PROJECT FACT SHEET

LOW VOLTAGE STRUCTURED CABLING CONTRACTORS
(Renovation and Construction Continuing Services)
University of Central Florida (All Campuses)

PROJECT DESCRIPTION

The University of Central Florida (UCF) is soliciting qualifications from experienced commercial and industrial specialty trade low-voltage (physical layer) contractors to provide structured cabling services, including the installation of copper, fiber optic, and coaxial riser cabling and associated infrastructure; voice, data, and television outlets; telecommunications room and server room build-outs; and outdoor copper and fiber optic installations. Services shall support a variety of Information Technology systems identified in **Attachment "B"** and may include new construction, renovations, alterations, repairs, and other related construction activities. Note that these limits may be updated over time to match the most current version of the Board of Governor's Regulations.

The University of Central Florida wishes to enter into an open-ended contract with multiple companies for a period of one year, with an option to renew for four additional one-year periods. The University has the right to amend the terms of the contract at each annual renewal. The selected firms' minimum bonding capacity shall be $4,000,000 with a maximum of $7,500,000.

Scope for Structured Cabling, must be able to perform the following tasks in the UCF environments of the main campus, satellite campuses, urban municipalities, residential, educational, athletic, performance, administrative and business:

1. OSP innerduct and cable placement, termination, and testing
2. Interior pathways and spaces buildout
3. Category and Class 2 cable placement, termination, and testing
4. Design services
5. Permit applications

The Contractor shall furnish all labor, supervision, materials, equipment, testing, documentation, and project management necessary to provide complete structured cabling systems for renovations, additions, repairs, and new construction projects at all University of Central Florida campuses.

The work shall include, but is not limited to:

- Installation of Category 6A, Category 6, fiber optic (single-mode and multimode), and coaxial cabling.
- Installation of horizontal, backbone, riser, and outside plant cabling systems.

- Installation of telecommunications rooms (TR), equipment rooms (ER), main distribution frames (MDF), intermediate distribution frames (IDF), and server room infrastructure.
- Installation of cable tray, ladder rack, J-hooks, conduits, sleeves, pathways, and cable management systems.
- Installation and termination of patch panels, fiber enclosures, racks, cabinets, outlets, faceplates, and associated connectivity hardware.
- Installation of cabling supporting:
    - Voice and data communications
    - Wireless Access Points (WAPs)
    - Security systems
    - Access control systems
    - IP surveillance cameras
    - Audio/Visual systems
    - Digital signage
    - Building automation interfaces
    - Power over Ethernet (PoE) devices
    - Other network-connected devices
- Fiber optic splicing, termination, testing, and certification.
- Copper cable termination and certification.
- Labeling of all pathways, cables, patch panels, outlets, racks, and equipment in accordance with UCF standards.
- Removal and disposal of abandoned cabling as directed by the University.
- Coordination with other trades to maintain proper routing, separation from power systems, and compliance with project schedules.

Testing and Documentation

The Contractor shall provide complete testing and commissioning of all installed systems, including:

- 100% certification testing of copper cabling.
- Optical loss testing (OLTS) and OTDR testing of fiber optic cabling, when required.
- Correction of any deficiencies identified during testing.
- Electronic copies of all test reports.
- As-built drawings showing cable routing, outlet numbering, telecommunications rooms, and fiber assignments.
- Updated cable schedules and rack elevations.
- Warranty documentation and manufacturer certifications.

Standards

All work shall comply with the latest editions of applicable standards, including but not limited to:

- ANSI/TIA-568 Series
- ANSI/TIA-569
- ANSI/TIA-606
- ANSI/TIA-607
- ANSI/BICSI standards
- NEC (NFPA 70)
- Florida Building Code
- Manufacturer installation requirements
- UCF Design Standards and Information Technology Standards

Qualifications

The Contractor shall maintain all certifications required under Attachment A of this Project Fact Sheet, including manufacturer certifications applicable to the systems being installed. At least one Registered Communications Distribution Designer (RCDD) shall be employed by the firm and available to oversee structured cabling projects.

Deliverables

At project closeout, the Contractor shall provide:

- Certified test results for all installed cabling.
- Electronic and hard-copy as-built documentation.
- Cable identification schedules.
- Fiber strand assignment documentation.
- Warranty certificates.
- Manufacturer registration documentation.
- Final commissioning reports.

