

**THE ESCAMBIA COUNTY SCHOOL DISTRICT
PURCHASING DEPARTMENT
75 NORTH PACE BLVD.
PENSACOLA, FL 32505**

REQUEST FOR PROPOSAL (RFP) & PROPOSAL ACKNOWLEDGMENT

POSTING DATE:
March 26, 2021

PURCHASING CONTACT & TELEPHONE:
**David Romero 850.469.6203
dromero@ecsdfl.us**

RFP TITLE:
Communications Cabling

RFP NUMBER:
210706

RFP OPENING DATE & TIME:
Wednesday, April 21, 2021 at 2:00 p.m., CST

NOTE: PROPOSALS RECEIVED AFTER THE RFP OPENING DATE AND TIME WILL NOT BE ACCEPTED.

The School District of Escambia County, Florida, (the District) solicits your company to submit a Proposal on the above referenced goods or services. All terms, specifications and conditions set forth in this request are incorporated by this reference into your response. Proposals will not be accepted unless all conditions have been met. All Proposals must have an authorized signature in the space provided below. All Proposals must be sealed and received in the School District's Purchasing Office at 75 North Pace Blvd., Pensacola, Florida, 32505 by the "RFP Opening Date & Time" referenced above. All envelopes containing sealed Proposals must reference the "RFP Title", "RFP Number" and the "RFP Opening Date & Time". The School District is not responsible for lost or late delivery of Proposals by the U.S. Postal Service or other delivery services used by the Responder. Proposals may not be withdrawn for a period of sixty (60) days after the opening date unless otherwise specified.

THE FOLLOWING MUST BE COMPLETED, SIGNED, AND RETURNED AS PART OF YOUR PROPOSAL. PROPOSALS WILL NOT BE ACCEPTED WITHOUT THIS FORM. AN ORIGINAL, MANUAL SIGNATURE, BY AN AUTHORIZED AGENT OF THE RESPONDER, IS REQUIRED ON THIS FORM.

COMPANY NAME:

MAILING ADDRESS:

CITY, STATE, ZIP:

FEDERAL EMPLOYER'S IDENTIFICATION NUMBER (FEIN):

TELEPHONE NUMBER: (EXT:)

FACSIMILE NUMBER:

EMAIL:

HOW DID YOU FIND OUT ABOUT THIS RFP? SCHOOL DISTRICT WEBSITE____ BIDNET____ DEMAND STAR____ PRIME VENDOR____ OTHER____ (PLEASE SPECIFY____)

I CERTIFY THAT THIS PROPOSAL IS MADE WITHOUT PRIOR UNDERSTANDING, AGREEMENT, OR CONNECTION WITH ANY OTHER RESPONDER SUBMITTING A PROPOSAL FOR THE SAME MATERIALS, SUPPLIES, EQUIPMENT OR SERVICES, AND IS IN ALL RESPECTS FAIR AND WITHOUT COLLUSION OR FRAUD. I AGREE TO ABIDE TO ALL TERMS AND CONDITIONS OF THIS RFP AND CERTIFY THAT I AM AUTHORIZED TO SIGN THIS RFP FOR THE RESPONDER. SIGNING THIS ACKNOWLEDGEMENT ALSO AFFIRMS THAT THE ORIGINAL REQUEST FOR PROPOSAL DOCUMENT HAS NOT BEEN ALTERED IN ANY WAY.

TYPED OR AUTHORIZED SIGNATURE:

PRINTED NAME:

TITLE:

DATE:

I. INTRODUCTION & GENERAL INFORMATION

The purpose of this Request for Proposal (RFP) is to solicit sealed Proposals from qualified telecommunications firms for the purpose of providing comprehensive as-needed District Wide Communications Cabling installation as described further.

CALENDAR OF EVENTS	
RFP Posting Date	March 26, 2021
Deadline for Questions (See Page 5, Section II.V. and Page 8, Section III.K)	Friday, April 2, 2021 at 5:00 p.m., CST
Answers to Questions and Any Addendums Posted By (See Page 5, Section II.V. and Page 8, Section III.K)	Wednesday, April 7, 2021 at 5:00 p.m., CST
RFP Opening (See Page 1)	Wednesday, April 21, 2021 at 2:00 p.m., CST
RFP Evaluation (subject to change)	Wednesday, April 28, 2021 at 9:00 a.m., CST
Anticipated Agreement Start Date	Thursday, July 1, 2021 at 9:00 a.m., CST

II. GENERAL TERMS AND CONDITIONS

NOTE: The term "Responder", "Contractor", or "Vendor" as used within this Request for Proposal (RFP) refers to the person, company or organization responding to this RFP. The Responder is responsible for understanding and complying with the terms and conditions herein. The term "Parties", when used collectively, will apply to both the District and the Responder.

- A. GENERAL:** Upon an RFP award, the terms and conditions of this RFP or any portion thereof, may upon mutual agreement of the parties be extended for an additional term(s) or for additional quantities (all original terms and conditions will remain in effect). Subject to the mutual consent of the parties, the pricing, terms and conditions of this RFP, for the products or services specified herein, may be extended to other municipal, city or county government agencies, school boards, community or junior colleges, or state universities within the State of Florida.
- B. RFP OPENING AND FORM:** Proposal openings will be public on the date and time specified on the Proposal Acknowledgement form. All Proposals received after the time indicated will be rejected as non-responsive and retained by the District. Proposals by email, fax, telegram, or verbally by telephone or in person will not be accepted. The public opening will acknowledge receipt of the Proposals only; details concerning pricing or the offering will not be announced. All Proposals submitted shall become public record upon an announcement of a recommended award or thirty (30) days after the opening date whichever occurs first. To protect any confidential information contained in their Proposal, companies must invoke the exemptions to disclosure provided by law in response to the RFP, and must identify the data and other material to be protected, and must state the reasons why such exclusion from public disclosure is necessary.
- C. WARRANTY:** All goods and services furnished by the Responder, relating to and pursuant to this RFP will be warranted to meet or exceed the Specifications contained herein. In the event of breach, the Responder will take all necessary action, at Responder's expense, to correct such breach in the most expeditious manner possible.
- D. PRICING:** All pricing submitted will include all packaging, handling, shipping charges, and delivery to any point within Escambia County, Florida to a secure area or inside delivery. The School Board is exempt and does not pay Federal Excise and State of Florida Sales Taxes.

- E. TERMS OF PAYMENT / INVOICING:** The normal terms of payment will be Net 30 Days from receipt and acceptance of goods or services and Responder's invoice. Itemized invoices, each bearing the Purchase Order Number must be mailed on the day of shipment. Invoicing subject to cash discounts will be mailed on the day that they are dated.
- F. TRANSPORTATION AND TITLE:** (1) Title to the goods will pass to the School District upon receipt and acceptance at the destination indicated herein. Until acceptance, the Responder retains the sole insurable interest in the goods. (2) The shipper will prepay all transportation charges. The School District will not accept collect freight charges. (3) No premium carriers will be used for the School District's account without prior written consent of the Director of Purchasing.
- G. PACKING:** All shipments will include an itemized list of each package's content, and reference the School District's Purchase Order Number. No charges will be allowed for cartage or packing unless agreed upon by the School District prior to shipment.
- H. INSPECTIONS AND TESTING:** The School District will have the right to expedite, inspect and test any of the goods or work covered by this RFP. All goods or services are subject to the School District's inspection and approval upon arrival or completion. If rejected, they will be held for disposal at the Responder's risk. Such inspection, or the waiver thereof, however, will not relieve the Responder from full responsibility for furnishing goods or work conforming to the requirements of this RFP or the RFP Specifications, and will not prejudice any claim, right, or privilege the School District may have because of the use of defective or unsatisfactory goods or work.
- I. STOP WORK ORDER:** The School District may at any time by written notice to the Responder stop all or any part of the work for this RFP award. Upon receiving such notice, the Responder will take all reasonable steps to minimize additional costs during the period of work stoppage. The School District may subsequently either cancel the stop work order resulting in an equitable adjustment in the delivery schedule and/or the price, or terminate the work in accordance with the provisions of the RFP terms and conditions.
- J. INSURANCE AND INDEMNIFICATION:** The Responder agrees to indemnify and save harmless the School District, its officers, agents and employees from and against any and all claims and liabilities (including expenses) for injury or death of persons or damage to any property which may result, in whole or in part, from any act or omission on the part of the Responder, its agents, employees, or representatives, or are arising from any Responder furnished goods or services, except to the extent that such damage is due solely and directly to the negligence of the School District. The Responder will carry comprehensive general liability insurance, including contractual and product liability coverage, with minimum limits acceptable to the School District. The Responder will, at the request of the School District, supply certificates evidencing such coverage.
- K. RISK OF LOSS:** The Responder assumes the following risks: (1) all risks of loss or damage to all goods, work in process, materials and equipment until the delivery thereof as herein provided; (2) all risks of loss or damage to third persons and their property until delivery of all goods as herein provided; (3) all risks of loss or damage to any property received by the Responder or held by the Responder or its suppliers for the account of the School District, until such property has been delivered to the School District; (4) all risks of loss or damage to any of the goods or part thereof rejected by the School District, from the time of shipment thereof to Responder until redelivery thereof to the School District.
- L. LAWS AND REGULATIONS:** Responders will comply with all applicable Federal, State and Local laws, statutes and ordinances including, but not limited to the rules, regulations and standards of the Occupational Safety and Health Act of 1970, the Federal Contract Work Hours and Safety Standards Act, and the rules and regulations promulgated under these Acts. Responders agree not to discriminate against any employee or applicant for employment because of race, sex, religion, color, age or national origin.

All agreements as a result of an award hereto and all extensions and modifications thereto and all questions relating to its validity, interpretation, performance or enforcement shall be governed and construed in conformance to the laws of the State of Florida. The parties agree that

jurisdiction for the resolution of any legal issues arising out of this contract shall be solely with the Circuit Courts of Escambia County, Florida. The parties hereby waive venue in any other forum.

- M. PUBLIC ENTITY CRIMES:** A Responder, person, or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Proposal on a contract to provide any goods or services to a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida State Statute, Section 287.017, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.
- N. PATENTS:** Responders agree to indemnify and save harmless the School District, its officers, employees, agents, or representatives using the goods specified herein from any loss, damage or injury arising out of a claim or suit at law or equity for actual or alleged infringement of letters of patent by reason of the buying, selling or using the goods supplied under this solicitation, and will assume the defense of any and all suits and will pay all costs and expenses thereto.
- O. CONFLICT OF INTEREST:** The award hereunder is subject to the provisions of Chapter 112 Florida Statutes. All Responders must disclose the name of any company owner, officer, director or agent who is an employee of the School District and/or is an employee of the School District and owns, directly or indirectly, an interest of five percent (5%) or more of the company.
- P. TERMINATION: DEFAULT.** The School District may terminate all or any part of a subsequent award by giving notice of default to Responder, if Responder: (1) refuses or fails to deliver the goods or services within the time specified; (2) fails to comply with any of the provisions of this RFP or so fails to make progress as to endanger performances, hereunder, or; (3) becomes insolvent or subject to proceedings under any law relating to bankruptcy, insolvency, or relief of debtors. In the event of termination for default, the School District's liability will be limited to the payment for goods and services delivered and accepted as of the date of termination. **CONVENIENCE.** The School District may terminate for its convenience at any time, in whole or in part any subsequent award. In which event of termination for convenience, the School District's sole obligations will be to reimburse Responder for (1) those goods or services actually shipped/performed and accepted up to the date of termination, and (2) costs incurred by Responder for unfinished goods, which are specifically manufactured for the School District and which are not standard products of the Responder, as of the date of termination, and a reasonable profit thereon. In no event is the School District responsible for loss of anticipated profit nor will reimbursement exceed the RFP value.
- Q. DRUG-FREE WORKPLACE:** Whenever two (2) or more RFPs are equal with respect to price, quality, and service, an RFP received from a business that certifies that it has implemented a drug-free workplace program as defined by Section 287.087 Florida Statutes, will be given preference in the award process.
- R. PERFORMANCE:** In an effort to reduce the cost of doing business with the School District, and unless indicated elsewhere, no bid or performance bond is required. However, upon award and subsequent default by Responder, the School District reserves the right to pursue any or all of the following remedies: (1) to accept the next lowest available RFP price or to purchase materials or services on the open market, and to charge the original awardees for the difference in cost via a deduction to any outstanding or future obligations; (2) the Responder in default will be prohibited from activity for a period of time determined by the severity of the default, but not exceeding two (2) years; (3) any other remedy available to the School District in tort or law.
- S. AUDIT AND INSPECTION:** The District or its representative reserves the right to inspect and/or audit all the Responder's documents and records as they pertain to the products and services delivered under this Agreement. Such rights will be exercised with notice to the Responder to determine compliance with and performance of the terms, conditions and specifications on all matters, rights and duties, and obligations established by this Agreement. Documents/records in any form shall be open to the District's representative and may include but are not limited to all

correspondence, ordering, payment, inspection and receiving records, and contracts or sub-contracts that directly or indirectly pertain to the transactions between the District and the Responder.

- T. SAMPLES AND BRAND NAMES: BRAND NAMES.** Specifications referencing specific brand names and models are used to reflect the kind and type of quality in materials and workmanship, and the corresponding level of performance the School District expects to receive as a minimum. Responders offering equivalents or superior products to the brand/model referenced will: (1) reference on the RFP in the space provided the manufacturer's name, brand name, model and/or part number; (2) next to the price, indicate "ALT" to reflect an alternate offering; (3) where no sample is provided with the RFP, enclose sufficient technical specification sheets and literature to enable the District to reach a preliminary evaluation; (4) agree to any request by the District for submission of a sample or to provide its product on-trial or demonstration, whichever the District may deem appropriate, at no charge to the District. The District reserves the right to determine the acceptability of any alternatives offered. **SAMPLES.** Any sample requested by this RFP or to be provided at the Responder's option, should be forwarded under separate cover to the attention of the Purchasing Office of the District. The package or envelope will reference the RFP Number, RFP Title, and RFP Item Number and clearly marked "Samples". All samples will be provided free of charge, including transportation charges. Responders are responsible for notifying and making arrangements for pick up from the District if a return of samples is expected. All samples unclaimed for thirty (30) days will be disposed of at the discretion of the District.
- U. EVALUATION CRITERIA:** Primary factors used to decide the award hereunder will be price, quality, availability, vendor experience, references, and responsiveness. Other factors that may be used in the evaluation of Proposals received will be: (1) administrative costs incurred by the District in association with the discharge of any subsequent award; (2) alternative payment terms; (3) Responder's past performance. The School District reserves the right to evaluate by lot, by partial lot, or by item, and to accept or reject any Proposal in its entirety or in part, and to waive minor irregularities if the Proposal is otherwise valid. In the event of a price extension error, the unit price will be accepted as correct. The School District has sole discretion in determining testing and evaluation methods. The School District may consider in conjunction to any award hereunder, those products, services and, prices available to them through contracts from state, federal, and local government agencies or other school districts within the State of Florida.
- V. CLARIFICATIONS AND INTERPRETATIONS:** The School District reserves the right to allow for clarification of questionable entries, and for the Responder to withdraw items with obvious mistakes. Any questions concerning terms, conditions or specifications will be directed to the designated Purchasing Agent referenced on the RFP Acknowledgement. Any ambiguities or inconsistencies shall be brought to the attention of the designated Purchasing Agent, in writing, no later than **Friday, April 2, 2021 at 5:00 p.m., CST**. Failure to do so, on the part of the Responder will constitute an acceptance by the Responder of consequent decision. An addendum to the RFP shall be issued and posted for those interpretations that may affect the eventual outcome of this solicitation. It is the Responder's responsibility to assure the receipt of all addendum issued. No person is authorized to give oral interpretations of, or make oral changes to the RFP. Therefore, oral statements given before the RFP opening date will not be binding. The School District will consider no interpretations binding unless provided for by issuance of an addendum. Addenda will be posted to the School District's Purchasing website address at <http://ecsd-fl.schoolloop.com/purchasing/bids> on or before **Wednesday, April 7, 2021 at 5:00 p.m., CST**. The Responder shall acknowledge receipt of all addenda by signing and enclosing said addenda with their Proposal.
- W. RFP TABULATIONS, RECOMMENDATIONS, AND PROTEST:** RFP tabulations with award recommendations are posted for seventy-two (72) hours in the Purchasing Office and are also posted to the School District's Purchasing website address at <http://ecsd-fl.schoolloop.com/purchasing/bids>. Failure to file a protest within the time prescribed in Section 120.57(3) Florida State Statutes will constitute a waiver of proceedings under Chapter 120, Florida State Statutes and School Board Rules. RFP tabulations, recommendations or notices will not be automatically mailed.

