include supporting hardware (Labor and Material)

F-23 4" RMC 45 degree bend Threaded - Include supporting hardware (Labor and Material)

F-24 4" RMC 90 degree bend Threaded - Include supporting hardware (Labor and Material)

F-25 2" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-26 2" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-27 2" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-28 4" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-29 4" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-30 4" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 6)

F-31 6" Core Drill through 1" to 6" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-32 6" Core Drill through 6" to 12" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-33 6" Core Drill through 12" to 18" Concrete/Brick Wall Including Sleeve and Sealing between the wall and sleeve (Labor and Material)

F-34 2" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)

F-35 4" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)

F-36 6" holesaw through metal (wall, NEMA Boxes, etc.)(Labor Only)

Section G Outside Plant Duct (see attachment R for items G-8 thru G-15)

G-1 4"W x 10' L Steel Casing (Material and Installed)

G-2 6"W x 10' L Steel Casing (Material and Installed)

G-3 10"W x 10' L Steel Casing (Material and Installed)

G-4 24"W x 10' L Steel Casing (Material and Installed)

G-5 30"W x 10' L Steel Casing (Material and Installed)

G-6 10' x 2" RMC Duct Threaded Include wall mount (1) 12 inch unistrut mounted to wall with (2) single pipe straps for 2 inch RMC hardware (Typical Installation is from NEMA Box to Ground)

G-7 10' x 4" RMC Duct Threaded Include wall mount (1) 12 inch unistrut mounted to wall with (2) single pipe straps for 2 inch RMC hardware (Typical Installation is from NEMA Box to Ground)

G-8 10' x 2" RMC Duct Threaded Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-9 2" RMC 30 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-10 2" RMC 45 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-11 2" RMC 90 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 7)

G-12 10' x 4" RMC Duct Threaded Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-13 4" RMC 30 degree bend Threaded -Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-14 4" RMC 45 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

G-15 4" RMC 90 degree bend Threaded - Include Bridge Attachment Hardware (See Typical Bridge Attachment Drawing – attachment R)

Section H Outside Plant Hand Holes (see attachments I, J, K & L)

H-1 24"W x 36"L x 48" Deep Poly Concrete w/ single 20K Traffic Lid w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)

H-2 30"W x 48"L x 48" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)

H-3 30"W x 48"L x 36" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)

H-4 36"W x 60"L x 36" Deep Poly Concrete w/ dual 20K Traffic Lids w/Open Bottom. All hand holes must include racking hardware, 12" cable brackets (4 Min.), Grounding lugs, Grounding rods. All lids must have "Garland ISD Fiber Optic Cable" inscribed from the manufacturer on the lid. Newbasis or Old Castle is the preferred manufacturer (Labor and Materials)

<u>Section I Splice Cases Outside Plant (Preformed COYOTE Only) All splice cases are to include all</u> <u>miscellaneous materials such as endplates, Grommett kits, minimum of 1 - 36 strand fusion splice</u> <u>tray, fusion splice sleeves, cement, sealant tape, bonding and grounding.</u>

I-1 Coyote Splice Closure - 6" x 22", capacity 4-36 tray, 144 fiberPreformed 8006560

I-2 Coyote Splice Closure - 8.5" x 22", capacity 4-36 tray, 144 fiberPreformed 8006561

I-3 Preformed Single fusion splice tray - 36 80805110

I-4 Coyote Dome Closure - Preformed - 9.5" x 28" for Loose Buffer Cables 80061055

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I-5 Coyote Dome Closure - Preformed - 6.5" x 22" for Loose Buffer Cables 8006877 I-6 Coyote Dome Closure - Preformed - 6.5" x 17" for Loose Buffer Cables 8006944 I-7 Corning Splice Sleeves 2806031-01Pkg. Of 50 I-8 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 12 to 24 Strands I-9 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 24 to 36 Strands I-10 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 37 to 48 Strands I-11 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 49 to 72 Strands I- 12 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 73 to 84 Strands I-13 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 85 to 96 Strands I-14 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 97 to 108 Strands I-15 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 109 to 120 Strands I-16 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 121 to 132 Strands I-17 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 133 to 156 Strands I-18 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 157 to 168 Strands I-19 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 169 to 180 Strands I-20 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 181 to 228 Strands I-21 Fusion Splice w/OTDR/Pwr Meter Test & Documentation - 229 to 252 Strands I-22 New Splice Preparation Fusion Splice - 12 to 24 Strands **I-23** New Splice Preparation Fusion Splice - 24 to 36 Strands **I-24** New Splice Preparation Fusion Splice - 37 to 48 Strands **I-25** New Splice Preparation Fusion Splice - 49 to 72 Strands **I-26** New Splice Preparation Fusion Splice - 73 to 84 Strands I-27 New Splice Preparation Fusion Splice - 85 to 96 Strands **I-28** New Splice Preparation Fusion Splice - 97 to 108 Strands