It is at UCF's discretion to choose among its selected Contractors the individual projects that Contractors will have the opportunity on which to propose. Contractor is required to provide quotes for all such projects requested by UCF. If Contractor does not intend to submit a quote on a certain project, justification must be provided to UCF. UCF shall take non-responsiveness into consideration when awarding future work and determining whether contract options will be exercised.

A not-to-exceed percentage fee for overhead and profit will be established in the agreement. This fee will be effective for the life of the contract. When an individual Project arises, the Contractor will be provided a detailed description of the Project scope (plans and specifications when applicable) and asked to provide to the designated UCF Project

Manager a cost proposal for completing the work. The cost of the work will include all costs related to completing the work plus the agreed upon percentage fee for overhead and profit. The Contractor will be required to seek competitive bids for all subcontracted work with a value over $5,000 which will be included as part of the cost. Upon approval of the cost, the UCF Project Manager will submit a requisition to the University Purchasing Division, which, in turn, will issue a Purchase Order to the Contractor for the work.

NOTE: The Selection Committee may reject all proposals and stop the selection process at any time. The University also reserves the right to cancel the project at any time.

INSTRUCTIONS:

Carefully review the Contract posted with this advertisement at https://www.fp.ucf.edu/resources/contract-documents/. Submitting a proposal for this project constitutes complete agreement with, and acceptance of, the terms and conditions contained within these documents. **NO changes will be accepted.**

Contractors desiring to apply shall submit **only electronic submissions,** to be uploaded at: **https://ucf.bonfirehub.com/opportunities/247000**, comprising:

A. a letter of interest;
B. a copy of the Contractor firm's current license from the appropriate governing board. All applicants must be licensed and insured to practice as General Contractors in the State of Florida at the time of application. Corporations must be registered to operate in the State of Florida by the Department of State, Division of Corporations, at the time of application.
C. a completed Contractor Form;
D. a list of completed jobs over the last three (3) years, with contract value, contact name, and telephone number;
E. Provide three (3) letters of reference and recommendation prepared by your firm's client(s) for each specialty trade you are applying for hereunder. Reference letters should describe your performance on the projects. References may not be from UCF personnel; and
F. narratives to address items listed in the Selection Criteria, as shown below

Please note that only ONE (1) file can be uploaded for the entire project submission.

Pages must be numbered consecutively. Proposals must not exceed 20 double-sided pages. Fonts must be a minimum 10-point font when printed full size. Points may be deducted from proposals exceeding the 20-page limit.

Detailed submissions instructions can be downloaded from the link shown above.

Applications that do not comply with all instructions may be disqualified.

Application materials will not be returned.

No oral communications shall be binding as a change to the Advertisement or Project Fact Sheet. Interpretation of the wording of this Project Fact Sheet shall be solely that of UCF and that interpretation shall be final. UCF may respond to questions deemed by the University to be material in nature.

It shall remain the responsibility of the firms participating in this solicitation to check the Planning, Design and Construction website (https://www.fp.ucf.edu/vendors/current-advertisements/) regarding any addendums and Notice of Change.

As required by Section 287.133, Florida Statutes, a consultant may not submit a proposal for this project if it is on the convicted vendor list for a public entity crime committed within the past 36 months. The selected consultant must warrant that it will neither utilize the services of, nor contract with, any supplier, subcontractor, or consultant in connection with this project for a period of 36 months from the date of their being placed on the convicted vendor list.

SELECTION CRITERIA

Companies will be evaluated on the following:

1. **Past Performance.** Provide information on five (5) projects that are similar in project type, size, and scope to what may be performed under this contract with UCF. Projects that are submitted that are not relevant in project type, size, and scope will receive no points. Clearly articulate within each of the 5 projects information regarding:
    a) similarity in function, size and complexity; names of proposed team members who worked on each project and roles that the proposed team members played; owner's contact information; (name, title, phone, email); and representative images of the project
    b) initially scheduled design completion dates and actual design completion dates; provide month/day/year for each date
    c) original construction budget, final construction budget, and reasons for any differences; do not include direct owner purchase information

2. **Experience and Ability.** Describe your firm's experience and ability:

    a) working with public, higher education clients and their Standards and processes;
    b) with cost estimating and change order avoidance; and
    c) with cost control, including methods employed
    d) managing and performing numerous projects at the same time;
    e) work in a High-Energy System Environment (PPE, training, onsite supervision), which includes Voltages, Lubricants, Air and Water. Provide a narrative to address this ability.