- X. **CONTACT:** All questions for additional information regarding this RFP **must be directed to the designated Purchasing Agent noted on page one (1)**. Prospective Responders shall not contact any member of the Escambia County School Board, Superintendent, or staff regarding this solicitation prior to posting of the final tabulation and award recommendation on the website and in the Purchasing Office. Any such contact shall be cause for rejection of your Proposal.
- Y. **PROPOSAL PREPARATION COSTS:** Neither the School District nor its representatives shall be liable for any expenses incurred in connection with the preparation of a response to this Proposal.
- Z. **AGREEMENT FORM:** All subsequent agreements as a result of an award hereunder, shall incorporate all terms, conditions and specifications contained herein, and in response hereto, unless mutually amended in writing.
- AA. **ADDITIONAL TERMS AND CONDITIONS:** The School District reserves the right to reject offers containing terms and/or conditions contradictory to those requested in this solicitation.

III. SPECIAL CONDITIONS

These "SPECIAL CONDITIONS" are in addition to or supplement Section II GENERAL TERMS AND CONDITIONS. In the event of a conflict these SPECIAL CONDITIONS shall have precedence.

- A. **CONTRACT TERM AND RENEWAL:** Upon approval from the School Board of Escambia County, FL, this award will be valid for up to five (5) years in one (1) year increment renewals. Each agreement year will be effective from July 1st through June 30th ("Term"). Adjustments to labor rates will be negotiable and limited to the *Consumer Price Index for All Urban Consumers (CPI-U): Selected areas, all items index for South urban; Size B/C* as published by the US Department of Labor, Bureau of Labor Statistics in February of each year. Any requests for adjustments must be submitted in writing to the Purchasing Department no later than April 1st of each following year. Rate adjustments will not be automatic. Current year pricing **will** be retained for an additional, successive year if the CPI-U is not greater than zero percent (0%) or if the successful Vendor fails to submit a rate adjustment by the deadline. If a rate adjustment is requested, the Purchasing Department will provide notification of allowable increases, if applicable, by May 1st.

Notification of non-renewal by the Vendor must be sent in writing and received at least ninety (90) calendar days prior to the end of each Term.

The award may, with School Board approval and subject to then-current Florida Statutes, thereafter be renewed for five (5) more additional one (1) -year periods, unless the District provides notice (in the District's sole discretion) to not renew the Agreement. Note: The District's written notice of non-renewal shall be delivered not less than ninety (90) days prior to the end of the then-current Term.

- B. **LICENSES:** Responder must be licensed to do business in Escambia County, Florida and/or the State of Florida. If a Contractor is located within Escambia County, FL, and fails to provide a copy with their proposal, the Responder's Proposal may be rendered non-responsive. Non-Florida businesses shall submit documentation from the state in which the business was formed and documentation from the State of Florida providing authorization to perform business in the state of Florida. Responder shall also hold and maintain any certifications and/or licenses required to provide work under this Agreement. Electrical or other licenses need to be issued or recognized by the Department of Business and Professional Regulations, Florida. All licenses shall be current and active for the duration of the project.
- C. **BACKGROUND SCREENING REQUIREMENTS:** The successful Responder will comply with all requirements of Sections 1012.32 and 1012.465, Florida Statutes, by certifying that the vendor and all of its employees who provide services under this contract have completed the background screening required by the referenced statutes and meet the standards established by the statutes. This certification will be provided to the school in advance of the vendor providing any services on campus while students are present. The vendor will bear the cost of acquiring the background screening required by Section 1012.32, F.S., and any fee imposed by the Florida Department of

Law Enforcement to maintain the fingerprints provided with respect to vendor and its employees. The vendor will follow the procedures for obtaining employee background screening as outlined on the Escambia County School District Website: <http://ecsd-fl.schoolloop.com>. The parties agree that in the event that vendor fails to perform any of the duties described in this paragraph, this will constitute a material breach of the contract entitling school to terminate immediately with no further responsibility to make payment or perform any other duties under this contract. Vendor agrees to indemnify and hold harmless school, its officers and employees from any liability in the form of physical injury, death, or property damage resulting from vendor's failure to comply with the requirements of this paragraph or Sections 1012.32 and 1012.465, Florida Statutes.

- D. THE RESPONDER AS AN INDEPENDENT CONTRACTOR:** The Responder shall have sole control over the manner and means of providing the services performed under this Agreement. The Responder's relationship to the District under this Agreement shall be that of an Independent Contractor. The Responder will not be considered an agent or employee of the District for any purpose.

As an Independent Contractor, the Responder is responsible for all taxes incident to payments for services herein, including without limitation, all state and federal income taxes payroll and other taxes, and Workers' Compensation.

- E. CONFLICT OF INTEREST:** The Responder affirms that, to the best of its knowledge, there exists no actual or potential conflict between the Independent Contractor's family, business, or financial interests and its services under this Agreement; and, in event of change in either its private interests or services under this Agreement, the Responder will raise with the District any questions regarding possible conflict of interest which may arise as a result of such change.

- F. COMPLIANCE WITH LAWS:** The Responder agrees to comply with all applicable laws, statutes, regulations, rulings, or enactments of any governmental authority. The Responder shall obtain from third parties, including State and local governments, all licenses and permissions necessary for the performance of the work.

- G. GOVERNING LAWS:** This Agreement is to be governed and construed in accordance with the laws of the State of Florida. The parties agree that jurisdiction for the resolution of any legal issues arising out of this contract shall be solely with the Circuit Courts of Escambia County, Florida. The parties hereby waive venue in any other forum.

- H. EXAMINATION OF RECORDS:** The Responder agrees that the District, the Comptroller General of the United States of America and/or the Inspector General of the Federal Sponsoring Agency, and the Auditor General of the State of Florida or their duly authorized representatives shall have access to, and the right to examine, any directly pertinent books, papers, and records of the Responder involving transactions related to this Agreement until the expiration of five (5) years after final payment under this Agreement or such longer period as required by law.

I. EX PARTE COMMUNICATION:

1. Ex parte communication, whether verbal or written, by any potential Responders or representatives of any potential Responders to this solicitation with District personnel involved with or related to this RFP, other than as expressly designated in this document, is strictly prohibited. Violation of this restriction may result in the rejection/disqualification of the Responders' offer.
2. Ex parte communication whether verbal or written, by any potential Responders or representative of any potential Responders to this solicitation with District Board members is also prohibited and will result in the rejection/disqualification of the Responders' offer.
3. Any current meetings the Responder has with District staff and administration, or instructional personnel, shall at no time include any conversation regarding the RFP.

- J. COVENANT AGAINST CONTINGENT FEES:** The Responder warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingency fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the

Independent Contractor for purposes of securing business. For breach or violation of this warranty, the District shall have the right to annul this Agreement without liability, or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

- K. INVOICING AND PAYMENTS:** The Contractor must submit a detailed, itemized invoice within thirty (30) calendar days after inspection and acceptance by the District of work contracted for, which will include the Purchase Order number for this project. A Purchase Order will be provided following a quote received from the Contractor unless arrangements have been made to utilize a purchase card as described below.

The District/originating requestor may alternatively make payment from an invoice to the Contractor using a purchase card instead of issuing a Purchase Order for projects less than \$5,000.00 at no additional cost to the District. In this case, the District/originating requestor must correspond with the Contractor their intention to make payment using a purchase card within five (5) days of receiving a quote.

Note: No work shall begin until a Purchase Order has been submitted to the Contractor or the District/originating requestor has made arrangements to utilize a purchase card.

The District/originating requestor has fifteen (15) business days after receipt of invoice to notify the Contractor if an invoice appears incorrect. Once notified, the Contractor must provide all documentation necessary to validate pricing listed on the invoice to the requesting District representative within ten (10) business days. In the event additional time is required to obtain the necessary documentation, the Contractor will notify the District designee within five (5) business days and provide a specified date that the documentation will be ready, which will not exceed ten (10) days from the date of the notification. Furthermore, the Contractor agrees that payment for the invoice in question will be held, without penalty to the District, until the requested documentation has been provided and reviewed by the District.

Any bill, invoices, statement or other claim for funds due submitted more than ninety (90) calendar days after inspection and acceptance of the work contracted for may be deemed waived.

- L. COMMUNICATION AND QUESTIONS:** Due to time constraints, it is recommended Responders send any questions they may have regarding this solicitation to the designated Purchasing Agent below using a method that can be tracked (email, certified mail, overnight courier, etc.); email is preferred. The deadline for submitting questions concerning this RFP is **Friday, April 2, 2021 at 5:00 p.m., CST.**

All changes in the specifications contained within this RFP will be made by Addendum. All Addendums concerning this RFP will be posted to the Purchasing Department's webpage located at <http://ecsd-fl.schoolloop.com/purchasing/bids>. It is the sole responsibility of each Responder to contact the Purchasing Agent responsible for this solicitation or visit the District's website to determine if any Addendums have been issued in order to obtain said Addendum(s). Any applicable Addendums and/or responses to questions received will be posted to the Purchasing Department's Current Bid Activity webpage by **Wednesday, April 7, 2021 at 5:00 p.m., CST.**

In order for the Escambia County School District, Florida to ensure fair and equal treatment of all participating Responders, the below named individual is the District's only designated representative for this RFP. Responders shall contact this representative for all information regarding this RFP. **Responders who contact any other District employee, staff, Board members, or plan developer regarding this RFP are subject to disqualification from participating in this solicitation.**

David Romero, Purchasing Agent
Purchasing Department
Escambia County School District
75 North Pace Boulevard
Pensacola, FL 32505
Email: dromero@ecsdf.us

- M. FORCE MAJEURE:** A “Force Majeure Event” is defined as fire, flood, earthquake, acts of God, wars, riots, civil unrest, vandalism, acts of terrorism, or any other similar cause beyond the reasonable control of either Party (the District or the Responder) which make it illegal, impossible, or unreasonable for the Party to perform as originally contracted under this Agreement. Force Majeure does not apply where the non-performing Party is at fault in failing to prevent or causing the default or delay or if the default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workaround plans, or other means. In the event that a Force Majeure Event prevents the Responder from executing its responsibilities under this Agreement, the Responder must immediately notify the District. The District will not hold the Responder in default of this Agreement if the Responder’s non-performance is directly caused by a Force Majeure Event. A strike, lockout, or labor dispute shall not constitute a Force Majeure Event and shall not excuse the Responder from its obligations under this Agreement.
- N. PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES:** In accordance with Chapters 215 and 287, Florida Statutes, the District is prohibited from, or limited in its ability to, contract with companies on the Scrutinized Companies lists created pursuant to Ch. 215, Florida Statutes. This includes companies with activities in Sudan, with activities in the Iran Petroleum Sector, and/or companies which boycott Israel. “Companies” is defined to include “all wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations that exists for the purpose of making profit.” By submitting a response to this solicitation, a respondent certifies that it and all related entities of respondent as defined above are not on such Scrutinized Companies lists. The respondent is specifically required to complete the State of Florida Vendor Certification Regarding Scrutinized Companies Lists form included within this solicitation (Attachment E). Any multi-year agreement award resulting from this solicitation shall further require the awarded vendor to recertify prior to each renewal of the agreement that it and its related entities are not on statutory Scrutinized Companies lists. The School Board (or District) may terminate any agreement resulting from this solicitation if the vendor or a related entity as defined above is found to have submitted a false certification or been placed on a statutory Scrutinized Companies list. Notwithstanding the preceding, the District reserves the right to and may permit a company on such lists to be eligible for, bid on, submit a proposal for, or enter into or renew a contract, should the District determine, on a case-by-case basis and in its sole discretion, that the conditions set forth in Section 287.135(4) are met.
- O. E-VERIFY:** Pursuant to § 448.095(2) Florida Statutes (2020), Contractor shall register with and use the E-Verify system operated by the United States Department of Homeland Security to verify the work authorization status of all new employees hired by Contractor prior to entering into a Contract involving labor or providing goods or services to the Escambia County School District (ECSD) or Escambia County School Board (ECSB). ECSD or ECSB may request or require evidence of registration with E-Verify. Contractor shall also include in any related subcontracts a requirement that subcontractors performing labor or providing goods or services for ECSD or ECSB on its behalf, register with and use the E-Verify system to verify the work authorization status of all new employees hired by the subcontractor while performing labor or providing goods or services for ECSD or ECSB. Additionally, Contractor shall include in any related subcontracts a requirement that subcontractors performing labor or providing goods or services for ECSD or ECSB on its behalf provide Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with any unauthorized alien as defined in 8 U.S.C. § 1324a(h)(3). Contractor shall maintain a copy of such affidavit for the duration of its contract with ECSD or ECSB and will furnish a copy of such affidavit as may be required or requested. Further, it is understood and accepted that a Contract may be terminated for failure to comply with the requirements of § 448.095 Florida Statutes and the Contractor shall be ineligible for award for a period of at least one (1) year. Contractor will certify compliance by completing the attached State of Florida Vendor Certification Regarding E-Verify form (Attachment F) included herein.

P. ADDITIONAL FEDERAL REQUIREMENTS: While not provided as separate certifications in this RFP, by signing this Proposal, the signatory attests to the applicable certification provisions listed below:

1. Title VI of Civil Rights Act of 1964, as amended, USDA regulations implementing Title IX of the Education Amendments, Section 504 of the Rehabilitation Act of 1973, Age Discrimination Act of 1975, 7 C.F.R. Parts 15, 15a and 15b, and FNS Instruction 113-1, Civil Rights Compliance and Enforcement-Nutrition Programs and Activities, and any additions or amendments.
2. The Clean Air Act (42 U.S.C. § 7401 et seq.), the Clean Water Act (33 U.S.C. § 1311–1330, § 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 C.F.R. § 1.1 et seq.).
3. Certification Regarding Lobbying pursuant to 31 U.S.C. 1352 (Appendix A: 7 C.F.R. Part 3018).
4. Disclosure of Lobbying Activities pursuant to 31 U.S.C. 1352 (Appendix A: 7 C.F.R. Part 3018).
5. Energy Policy and Conservation Act (Pub. L. 94–163, 89 Stat. 871).
6. Contract Work Hours and Safety Standards Act (29 C.F.R. Part 5). 9
7. Executive Order 11246, entitled Equal Employment Opportunity, as amended by Executive Order 11375 and Department of Labor Regulation (41 C.F.R. Chapter 60).
8. Copeland “Anti-Kickback” Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 C.F.R. Part 3).
9. Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 C.F.R. Part 5).
10. The vendor is subject to the provisions of Section 2209d of Title 7 of the United States Code due to the use of federal funds for the food service program. All announcements and other materials publicizing this program must include statements as to the amount and proportion of federal funding involved.
11. Rights to Inventions Made Under a Contract or Agreement (2 CFR 200.326 Appendix II (F)).
12. Procurement of Recovered Materials and Solid Waste Act (2 CFR 200.322).
13. Breach of Contract [2 CFR Appendix II to Part 200 (b)].
14. Byrd Anti-Lobbying [2 CFR 200.326 Appendix II (J)].

Minority/Disabled Service Veteran Suppliers are encouraged to register with the Florida Department of Management Services Office of Supplier Diversity at: <https://osd.dms.myflorida.com>

Q. MISCELLANEOUS:

1. The District will not be liable for any cost incurred in the preparation of Proposals.
2. The submission of a Proposal shall be prima facie evidence that the Responder has full knowledge of the scope, nature, quantity and quality of work to be performed; the detailed requirements of the specifications; and the conditions under which the work is to be performed.
3. The Responder shall furnish the District such additional information as the District may reasonably require.
4. The District will not be liable for any costs not included in the Proposal and subsequent contracted-for-costs.

