



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

April 1, 2016

Owner: Colusa Unified School District
745 Tenth Street
Colusa, CA 95932

Project Manager: Capital Program Management, Inc.
1851 Heritage Lane, Suite 210
Sacramento, CA 95815

This Addendum has been prepared to clarify, modify, delete, or add to the drawings and/or specifications for the above referenced project, and revisions to items listed here shall supersede description thereof prior to the above stated date. All conditions not specifically referenced here shall remain the same. It is the obligation of the Prime Contractor to make subcontractors aware of any items herein that may affect submitted bids.

Acknowledge receipt of this addendum by inserting its number and date in the bidding documents. Failure to do so may subject bidder to disqualification.

All addenda items refer to the plans and specifications unless specifically noted otherwise.

TOTAL PAGES IN THIS ADDENDUM: (9 pages plus 7 attachments)



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

PART A - BIDDING AND CONTRACT REQUIREMENTS

Request for Proposal for E-Rate Funding Year 2016 Request Cabling Infrastructure Upgrade

- 1.1 Refer to Schedule and **REPLACE** in its entirety **WITH**:

SCHEDULE:

The schedule for this project is as follows:

First advertisement 3/15/2016
Second advertisement 3/22/2016
Pre-bid meeting 3/30/2016 at 3:00 pm
Clarifications 3/31/2016 by 12:00 pm
Final Addenda issued 4/1/2016
Proposals Due 4/5/2016 no later than 2:00:00pm
Notice of Intent to Award 4/07/2016
Board Approval of Contract 4/12/2016
Notice to Proceed 4/13/2016
Submittals start 4/15/2016
Procurement 5/06/2016
Mobilization 5/30/2016
Construction Start 6/6/2016
Completion no later than 8/12/2016

- 1.2 Refer to Proposal Evaluation, Item 7 and **REPLACE** in its entirety **WITH**:

7. 10% - The ability of the vendor to provide satisfactory services in this area as determined solely by the CUSD. This includes, but is not limited to, having an office within 2 hours drive of the site.

- 1.3 Refer to Proposal Requirements, and **REPLACE** in its entirety **WITH**:

PROPOSAL REQUIREMENTS:

1. Attendance of Mandatory Pre-Bid Walk
2. Signed Proposal with detailed Scope of Work (Proposals must be valid for 30 days)
3. Copies of current Contractor Licenses issued by the State of California and DIR Registration.
4. Listing of any Subcontractors as set forth by PCC Section 4100-4113



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

The lowest proposal, if acceptable and upon recommendation of staff will be submitted to the School Board for approval, authorize the award of the Contract and authorize the work to begin in or around June 6th, 2016. The School Board reserves all rights to accept or reject any and all proposals for a period of Thirty (30) days, deemed non-responsive or non-responsible of any bid proposal, waive any informality or irregularity in any bid proposal.

Work is expected to begin **June 6th, 2016** with all work required to be completed by **August 12th, 2016**. In the event the project is not completed within the time frame specified, the Contractor may be subject to Liquidated Damages in the amount of Five Hundred Dollars per day (\$500) until the project is accepted by the School Board or their designee.

PART B - TECHNICAL REQUIREMENTS

SCS Specification Section - 27 15 00 Communications Horizontal Cabling

- 1.4** Refer to Part 1 General, Section 1.4 System Description, Item A.1.d on page 5 and **DELETE** in its entirety:
- d. Wire management shall be provided above and below, 1 Ru, for each 48 port patch panel.
- 1.5** Refer to Part 1 General, Section 1.4 System Description, Item A.2.c.1 on page 6 and **REPLACE** in its entirety **WITH:**
- 1) Two patch cords for each category 6/6A data cable installed. This includes one patch cord at the work station and one patch cord at the equipment room.
- 1.6** Refer to Part 1 General, Section 1.4 System Description, Item A.3.a.3 on page 6 and **REPLACE** in its entirety **WITH:**
- 3) Gang box mounted above tile with faceplate below tile flush with ceiling tile facing into the classroom when installed at accessible ceiling.



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

1.7 Refer to Part 1 General, Section 1.10 Maintenance, Item A.1 on page 8 and **REPLACE** in its entirety **WITH**:

1. Integrator/Installer of the major system components shall maintain a replacement parts supply and provide testing equipment when needed. A complete parts supply shall be located close enough to supply replacement parts within a 4 hour time period as required in contract documents.