3. **Bonding Capacity.** Provide a letter from your bonding company reflecting your current bonding capacity and rating.

4. **Personnel.** Provide bios for the following design team members, clearly indicating their experience with this project type, education, and licenses/certifications/credentials:
    - Supervisor
    - Project Manager
    - Line Employee / Crew Member
    - Field Engineer
    - Specialty Technician

5. **Location**. Provide the address of your main office, and any regional/local offices you have, and provide details of what services and technical personnel you have at those locations. Indicate which office(s) the personnel leading this project will be operating from.

6. **Quality Assurance/Quality Control.** Work shall be completed in accordance with the latest ANSI/BICSI/EIATIA standards, original equipment manufacturer (OEM), and applicable codes, in addition to adherence to the University's standards and guidelines (installation practices, materials, and topologies). Describe your firm's approach to QA/QC and commissioning.

7. **Job-specific Qualifications**.

    a) Change Order Avoidance. All change orders will be received in writing and must be approved by UCF prior to execution. Describe your experiences with eliminating scope creep and approach to cost estimating.
    b) Approach to Effective Supply Chain Management for capital replacement. Describe your company's approach to ensuring consistent supply chain management.
    c) Ability to respond to Disaster Relief Work during campus and state emergencies.
        - Include labor and equipment rates for disaster relief work requests.
        - Normal working hours
        - After hours (define times)
        - Weekends and holidays
        - Quantity of shifts vendors can support in one calendar day. (i.e. 1, 2 or 3)
        - Margin for material and equipment labor
        - Guaranteed response time

GENERAL INFORMATION

1. All applicants will be notified of the results of the short-listing in writing. Finalists will be informed of the interview dates and times and will be provided with additional project information, if available.

2. The Selection Committee will make a recommendation to the University President. All finalists will be notified in writing of the President's action. Upon approval by the President, negotiations will be conducted.

3. UCF Team Members may not discuss the project with interested firms during the entire selection process.

Attachment "A"
Certifications And Factory Authorizations

The Certifications below are required by Contractors who work on low voltage (physical layer) systems.

- Belden Partner Alliance Installer and Integrator Program Member.
- Accredited Fiber Certification
- Registered Communications Distribution Designer (RCDD). Each company must have at least one RCDD on staff to bid on any or all structure cabling lots. Include name of staff member and RCDD number.
- Powder Actuated Tools Qualified Operator Certification.
- Firestop training Certification.
- Burglar Alarms Systems Agent (BASA).
- Acre Installation Partner.
- National Institute for Certification in Engineering Technologies (NICET).
- Axis Integrator.
- DNA Fusion software integration.
- Milestone VMS systems.
- Accredited Fundamentals of Speech Privacy and Sound Masking.
- Certified Technology Specialist (CTS).
- Crestron Commercial Dealer.
- Motorola Mobile Access.
- JMA Connector Certification.
- TEKO DAS Commissioning Certification.
- Cisco, Extreme, TIA, and Ekahau.

All visits will be documented and report(s) sent to the appropriate UCF Planning, Design & Construction employee for record retention.

Attachment "B"

STRUCTURED CABLING

1. Contractors shall prepare As-Built drawings in .pdf form. The drawings shall display the building name, project number, room layout, data jack locations, communications rooms/closets, jack numbers, etc.
2. When directed to do so, Contractors will comply with the UCF building permit or other jurisdictional permit procedures along with the associated inspection processes.
3. Contractors shall, at all times, protect the work, adjacent property, and the public from any injury or loss arising in conjunction with this contract. Contractors shall be responsible for any damage or injury due to Contractors and/or Contractors' Agents' acts or neglect. The University may withhold payment or make such deductions as may be deemed necessary, to insure reimbursement for loss or damage to property through negligence on the part of Contractor or Contractor's Agents.
4. Contractors shall, at all times, keep the construction area, including storage areas used, free from accumulation of waste material, trash, or rubbish. Upon completion of construction, Contractors shall leave the work site and premises in a clean, neat, and quality workmanship condition, satisfactory to the University.
5. Work schedules will be flexible to take account for the needs of UCF. When working in existing facilities, class schedules may require that work be accomplished outside of normal business hours. The PDC Project Manager will coordinate with affected facility occupants to determine when off-shift work is necessary. Off shift work will be conducted as flexible scheduling rather than overtime status.
6. Contractors shall provide .pdf digital copies of test results to UCF prior to final invoice for each project.