5. The District reserves the right to reject any and all Proposals, and the right, in its sole discretion, to accept the Proposal it considers most favorable to the District's interests. The District further reserves the right to reject all Proposals and to seek new Proposals when such a procedure is reasonable and in the best interest of the District.
6. The District reserves the right to waive any of the conditions or criteria set forth in this RFP.
7. The Agreement cannot be assigned to a subcontractor without the prior written approval of the District.
8. The District reserves the right to purchase unlimited quantities of services under this Agreement for any facility operated by the District.
9. The District reserves the right, in its sole discretion, to increase and/or decrease the frequency of any services provided under this Agreement.
10. The District reserves the right, in its sole discretion, to add and/or remove equipment to or from this Agreement.

IV. DISPUTE

Any person or company whose substantial interests are directly and adversely affected by the award or intended award of a bid, RFP, or contract may file a protest in accordance with the rules set forth herein.

- A. The District reserves the right to reject all Proposals submitted and re-solicit at any time during the solicitation process.
- B. Solicitation award recommendations and tabulations will be posted for seventy-two (72) hours in the Purchasing and Business Services Department and on its website. Failure to file a "Notice of Protest" during this seventy-two (72) hour period, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under School Board Rule and Florida Statutes. It is the Contractor's responsibility to insure timely filing and receipt of protest by the Purchasing and Business Services Department.
- C. Within ten (10) days, not including Saturdays, Sundays and state holidays, of filing the Notice of Protest, the Protester shall file a formal written protest with the Purchasing and Business Services Office. The formal written protest shall state with particularity the facts and law on which the protest is based. At the time of filing the formal written protest, the Protester shall post a Protest Bond to defray the costs incurred by the Board in considering the protest. The Bond, payable to the Board, shall be in the amount equal to five percent (5%) of the estimated amount of the contract or ten thousand dollars (\$10,000.00), whichever is greater, not to exceed twenty-five thousand dollars (\$25,000.00).
 1. The Protest Bond shall be in the form of a surety bond, cash, or certified funds, and shall be conditioned upon payment of all costs and charges which may be incurred by the Board in considering the protest if the Board prevails. In the event the Protest is withdrawn prior to a formal hearing or the Protester prevails as determined by the findings of an independent Hearing Officer, the Bond will be refunded to the Protester.
 2. Failure to file the Notice of Protest, formal written protest, and/or Protest Bond within the time permitted shall constitute a waiver of proceedings under Board Rules and Florida Statutes. The Protester has the responsibility to insure timely filing of the Notice of Protest, formal written protest and/or Protest Bond and receipt of same by the Purchasing and Business Services Office.
- D. Communications shall continue between the Protester and the Purchasing and Business Services Department and/or their legal counsel for seven (7) days, not including Saturdays, Sundays and state holidays from filing the formal written protest in an effort to mutually resolve the protest. The Parties may mutually extend the seven (7) workday time period. If the subject of a protest is not resolved by mutual agreement within seven (7) days, excluding Saturdays, Sundays, and state holidays, after receipt of the formal written protest, the Board shall refer the protest to the Florida Division of Administrative Hearings (DOAH).

- E. The Florida Division of Administrative Hearings (DOAH) will assign an Administrative Law Judge (ALJ) to serve as an impartial Hearing Officer. A date, time and location will be set for an administrative hearing within thirty (30) days.
1. The Parties shall arrange to have all witnesses and evidence present at the time and place of hearing. Subpoenas will be issued by the ALJ upon request of the Parties. All Parties have the right to present oral argument and to cross-examine opposing witnesses. All Parties have the right to be represented by counsel or other qualified representative, in accordance with Florida Administrative Code Rule 28-106.106. Failure to appear at this hearing may be grounds for closure of the file without further proceedings.
 2. The ALJ shall render his findings of fact and ruling of law. Each Party shall be allowed ten (10) days in which to submit written exceptions to the recommended order. A final order shall be submitted within thirty (30) days of the entry of the recommended order to the School Board to be adopted for resolution and disposition of the protest.
 3. If the Protester prevails, the Board shall return the Protest Bond to the Protester.

If the Board prevails, the Protester will submit payment for all costs and charges, such as ALJ and court reporter fees. Each Party will be responsible for their own attorney fees regardless of the findings of the ALJ. Upon settlement of all cost and charges, the Protest Bond will be returned to the Protester.

V. EVALUATION CRITERIA

Points will be awarded based on the responses in each proposal received. The number of points in parenthesis is the total potential points for award. Points awarded by each member of the evaluation committee will be averaged and rounded to the next whole point to determine the total quantity of points awarded in each of the below categories.

A. QUESTIONNAIRE AND RESPONSE (60 POINTS):

1. Responses to each paragraph in Section VIII.A. shall be awarded some number of points up to the maximum number stated. A possible total of twenty-five (25) points will be available for this section.
2. The evaluation committee will determine scores for Section VIII.B. A possible total of thirty-five (35) points will be available for this section.

B. PRICE PROPOSAL (40 POINTS): The maximum total points will be awarded to the Responder with the most responsive and competitive Price Proposal. All other Responders will be awarded less than the total maximum points based on their comparison to the most responsive and competitive Price Proposal.

Lack of a response for any item above may result in zero (0) points for that item. All attachments shall be clearly marked and reference the appropriate item. Additional information may be submitted by the Responder; however, the evaluation committee shall be solely responsible for determining the weight such information will be assigned, if any. Responses received which do not contain ALL items listed in this section may be considered non-responsive at the sole discretion of the District. An Agreement will be awarded to the Responder(s) deemed to be, overall, the most responsive and capable to meet and perform according to the RFP's specifications and scope of work for services.

C. PROPOSAL EVALUATION PROCESS AND DISTRICT'S RIGHTS AND RESERVATIONS:

1. Proposals are received and publicly opened. Only the names of the Responders are read at the proposal opening.
2. An Evaluation Committee will convene, review, and evaluate all Proposals submitted based on the factors set forth in the RFP. The District reserves the right to waive any irregularities and technicalities. The District reserves the right to accept or reject any or all Proposals. Purchasing personnel will participate in an administrative and advisory capacity only.
3. The Evaluation Committee reserves the right to interview any or all Responders and to require a formal presentation with the key people who will administer and be assigned to

work on the contract before recommendation of award. This interview is to be based upon the written Proposal received. The District will not be liable for any costs incurred by the Responder in connection with such interviews (i.e., travel, accommodations, etc.).

4. All Proposals will be evaluated in accordance with the evaluation criteria specified in this document. Information derived by investigation and overall due diligence of District staff will be considered. Based on the Proposals received, the District may elect to proceed based on any of the following options, but will not necessarily be limited only to these options: (1) Award to the best initial Proposal without any further discussion or negotiation; (2) Negotiate with the highest ranked Responder; or, (3) Allow the top ranked Responders to make oral presentations.
5. Responders are advised to provide their best offer with the initial Proposal because the District reserves the right to award a Contract based on initial Proposals without further discussion or negotiation. The District reserves the right, before awarding the Contract, to require Responder(s) to submit additional evidence of qualifications or any other information the District may deem necessary.
6. The District, in its sole discretion, will select the Proposal(s) most advantageous to the District. The District reserves the right to negotiate out unacceptable clauses or restrictions incorporated within an otherwise acceptable Proposal. The District reserves the right to further negotiate any Proposal, including price. In the event that a mutually acceptable contract between the District and the selected Responder(s) cannot be successfully negotiated and executed, the District reserves the right to discontinue negotiations with such Responder(s) and to negotiate and execute a Contract with the next-ranked Responder(s).
7. The District reserves all rights, in its sole discretion, not to issue an award to any Responder, to cancel this RFP at any time, to reissue this RFP for any reason, or a combination of any or all of the above. The District will not be liable to any Responder for any costs incurred in connection with this RFP as a result of any of the above stated actions taken by the District.
8. The Purchasing Department will prepare and submit a recommendation agenda item to the Superintendent of Schools, Escambia County, Florida. The Superintendent will then recommend the award(s) to the School Board. The School Board will then approve or reject the recommendation.

VI. PREPARATION AND SUBMISSION REQUIREMENTS

Proposals not conforming to the instructions provided herein may be subject to disqualification at the sole discretion of the District.

A. SUBMISSION REQUIREMENTS: All documents listed below must be returned in their entirety. **Failure to return all pages of the entire document or any of the listed items will subject the Proposal to disqualification as indicated below.** Once accepted, all originals and any copies of Proposals become the sole property of the District and may be retained or disposed of by the District in any manner which the District deems fit. Modifications or alterations to this RFP document are prohibited and may result in the rejection of your Proposal.

1. **The entire RFP document (Pages 1 - 63) must be returned.** The signature on the first page must be an original signature. No fax or email documents will be accepted. In the event that the Responder makes an error on entering any information and enters a correction, the Responder shall initial the change(s). Any Proposal submitted with strike over or white out corrections that are not initialed may be rejected as a non-responsive Proposal.
2. **Return your original Proposal and five (5) copies.** The copies must be a photocopy of your original Proposal and there shall be no differences in the RFP document or attached enclosures. Any difference or failure to include RFP attachments in both sets may cause your Proposal to be rejected. **Please mark all copies as "COPY". RFP documents**

may be printed double-sided with left margin, book-style binding. Your original Proposal and your five (5) copies, excluding your Price Proposal, must be submitted in a sealed envelope which must be clearly labeled “RFP #210706 – ECSD – COMMUNICATIONS CABLING” on the outside of the package.

3. **Copy of Responder’s current business license and any applicable contractor licenses as referenced in Section III.A.**
4. **Price Proposal:** A Price Proposal must be signed, dated, and submitted. Original Price Proposals and a photocopy must be provided in a separate, sealed envelope which must be clearly labeled “**PRICE PROPOSAL: RFP #210706 – ECSD – COMMUNICATIONS CABLING.**” Failure to submit a signed and dated Price Proposal will result in your Proposal not being accepted.
5. **Response to Questionnaire Attachments:** The following items must be provided and attached to the Responder’s Proposal. Failure to provide any of the requested items may result in your Proposal not being accepted.
 - i. **Company Background and Experience:** This information must be provided per Section VIII.A. (See Pages 15-16).
 - ii. **References:** This information must be provided per Section VIII.A.3 (See Page 16)
6. **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions:** This form must be completed in its entirety, signed, and returned with the Responder’s Proposal. Failure to return this form will result in your Proposal not being accepted. Refer to Attachment A.
7. **Escambia School District Risk Management Addendum:** This form must be initialed and returned with the Responder’s Proposal. Refer to Attachment B. Contractor shall furnish proof of the required insurance by certificate of insurance thirty (30) days prior to the start of term.
8. **Escambia School District Public Records Addendum:** This form must be initialed and returned with the Responder’s Proposal. Refer to Attachment C.
9. **Drug Free Workplace:** This form while not required, will be a determining factor in award between two (2) Proposals equal in price, quality, and service. If submitting, this form must be signed and returned with the Responder’s Proposal. Refer to Attachment D.
10. **Vendor Certification Regarding Scrutinized Companies Lists:** This form must be completed in its entirety, signed, and returned with the Responder’s Proposal. Refer to Attachment E.
11. **Vendor Certification Regarding E-Verify:** This form must be completed in its entirety, signed, and returned with the Responder’s Proposal. Refer to Attachment F.

A Submission Checklist has been provided in Attachment H to assist Responders in ensuring that their respective Proposal includes all of the required documents and attachments. **All Proposals and pricing must be received no later than Wednesday, April 21, 2021 at 2:00 p.m., CST.**

VII. SPECIFICATIONS AND SCOPE OF WORK OR SERVICES

The District invites proposals from qualified firms experienced in providing comprehensive Communications Cabling installation and repair on an as needed basis to include but not limited to mounting televisions up to 80”, repairing network ports, running new network drops, repairing fiber cable which may include splicing, and running or repairing other audio visual lines. The Contractor will be expected to work on both new and old construction, drywall or block walls, in raised flooring or high ceilings, and in indoor and outdoor areas.

- A. All services and material provided will be in accordance with the District’s “Telecommunications Design Standard for All Building Construction & Technology Retrofit Projects” (Attachment I). This may be subject to change during the term of Agreement. All equipment and material must be new. Any used, refurbished, damaged, or deteriorated equipment and material will not be accepted. Any gray market goods will be not accepted. Gray market goods are defined as trading of goods through distribution channels which are unofficial, unauthorized, or unintended by an original manufacturer.
- B. The Contractor will cover all costs on an as needed basis for services in accordance with Attachment I. Invoicing will be billed at Time (Labor) and Materials (Parts) cost separately by site (designated by cost center). No additional or separate charges for transportation will be allowed for services. The District Contract Administrator (DCA) may order parts separately under this award to effect services.

Note: Price proposals using a “cost plus” model is not permissible for this solicitation and if offered, will result in the rejection of your proposal.

- C. The awarded Contactor will be required to reimburse the District for the cost of at least one (1) Zendesk license from the District IT department in order to communicate with Technology Coordinators at the District and School levels as well as track and note the work performed. The estimated cost for the Zendesk license is \$528.00 per license, per year which will be invoiced to the Awarded Contractor within thirty (30) days of the beginning of each new contract term.
- D. All services by the Contractor must be properly addressed, tested for continuity, and the appropriate Zendesk ticket will be noted as described below.
 - 1. Zendesk tickets will record the following by District personnel:
 - i. Date of the request
 - ii. Detail of work requested
 - iii. School/Center
 - iv. Room number
 - 2. Zendesk tickets will record the following by the Contractor:
 - i. Date of services rendered
 - ii. Detail of the work performed
 - iii. Listing of all parts replaced with serial numbers and pricing
- E. Upon the completion of work, the Contractor must submit a detailed, itemized invoice within thirty (30) calendar days after District inspection and acceptance as described in Section III.J. on pages 7-8 to the originating requestor.

VIII. QUESTIONNAIRE AND RESPONSE (MAXIMUM – 60 POINTS)

Responder shall provide the information requested in this section as an attachment – Response to Questionnaire Attachments and submit it in the manner prescribed in Section V and VI (Pages 12-14).

A. COMPANY BACKGROUND, EXPERIENCE, AND REFERENCES (MAXIMUM – 25 POINTS):

- 1. **Company Biography (Maximum – 4 Points):** Provide a brief company biography, limited to two (2) pages, to include:
 General information on the company to include, number of years in business as a Telecommunications provider, the location of Corporate headquarters, the location of the office from which the work for the District would be performed, and the company’s primary business focus.
- 2. **Company Structure and Experience (Maximum – 15 Points):** The Responder must be capable of efficiently and successfully servicing all of the locations listed in Attachment G. To assist in the evaluation of the size and expertise of the Responder’s staff, please provide the following information:

- a. Provide the Responder's point of contact information, including the name, email, and phone number if the District will have a single point of contact. If the Responder plans to have multiple designated contacts, describe each person's area of responsibility and provide their contact information. If the District will not have any designated contacts-single or multiple, describe the support services structure the District should expect.
- b. State the number and names of full-time and part-time employees employed by the Contractor who will provide service to the District under this Agreement as well as their years of experience in this field and provide proof of any relevant licenses and/or any certifications they possess.
- c. Provide both a detailed listing of the heavy equipment your company currently owns or will be utilizing which is necessary for providing telecommunications services for this solicitation; e.g. bucket trucks, scissor lifts, light alls, etc....
- d. Provide a copy of your business license and contractor licenses as referenced in Section III.A. These licenses must remain current during the contracted terms and are subject to be requested by the District for verification purposes.
- e. Will the Responder require the use of a subcontractor to provide the requested services listed in this RFP? If you plan to use sub-contractors to perform services, then please provide a one (1) page explanation of who the sub-contractor(s) is/are and how and when they will be utilized.

Note: Anyone on the convicted vendor list following a conviction for a public entity crime may not perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida State Statute, Section 287.017, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

3. **References (Maximum – 6 Points):** Provide a list of no more than three (3) references for which you have performed services similar to those proposed in this RFP within the last five (5) years. The reference list shall include: the client's name, address, contact name, phone number, email address (if available), and a brief description of the work provided. One reference citing a District project may also be considered in this section.