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 9)

I-29 New Splice Preparation Fusion Splice - 109 to 120 Strands

I-30 New Splice Preparation Fusion Splice - 121 to 132 Strands

I-31 New Splice Preparation Fusion Splice - 133 to 156 Strands

I-32 New Splice Preparation Fusion Splice - 157 to 168 Strands

I-33 New Splice Preparation Fusion Splice - 169 to 180 Strands

I-34 New Splice Preparation Fusion Splice- 181 to 228 Strands

I-35 New Splice Preparation Fusion Splice - 229 to 252 Strands

I-36 Splice Case Open & Closure Cost

I-37 OTDR Test and Documentation Only 36 Strand Groups

I-38 PLP 36 count low profile splice tray (part number 80808289)

I-39 PLP 9.5X28 deluxe coyote stainless steel splice closure /buffer tube (part number 8006627)

Section J Outside Plant Miscellaneous Items

J-1 # 6 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.

J-2 # 10 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.

J-3 # 12 AWG Green Insulated Ground Wire Pulled through duct. Provide hardware on each end for grounding - do not include BusBar in this cost (labor and material) per foot installed.

J-4 The Flush Fink® cathodic protection test station and terminal enclosure

J-5 1,800 pound test mule tape installed in duct (per Foot)

J-6 12"H x 12" W x 8" Deep NEMA Enclosure Weatherproof mounted and sealed - should include threaded hardware for securing duct that will be terminated in the box (Labor and Material)

J-7 NEMA-rated metallic pull boxes 18"x 18"x 6", (for inside building)

J-8 Pull String - jet line (labor and materials)

J-9 Unistrut w/wall mounting hardware (1) 12 inch unistrut mounted to wall with (2) single pipe straps for 2 inch RMC

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 10)

J-10 Cable Support Brackets (Steps) (Hand Hole)

J-11 Cable Support Racks w/mounting hardware

J-12 Orange Curb marker 2.5" crystal cap, UV resistant, include Ultra violet resistant (see attachment N)

J-13 Locating Flags (see attachment S)

Section K Outside Plant Duct Installation Costs

(refer to section A thru I /pg 35 thru 40 Directional Boring Operations)

K-1 Bore and install 1 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-2** Bore and install 1 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) K-3 Bore and install 2 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-4 Bore and install 2 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-5** Bore and install 1 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-6** Bore and install 1 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-7** Bore and install 2 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-8 Bore and install 2 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-9** Bore and install 3 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-10** Bore and install 3 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-11** Bore and install 4 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-12** Bore and install 4 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-13** Bore and install 1 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-14** Bore and install 1 - 2" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-15** Bore and install 2 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-16 Bore and install 2 - 2" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-17** Bore and install 1 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-18** Bore and install 1 - 4" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials)

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K-19 Bore and install 2 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-20** Bore and install 1 - 6" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-21 Trench and install 1 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-22 Trench and install 1 - 1.25" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-23** Trench and install 2 - 1.25" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-24 Trench and install 1 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-25 Trench and install 1 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) K-26 Trench and install 2 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-27 Trench and install 2 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) K-28 Trench and install 3 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-29 Trench and install 3 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) **K-30** Trench and install 4 - 1.5" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-31 Trench and install 4 - 1.5" HDPE SDR 11Duct 1,000' to 5,000' price per foot (labor and materials) K-32 Trench and install 1 - 2" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials) K-33 Trench and install 2 - 2" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials) K-34 Trench and install 3 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-35** Trench and install 4 - 2" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) **K-36** Trench and install 1 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-37 Trench and install 2 - 4" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-38 Trench and install 3 - 4" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials) K-39 Trench and install 4 - 4" HDPE SDR 11 Duct 1' to 1,000' price per foot (labor and materials) **K-40** Trench and install 1 - 6" HDPE SDR 11Duct 1' to 1,000' price per foot (labor and materials) K-41 Trench and install 1 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-42 Trench and install 2 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 12)