1.8 Refer to Part 2 Products, Section 2.1 Manufacturers on page 8 and **REPLACE** in its entirety **WITH**:

2.1 MANUFACTURERS

A. Furnish products by the following Manufacturers; All components shall be from the same manufacturer system and offer minimum 20 year manufacturer system warranty.

1. Fiber Optic Cable, terminations, and patch cord cable:
 - a. PanGen Structured Cabling Solutions;
 - b. Commscope Systimax
 - c. BerkTek Leviton
2. Horizontal twisted pair and modular patch cord cable:
 - a. PanGen Structured Cabling Solutions;
 - b. Commscope Systimax
 - c. BerkTek Leviton
3. Horizontal twisted pair modular patch cord terminations and modular patch panels:
 - a. PanGen Structured Cabling Solutions;
 - b. Commscope Systimax
 - c. BerkTek Leviton
4. Test equipment:
 - a. Corning Cable Systems



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

- b. Fluke Networks.
- c. Agilent Technologies WireScope 350 Test Set.
- d. Laser Precision.
- e. Tektronix.

1.9 Refer to Part 2 Products, Section 2.2 Horizontal Twisted Pair Cabling, B.6 on page 10 and **REPLACE** in its entirety **WITH**:

6. Manufacturer:

- a. Matching horizontal cabling solution manufacturer and matching Category, Cat 6 or Cat 6A.
- b. Cord lengths
 - 1) Work Station Cords 10' for 70% of total, 20' for 30% of total. Blue.
 - 2) Patch Panel Cords 1'.

1.10 Refer to Part 2 Products, Section 2.2 Horizontal Twisted Pair Cabling, A.1.d on page 9 and **REPLACE** in its entirety **WITH**:

d. Cables shall be CMR, CMP or Indoor/Outdoor rated as required for the rating of the space and pathway:

1.11 Refer to Part 2 Products, Section 2.2 Horizontal Twisted Pair Cabling, A.5. on page 9 and **ADD** item d.

d. Mohawk or District approved equivalent

- 1) Mohawk VersaLAN M58772 for use only in areas requiring indoor/ outdoor rated cabling

1.12 Refer to Part 2 Products, Section 2.8 Surface Mounted Raceways A. on page 12 and **REPLACE** in its entirety **WITH**:

A. Panduit or District approved equal. Provide all parts and accessories for a complete system.

- 1. Raceway shall be LDP210
- 2. Outlet box shall be 2 gang extra deep divided box
- 3. Fittings – for use with LDP210; end fitting, entrance end fitting, inside corners, outside



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

corners, etc...

4. No exposed cabling shall be allowed and all raceway shall be installed in a professional manner adhering to manufacturers guidelines.

- 1.13** Refer to Part 2 Products, Section 2.9 Surface Mounted Raceways on page 12 and **ADD** the following:

C. Fiber Optic Patch Cords

1. Provide qty 12 – 3 meter SM fiber optic patch cord SC to SC matching the manufacturer of the fiber optic cabling solution.

- 1.14** Refer to Part 3 Execution, Section 3.2 Installation B.3.d on page 14 and **REPLACE** in its entirety **WITH**:

d. Modular patch panels:

- 1) Provide quantity of modular patch panels to support the terminations of cables served from respective MDF / IDF and allow for 20% future growth.
- 2) Install and assemble modular patch panels according to the manufacturer's instructions.
- 3) Terminate cables in sequential order using the link's identifier starting at the top left and completing a panel before moving to the next panel below.

- 1.15** Refer to Part 3 Execution, Section 3.4 Field Quality Control and Testing on page 15 and **REPLACE** in its entirety **WITH**:

3.4 FIELD QUALITY CONTROL AND TESTING

- A. Cables and Termination Hardware: Test 100 percent for defects in installation and verify cabling system performance under installed conditions in accordance with ANSI/TIA-568-C.0.
1. Verify all pairs of each installed cable before system acceptance.