By providing the reference information, you are authorizing the District to contact the reference to ask questions and obtain information relative to your performance.

In addition, list a site within fifty (50) miles of Pensacola, FL where we may view a project your company has completed. Please include point of contact and phone number to arrange a site visit. The District has the sole discretion to choose if a site visit is required.

References will be awarded points based on responses up to a maximum of six (6) points. Each reference will be awarded up to two (2) points. Two (2) points will be awarded for a positive response, one (1) point for a neutral response, and zero (0) points for a negative response.

B. PERFORMANCE PARAMETER COMMITMENT (MAXIMUM – 35 POINTS): The District is interested in finding out timelines, catastrophe responses, service warranty periods, and invoicing of services rendered. Past performance will be considered when evaluating this section.

1. **Timeline:** Describe the response times as stated below.
 - a. State the average and maximum time it will take to be onsite to evaluate and schedule a request.
 - b. State the average and maximum time it will take to be onsite to evaluate an emergency request.

Note: Any hardship, i.e. disruption of utilities, incurred by the District related to this RFP to include, as applicable, permitting, ordering, shipping, and install time frames will be at the vendors expense and should last no longer than two (2) days.

2. **Catastrophe Response:** The District has experienced interruptions in other lengthy projects in the past due to catastrophes such as hurricanes. Provide a plan using Hurricane Sally as an example to indicate your response to catastrophic issues that could be experienced by the District or by your organization. Include a ranking of the District's priority in relation to other entities within government, private and public sectors in the event that your organization's services are requested and how your organization will handle an over load of emergency requests. Also state the number of current contracts your organization manages for those entities.

3. **Service Warranty:** Include in your proposal a description of your service warranty covering parts and labor which will be covered after service has been completed. The warranty will cover the cost of any and all parts, material, supplies, and equipment as well as related labor required to return the system to its proper working condition. The service warranty will also cover any work deemed insufficient or inadequate to the District.

Each Proposal should clearly acknowledge the Responder's service warranty period, and exclusions.

4. **Invoicing:** Include a sample invoice with the proposal. Such documentation will provide the Contractor's name and billing address, Zendesk ticket number, invoice date, total cost of repairs, and site (cost center).

5. **Permits and Authorizations:** List anticipated applicable permits that will likely be obtained to perform the requested work. If authorizations for utility companies will be anticipated, please provide this information as well.

6. **Zendesk License:** Proposer will affirm commitment to reimbursing the District for the cost of at least one (1) Zendesk license from the District IT department. The estimated cost for the Zendesk license is \$528.00 per license, per year which will be invoiced to the Awarded Contractor within thirty (30) days of the beginning of each new term. Should the District change providers, the Contractor will be notified.

7. **Badging:** Proposal will affirm commitment to obtaining badges for all employees as required in accordance with Section III.C., which will be maintained for the duration of award Term and subsequent renewals, as applicable. Further, Proposer will affirm that only employees holding valid, current badges will be allowed on District property to perform on-site work. Proof of badging must be provided no later than thirty (30) days following award to the Purchasing Agent responsible and listed for this solicitation.

8. **Documentation:** Provide some documentation of your past communications cabling projects to include pictures, drawings, or sketches of the work you have completed in the past.

Note: Any documentation created during the course of providing services under this contract may be requested by the District and would be considered the property of the District.

IX. PRICE PROPOSAL (MAXIMUM – 40 POINTS)

In a separate sealed envelope, provide a completed Price Proposal for the services described in Section V – Evaluation Criteria. No pricing will be given consideration until all Proposals are evaluated based on qualification items in the above Section VIII – Questionnaire and Response.

A. Labor Rates

1. State labor rates during normal business hours.
2. State labor rates during non-normal business hours or declared states of emergency.

B. Billable Hours

1. Billable hours will begin upon arrival at the work site and stop once the work has completed at the site. Any breaks in the working session will not be billed to the District.
2. State what increments will your billable hours be broken down into, and how will partial increments be billed?

C. Indicate if components acquired from other sources could be installed by your organization at labor only rates.

D. As stated in Section VII.B., invoicing will be billed at Time (Labor) and Materials (Parts) cost. Indicate how we will be able to verify the cost of materials and how their cost to the District will be computed.

Note: Price proposals using a “cost plus” model is not permissible for this solicitation and if offered, will result in the rejection of your proposal.

E. Indicate how rental reimbursement will be handled for equipment not owned but used by your company.

ATTACHMENT A

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTIONS

This certification is required by the regulations implementing Executive Order 12549, Executive Order 12689, and 31 U.S.C. 6101; Debarment and Suspension, 2 CFR Part 417, Subpart C, Responsibilities of Participants Regarding Transactions Doing Business with Other Persons.

(Please read instructions below before completing Certification)

- (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

SPONSOR AGREEMENT NUMBER OR PROJECT NAME

NAME(S) AND TITLE(S) OF AUTHORIZED REPRESENTATIVE(S)

SIGNATURE(S)

DATE

1. By signing and submitting this form, the prospective lower tier participant is providing the certification above 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," "participant," "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 Transactions," 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 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 Nonprocurement 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.

ATTACHMENT B

ESCAMBIA SCHOOL DISTRICT RISK MANAGEMENT ADDENDUM (REGULAR)

Anything in the foregoing agreement to the contrary notwithstanding, each Signer thereof (other than the School Board, the Superintendent of Schools, the School District, their officers, agents and employees) hereby agrees to:

A. HOLD H ARMLESS/INDEMNIFICATION AGREEMENT:

1. Save and hold harmless, pay on behalf of, protect, defend, and indemnify the School Board, (including the Superintendent of Schools, the School District, their officers, agents, and employees) from and against any demand, claim, suit, loss, expense, or damage which may be asserted against any of them in their official or individual capacities by reason of any alleged damage to property, or injury to, or death of any person arising out of , or in any way related to, any action or inaction of the Signer (including its sub-contractors, officers, agents, and employees) in the performance or intended performance of this agreement, or the maintenance of any facility, or the operation of any program, which is the subject of, or is related to the performance of this agreement. The obligations of the Signer pursuant to this paragraph shall not be limited in any way by any limitation in the amount or type of proceeds, damages, compensation, or benefits payable under any policy of insurance or self-insurance maintained by or for the use and benefit of the Signer.

B. REQUIRED INSURANCE:

1. Maintain, keep in full force and effect during the term of this agreement and any extensions and renewals thereof, and furnish to the undersigned good and sufficient evidence of general liability and auto liability insurance in an amount not less than \$1,000,000 with an insurance company rated not lower than "A" by A. M. Best and Company. The School Board shall be named as an additional insured. The policy and evidence of such insurance shall be endorsed so as to provide coverage for all liability hereby contractually assumed by the Signer and a copy thereof shall be delivered to the undersigned before beginning performance of this agreement. Such insurance shall not be subject to cancellation, non-renewal, reduction in policy limits or other adverse change in coverage, except with 45 days prior written notice to the School Board, which notice shall be given by U.S. Certified Mail with return receipt requested to the undersigned. No other form of notification shall relieve the insurance company, or its agents, or representatives of responsibility.
2. If this agreement involves performance by officers, employees, agents or sub-contractors of the Signer, the Signer shall also maintain, keep in full force and effect during the term of this agreement and any extensions and renewals thereof, and furnish to the undersigned good and sufficient evidence of workers' compensation insurance in the amount required by Florida Statutes Chapter, 440, and Employer Legal Liability Insurance in the amount of \$100,000.

Approved:
Signer:

Initials of each
Signer:



**Kevin T. Windham, CFE, CSRM,
 Director-Risk Management
 Escambia School District
 75 North Pace Boulevard
 Pensacola, FL 32505**

ATTACHMENT C

ESCAMBIA SCHOOL DISTRICT PUBLIC RECORDS ADDENDUM

CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE WITH CHAPTER 119, FLORIDA STATUTES. Pursuant to Section 119.0701, F.S., CONTRACTOR agrees to comply with all public records laws, specifically to:

- A. Keep and maintain public records required by the School Board to perform the service.
 - 1. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies and GS7 for Public Schools. (See <http://dos.myflorida.com/library-archives/records-management/general-records-schedules>)
 - 2. Records include all documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the School Board. Contractor's records under this Agreement include but are not limited to supplier/subcontractor invoices and contracts, project documents, meeting notes, emails and all other documentation generated during this Agreement.
- B. Upon request from the School Board's custodian of public records, provide the School Board with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided for by law. If a Contractor does not comply with the School Board's request for records, School Board shall enforce the provisions in accordance with the contract.
- C. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to School Board.
- D. Upon completion of the contract, transfer, at no cost, to the School Board all public records in possession of the Contractor or keep and maintain public records required by the School Board to perform the service. If the Contractor transfers all public records to the School Board upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon the completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records kept electronically must be provided to the School Board, upon request from the School Board's custodian of public records, in a format that is compatible with the information technology systems of the SCHOOL BOARD.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE SCHOOL BOARD OF ESCAMBIA COUNTY, CUSTODIAN OF PUBLIC RECORDS AT (850) 469-6131, SPAYNE2@ECSDFL.US, OR 75 NORTH PACE BLVD., PENSACOLA, FL 32505.

A Contractor who fails to provide the public records to the School Board within a reasonable time may also be subject to penalties under Section 119.10, Florida Statutes.

Approved:

Initials of each

Signer:

Signer:

J.L. Hammons

Joseph L. Hammons

Acting General Counsel

Escambia County School Board

75 North Pace Boulevard

Pensacola, FL 32505

12/14/20

ATTACHMENT D
DRUG FREE WORKPLACE

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a proposal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie proposals will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3) Give each employee engaged in providing the commodities or contractual services that are under contract a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under contract, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Vendor's Signature _____

ATTACHMENT E
State of Florida
Vendor Certification Regarding Scrutinized Companies Lists

Respondent Vendor Name: _____		
Vendor FEIN: _____		
Vendor's Authorized Representative Name and Title: _____		
Address: _____		
City: _____	State: _____	ZIP: _____
Phone Number: _____		
Email Address: _____		

Section 287.135, Florida Statutes prohibits or limits agencies from contracting with companies, for goods or services, that are participating in a boycott of Israel, are on the Scrutinized Companies that Boycott Israel list, the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Both lists are created pursuant to Section 215.473, Florida Statutes.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above in the sector entitled "Respondent Vendor Name" is not participating in a boycott of Israel, is not listed on the Scrutinized Companies that Boycott Israel List, the Scrutinized Companies with Activities in Sudan List, or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List and has not been engaged in business operations in Cuba or Syria. I understand that pursuant to Section 287.135, Florida Statutes, the submission of false certification may subject company to civil penalties, attorney's fees, and/or costs.

Certified By: _____	VENDOR'S AUTHORIZED SIGNATURE
Print Name and Title: _____	
Date: _____	

ATTACHMENT F
State of Florida
Vendor Certification Regarding E-Verify

Respondent Vendor Name: _____		
Vendor FEIN: _____		
Vendor's Authorized Representative Name and Title: _____		
Address: _____		
City: _____	State: _____	ZIP: _____
Phone Number: _____		
Email Address: _____		

Contractor hereby certifies compliance with the following:

Pursuant to § 448.095(2) Florida Statutes (2020), Contractor shall register with and use the E-Verify system operated by the United States Department of Homeland Security to verify the work authorization status of all new employees hired by Contractor prior to entering into a Contract involving labor or providing goods or services to the Escambia County School District (ECSD) or Escambia County School Board (ECSB). ECSD or ECSB may request or require evidence of registration with E-Verify. Contractor shall also include in any related subcontracts a requirement that subcontractors performing labor or providing goods or services for ECSD or ECSB on its behalf, register with and use the E-Verify system to verify the work authorization status of all new employees hired by the subcontractor while performing labor or providing goods or services for ECSD or ECSB. Additionally, Contractor shall include in any related subcontracts a requirement that subcontractors performing labor or providing goods or services for ECSD or ECSB on its behalf provide Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with any unauthorized alien as defined in 8 U.S.C. § 1324a(h)(3). Contractor shall maintain a copy of such affidavit for the duration of its contract with ECSD or ECSB and will furnish a copy of such affidavit as may be required or requested. Further, it is understood and accepted that a Contract may be terminated for failure to comply with the requirements of § 448.095 Florida Statutes and the Contractor shall be ineligible for award for a period of at least one (1) year.

Certified By: _____	VENDOR'S AUTHORIZED SIGNATURE
Print Name and Title: _____	
Date: _____	

ATTACHMENT G

Service Locations for the Escambia County School District

Elementary Schools

A.K. Suter Elementary
501 Pickens Avenue
Pensacola, FL 32503

Bellview Elementary
4425 Bellview Avenue
Pensacola, FL 32526

Beulah Elementary
6201 Helms Road
Pensacola, FL 32526

Blue Angels Elementary
1551 Dog Track Road
Pensacola, FL 32506

Bratt Elementary
5721 North Highway 99
Century, FL 32535

Brentwood Elementary
4820 North Palafox Street
Pensacola, FL 32505

C.A. Weis Elementary
2701 North Q Street
Pensacola, FL 32505

Cordova Park Elementary
2250 Semur Road
Pensacola, FL 32503

Ensley Elementary
501 East Johnson Avenue
Pensacola, FL 32514

Ferry Pass Elementary
8310 North Davis Highway
Pensacola, FL 32514

Global Learning Academy
100 North P Street
Pensacola, FL 32505

Hellen Caro Elementary
12551 Meadson Road
Pensacola, FL 32506

Holm Elementary
6101 Lanier Drive
Pensacola, FL 32504

Jim Allen Elementary
1051 Highway 95A North
Cantonment, FL 32533

Kingsfield Elementary
900 West Kingsfield Road
Cantonment, FL 32533

Lincoln Park Elementary
7600 Kershaw Street
Pensacola, FL 32534

Lipscomb Elementary
10200 Ashton Brosnaham Road
Pensacola, FL 32534

Longleaf Elementary
2600 Longleaf Drive
Pensacola, FL 32526

McArthur Elementary
330 East Ten Mile Road
Pensacola, FL 32534

Molino Park Elementary
899 Highway 97
Molino, FL 32577

Montclair Elementary
820 Massachusetts Avenue
Pensacola, FL 32505

Myrtle Grove Elementary
6115 Lillian Highway
Pensacola, FL 32526

Navy Point Elementary
1321 Patton Drive
Pensacola, FL 32507

N.B. Cook Elementary
1310 North 12th Avenue
Pensacola, FL 32503

Oakcrest Elementary
1820 North Hollywood Boulevard
Pensacola, FL 32505

O.J. Semmes Elementary
1250 East Texar Drive
Pensacola, FL 32503

Pine Meadow Elementary
10001 Omar Avenue
Pensacola, FL 32534

Pleasant Grove Elementary
3000 Owen Bell Lane
Pensacola, FL 32507

Scenic Heights Elementary
3801 Cherry Laurel Drive
Pensacola, FL 32504

Sherwood Elementary
501 Cherokee Trail
Pensacola, FL 32506

Warrington Elementary
220 North Navy Boulevard
Pensacola, FL 32507

West Pensacola Elementary
801 North 49th Avenue
Pensacola FL, 32506

ATTACHMENT G (Continued)

Middle Schools

Bellview Middle
6201 Mobile Highway
Pensacola, FL 32526

Ernest Ward Middle
7650 Highway 97
Walnut Hill, FL 32568

Ransom Middle
1000 West Kingsfield Road
Cantonment, FL 32533

Beulah Middle
6001 West Nine Mile Road
Pensacola, FL 32526

Ferry Pass Middle
8355 Yancey Avenue
Pensacola, FL 32514

Warrington Middle
450 South Old Corry Field Road
Pensacola, FL 32507

Brown-Barge Middle
201 East Hancock Lane
Pensacola, FL 32503

Jim C. Bailey Middle
4110 Bauer Road
Pensacola, FL 32506

Workman Middle
6299 Lanier Drive
Pensacola, FL 32504

High Schools

Escambia High
1310 North 65th Avenue
Pensacola, FL 32506

Pine Forest High
2500 Longleaf Drive
Pensacola, FL 32526

Washington High
6000 College Parkway
Pensacola, FL 32504

Northview High
4100 West Highway 4
Bratt, FL 32535

Tate High
1771 Tate Road
Pensacola, FL 32533

West Florida Tech High
150 East Burgess Road
Pensacola, FL 32503

Pensacola High
500 West Maxwell Street
Pensacola, FL 32501

Alternative Schools and Locations

McDaniel Building
75 North Pace Boulevard
Pensacola, FL 32505

Escambia Boy's Base
640 Roberts Avenue #3780
Pensacola, FL 32511

Lakeview Center
1221 West Lakeview Avenue
Pensacola, FL 32501

J.E. Hall Center
30 East Texar Drive
Pensacola, FL 32503

Escambia Juvenile Justice Center
1800 St. Mary Avenue
Pensacola, FL 32501

PATS Center
201 East Hancock Lane
Pensacola, FL 32503

Spencer Bibbs
2005 North 6th Avenue
Pensacola, FL 32503

Escambia Westgate Center
10050 Ashton Brosnaham Drive
Pensacola, FL 32534

Success Academy
7045 Wymart Road
Pensacola, FL 32526

Escambia County Jail
2935 North L Street
Pensacola, FL 32501

George Stone Technical College
2400 Longleaf Drive
Pensacola, FL 32526

ATTACHMENT H

Submission Checklist

Use this checklist to ensure that you have included all required items in your Proposal. For specific submission instructions, refer to Section VI.