K-43 Trench and install 3 - 2" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-44 Trench and install 4 - 2" PV C Duct 1' to 1,000' price per foot (labor and materials)

K-45 Trench and install 1 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-46 Trench and install 2 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-47 Trench and install 3 - 4" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-48 Trench and install 4 - 4" PV C Duct 1' to 1,000' price per foot (labor and materials)

K-49 Trench and install 1 - 6" PVC Duct 1' to 1,000' price per foot (labor and materials)

K-50 2" Bore Without Duct Cost - 2"

K-51 4" Bore Without Duct Cost - 4"

K-52 6" Bore without Duct Cost - 6"

K-53 Rock Adder for boring per foot

K-54 Depth Adder boring per foot deeper than 20 feet.

K-55 Rock Adder for trenching per foot

K-56 3" Orange Warning Tape w/ "Garland ISD Fiber Optic Cable Call 1-800- DigTess" to be installed during trenching operations min. 1' above cable facilities (labor and Material)

K-57 Excavate Splice Pit 1' to 4' Deep

K-58 Excavate Splice Pit 4' to 8' Deep

K-59 Excavate Splice Pit 8' to 12' Deep

K-60 Cable pulling in duct cost per foot

K-61 Pull cable out of existing duct cost per foot

K-62 Concrete Demolition - removal & restoration per cubic yard

K-63 Asphalt/Pavement removal & restoration per cubic yard

K-64 Removal of hand hole

K-65 Removal of hand hole & backfill

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<u>Section L CAT 5E Data Cables Installed, Terminated, Labeled and Tested</u> (Systimax Products Only)

Refer to items L-1 through L-10 for pricing on spreadsheet.
The following drops include labor and materials to install, terminate, test and document
Materials for the drops includes:

each, Systimax modular faceplate:
MPLS Clips
"M"series flush mounted multi-outlet (ivory)
Port configuration includes from 1 to 6 port single gang, the standard being a 4 port single gang
Information outlet (Data / Voice) MPS100E PowerSUM
Blank inserts in all vacant ports

225 ft of 4 pair Sytimax 2061 PowerSUM plenum Cat 5E cable

each, 2 meter Systimax Cat 5E patch cable
Testing shall include a Category 5E level 3 tester and a Fluke LINK Runner to obtain an ip address.

All tests must be provided in electronic version. Hard copy will be provided per request.
Do not include patch panel costs.

L-1 Between 1 and 3 (250' Average) per cable (Labor and Materials)

L-2 Non-Standard Drop - Between 1 and 3 (225' Average) per cable

L-3 Between 4 and 9 (250' Average) per cable (Labor and Materials)

L-4 Non-Standard Drop - Between 4 and 9 (225' Average) per cable

L-5 Between 10 and 25 (250' Average) per cable (Labor and Materials)

L-6 Non-Standard Drop - Between 10 and 25 (225' Average) per cable

L-7 Between 26 and 99 (250' Average) per cable (Labor and Materials)

L-8 Non-Standard Drop - Between 26 and 99 (225' Average) per cable

L-9 One hundred or more (250' Average) per cable (Labor and Materials)

L-10 Ten or more drops lacated in a room adjacent to an MDF/IDF where the cables average less than 50' per cable (Labor and Materials)

<u>Section M CAT 6 Data Cables Installed, Terminated, Labeled and Tested</u> (Systimax Products Only)

Refer to items M-1 through M-10 for pricing on spreadsheet.

The following drops include labor and materials to install, terminate, test and document Materials for the drops includes:

GARLAND INDEPENDENT SCHOOL DISTRICT PRICING (Page 14)

1 each, Systimax modular faceplate:

"M"series flush mounted muti-outlet

Port configuration includes from 1 to 6 port single gang, the standard being a 4 port single gang Information outlet (Data / Voice) MGS 400 series GigaSpeed XL Blank inserts in all vacant ports

225 ft of 4 pair SYSTIMAX GigaSpeed 2071 Cat6 Cable plenum

1 each, 2 meter Systimax Cat 6 modular patch cord GS8E GigaSpeed XL Testing shall include a Category 6 level 3 tester and a Fluke LINK Runner to obtain an ip address. All tests must be provided in electronic version. (Hard copy will be provided per request. Do not include patch panel costs.