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

2. Defects in cabling system installation, including but not limited to cables, connectors, patch panels, and connector blocks shall be repaired or replaced to ensure 100 percent useable conductors in all cables installed.
- B. Test all cables in accordance with this specification section, ANSI/TIA-568-C.2, and ANSI/TIA-568-C.3 standards.
 1. If any of these are in conflict, bring discrepancies to the attention of the Consultant for clarification and resolution.
- C. Cables, Jacks, Connecting Blocks, and Patch Panels:
 1. Verify all pairs of each installed cable before system acceptance.
 2. Defects in cabling system installation, including but not limited to cables, connectors, patch panels, and connector blocks shall be repaired or replaced to ensure 100 percent useable conductors in all cables installed.
- D. Testing Unshielded Twisted-Pair Cables:
 1. Test twisted-pair copper cable links for continuity, pair reversals, shorts, opens, and performance as specified.
 - a. Additional testing is required to verify Category performance.
 - b. Test horizontal cabling using approved certification tester for Category 6A, Category 6, and Category 5e performance compliance in accordance with ANSI/TIA-568-C.2.
 - c. Category 6A shall conform to ANSI/TIA-568-C.2 for augmented Category 6 to 500 MHz.
 2. Follow ANSI/TIA-568-C.2.
 3. Basic Tests Required:
 - a. Wire map.
 - b. Length (feet).
 - c. Insertion loss (dB), formerly attenuation.
 - d. NEXT (Near end crosstalk) (dB).
 - e. Return loss (dB).
 - f. ELFEXT (dB).
 - g. Propagation delay (ns).
 - h. Delay skew (ns).
 - i. PSNEXT (Power sum near-end crosstalk loss) (dB).
 - j. PSELFEXT (Power sum equal level far-end crosstalk loss) (dB).
 4. Test Category 6A by auto test to 500 MHz.



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

5. Test Category 6 by auto test to 250 MHz.

 6. Provide test results in approved certification testers original software format on CD, with the following minimum information per cable:
 - a. Circuit ID.
 - b. Information from specified basic tests required.
 - c. Test Result: "Pass" or "Fail".
 - d. Date and time of test.
 - e. Project name.
 - f. NVP.
 - g. Software version.

 7. An occasional asterisk-Pass (*Pass) will be accepted at the manufacturer's discretion, but rework of these links should be done in an attempt to achieve clean "Pass" results prior to submission of test results.

 8. To receive Manufacturer's Warranty for the project, submit software copy of test results, in original tester software format, to the Owner and to the Manufacturer.

 9. Submit fully functional version of tester software for use by the Owner in reviewing test results.

 10. Report in writing to the Owner immediately, along with copy of test results, failed test results that cannot be remedied through re-termination (as in the case of reversed or split pairs).
- E. Optical Fiber:
1. Testing procedures shall be in accordance with the following:
 - a. ANSI/TIA-568-C.3.
 - b. ANSI/TIA-526-7, Method B.
 - c. Proposed TSB-140 Tier One Fiber Certification, C.
 - d. Encircled Flux testing per the TSB-4979 and TIA-526-14-B standard.

 2. Test Equipment: OTDR and Power Meter

 3. Testing:
 - a. Test optical fibers at both 850 nm and 1300 nm wavelengths for multimode, 1310 nm and 1550 nm wavelengths for singlemode, end-to-end insertion loss,



Colusa Unified School District

E-Rate Funding Year 2016 Cabling Infrastructure Upgrade

Bid Package #16-107

ADDENDUM NO. 1

- Telecommunications Room (TR) to Telecommunications Outlet (TO),
Telecommunications Outlet (TO) to Telecommunications Room (TR).
- b. Maximum insertion loss for horizontal fiber optic cables without consolidation point: 2.0 dB.
 - c. Test horizontal fiber runs TR to TO, TO to TR, at wavelength of operation to desktop applications.
4. Submit software copy of test results, in original tester software format, to the Owner and to the owner's representative.

PART C – DRAWINGS

REPLACE in its entirety drawing Burchfield PS W_P_S 160304 AttachmentB_1 of 3 **WITH** drawing Addendum 1 Burchfield PS W_P_S 160304 AttachmentB_1 of 3

REPLACE in its entirety drawing Egling MS W_P_S 160304 AttachmentB_2 of 3 **WITH** drawing Addendum 1 Egling MS W_P_S 160304 AttachmentB_2 of 3

List of Attachments

- 1.16** Pre Bid Conference Agenda dated March 30, 2016 (1 page)
- 1.17** Pre Bid Sign-in Sheet dated March 30, 2016 (1 page)
- 1.18** Addendum 1 Colusa (E) RFP Cable Schedule by site 160307 (1 page)
- 1.19** Addendum 1 Burchfield PS W_P_S 160304 AttachmentB_1 of 3 (6 pages)
- 1.20** Addendum 1 Egling MS W_P_S 160304 AttachmentB_2 of 3 (7 pages)
- 1.21** CUSD E-Rate Funding Year 2016 Cabling Infrastructure Upgrade Project Pre Bid Questions and Answers (2pages)
- 1.22** E-Rate Funding Year 2016 Cabling Infrastructure Upgrade Project_Project Manual (284 pages)

End of Addendum