ENVELOPE 1

- _____ Complete Proposal (Refer to Section VI) – **One (1), Manually-Signed Original and Five (5) Copies**
 - _____ Request for Proposal (RFP) & Proposal Acknowledgement Form (Page 1)
 - _____ State of Florida Business License (See Section III.A.)
 - _____ A. Company Background and Experience (Refer to Section VIII.A.)
 - _____ 1. Company Biography (4 Points)
 - _____ 2. Company Structure (15 Points)
 - _____ a. Point of Contact Information
 - _____ b. Contractor Information (with License/Certificate copies)
 - _____ c. Heavy Equipment Listing
 - _____ d. Business License
 - _____ e. Use of sub-contractors and explanation (if applicable)
 - _____ 3. References (6 Points)
 - _____ B. Performance Parameter Commitment (Refer to Section VIII.B.)
 - _____ 1. Timeline
 - _____ 2. Catastrophe Response
 - _____ 3. Service Warranty
 - _____ 4. Sample Invoices
 - _____ 5. Permits/Authorizations
 - _____ Attachment A - Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions (Page 19)
 - _____ Attachment B - Escambia School District Risk Management Addendum (Page 20)
 - _____ Proof of Required Insurance (Current copy of Certificate of Insurance)
 - _____ Attachment C - Escambia School District Public Records Addendum (Page 21)
 - _____ Attachment D - Drug Free Workplace (Page 22)
 - _____ Attachment E - Vendor Certification Regarding Scrutinized Companies Lists (Page 23)
 - _____ Attachment F - Vendor Certification Regarding E-Verify (Page 24)

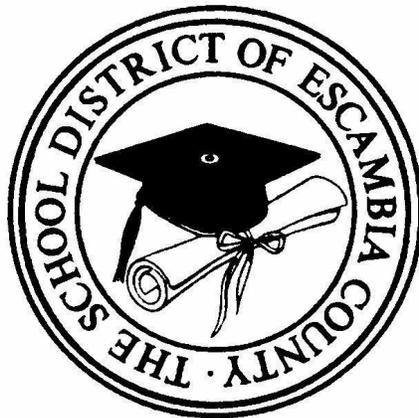
ENVELOPE 2

- _____ Price Proposal (Refer to Section IX. on Pages 17-18) – **One (1), Manually-Signed Original and One (1) Copy**

ATTACHMENT I

Telecommunications
Design Standard
For
All Building Construction &
Technology Retrofit Projects

For the



Twelfth Revision
September 2019

Prepared by:

ECSD Office of Information Technology
850.469.5344

Table of Contents

<u>Section</u>	<u>Section Title</u>	<u>Last Revision</u>
Section 17000	Communications Structured Cabling System	09/09/19
Section 17025	Local Area Network Equipment	09/09/19
Section 17050	Telephone Equipment	09/09/19
Section 17100	Instructional Television / Media Retrieval System	05/01/15
Section 17125	Camera Surveillance System and Related Infrastructure	09/09/19
Section 17150	Metropolitan Area Network Communications Systems	09/09/19
Section 17175	Internet of Things (IoT) Systems	09/09/19
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Appendix A	Currently Acceptable Network Equipment	09/09/19

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019**1. INTRODUCTION**

All telecommunications design work for any facility owned and operated by The School District of Escambia County (ECSD) shall be done in accordance with the most recent revision of these standards.

This section is intended to provide the Architect/Engineer (A/E) guidance in the design of Communications Structured Cabling Systems (SCS). The SCS consists of conduit, cabling, terminal equipment, racks, backboards, wire management and the like that make up the infrastructure serving various technologies including:

- Data Local Area Networks (LANs).
- Metropolitan Area Networks (MANs).
- Telephone service distribution.
- Current and future services offered by the local telephone exchange carrier including plain old telephone (POTS) and the various higher bandwidth offerings.

All related systems shall share common communications spaces and pathways with the SCS. See paragraph 5.0 of this section and related sections.

1.1 DESIGN REQUIREMENTS

The A/E team shall be responsible for a fully developed structured cabling systems (SCS) and related communications systems design. This section provides overall guidance in specific ECSD requirements but is not intended to provide an exhaustive design methodology nor construction specifications. Unless specifically exempted, the ECSD Office of Information Technology (IT) also requires the services of a BICSI certified (Registered Communications Distribution Designer (RCDD) for all communications systems design services. The A/E shall provide a competent designer who, in the judgment of ECSD IT, is sufficiently experienced to design the SCS in accordance with these guidelines and all applicable standards.

The A/E shall provide detailed drawings and specifications that fully document the SCS. The A/E shall not rely upon the installing contractor to develop the SCS design or to provide detailed drawings for the system.

The types of drawings and level of detail indicated below are mandatory requirements for each telecommunications design project for ECSD with individual considerations to be taken into account for each project. A custom design shall be provided for each school.

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019

Key design requirements are as follows:

- 1.1.1 Develop and indicate specific topology for the SCS including location and sizing of equipment rooms, backbone conduit sizes and configuration, and backbone cabling pair or strand counts and configuration.
- 1.1.2 Provide dimensionally accurate site floor plans indicating the location of all buildings and rooms, correct FISH room numbers, location of all equipment rooms and communications outlets, conduit routing, and other pertinent information.
- 1.1.3 Indicate all cable types and sizes, including end connections and terminal equipment. Provide detailed single line riser diagrams of all voice, data and video systems indicating manufacturer and model number for each system component.
- 1.1.4 Provide detailed layout elevations of all backboards and racks, including all wire management, drawn to scale.
- 1.1.5 Deliver copies of as-built documentation to the ECSD IT representative in dwg (or specified) file format.
- 1.1.6 Select and properly apply all data equipment including high speed backbone interconnections. Indicate location and mounting of equipment. Incorporate into riser diagrams and backboard and rack elevations.
- 1.1.7 Select and properly apply equipment for wireless network access for all instructional and administrative areas for each facility. Indicate physical location of all access points and their required power connections. Incorporate into riser diagrams and specify equipment requirements. Quantity of access points shall be dependent on the anticipated data connectivity demands for each area served.
- 1.1.8 Select and properly apply all telephone equipment. Indicate location and mounting. Incorporate into riser diagrams and backboard elevations.

2.0 STANDARDS AND ABBREVIATIONS

2.1 STANDARDS

All work shall be designed in accordance with the most recent revision of these standards. Where there is a perceived conflict between a listed standard and this guideline, the A/E shall design the work as directed by ECSD IT.

NFPA National Fire Protection Association

TIA/EIA568 Telecommunications Industry Association / Electronic Industries Association "Commercial Building Telecommunications Wiring Standard"

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019

EIA/TIA569	Electronic Industries Association / Telecommunications Industry Association "Commercial Building Standard for Telecommunications Pathways and Spaces"
TIA/EIA607	Telecommunications Industry Association / Electronic Industries Association Commercial Building "Grounding and Bonding Requirements for Telecommunications"
TIA/EIA606A	Telecommunications Industry Association / Electronic Industries Association Commercial Building "Administrative Standard "
TIA/EIA758	Telecommunications Industry Association / Electronic Industries Association Commercial Building "Customer-Owned Outside Plant Telecommunications Cabling Standard"
IEEE 802.3	Institute of Electrical and Electronics Engineers - LAN Standard for Ethernet
IEEE 802.11	Institute of Electrical and Electronics Engineers - LAN Standard for Wireless Ethernet
BICSI TDMM	BICSI, A Telecommunications Association, "Telecommunications Distribution Methods Manual", Thirteenth Edition, adopted 2014

All materials and equipment shall be UL listed for the intended application.

2.2 ABBREVIATIONS

A/E	- Architect/Engineer
SCS	- Communications Structured Cabling System
OSP	- Outside Plant
CER	- Communications Equipment Room
CC	- Communications Closet
CP	- Communications Panel
CO	- Communications Outlet
BICSI	- Building Industry Consulting Service International
RCDD	- Registered Communications Distribution Designer

3.0 EXISTING TECHNOLOGIES

The design for new networks shall include detailed provisions for integration with or replacement of all existing networks as directed by ECSD IT.

ECSD provides MAN (Metropolitan Area Network) interface equipment, but each design must conveniently accommodate such interfaces.

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019**4.0 SCS TOPOLOGY**

The general design of the SCS shall be in accordance with the latest revision of TIA/EIA-568 and shall be a hierarchical star. Horizontal cabling shall extend from the CER, CCs and CPs to COs and shall not exceed 90 meters (295 feet) in actual length. Backbone cabling shall extend from the CER to CCs and from the CER to CPs and shall not exceed 500 meters (1640 feet) in actual length to accommodate **Ten Gigabit** Ethernet services over 50/125 OM4 multimode fiber optic cabling (or as specified by ECSD IT). The SCS shall incorporate cabling and equipment for wireless Ethernet access for all instructional and administrative areas.

The SCS shall be designed to support telephone, surveillance, IoT and data services. Current data equipment requirements are specified under Section 17025 and Appendix A. Current telephone equipment requirements are specified under Section 17050. Current surveillance system requirements are specified under Section 17125. Current Internet of Things system requirements are specified under Section 17175.

5.0 COMMUNICATIONS SPACES AND PATHWAYS**5.1 COMMUNICATIONS EQUIPMENT ROOM (CER)**

A CER is defined as a telecommunications room that serves as the main communications equipment room in a school campus. This room will house some or all of the following systems:

- telecommunications (PBX/KSU/ESSX/VoIP) equipment
- broadband CATV equipment
- data network equipment
- lightning protection
- fiber optic cable terminations
- building automation (controls) system equipment
- building security and fire alarm equipment
- overhead paging systems

All school campuses shall have one Communications Equipment Room. The smallest dimension permitted for any CER shall not be less than 12' X 12'.

ECSD IT shall provide final square footage approval for any CER before construction documents are issued however this room shall not be less than 12' x 12', except in specifically approved situations. The Communications Equipment Room is the central equipment space to which all star wired segments of the network attach. Space shall be reserved for other technologies that share the same space. CERs shall not be located in rooms which house HVAC, plumbing, electrical power panels, or other equipment.

CERs shall be cooled by the primary building HVAC with a supplemental mini-split unit

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019

for times when the primary system set point is raised. CERs shall be provided with HVAC services with dedicated thermostats. Do not locate CERs in a perimeter space with vented doors (i.e. similar to outside access mechanical and electrical rooms). All CER's shall be environmentally controlled to maintain a temperature range of 65 to 80 degrees Fahrenheit and relative humidity of 50%. Conditions shall be capable of being maintained 24 hours per day, 7 days per week.

Cover all walls of CER with 8'-0" high 3/4" exterior grade AC plywood primed and finished with 2 coats of gray fire retardant semi-gloss enamel paint. Provide lighting to 50 footcandles at 3'-0" above the finished floor. Provide surge protected and filtered power as required for convenient service to all devices requiring power. As a minimum provide three quadraplex power receptacles on each long wall and one quadraplex power receptacle on each short wall. Indicate specific location of receptacles relative to equipment served. All receptacles shall be non-switched and surge suppression type. Provide racks, cable tray, and wire management as required for a uniformly organized installation. CER's shall not be used for staging or storage of construction materials and shall be protected from dust and debris prior to any network equipment being installed or cables being terminated and for the duration thereafter.

5.2 COMMUNICATIONS CLOSET (CC)

A CC is defined as a telecommunications room that serves as an intermediate connecting point for the building horizontal and vertical cabling and information systems. This room will typically serve a portion of a floor for a large building or a free-standing school building.

CCs shall not be located in rooms which house HVAC, plumbing, electrical power panels, or other equipment. CCs shall be cooled by the primary building HVAC with a supplemental mini-split unit for times when the primary system set point is raised. All CC's shall be environmentally controlled to maintain a temperature range of 65 to 80 degrees Fahrenheit and relative humidity of 50% shall be maintained 24 hours per day, 7 days per week. Do not locate CCs in a perimeter space with vented doors (i.e. similar to outside access mechanical and electrical rooms).

CC's shall be approximately 8' x 8' in size or equivalent. The smallest dimension of any room (CER or CC) shall not be less than 6' for any reason.

GENERAL REQUIREMENTS

Janitorial or storage space is not suitable for telecommunications rooms. Telecommunications rooms shall not be used to store materials or janitorial supplies.

Shallow telecommunications closets are strictly prohibited and shall not be permitted for any reason.

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Minimum clearances for equipment and cross-connect fields in the telecommunications closet:

- Allow a minimum of 3.0 ft. of clear working space from equipment and cross connect fields.
- Equipment racks or cabinets should be provided within the telecommunications closet (room). Allocate a space at least 32 in. deep and 7 ft., 6 in. high for each rack or cabinet. Provide space for an aisle at least 32 in. wide

To facilitate the proper installation, routing and placement of cables, wires, premise equipment and terminal fields, CC's shall be located in the middle of the floor, and stacked one above the other (if multiple floors). Rooms shall be placed to minimize cable lengths, such that no length of cable exceeds 260 feet horizontally (this length will assure the maximum cable distance of 295' is maintained.).

Doors shall be 3' W x 7' H. Doors shall open fully into the corridor. Some exceptions may apply. Floors shall be tile or sealed concrete. No carpet shall be installed in telecommunications rooms.

All rooms shall be provided with 2' x 2' acoustical ceiling tile grid ceilings. No rooms shall be permitted to have ceilings exposed to the building structure.

Fire treated plywood, 3/4" thick, shall be provided on all walls in the CER and CCs with (2) coats of fire-retardant paint, light gray in color.

Install multiple 3" or 4" conduits sleeves between CC's and CER's. Quantity shall be as required by the project.

Install overhead ladder cable tray in CER's and CC's on all walls and extend to the data racks in the room. Cable tray shall be 12" W x 1-1/2" D, typical. Provide racks, cable tray, and wire management as required for a uniformly organized installation.

ELECTRICAL AND MECHANICAL REQUIREMENTS

All CER's and CC's shall be environmentally controlled to maintain a temperature range of 65 to 80 degrees Fahrenheit and relative humidity of 50%. Conditions shall be capable of being maintained 24 hours per day, 7 days per week. If these conditions cannot be maintained 24 hours per day, 7 days per week, HVAC units dedicated to these rooms must be installed.

Whenever possible; plumbing, sprinkler system, HVAC ductwork, and electrical conduit shall be routed around telecommunications spaces. Active supply lines and ducts **shall not be allowed** over rack or communications equipment in any situation.

Provide LED fixtures, ceiling mounted, as required, to provide 50 foot-candles at 3' AFF. All lighting should be connected to emergency power when available and/or contain battery backup.