M-1 Between 1 and 3 (225' Average) per cable

M-2 Non-Standard Drop - Between 1 and 3 (225' Average) per cable

M-3 Between 4 and 9 (225' Average) per cable

M-4 Non-Standard Drop - Between 4 and 9 (225' Average) per cable

M-5 Between 10 and 25 (225' Average) per cable

M-6 Non-Standard Drop - Between 10 and 25 (225' Average) per cable

M-7 Between 26 and 99 (225' Average) per cable

M-8 Non-Standard Drop - Between 26 and 99 (225' Average) per cable

M-9 One hundred or more (225' Average) per cable

M-10 Ten or more drops located in a room adjacent to an MDF/IDF where the cables average less than 50' per cable

Section N Accessories for Structured Cabling

N-1 Caddy J-Hooks

N-2 SC 50 micron Systimax Connectors (Field Installable) Include consumables

N-3 LC 50 micron Systimax Connectors (Field Installable) Include consumables

N-4 SC 62.5 micron Systimax Fiber Connectors (Field Installable) Include consumables

N-5 LC 62.5 micron Systimax Fiber Connectors (Field Installable) Include consumables

N-6 SC Singlemode Systimax Fiber Connector (Field Installable) Include consumables

N-7 LC Singlemode Systimax Fiber Connector (Field Installable) Include consumables

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N-8 Grounding NEC approved bus bar (12" w/various lug configuration) and 200' of #6AWG Green Insulated solid copper wire to be run to building MGN. GISD Electrician to terminate at MGN end.

N-9 #6 AWG Green Insulated solid copper wire to be run to building MGN, increments of 50' over the initial 200'

Section O Portable Classrooms

O-1 Single classroom portable w/25 pair connectivity up to 100' in length and (3) CAT 5E drops

O-2 25-pair connectivity add per 25-foot increments over 100'

O-3 Double classroom portable w/25 pair connectivity up to 100' in length and (6) CAT 5E drops

O-4 Add per drop over the standard (3 or 6) drops per classroom

O-5 Six strand indoor/outdoor multi-mode fiber installed in 1" plenum innerduct from the portable IDF to the main building MDF; terminated, labeled, and tested (up to 300')

O-6 Six-strand fiber MM installed in 1" plenum rated innerduct Systimax add per 50' increments over 300'

Section P Labor Requirements

P-1 Fiber cable splicer - Hourly labor rate (Including all required equipment such as OTDR, Power Meter, Fusion Splicer, and consumables)

P-2 Fiber cable splicer - Hourly labor rate Overtime (Including all required equipment such as OTDR, Power Meter, Fusion Splicer, and consumables)

P-3 OSP Supervisor - Hourly labor rate including Vehicle (must be Systimax Certified)

P-4 OSP Supervisor - Hourly labor rate Overtime Including Vehicle (must be Systimax Certified)

P-5 OSP Foreman - Hourly labor rate including Vehicle (must be Systimax Certified)

P-6 OSP Foreman - Hourly labor rate Overtime Including Vehicle (must be Systimax Certified)

P-7 Skilled Labor - Hourly labor rate

P-8 Skilled Labor - Hourly labor rate Overtime

P-9 Laborer - Hourly labor rate

P-10 Laborer - Hourly labor rate Overtime

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P-11 OSP Design Engineer - Hourly labor rate - Must be a BICSI Registered Communication Distribution Designer (RCDD), BICSI Specialist, and Systimax Certified.

P-12 OSP Cable Locator - Hourly labor rate - includes vehicle, locating equipment, and electronic communication equipment such as laptop and cellular phone.

P-13 Technician Inside Plant Systimax BICSI Certified - Hourly labor rate

P-14 Technician Inside Plant Systimax BICSI Certified - Hourly labor rate overtime

P-15 Survey costs - Hourly labor rate

END OF PRICING SECTION

THE FOLLOWING FORMS MUST BE COMPLETED, SIGNED AND RETURNED AS A PART OF THE BID PACKAGE SUBMISSION:

Supplier Questionnaire

Deviation/Compliance Form

Confidential Information Declaration & Copyright Authorization Form

Certification for Criminal History Check

Insurance Requirements

Certification Regarding Lobbying

Disclosure of Lobbying Activities

Clean Air & Water Act

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions The Proposer shall furnish all the following information accurately and completely. Failure to comply with this requirement will render the bid non-responsive and may cause its rejection. Additional sheets may be attached, if necessary. "You" or "your" as used herein refers to the bidder's firm and any of its owners, officers, directors, shareholders, parties, or principals. Garland ISD has discretion to request additional information. Responses to the questionnaire will be used as evaluated factors.