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Provide quad 120V receptacles on each wall at 6' intervals, at standard 18" AFF height. Provide additional, dedicated 20 amp, duplex 120V receptacles mounted on overhead cable tray. Provide quad 120V receptacle for AT&T fiber ONT's near service entrance. Quantity and locations shall be as shown on the construction drawings. Coordinate with Information Technology for any 30A or atypical power requirements. Provide surge protected and filtered power as required for convenient service to all devices requiring power. All power receptacles shall be non-switched and surge suppression type.

It is recommended that new construction employ a system-wide Uninterruptible Power Supply (UPS). It is also recommended that the UPS contains an auxiliary connection point so that it can be fed by a portable generator during an extended outage.

5.3 COMMUNICATIONS PANEL (CP)

Communication Panels shall only be used when specifically permitted by ECSD IT.

A Communications Panel is a mini-CC within an enclosed hinged lockable Panel or a specific purpose wall mounted cabinet. All components of the CP, including a surge protected and filtered power source, surge suppression type power receptacle, and telephone terminal blocks, shall be enclosed within the panel or cabinet. CPs shall be star attached to the CER unless special topologies are needed and approved by ECSD IT. Provide slotted wireway and wire management as required for a uniformly organized installation.

5.4 COMMUNICATIONS CONDUIT, RACEWAY AND CABLE TRAY

Design in accordance with all applicable standards and the following specific requirements:

5.4.1 CONDUITS FOR BACKBONE CABLING

All backbone cabling shall be run continuously in conduit. Provide conduits between the CER and CCs and between the CER and CPs as follows:

- Exterior underground: Direct burial grade schedule 80 PVC electrical conduit. Elbows turning up to aboveground shall be rigid galvanized threaded and coated. All underground conduits shall be installed with a traceable identifier marker and aboveground markers shall be placed at all turns in conduit runs.
- Exterior aboveground: Rigid galvanized threaded.
- Indoors: EMT with set steel screw fittings where concealed and steel compression fitting where exposed.
- The conduit and raceways shall be designed as not to exceed the recommended bend radius of the intended cables. In no instance shall "LB" connectors be used for any fiber optic cabling.

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Size conduit as required to prevent excess tension on cabling while being pulled using proper equipment and methods. Analyze each pull segment separately. A fill rate of 30% or less will allow for a reasonable amount of future expansion as well as ease of service.

Require that a pull tape with sequential footage markings be pulled in along with cables.

Require that all underground conduit be cleaned and verified with a test mandrel. Spare underground conduits should then have pull tape installed and closed at each end by a conduit plug with rope tie.

5.4.2 CONDUITS, CABLE TRAY & RACEWAYS FOR HORIZONTAL CABLING

All wall mounted communications outlets shall consist of a dual-gang back box, a single gang plaster ring, and a 1" conduit stubbed above the ceiling with a pull string. Under no circumstances shall conduit smaller than 1" be used for communications cabling. All conduit ends shall be furnished with a plastic bushing to prevent damage to communications cables. Where conduit is extended to a cable tray or CC/CER, no more than two 90 degree sweeping bends shall be used without adding a junction box. Junction boxes shall NOT be used at 90 degree bends.

In new buildings where horizontal cabling may be damaged during construction, provide homerun conduits serving all COs, or provide cable tray with conduit drops to COs. Cable tray shall not extend between floors.

In existing buildings and where horizontal cabling is not subject to physical abuse, free route cabling above ceiling, supported with J-hooks at 4 feet on center minimum.

Size conduit as required to prevent excess tension on cabling while being pulled using proper equipment and methods. Analyze each pull segment separately. A fill rate of 30% or less will allow for a reasonable amount of future expansion as well as ease of service. Higher fill rates may be employed with ECSD IT approval.

Conduits: EMT with set steel screw fittings where concealed and steel compression fittings where exposed. Paint all exposed conduits to match surroundings.

Raceway: Non-metallic with TIA/EIA Category 6 compliant fittings shall be used for small raceways. **Color shall match that of any existing raceway and/or wall color.** Panduit Type T70 or approved equal for large raceways. Surface mounted raceways shall only be used in existing buildings where concealed cabling is not possible and only then with the written permission of the Owner and Engineer. Where surface raceways exist, any new raceways shall match existing for color and type.

5.5 COMMUNICATIONS SYSTEMS GROUNDING

Provide a telecommunications grounding busbar in each CER and CC. The bar shall be a

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minimum of 12" W X 2" H with pre-drilled ¼" holes. This bar shall be attached to the main building grounding system with a #4 AWG copper wire, minimum. All bonding and grounding shall meet the minimum requirements of the NEC.

Communications Systems Grounding shall comply with the NEC and EIA/TIA-607, Grounding and Bonding Requirements for Telecommunications.

Provide grounding busbars in all communication closets. Ground main busbar to building main electrical service ground with #2/o AWG insulated (green) copper grounding conductor. Run conductor from busbar location to building service ground in conduit.

Grounding to building structure, conduits, utility piping, or electrical subpanels in lieu of bonding to building main electrical service ground shall not be acceptable.

All ground connections shall be made with heavy duty 2-hole compression lugs.

All communication racks, cable trays, conduits, etc. shall be grounded with #6 AWG insulated (green) copper grounding conductor to main grounding busbar. Ground racks individually to busbar (do not loop grounds).

5.5.1 GROUNDING EXISTING COMMUNICATIONS ROOMS, CLOSETS, PANELS

When any additions are made to pre-existing communications systems, the affected room, closet or panel shall be tested for compliance with section 5.5. Any outstanding deficiencies must be reported to ECSD IT.

6.0 CABLING AND TERMINAL DEVICES

The installed system shall be a complete Category 6 (or 6a as directed) Structured Cabling System solution with all outlet and termination hardware provided by one single manufacturer. The corresponding cable required to make up the complete channel solution must be an approved and tested cable with the outlet and termination hardware provider.

For existing schools, the specified SCS manufacturer **solution shall match that of the "incumbent" system already installed at that facility.** For example, if School "A" has Panduit Mini-Com Category 5E outlets installed throughout the school, any new cabling installations for any new additions or renovations shall be Panduit Mini-Com category 6 outlets using the same general components (patch panel types, outlet types, etc) of the previously installed system unless directed differently by ECSD IT.

Any new schools shall be a certified Category 6 (or 6a as directed) solution utilizing either Siemon MX jacks or Panduit Mini-Com jacks (or approved equivalent).

Unless specifically directed otherwise by ECSD IT's project manager, the Local Area Network will provide auto-negotiating 100/1000, multi-gigabit Power over Ethernet (4PPoE) 802.3bt Class 6 switched Ethernet ports serving each location as follows:

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- Each instructional area: Two Category 6 desktop ports for student computers. One Category 6 port for each IPTV. Two Category 6A ports for a wireless access point.
- Each Teacher Resource/Collaboration Room: One Category 6 port for a printer and one category 6 port per teacher for telephone. In instances where teachers share a common workroom, provide a D2 for each teacher.
- Administrative areas: One Category 6 port for each network connected printer. One Category 6 port for each telephone. Two Category 6A ports for each wireless access point needed for appropriate coverage of administrative area.
- Computer labs: Two Category 6 desktop ports for student computers. One Category 6 port for each IPTV. Four Category 6A ports for two wireless access points.
- Mechanical areas: Category 6 ports as required for controls and sensors.
- Access/entry areas: Category 6 ports as required for access control panels.
- One Cat 6 port to intercom head end.
- Additional areas: Category 6 ports or Category 6A ports as directed.

6.1 Horizontal cabling shall be UL or ETL verified TIA Category 6 or Category 6A UTP. In general, the horizontal cabling system will consist of multiple Category 6(A) cables routed to communications outlets on each floor. Cables shall be terminated in patch panels in each corresponding communications closet. Install all cabling in conduit or cable tray, unless specific approval is given by ECSD IT to free route bundled cable above ceilings. Where cable is not installed in conduit, cabling shall be supported at 4'-0" on center with CADDY "CableCat" cable support hangers. All cabling installed above ceilings and not in conduit shall be plenum rated, regardless of code requirements.

6.2 The Backbone Cabling connects each communications closet to the main communications equipment room. It consists of the fiber optic and multi-pair copper backbone transmission media between these locations and the associated connecting hardware terminating this media. All backbone cabling shall be homerun from the CER to each CC or CP.

All multimode optical fiber cable must be an **OM4 50/125 multimode, regardless of existing infrastructure.**

50-micron fiber is different than the 62.5-micron fiber installed in the majority of schools. Patch cables are NOT interchangeable. Fiber optic patch panels MUST be labeled accordingly, notifying user as to the fiber type.

Terminate all strands with **Duplex-LC connectors, do not use SC connectors.** Install all fiber optic cabling in conduit. A quantity 12, 18, or 24 strands of fiber optic cabling shall be distributed to each CC with the quantity dependent on the network connectivity density of each closet. A fiber optic cable suitable for both indoor and outdoor use shall be provided in all cases. Each pair of fiber optic cables shall be crossed en route to facilitate the use of straight-through patch cables.

6.3 Any 25 pair telephone backbone cabling shall be tested and certified by the manufacturer

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to TIA Category 3 performance. Install backbone cabling from the CER to each CC to support analog devices and provide emergency backup. Install all backbone cabling in conduit. Provide telephone backbone cabling as follows:

- Exterior underground in conduit: Type AFMW Category 3 multi-pair direct burial grade gel-filled cable. Extend into indoors only in conduit. If not, splice to ARMM-type cable, ground splice, continue shield to point of termination, then ground shield and surge protect all pairs with UL listed primary and secondary protection devices.
- Exterior aboveground in conduit: Type ARMM Category 3 multi-pair shielded cable. Must continue to point of termination indoors, then ground shield and surge protect all pairs with UL listed primary and secondary protection devices.
- Indoors in conduit or cable tray: Type Category 3 multi-pair cable, rated as required.

6.4 PATCH CORDS

6.4.1 Fiber optic patch cords shall be aqua jacketed 10 Gigabit Multimode 50/125 OM4 provided with connectorized ends as required to suit new and existing LAN equipment and fiber optic terminal cabinets at each school. Provide quantity equal to the number of connections required to fully interconnect all fiber optic equipment, plus 10 percent extra. Provide various lengths of each type of fiber patch cords to suit each CER, CC and CP and to make all connections required without excess length.

6.4.2 Copper patch cords shall be Category 6 (or 6A as appropriate) snagless factory built and tested cables. Field built or assembled patch cords will not be accepted. Cables should conform to the following color table:

Data	Category 6 Black
Security/Cameras	Category 6 Red
IP Telephone (VOIP)	Category 6 Blue
Access Control/ Security	Category 6 Green
Wireless Access Points	Category 6A Violet
EMS/DDC/IoT	Category 6 Orange

6.4.2.1 Communications closet cables shall be of the shortest feasible length to effect the connection between patch panel port and network equipment port. In most cases that will be 18" cables for standard and POE data ports and 3' or 5' cables for telephone devices.

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Provide quantity equal to the number of terminated cables plus 10 percent extra.

6.4.2.2 Provide workstation patch cables in quantity equal to the number of terminated cables plus 10 percent extra. Provide cables in the following lengths and ratios:

7'	20% of total
10'	50% of total
15'	20% of total
20'	10% of total

6.5 GENERAL CABLING REQUIREMENTS:

In general, a certified, tested, and warranted structured data and voice cabling system shall be designed and installed in accordance with these standards

The complete installation shall be installed with highly skilled and trained technicians providing a quality and professional system. Installers shall be trained and certified to install all specified materials and also certified to use all system test equipment.

Workmanship shall be of the highest grade in accordance with the best modern practice and the highest standards of the industry.

The installed system shall be neat, clean, and well organized in appearance. Provide working clearances for normal system operation, reconfiguration and repair.

The installation shall be in strict accordance with all applicable codes and standards, the respective manufacturer's written recommendations, the contract drawings, and these specifications.

Provide wire management on backboards, such as exposed cabling ladder runway, to organize and protect all cabling.

Provide wire management equal to Panduit WMP series (or approved equivalent) on racks to organize, protect, and conceal patch cords. Provide appropriate wiring rings on sides of racks for vertical routing of patch cords. Horizontal wire management should only be utilized in multiple rack environments and be limited to the top, middle and bottom of each rack.

Provide slack at each end of each cable to allow for a minimum of five future re-terminations without rerouting or replacing cable.

All cables routed through a return air plenum must be plenum rated cable. **Plenum rated cable should be used for all locations terminated in or above the ceiling regardless of whether or not a return air plenum exists.**

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All cables shall be independently supported throughout the entire Project.

Cables shall be routed in accordance with TIA/EIA 568A and standards.

The current BICSI Telecommunications Distribution Methods Manual is to also be used as a guide for cable installations.

All cable shall be neatly routed in the ceiling at parallel or right angles to the building structure. Route cables by the shortest path to the cable tray at these angles.

Route cables along cable rack trays in a neat and straight order in 24 cable bundles. Use drop out shields to protect cables as they drop out of cable trays or cable rack trays. Use rear vertical cable management rails at racks to support and manage cables terminated to rear of patch panels. Maintain a neat and straight order of the cables inside the cable management rails. Adjust length of cables terminating on the rear of patch panels so that cables exit out of vertical cable management rail, fan into the proper port and are punched down in the proper order.

All cables shall be neatly bundled and velcroed to the racks and patch panels. Group outlet cables with not more than 24 cables per bundle. **Ty-wraps or other similar cable securing means shall strictly NOT be used for securing cables in patch panels or wire-management.**

All cables being pulled shall not exceed the manufacturers recommendations for pulling tensions.

All cables shall be installed following the manufacturer's recommendations for minimum bending radius.

All cables shall be tested and certified after installation is complete. Installation is not considered complete until face plates have been installed and all ports have been properly terminated and labeled. All test results are to be documented and those documents turned over to ECSD IT. All cables shall pass acceptable test requirements and levels. The Contractor shall remedy any cabling problems or defects in order to pass or comply with testing. This includes the re-pull of new cable as required at no additional cost to the owner.

6.6 LABELING REQUIREMENTS:

All labels shall be permanently affixed to each fiber tray or patch panel. Removable fronts of each fiber tray should be labeled to match the tray.

Fiber optic backbones should follow this typical nomenclature:

CER.A/CC.B MMF1-12; CER Room designator, CC Room designator, Cable ID

CO Patch Panel typical nomenclature:

430.A.1; Room number, Outlet designation, Jack number

WAO typical nomenclature:

200E. 215A CER,Room Number,Outlet Designation,Jack Number

17000/COMMUNICATIONS STRUCTURED CABLING SYSTEM Revised 09/09/2019**7.0 OTHER CONSTRUCTION CONSIDERATIONS****7.1 FIRESTOPPING**

The A/E shall require that the contractor firestop all penetrations of all floors, all fire rated walls, and all fire rated ceilings. Firestopping shall be accomplished using UL classified systems with a fire rating equal to or greater than the floor, wall or ceiling penetrated. Firestop systems shall be installed in accordance with the manufacturer's standard detail for each type of floor, wall or ceiling penetration encountered. The A/E shall require that the contractor submit the manufacturer's standard details that he proposes to use for approval.

7.2 ASBESTOS CONTAINING MATERIALS (ACMs)

No asbestos or asbestos-bearing materials in any form shall be used in the construction of the SCS.

Prior to the commencement of work, ECSD will identify known asbestos containing materials (ACMs) at the site in the presence of the contractor. All ACM abatement required to complete work under this contract will be performed by an asbestos abatement contractor employed directly by ECSD outside of this contract. The contractor shall coordinate the location of ACMs which require abatement with the asbestos abatement contractor.

The contractor shall instruct his employees not to disturb any ACMs identified by ECSD or the asbestos abatement contractor. When ACM abatement is in progress, the contractor shall limit his activities and location within buildings as directed by the asbestos abatement contractor. Any violation of directions provided by the asbestos abatement contractor shall be at the risk of and the sole responsibility of the contractor.