MINIMUM REQUIREMENTS:

In order to be considered for award, a responsive bidder shall meet the following requirements:

a.	Systimax certified. (please refer to Attachment C).		
	Are the supervisors, foremen and project managers who will be working with Garland ISD, Systimax certified?	Yes □	No 🗆
b.	Awarded firm must be able to respond 365 days of the year, 24 hours of the day, 7 days of the week, when needed. Does your firm agree to this requirement?	Yes □	No 🗆
c.	The successful bidder shall have at least five (5) years' experience installing and servicing Telecommunication Systems. Does your firm have at least five (5) years' experience?	Yes 🗆	No 🗆
d.	All fiber in Garland ISD has been Systimax certified and warrantied. Any modifications or additions shall be certified and warrantied by Systimax. The Systimax outside plant contractor shall provide proof of a twenty (20) year extended warranty and application assurance warranty for all installations. Does your firm agree to provide proof of compliance?	Yes 🗆	No 🗆
e.	The successful bidder shall comply with Emergency Restoration requirements (refer to pages 19-21). One (1) BICSI RCDD, One (1) Supervisor Uniprise Certified Installer-Outside Plant Specialist, Three (3) Job site Foremen Uniprise Certified Installers-Outside Plant Specialists.		
	Does your firm agree to this requirement?	Yes 🗆	No 🗆

- Is your company certified by the state of Texas or the North Central Texas Yes □ No □ Regional Certification Agency as a small, women-owned, or minority business? If yes, provide a copy of the certification with the Request for Proposal/Bid response.
- The Garland ISD has entered into Inter-Local Agreements for cooperative purchasing with the following public entities: City of Garland • Mesquite ISD • Plano ISD • Carrollton-Farmers Branch ISD

The Proposer agrees to honor orders for items or services included herein which $Yes \square$ No \square may be placed by these entities?

3. Several governmental entities (a membership list is available at the EPCNT web site, listed below) have indicated an interest in being included in this contract. Yes □ Should these governmental entities decide to participate in this contract, would you, (the proposer) agree that all terms, conditions, specifications, and pricing would apply? For information regarding the Educational Purchasing Cooperative of North Texas, please visit their website at the following address www.epcnt.com.

Several governmental entities (a membership list is available at the CTPA Yes \Box web site listed below) have indicated an interest in being included in this contract. Should these governmental entities decide to participate in this contract, would you, (the proposer) agree that all terms, conditions, specification, and pricing would apply? For information regarding the Central Texas Purchasing Alliance, please visit their website at the following address www.txctpa.org.

4. The Garland ISD has authorized district employees to use a credit card (Bank of America Master Card) to make purchases for business purposes.

4.1.	Will your company accept these credit card purchases?	Yes 🗆	No 🗆
4.2.	Does your company utilize level 3 data card processing information?	Yes □	No 🗆

- 5. Proposer's principal place of business (or main corporate office) is located in _____(state).
 - 5.1. Proposer's principal place of business is located within the boundaries Yes □ No □ of the Garland Independent School District?
- 6. Is your firm willing to honor the terms and conditions of this contract if awarded a contract as an alternate? Yes □ No □

Points awarded for reputation of the vendor and the vendors goods or services. Max 15 points – 9 points References, 3 points Litigation, 3 points Financials

7. List three (3) references of current customers similar in size and scope of services solicited in this RFP (Preferably but not limited to Public Schools).

Points awarded for each reference.

Public Education = Greater (Number of Building Locations, Fiber miles) - 3 points Number of buildings: greater than 76 buildings Miles of fiber: greater than 90 miles

Public Education = Less than (Number of Building Locations, Fiber miles) -2 points Number of buildings: 50 - 75 buildings Miles of fiber: 50 - 89 miles

Other entity = Greater (Number of Building Locations, Fiber miles) -2 points Number of buildings: greater than 76 buildings Miles of fiber: greater than 90 miles

Other entity = Less (Number of Building Locations, Fiber miles) -1 points Number of buildings: 50 - 75 buildings Miles of fiber: 50 - 89 miles

a) Name
Address
City, State, Zip
Contact Name & Phone #
Number of building locations
Miles of Fiber
Contract Dates of Service
b) Name
Address
City, State, Zip
Contact Name & Phone #
Number of building locations
Miles of Fiber
Contract Dates of Service

c)	Name	
	Address	
	City, State, Zip	
	Contact Name & Phone #	
	Number of building locations	
	Miles of Fiber	
	Contract Dates of Service	
Yes If yes,	ion – Is your company involved in any current or past (5 years) litigation? No provide an attachment indicating each suit and its resolution. num 3 points)	
Provid Max 3	e a Dunn & Bradstreet (D&B) number for Bidders organization:	
The Di	istrict will utilize the overall D&B Rating to assign points. D&B Rating of 1 = 3 points D&B Rating of 2 = 2 points D&B Rating of 3 = 1 point D&B Rating of 4 = 0 points	

Points awarded for extent to which the goods or services meet the district's needs. Max 33 points

10. Equipment Yard

8.