8.0 CONTRACTOR QUALIFICATIONS

The A/E shall specify and enforce the following qualifications for SCS contractors:

- 8.1 The SCS contractor shall be an experienced firm regularly engaged in the layout and installation of structured cabling systems of similar size and complexity as required for this installation. The SCS contractor, under the same company name, shall have successfully completed the layout, installation, testing and warranty of not less than five structured cabling systems of the scope of the largest system on this project for a minimum period of three years prior to the bid date. The contractor shall have an existing permanent office located within 75 miles of the job site from which installation and warranty service operations will be performed.

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- 8.2 The SCS contractor shall present, with his bid, the name and certification number of a BICSI certified Registered Communications Distribution Designer (RCDD) who is a permanent employee of the contractor. The contractor shall maintain this RCDD, or another RCDD approved by the A/E, in his permanent employment throughout this project. The RCDD shall have overall responsibility for certifying that the installed structured cabling system conforms to these contract documents and to the referenced EIA/TIA, IEEE, BICSI, and UL standards. Specific requirements for the RCDD are as follows:
- 8.3 The RCDD shall be, in the judgment of the A/E, thoroughly experienced in the layout and installation of structured cabling systems of similar size and complexity as required for this installation. The RCDD shall submit evidence of these qualifications to the A/E upon request.
- 8.4 The RCDD shall affix his stamp to the contractor's pre-installation submittal drawings, indicating that he has reviewed and approved the drawings for conformance to the contract documents and to the referenced codes and standards.
- 8.5 The RCDD shall periodically visit the site and inspect the work in progress. RCDD site visits shall be made not less than twice per month when the job is in active progress. The RCDD shall prepare a field report for each site visit for submission to the Engineer.
- 8.6 The RCDD shall sign off on all copper and fiber optic cable test results, indicating that he was responsible for all cable testing procedures and that all cables were tested in compliance with the contract documents and met or exceeded the requirements stated therein.
- 8.7 The RCDD shall affix his stamp to the contractor's as-built drawings, indicating that he has reviewed and approved the drawings as being complete, accurate, and representative of the system as actually installed.
- 8.8 All conduit and cable tray systems shall be installed by a licensed electrical contractor using tradesmen who are skilled and experienced in the types of conduit installations indicated in the bid documents.

9.0 BID REQUIREMENTS

The SCS contractor shall provide the following documentation, to be presented with the bid, as evidence that the requirements for SCS contractor qualifications listed above are satisfied. If the bidder does not meet the requirements of this specification section for structured cabling system work, he shall provide the following documentation, to be presented with the bid, as evidence that the requirements listed above are satisfied by the SCS subcontractor he proposes to use to perform work under this section. In either case, all work under this section shall be performed by permanent employees of the SCS contractor listed on the bid form, and shall not be performed by another subcontractor,

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employees of another company, or by temporary employees.

- 9.1 A list of not less than five (5) references for jobs of similar size and complexity including project name, location, contact person and phone number.
- 9.2 RCDD name, BICSI certification number, and qualifications.
- 9.3 Location of office from which installation and warranty work will be performed.
- 9.4 Qualifications of conduit and cable tray installer.

10.0 WARRANTY REQUIREMENTS

The following shall be a requirement for all installed systems. Contractor shall provide certificate of such warranty at project completion.

The Contractor shall warrant the entire structured cabling system under the manufacturer's systems warranty for a minimum period of 5 years. The warranty will begin on the first day after final acceptance. The warranty shall include materials, parts and labor. If any failure or defect occurs within the warranty period, the contractor and/or manufacturers shall remedy it within 48 hours at no cost to the owner, or any owner representative or consultant. Structured cabling systems warranty shall cover applications assurance, cable, connecting hardware and the labor cost for the repair or replacement

The Contractor shall warrant the remainder of installed systems for a period of one year. The warranty will begin on the first day after final acceptance. The warranty shall include materials, parts and labor. If any failure or defect occurs within the warranty period, the contractor and/or manufacturers shall remedy it within 48 hours at no cost to the owner, or any owner representative or consultant.

END OF SECTION 17000

17025/LOCAL AREA NETWORK EQUIPMENT**Revised 09/09/2019****1. INTRODUCTION**

This section is intended to provide the A/E guidance in the design of data equipment for Local Area Networks (LANs):

1.1 DESIGN REQUIREMENTS - refer to Section 17000.

2.0 STANDARDS AND ABBREVIATIONS - refer to Section 17000.

3.0 TECHNOLOGIES - refer to Section 17000.

4.0 SCS TOPOLOGY - refer to Section 17000.

5.0 DATA EQUIPMENT

Coordinate all data equipment design with ECSD IT. Coordinate site specific requirements with a school technology coordinator assigned by the Principal. Coordinate throughout the design process.

5.1 QUANTITIES

Provide the types and quantities of LAN equipment ports sufficient to connect all terminated cables:

5.1.1 Desktop ports - provide 100/1000 Base-TX or multi-gigabit Power over Ethernet (4PPoE) 802.3bt Class 6 auto-negotiating switched Ethernet ports serving each desktop as follows:

- Each instructional area: Two Category 6 desktop ports for student computers. One Category 6 port for each IPTV. Two Category 6A ports for a wireless access point.
- Each Teacher Resource/Collaboration Room: One Category 6 port for a printer and one category 6 port per teacher for telephone.
- Administrative areas: One Category 6 port for each network connected printer. One Category 6 port for each telephone. Two Category 6A ports for each wireless access point needed for appropriate coverage of administrative area.
- Computer labs: Two Category 6 desktop ports for student computers. One Category 6 port for each IPTV. Four Category 6A ports for two wireless access points.
- Mechanical areas: Category 6 ports as required for controls and sensors.
- Additional areas: Category 6 ports or Category 6A ports as directed.

5.1.2 Wireless ports - provide current model wireless access points throughout school to provide wireless network access from all instructional and administrative areas of the school. Provide and locate access points throughout school as required to fulfill the anticipated network connectivity demands for each area covered. Wireless ports will typically be located above the ceiling and the wireless access point attached to the ceiling

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grid and the network connecting through the ceiling tile. Coordinate access point locations with ECSD IT.

- 5.2 CURRENT BASIS OF DESIGN - DATA EQUIPMENT: Current accepted models are listed in Appendix A, which shall be kept current by ECSD IT.
- 5.2.1 Managed Desktop (edge) Switches: 48 or 24 port 100/1000Base-TX or multi-gigabit Power over Ethernet (4PPoE) 802.3bt Class 6 switch with appropriate 10GbE-SFP+ Gb fiber uplink modules for connection to CER. The switches shall be standalone with each having at least one 10 Gigabit-Ethernet uplink module and shall be connected to the backbone switch via fiber optic backbone cabling. Provide alternate switch types as required to suit individual requirements (i.e. 8 port switch with 10GbE-SFP+ Gb fiber uplink for small buildings when low port connectivity is required in building served).
- 5.2.2 Server/Power-user Switches: 24 port 10GbE switch with SFP+ fiber/twinax uplink modules for connection to servers and to the CER.
- 5.2.3 Backbone Switch (CER): 48 port 10GbE switch with SFP+ fiber/twinax uplink modules for connection to servers and edge switches. Switch shall provide wire-speed layer 3/4 routing capabilities, port-level Quality of Service (QOS), per port bandwidth allocation, and VLAN capability in order to control streaming/high bandwidth applications on school LANs. Provide correct series model as required for port densities and MAN capabilities to facility. Provide 10Gb uplinks as required for each desktop switch with 25% of slots open on final router configuration. In addition, size backbone switch as required to provide open slots for addition of three (3) 10Gb-LR/ZR uplinks.
- 5.2.4 WLAN Controller Switch: Provide an appropriately sized Mobility Controller. Solution should integrate with existing District WLAN implementation and fully support Directory Services and District security standards.
- 5.2.5 Wireless Access Points (WAP): Wireless access points shall be the current district standard (typically 802.11ax) as appropriate to the location served. Locate wireless access points in each classroom and throughout school to provide full coverage and sufficient bandwidth of wireless connectivity for each instructional and administrative area. The A/E shall coordinate with ECSD IT for exact placement and shall provide specifications for the contractor to utilize the manufacturer's utility software to determine in the field the best location and coverage for each access point.

Mount cables in outlet box above ceiling and mount access point on the ceiling grid below the outlet box, with cabling penetrating the ceiling panel and concealed behind WAP.

At the switch end (in communications closet), provide Power over Ethernet (4PPoE) 802.3bt Class 6 enabled desktop switches. Original Power over Ethernet 802.3af-2003 switches are not acceptable and 802.3at (POE+) will only be allowed in special use cases.

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No Access Points shall be powered locally at the access point location, unless the actual access point is located at the communications closet.

6.0 CONTRACTOR'S RESPONSIBILITY

Contractor shall provide a system of data equipment and cabling as indicated on the final design drawings. Contractor shall determine absolutely whether each piece of equipment is to be owner furnished or contractor furnished and communicate their understanding to ECSD IT before bidding or commencing work.

Contractor shall install equipment as directed by ECSD IT and Engineer and shall complete all manufacturer recommended startup and checkout procedures. Verify proper equipment operation and startup. Once set up, contractor shall coordinate with ECSD IT personnel for final configuration.

The Contractor is not responsible for installation or configuration of Network Operating Software (NOS) or Network Interface Cards (NICs).

Provide and install fiber optic and copper patch cords to interconnect data network equipment and to connect each port of data equipment to horizontal wiring connections as specified herein and as indicated on the drawings.

END OF SECTION 17025

17050/TELEPHONE EQUIPMENT

Revised 09/09/2019

1.0 INTRODUCTION

This section is intended to provide the A/E guidance in the design of telephone equipment:

- 1.1 DESIGN REQUIREMENTS - refer to Section 17000.
- 2.0 STANDARDS AND ABBREVIATIONS - refer to Section 17000.
- 3.0 TECHNOLOGIES - refer to Section 17000.
- 4.0 SCS TOPOLOGY - refer to Section 17000.
- 5.0 TELEPHONE EQUIPMENT

Coordinate all telephone equipment design with ECSD IT Telecommunications Staff. At a minimum, voice over IP (VOIP) handsets must support 1000TX connections. 100Mb handsets are not supported. Coordinate site specific requirements with technology personnel assigned by the Principal. Coordinate throughout the design process.

6.0 THE CONTRACTOR

The system shall be furnished, installed and fully configured by an Authorized Dealer of the system manufacturer. The Authorized Dealer shall provide a permanent employee who is certified as a technician by the system manufacturer in the installation and configuration of the specific equipment furnished for this project. The certified technician shall install, configure, and maintain the system throughout the project and warranty period.

The contractor shall provide all miscellaneous equipment, hardware, materials, labor and programming required for a complete system that is functional in every respect, whether or not those items are called for in the drawings or specifications.

The contractor shall provide full system, trunk, station and set programming as directed by ECSD IT.

The contractor shall provide all software and passwords required for full administrative system access.

The Contractor shall install the telephone instruments in the locations specified by ECSD IT, install patch cables to connect to station ports, and verify that each instrument is functioning properly.

END OF SECTION 17050

17100/INSTRUCTIONAL TELEVISION SYSTEM

Revised 05/01/2015

1.0 SECTION DEPRECATED:

Unified Communications standards have removed the need for separate ITV cabling in new installations. See section 17000 for standards.

Legacy repairs/additions are to be handled on a case-by-case basis coordinating with ECSD IT.

END OF SECTION 17100

17125/CAMERA SURVEILLANCE SYSTEMS

Revised 09/09/2019

1. INTRODUCTION

This section is intended to provide the A/E guidance in the design of infrastructure and related equipment for camera surveillance systems (CCTV)

1.1 DESIGN REQUIREMENTS

1.1.1 The surveillance systems system shall be a March Networks CCTV system with high-resolution color cameras using Category 6 cabling. Specific equipment needed shall be coordinated with ECSD IT.

1.1.2 The system shall be designed in conjunction with the structured cabling system infrastructure and shall utilize the same communications closets and backbone conduits for distribution.

1.1.3 All exposed cabling shall be installed in conduit. No camera cables shall be run exposed on any interior or exterior of any building.

1.1.4 The end result from the contractor shall be a complete and warranted system ready for operation. The installation shall include all accessories and appurtenances required to provide a complete and fully operational system. Any materials not specifically mentioned in these specifications but required for a finished installation shall be furnished and installed at no additional cost to the Owner.

2.0 HEADEND AND CAMERA EQUIPMENT

2.1 The proposed CCTV system shall be a complete and functional digital video surveillance system. The system shall include all required cameras, lenses, cabling, conduit, power supplies, camera enclosures, support brackets, network video recording servers, control enclosures, surge protection, and all other devices, equipment, and appurtenances not specifically listed herein.

2.2 All set-up and system programming to suit ECSD's requirements shall be included. System shall include anti-virus software in accordance with current district policies. Anti-virus software must be installed, configured and current before the system can be connected to the district network. ECSD IT shall be provided with complete administrative access to the system. Coordinate with school technology coordinator as appointed by principal.

3.0 CABLING INFRASTRUCTURE

3.1 The facility's existing cabling infrastructure shall be used whenever possible.

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- 3.2 The camera shall be connected via existing and new twisted pair infrastructure (Category 6 or higher) and Ethernet network. The systems shall be designed so that adequate spare cables remain on existing cabling systems.
- 3.3 Lightning protection shall be provided on any exterior cabling.
- 3.4 The system shall be designed alongside the structured cabling system infrastructure and shall utilize the same communications closets and backbone conduits for distribution.
- 3.5 All exposed cable cabling shall be installed in conduit. No camera cables shall be run exposed on any interior or exterior of any building.
- 4.0 LAYOUT
 - 4.1 Coordinate the layout of cameras and placement of the headend with ECSD IT. Coordinate site specific requirements with a school technology coordinator assigned by the Principal. Coordinate throughout the design process.
 - 4.2 Based on budget and need, each school will have different coverage requirements. Coordinate with ECSD IT for budgeting and design systems as allowable.
- 5.0 CONTRACTOR'S RESPONSIBILITY
 - 5.1 The contractor shall deliver, install, program, test, start-up, checkout and otherwise provide a fully operational and warranted system in accordance with the A/E design.
- 6.0 TRAINING
 - 6.1 The contractor shall provide a minimum of four hours training for the system. Additionally, the contractor shall be available for periodic additional training as required to keep personnel up to date on the use of the system.

END OF SECTION 17125

**17150/METROPOLITAN AREA NETWORK
COMMUNICATIONS SYSTEM****Revised 09/09/2019****1. INTRODUCTION**

ECSD has standardized on Outside Plant Fiber Optic Cabling for connection to each district facility into its Metropolitan Area Network.

**2.0 DESIGN REQUIREMENTS - OUTSIDE PLANT FIBER OPTIC CABLING
CONNECTIVITY**

This section is intended to provide the A/E with guidance in the design/routing of outside plant rated fiber optic cabling. Although, underground installation is the preferred method, in certain circumstances, aerial may be required. Design for the following must be included for this system:

- Underground installations (in conduit **with tracer**)
- Aerial installations (when applicable)
- Points of connection (i.e. existing/new facilities, exterior, etc.)
- Grounding and bonding

Each site shall be designed as determined to be the best route. In some cases, when aerial may be a requirement, contact with entity (i.e. NextEra Energy; DBA Gulf Power) may be required for permission in use of pathway, for example: attachment to Gulf Power electrical poles, Make Ready requirements, etc. This shall be taken into consideration by the designer but the ultimate responsibility shall be placed with the general contractor.

The A/E team shall be responsible for a fully developed outside plant cabling systems (OSP) and related communications systems design. This section provides overall guidance in specific ECSD requirements but is not intended to provide an exhaustive design methodology nor construction specifications. ECSD also requires the services of a BICSI certified (Registered Communications Distribution Designer (RCDD) for all OSP communications systems design services. The A/E shall provide a competent designer who, in the judgment of ECSD IT, is sufficiently experienced to design the OSP requirements in accordance with these guidelines and all applicable standards.

The A/E shall provide detailed drawings and specifications that fully document the OSP requirements. The A/E shall not rely upon the installing contractor to develop the OSP design or to provide detailed drawings for the system.

The types of drawings and level of detail indicated below are mandatory requirements for each telecommunications design project for ECSD with individual considerations to be taken into account for each project. A custom design shall be provided for each school.

Key design requirements are as follows:

- 3.0.1 Provide dimensionally accurate site plans indicating the location of all conduits, cabling, required points of connection, buildings, correct FISH room numbers, location of all

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required equipment rooms for tie-in purposes, and other pertinent information.

3.0.2 Make ready requirements with all required height indications.

3.0.3 All required sections/details including directional boring requirements and lengths.

3.1 **INSTALLATION REQUIREMENTS – OUTSIDE PLANT FIBER OPTIC
CONNECTIVITY**

3.1.1 **CONTRACTOR QUALIFICATIONS**

The Cabling Contractor shall be an experienced firm regularly engaged in the layout and installation of outside plant (OSP) buried and aerial infrastructure of similar size and complexity as required for this installation. The Contractor, under the same company name, shall have successfully completed the layout, installation, testing and warranty of not less than five systems similar to the scope of this project for a minimum period of three years prior to the bid date, and shall have been regularly engaged in the business of OSP Cabling Systems contracting continuously since. The Contractor shall have an existing permanent office located within 75 miles of the job site from which installation and warranty service operations will be performed. The contractor shall verify and comply with all inspection and permitting requirements. Contractor shall be solely responsible for determining and complying with requirements relative to the scope of work. Contractor shall submit all finalized drawings to the regulating authorities for right-of-way permitting, joint-use, or as required. The contractor shall be responsible for all pre- and post construction notifications to all required entities, and inspection hereof. These entities shall include, but are not limited to, FDOT, Escambia County, The City of Pensacola, Railroads, AT&T, Cox Communications, ECUA, and Gulf Power. ECSD currently has joint use agreements in hand for Gulf Power aerial pole use. Coordination with Gulf Power and Gulf Power inspections of the affected aerial work will be required.

Contractor shall install and test the OSP FO media in accordance with contract drawings, specifications, IEEE C2, NFPA 70, and TIA-590-A. Contractor shall provide all necessary power, utility services, permits, utility spotting, technicians, test equipment, calibration equipment as required to perform reel and final acceptance tests of the media.

Contractor shall promptly repair any and all utility lines or systems (water, gas, telephone, sprinkler, etc) damaged during site preparation and construction.

Upon completion, the contractor shall deliver to ECSD IT a complete set of as-built drawings in dwg (or specified) file format.

3.1.2 **WARRANTY**

- A. The Contractor shall warrant the installed cabling system for one year. The warranty shall include materials, parts and labor. If any failure or defect occurs within the warranty period, the contractor and/or manufacturers shall remedy it

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COMMUNICATIONS SYSTEM****Revised 09/09/2019**

- within the next calendar day at no cost to the owner, or any owner representative or consultant. The cabling systems warranty shall cover cable, mounting, connecting hardware and the labor cost for the repair or replacement.
- B. Any damage caused by any events outside of human control (Force Majeure) and/or caused by any outside entities (i.e. other utility companies) shall not be covered under this warranty.
 - C. Contractor warrants all work performed by him directly and all work performed for him by others.
 - D. All materials, equipment and workmanship incorporated in the work shall be guaranteed by the Contractor.
 - E. Any work, material or equipment which during the warranty period is, in the opinion of the Engineer or the Owner's Authorized Representative, defective or inferior and not in accordance with the contract documents, shall be made good at no additional cost to the Owner, including any other work which may have been damaged because of such deficiencies. The Contractor shall be the contact person and the person responsible for coordinating all warranty work for the Owner.
 - F. Provide a warranty letter at the project closeout from the contractor stating these requirements and agreement herein.

3.1.3 CABLE LOCATES

During the one-year warranty period, the Contractor shall provide cable locates for other utility work as part of the Sunshine State One Call of Florida (811) "call before you dig" program. The contractor will be responsible for reviewing all locate tickets and marking all required locations. This includes updates on all ongoing construction project locations every ten days. The contractor will also be available on standby 24-hours-a-day, 7-days-a-week for emergency locates and storm damage with a two hour response time.

END OF SECTION 17150

17175/INTERNET OF THINGS (IOT) SYSTEMS**Created 09/09/2019****1. INTRODUCTION**

IoT is a catch-all term to cover items that historically have not been connected to the network. The category includes many control systems (access, hvac, lighting, etc.) and sensors (temperature, appliances, security, etc.) as well as clocks, speakers, vending machines, and others. This section is intended to provide the A/E guidance in the design of infrastructure and related equipment for Internet of Things (IoT) systems. It also addresses the addition of IoT devices to existing installations.

1.1 DESIGN REQUIREMENTS

- 1.1.1 Engage ECSD IT personnel in the project planning process so as to assure a successful implementation. Failure to do so may result in a non-working system, delayed implementation or a compromise to existing systems and security. A compromise to existing system security may result in contractor liability.
- 1.1.2 Provide ECSD IT with any and all firewall and filtering requirements. Failure to do so may result in a non-working system, delayed implementation or a compromise to existing systems and security. A compromise to existing system security may result in contractor liability.
- 1.1.3 The system shall be designed in conjunction with the structured cabling system infrastructure and shall utilize the same communications closets and backbone conduits for distribution.
- 1.1.4 All exposed cabling shall be installed in conduit. No cables shall be run exposed on any interior or exterior of any building.
- 1.1.5 The end result from the contractor shall be a complete and warranted system ready for operation. The installation shall include all accessories and appurtenances required to provide a complete and fully operational system. Any materials not specifically mentioned in these specifications but required for a finished installation shall be furnished and installed at no additional cost to the Owner.

2.0 EQUIPMENT

- 2.1 The proposed system shall be complete and functional. The system shall include all required cabling, conduit, power supplies, enclosures, support brackets, control enclosures, surge protection, and all other devices, equipment, and appurtenances not specifically listed herein.
 - 2.1.1 Current high-speed ethernet switch technology is dropping support of 100Mb/s and 10Mb/s equipment. IoT equipment should be capable of connecting to the LAN at no less than 1000TX (1Gb/s) speeds. Equipment that is not capable of connecting at 1000TX speeds must include a transceiver approved by ECSD IT to effect a connection.

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- 2.1.2 Current WLAN technology has dropped support of 802.11a/b/g wireless equipment. Any wireless IoT equipment must connect to the WLAN at no less than 802.11n speeds. 802.11ac capable components are strongly preferred.
- 2.1.3 All switches, access points or transceivers required must be approved by ECSD IT. Small office/home routers and non-approved wireless access points are strictly forbidden from being added to ECSD networks.
- 2.2 All set-up and system programming to suit ECSD's requirements shall be included. System shall include anti-virus software in accordance with current district policies. Anti-virus software must be installed, configured and current before the system can be connected to the district network. ECSD IT shall be provided with complete administrative access to the system. Coordinate with school technology coordinator as appointed by principal.
- 2.3 **Coordinate IP addressing requirements and switch port identification with ECSD IT.** Switching equipment may be configured in such a way as to prevent successful connections without active involvement from ECSD IT.
- 3.0 CABLING INFRASTRUCTURE
- 3.1 The facility's existing cabling infrastructure shall be used whenever possible.
- 3.2 Equipment shall be connected via existing and new twisted pair infrastructure (Category 6 or higher) ethernet network. The systems shall be designed so that adequate spare cables remain on existing cabling systems.
- 3.3 **Lightning protection shall be provided on any exterior cabling.** Failure to lightning protect exterior cabling may result in contractor liability.
- 3.4 The system shall be designed alongside the structured cabling system infrastructure and shall utilize the same communications closets and backbone conduits for distribution.
- 3.5 All exposed cable cabling shall be installed in conduit. No IoT cables shall be run exposed on any interior or exterior of any building.
- 3.6 Network cabling that enters any high voltage enclosure or is utilized to monitor or control the buildings AC supply, switch gear, or UPS systems shall be electrically isolated from network switching equipment by utilizing optical transceivers.
- 4.0 LAYOUT
- 4.1 Coordinate the layout of equipment with ECSD IT. Coordinate site specific requirements with a school technology coordinator assigned by the Principal. Coordinate throughout the design process.

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Created 09/09/2019

5.0 CONTRACTOR'S RESPONSIBILITY

5.1 The contractor shall deliver, install, program, test, start-up, checkout and otherwise provide a fully operational and warranted system in accordance with the A/E design.

6.0 TRAINING

6.1 The contractor shall provide training for the system. Additionally, the contractor shall be available for periodic additional training as required to keep personnel up to date on the use of the system.

END OF SECTION 17175

17200/NEW COST CENTER CONSTRUCTION**Revised 09/09/2019****1. INTRODUCTION**

New cost center construction offers opportunity to build to new standards without the concern of interfacing with existing equipment. This section is intended to provide general guidance for how this will differ from additions to existing cost centers. It is expected that the A/E team will work closely with the ECSD IT contact to design the appropriate solution for the cost center.

1.1 STRUCTURED CABLING SYSTEM

It is anticipated that new cost centers will rely even more heavily on a multipurpose category 6 cabling infrastructure.

1.2 LAN EQUIPMENT

New cost centers can be expected to include more in-line and higher-powered equipment and thus 4PPoE 802.3bt Class 6 60W switches. Higher capacity 802.11ax access points also require 802.3bz multi-gigabit ethernet ports.

1.3 WIRELESS LAN EQUIPMENT

New cost centers can be expected to rely primarily on wireless networking for data communications. The latest in wireless network standards should be used throughout. At this time, that means 802.11ax access points supporting 802.3bz line rates and 802.3bt Class 6 power delivery.

1.4 TELEPHONE EQUIPMENT

New cost centers can be expected to include Voice-Over-IP calling systems. The A/E team must consult with ECSD IT to determine the desired equipment and configuration.

1.5 ITV/MEDIA RETRIEVAL

New cost centers will utilize category 6 cabling and video over twisted pair drivers and receivers to deliver ITV. The A/E team should consult with ECSD IT to determine the desired equipment and configuration.

1.6 CCTV SYSTEM

Camera surveillance systems shall utilize the category 6 infrastructure without exception. Consult with ECSD IT to determine the desired equipment and configuration.

1.7 IoT SYSTEMS

IoT systems shall utilize the category 6 infrastructure and high-speed wireless network.

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Revised 09/09/2019

The A/E team is encouraged to find systems at a minimum capable of 1000TX or 802.11ac operating speeds. Consult with ECSD IT to determine the desired equipment and configuration.

1.8 METROPOLITAN AREA NETWORK

New cost centers must connect to the ECSD MAN at a minimum speed of 10Gb/s. The A/E team should consult with ECSD IT to determine the most effective method of implementing that connection.

1.9 CER/CCs

CER/CCs shall be cooled by the primary building HVAC with a supplemental mini-split unit for times when the primary system set point is raised. CERs shall be provided with HVAC services with dedicated thermostats. All CER's shall be environmentally controlled to maintain a temperature range of 65 to 80 degrees Fahrenheit and relative humidity of 50%. Conditions shall be capable of being maintained 24 hours per day, 7 days per week.

1.10 OTHER CONSIDERATIONS

Other systems are expected to utilize the network infrastructure. The A/E team should consult with ECSD IT to determine desired equipment and configuration.

It is recommended that new construction employ a system-wide Uninterruptible Power Supply (UPS). It is also recommended that the UPS contains an auxiliary connection point so that it can be fed by a portable generator during an extended outage.

ECSD IT actively seeks to improve the utilization of the network infrastructure. The A/E team is encouraged to recommend new technologies and techniques for leveraging ECSD's technology investment to provide a safer, more productive learning and working environment.

END OF SECTION 17200

17300/AUDIO/VISUAL SYSTEM**Revised 05/01/2015****1. INTRODUCTION**

This section is intended to provide the A/E guidance in the design of Audio/Visual Systems (AV). The AV system consists of conduit, cabling infrastructure, electronic appurtenances (i.e. switches, controllers, amplifiers), LCDs/projectors, screens, mounting hardware, cabinets/racks, wire management as required for a fully functioning AV system.

1.1 DESIGN REQUIREMENTS

The A/E team shall be responsible for a fully developed audio/visual system (AV) design. This section provides overall guidance in specific ECSD requirements, but is not intended to provide an exhaustive design methodology nor construction specifications. ECSD also requires the services of a Certified Technology Specialist (CTS) for all audio visual systems design services. The A/E shall provide a competent designer who, in the judgment of ECSD IT, is sufficiently experienced to design the AV systems in accordance with these guidelines and all applicable standards.

The A/E shall provide detailed drawings and specifications that fully document the AV system. The A/E shall not rely upon the installing contractor to develop the AV design or to provide detailed drawings for the system.

1.2 AUDIO / VISUAL SCOPE OF WORK

AV system needs may vary between existing schools, classrooms, media centers, cafeterias, auditoriums, conference rooms, etc. Each shall be designed in a manner consistent with existing facility or as deemed applicable by ECSD IT and/or end users as applicable to that facility. Scope shall include entire system described above with required programming, training of staff and warranty of entire system.

1.3 CONTRACTOR QUALIFICATIONS

The A/E shall specify and enforce the following qualifications for AV contractors:

1.4 The AV contractor shall be an experienced firm regularly engaged in the layout and installation of AV systems of similar size and complexity as required for this installation. The AV contractor, under the same company name, shall have successfully completed the layout, installation, testing and warranty of not less than five audio visual systems of the scope of the largest system on this project for a minimum period of three years prior to the bid date. The contractor shall have an existing permanent office located within 75 miles of the job site from which installation and warranty service operations will be performed.

1.5 All conduit and cable tray systems shall be installed by a licensed electrical contractor using tradesmen who are skilled and experienced in the types of conduit installations

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Revised 05/01/2015

indicated in the bid documents.

1.6 WARRANTY REQUIREMENTS

The following shall be a requirement for all installed systems. Contractor shall provide certificate of such warranty at project completion.

- 1.6.1 All equipment including material used in the installation thereof shall be warranted for one full year by the contractor against mechanical, electrical, and workmanship defects. In the event defects become evident within the warranty period, the contractor shall repair or replace the defective parts and materials at no additional cost to the Owner. The warranty period shall start with the date of substantial completion. The warranty shall apply to all equipment provided under the provisions of this contract regardless of the location. Warranties submitted with bids, either appearing separately or included in pre-printed literature and price lists, shall not be acceptable and provisions herein take precedence.

END OF SECTION 17300

APPENDIX A/ CURRENT NETWORK EQUIPMENT

Revised 09/09/2019

- 1.0 Approved equipment as of this date. Consult ECSD IT Network Services personnel for guidance in selecting the appropriate equipment.
- 1.1 Switches for Edge Devices, IP Cameras and IP Telephones:
48 ports: JL322A Aruba 2930M 48G POE+ 1-slot Switch. 44 autosensing 10/100/1000TX 802.3at PoE+ ports, 4 Combo 10/100/1000BASE-T PoE+ or SFP ports with JL083A Aruba 3810M/2930M 4SFP+ Module with appropriate fiber transceivers and appropriate power supplies.
- 1.2 Switches for Access Points:
24 ports: JL324A Aruba 2930M 24G POE+ 1-slot Switch. 24 autosensing 100/1/2.5/5Gb 802.3bt PoE Class 6 ports, with JL083A Aruba 3810M/2930M 4SFP+ Module with appropriate fiber transceivers and JL087A power supply.
- 1.3 Server Switches:
JL075A Aruba 3810M 16SFP+ 2-slot Switch. 16 fixed SFP+ transceivers with Quantity 2 JL083A Aruba 3810M/2930M 4SFP+ Modules. Supply with appropriate fiber transceivers and appropriate power supplies.
- 1.4 Backbone Switches (CER):
JL479A#ABA Aruba 8320 48SFP+ Switch. Supply with appropriate fiber transceivers and appropriate power supplies.
- 1.5 Wireless Controller:
Aruba Networks 7240 Mobility Controller. Consult ECSD IT to determine if/which AP licenses are required.
- 1.6 Wireless Access Points:
Aruba Networks AP-515 for classrooms and office environments.
Aruba Networks AP-535 for auditorium, gymnasium, cafeteria & similar environments.
Aruba Networks AP-36x as appropriate for outdoor environments.