9.

- a. Location ______ distance from Technology Center 410 Stadium Drive Garland, Tx 75040
- 11. Response time for repairs Max (20) points
 - a. 2 hours to respond and repair (20 points)
 - b. 3 4 hours respond and repair (10 points)
 - c. 5 hours respond and repair (5 points)
 - d. Greater than 5 hours response time (0 points)
- 12. Is your company willing to provide a Service Level Agreement (SLA) with your RFP response? Max (10) points Yes _____ No _____

Proposer shall provide a SLA which will contain as a minimum the items listed below:

- a. Contractual assurance of meeting the proposed response time
- b. Key company contacts dedicated to Garland ISD
- c. Trouble reporting process
- d. Escalation procedures
- e. Performance indicators
- 13. Presentations, if required Max (3) points

Garland ISD reserves the right to ask for presentations during the evaluation process. Notice will be given to the proposers who are in the "zone of consideration" for award. Presentations, if required, will be scheduled November 9-11, 2016.

Will your firm be willing to attend a presentation, if requested? Yes_____ No _____

Total long-term cost to the district to acquire the vendor's goods and services: Max (7) points

All prices provided on the price sheet shall remain firm for one year. Indicate the percentage increase, if any, for years 2-5.

Year 2	%
Year 3	%
Year 4	%
Year 5	%

14. Time and Material

The District has provided an extensive price sheet for the majority of services needed for this contract.

In the event an additional service is needed, a quote will be requested based on a time and material basis.

Please provide an hourly rate structure for all personnel that may be involved in providing services, as a separate attachment.

Material will be charged based on a percent markup of cost. Is your firm willing to provide documentation indicating the cost of goods? Yes _____ No _____

Please indicate your markup percentage: _____%

If the undersigned supplier intends to deviate from the General Conditions, Standard Terms and Conditions or Item Specifications listed in this document, all such deviations shall be listed on this page, with complete detailed conditions and information included or attached. The District will consider any deviations in its award decisions, and the District reserves the right to accept or reject any bid based upon any deviations indicated below or in any attachments or inclusions.

In the absence of any deviation entry on this form, the bidder assures the District of their full compliance with the Standard Terms and Conditions, Item Specifications, and all other information contained in this document.

Please list deviations below (attach additional sheets, if needed):

Confidential Information Declaration & Copyright Authorization Form

The bidder must stamp in bold red letters the term "CONFIDENTIAL" or "PROPRIETARY" on every page of any part of a bid that the bidder claims is confidential or proprietary. *Furnishing confidential or proprietary information is discouraged*. The District cannot guarantee that the District will be allowed to keep the information submitted confidential. The District may reject as non-conforming any bid that contains confidentiality claims that the District in its sole discretion considers vague or unreasonable.

All Invitations to Proposal and parts of bids that are not marked as confidential or proprietary will generally be considered public information once the contract is awarded. The District assumes no liability or responsibility for release of any information not properly marked. The District assumes no liability or responsibility for release of any information that is properly marked but is determined by the Texas Attorney General or a court of law to be subject to release. In the event that the District receives a request for disclosure of material marked "confidential" or "proprietary", the District may request a ruling from the Texas Attorney General concerning whether such material must be disclosed.

Proposals asserted to be copyright protected in their entirety are unacceptable and may, in the District's sole discretion, be disqualified as non-responsive. By submitting copyrighted materials as part of your bid, you hereby grant the District authorization to reproduce and provide copies of such information in response to a valid request for information under the Texas Public Information Act, Texas Government Code Chapter 552. By submitting copyrighted materials, you are representing that you have the authority to grant such authorization for the reproduction and release of such information. You further agree to waive any and all claims against the District regarding the release of such copyrighted information including, but not limited, to any claim of copyright infringement when released in response to a valid request for information under the Texas Public Information Act, Texas Government Code Chapter 552.

- Contents of this document are NOT considered Confidential or Proprietary
- Contents of this document ARE considered Confidential or Proprietary. Please identify the pages and/or sections declared Confidential or Proprietary by properly marking the pages &/or sections as confidential or proprietary and listing them below:

The undersigned affirms that the District assumes no liability/responsibility for the release of any information if this form is not properly completed, signed and the appropriate pages clearly marked as directed. The undersigned further grants authorization for the reproduction and release of any information asserted to be copyright protected in response to a request for information under the Texas Public Information Act, and waives any and all claims regarding the release of such information.

Printed Name

Signature

Certification for Criminal History Check (In Compliance With Texas Education Code § 22.0834(A))

"*Covered employee*" - A "covered employee" is a person who is an employee, applicant, agent or Subcontractor of the Contractor or of any Subcontractor of the Contractor, if (a) the person has or will have work duties related to the Project that will be performed on District property or at another location on a regular or repeated basis, (b) students are regularly present at such location, and (c) the person will have verbal or physical interaction with, or be in direct proximity to, one or more students.

"Direct contact with students"-The contact that results from activities that provide substantial opportunity for verbal or physical interaction with students that is not supervised by a certified educator or other professional district employee. Contact with students that results from services that do not provide substantial [the] opportunity for unsupervised interaction with a [an individual] student or students, such as addressing an assembly, officiating a sports contest, or judging an extracurricular event, is not, by itself, direct contact with students. However, direct contact with students does result from any activity that provides substantial [the] opportunity for unsupervised contact with students, which might include [such as], without limitation, the provision of [individualized] coaching, tutoring, or other services to students.

"*Disqualifying conviction*" - A "disqualifying conviction" is a conviction of (a) any felony under the Texas Penal Code, (b) any offense for which the person is required to register as a sex offender under Chapter 62 of the Texas Code of Criminal Procedure, (c) any equivalent offense under the laws of the United States or any other state, (d) any offense against a child, (e) misdemeanor possession of a controlled substance within 10 years, (f) any weapon offense, (g) theft, larceny, fraud, issuance of a bad check, theft by check above the class C misdemeanor level, or more than one offense at the class C level, (h) forgery, (i) altering an Official Document, (j) perjury, or (k) securing executing of a document by deception.

On behalf of

("Contractor"), I certify that [check one]:

- □ None of Contractor's employees are *covered employees*, as defined above. The service contractor shall also certify that it will take reasonable steps to ensure that the conditions or precautions that have resulted in a determination that any person is not a covered contract employee continue to exist throughout the time that the contracted services are provided.
- Or
- Some or all of Contractor's employee are *covered employees*. If this box is selected, I further certify that:
 - (1) Contractor has obtained all required criminal history record information, through the Texas Department of Public Safety, regarding its covered employees. None of the covered employees has a disqualifying conviction.
 - (2) If Contractor receives information that a covered employee has a disqualifying conviction, Contractor will immediately remove the covered employee from contract duties and notify the District in writing within 3 business days that it has done so. Noncompliance by Contractor with this certification may be grounds for contract termination.

Signature

The Proposer shall purchase and maintain, in a company or companies licensed to do business in the State of Texas. Such insurance as will protect the Proposer and the District from claims set forth below, which may arise out of, or result from, the operations under the contract. The Proposer shall be a subscriber to the Texas Workers' Compensation Act for Workers' Compensation Insurance. The proposer shall file with the Director of Purchasing, before work is begun, certificates of such insurance which shall be subject to approval by the District as to the company providing insurance and the manner and adequacy of insurance protection. The Proposer shall, during the performance of this Agreement, keep in force the following insurance:

a.	Comprehensive General Liability*(CGL)		
	1) Bodily Injury	\$250,000 each person, \$500,000 each occurrence,	
		\$1,000,000 aggregate	
	2) Personal Injury	\$250,000 each person, \$500,000 each occurrence,	
	/ 55	\$1,000,000 aggregate	
	3) Property Damage	\$500,000 each occurrence	
b.	Comprehensive Automobile Liability*(CAL)		
	1) Bodily Injury	\$500,000 each person, \$500,000 each occurrence,	
		\$1,000,000 aggregate	
	2) Property	\$100,000 each occurrence	
c.	Workers' Comp. (as a subscriber to the Act) Statutory (per benefits of Texas Workers' Comp. Act)		
d.	Employer's Liability		
	1) Each accident	\$300,000	
	2) Disease		
	3) Disease for each employee		

*In the alternate, CGL and CAL insurance coverage a combined single limit policy of \$500,000 for both property damage and bodily injury may be provided with 1 million dollar aggregate. Vendors having unsupervised access to students must have a minimum of \$100,000 claim/\$300,000 aggregate coverage for sexual abuse and molestation endorsed to their General Liability.

The Proposer shall either: (1) require each of its sub-contractors to procure and to maintain during the life of the sub-contract, Sub-contractor's Workers' Compensation Insurance as a subscriber to the act, Comprehensive General Liability, Automobile Liability, and Property Damage Liability Insurance of the type and in the same amounts as specified above, or (2) insure the activity of its sub-contractors in its own policy(ies).

All such policies of insurance shall contain a provision that they shall not be cancelled or altered nor the amount of coverage reduced until at least thirty (30) days after notice of such cancellation, alteration, or reduction has been delivered to the District.

Such policies of insurance shall be written by companies authorized by the Texas Department of Insurance to conduct business in the state and shall be satisfactory to the District. Proposer shall not commence work under this Agreement until satisfactory evidence of such insurance has been delivered to, and approved by the District.

Self-Insurance: A proposer who self-insures for workers compensation must possess a Certificate of Authority to Self-insure issued by the Texas Workers Compensation Commission as a subscriber to the Workers' Compensation Act. By signing below, the bidder/prospective Proposer certifies that it possesses such certificate, and shall furnish a copy of the Certificate of Self Insurance with Proposal Invitation.

The Certificate of Insurance must be presented prior to start of service. The policy must reflect Garland I.S.D. as "additional insured" or "co-insured". The amount of deductibles and self-insurance retention must be shown on Certificate of Insurance.

By initialing below, the bidder certifies that it is capable of providing the type(s) and coverage of insurance required. _____(Initials)

Applicable to Grants, Subgrants, Cooperative Agreements, and Contracts Exceeding \$100,000 in Federal Funds.

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by section 1352, Title 31, U.S. Code. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all covered subawards exceeding \$100,000 in Federal funds at all appropriate tiers and that all subrecipients shall certify and disclose accordingly.

Name/Address of Organization

Name/Title of Submitting Official

Signature

Date

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Complete this form to disclose lobbyi	ng activities pur	rsuant to 31 U.	S.C. 1352	Approved by OMB 0348-0046
 1. Type of Federal Action: a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance 	2. Status of Fedd a. bid/offe b. initial a c. post-aw	fer/application award		rt Type: . initial filing . material change faterial Change Only: ear quarter ate of last report
 4. Name and Address of Reporting Entity: Prime Subawardee Tier, if known: Congressional District, if known: 		5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:		
6. Federal Department/Agency:		Congressional		<i>known</i> : ne/Description:
8. Federal Action Number, <i>if known</i> :		CFDA Number, <i>if applicable</i> : 9. Award Amount, <i>if known</i> : \$		
10. a. Name and Address of Lobbying Registrant (<i>if individual, last name, first name, MI</i>):		b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		Signature:		
Federal Use Only:				Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

(Instructions for Completing Disclosure of Lobbying Activities (SF-LLL)

This disclosure form shall be completed by the reporting entity, whether sub-awardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a follow up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or sub-award recipient. Identify the tier of the sub-awardee, e.g., the first sub-awardee of the prime is the 1st tier. Sub-awards include but are not limited to subcontracts, sub grants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Sub-awardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

I, the Proposer, am in compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act of 1970, as Amended (42 U.S.C. 1857(h)), Section 508 of the Clean Water Act, as amended (33 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15 as required under OMB Circular A-102,

Attachment O, Paragraph 14 (1) regarding reporting violations to the grantor agency and to the United States Environment Protection Agency Assistant Administrator for the Enforcement.

Proposer Name

Title of Authorized Representative

Mailing Address

Signature

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510, Participants' responsibilities. The regulations were published as Part IV of the January 30, 1989, *Federal Register* (pages 4722-4733). Copies of the regulations may be obtained by contacting the Department of Agriculture agency with which this transaction originated.

(Before completing certification, read attached instructions on the following page.)

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name

Name and Title of Authorized Representative

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions Instructions

- 1. By signing (above) and submitting this form, the prospective lower tier participant is providing certification set out on the form in accordance with these instructions.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participants," "person," "primary covered transaction," "principal," "proposal" and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction" without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible or voluntarily excluded from the covered transaction; unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-procurement List.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.