STRUCTURED CABLING SERVICES

1. Contractors installing Structured Cabling shall use methods compliant with ANSI/TIA/EIA- 568-E, 569-E, 606-D, 607-D, 942-B, standards. Contractors shall label each cable on both ends with appropriate labels showing the room/outlet/jack number. Contractors shall terminate each cable onto an RJ-45 connector with the appropriate specification for the cable being installed on the station side and onto a patch panel on the communications closet side unless otherwise directed. Contractors shall place the RJ-45 connector in a multi-port face plate, surface mount box, or directly into equipment, as determined by the UCF IT PM. Contractors shall label the faceplates with the cables' room/outlet/jack numbers.
2. UCF IT installs ANS/TIA/EIA-568-E Category 6A Structured Cabling Systems in all new construction locations.
3. Contractors shall test cables end to end for ANSI/TIA/EIA-568-E compliance via Permanent Link Testing and Modular Plug Terminated Link (MPTL) utilizing a

Level 3 Certification tester. Contractors shall provide the PDC Project Manager with documentation for all tests.

CABLE TERMINATING SERVICES

1. All fiber optic cables, and associated components shall be installed and terminated in accordance with the cable and component manufacturer's installation instructions and practices.
2. Terminate fiber optic cable strands as directed by the PDC Project Manager. Systems typically used by UCF are fuse on style individual connectors or twelve (12) strand ribbonized pig-tail fusion splice connectors.
3. Contractors shall perform Optical Power Loss Testing of all fiber optic cable strands end to end, in both directions, by using a Level 3 Certification tester. Contractors shall provide the PDC Project Manager with documentation for all tests. The test results must meet the cable and connector manufacturers' published standards for acceptable loss.

   The troubleshooting, repair/re-terminating, and re-testing of strands which do not meet the above test criteria, shall be performed by the Contractor at no additional charge to the University.

OSP FIBER OPTIC CABLE PLACEMENT AND TERMINATION SERVICES

1. Contractor is to install fiber optic cable specified for the particular tasks assigned by UCF IT. Dielectric, dry blocked cables are to be installed to match UCF's existing fiberoptic infrastructure. generally specifies ribbonized single mode fiber and fusion terminations. Contractor must have the capability to ribbonize non-ribbon cable for purposes of termination with a ribbon fusion splicer. Ribbonized pigtails are the typical termination method. Single terminations are to be done with fuse on connector types unless otherwise specified by the PDC Project Manager.
2. Contractor is to install associated materials specified and provided by the PM such as connectors, buffer tube fan out kits, enclosures, and bulkhead panels.
3. When working in UCF IT's MHs, OSHA Regulation #1910.268 "Telecommunications" shall be followed.
4. Fiber optic cable shall be pulled as one continuous run from originating point to terminating point. No splicing will be allowed.
5. Fiber optic cables are to be pulled into pathway conduits as specified by the PM. This may include empty conduit, conduit with pre-existing cables or FoDuct. A Service Loop consisting of a minimum of 10 feet of fiber optic cable is to be coiled and secured at the originating point and at the end terminating point of the fiber path, plus in MHs as specified by the PDC Project Manager.
6. Fiber optic cables are to be supported by standard MH racking in MHs. PDC Project Manager is to be consulted concerning the exact installation of MH racking in each MH.
7. Where fiber optic cables enter buildings or enter Intermediate Distribution Frame (IDF) rooms through conduits and inner ducts, duct sealing materials are to be

installed around cables. Fire rated duct sealing materials shall be installed in riser system installations.

8. All fiber optic cables, and associated components are to be installed and terminated in accordance with the cable and component manufacturer's installation instructions and practices.
9. Terminate fiber optic cable strands as directed by the PM. Typically for OSP fiber optic cable this can be ribbonized or individual strands. Individual strands utilizing fusion splicing of 12 connector ribbon pig tails or individual fuse on connectors is typical.
10. Contractor shall perform Optical Power Loss Testing of all fiber optic cable strands end to end, in both directions, by using a Level 3 Certification tester. Contractor shall provide PDC Project Manager with printed documentation for all tests. The test results must meet the cable and connector manufacturers minimum acceptable test results are as follows: published standards for acceptable loss.
11. The troubleshooting, repair/re-terminating, and re-testing of strands which do not meet the above test criteria, shall be performed by the Contractor at no additional charge to the University.

EQUIPMENT ROOM APPURTENANCES

1. Contractors installing Equipment Room fittings shall use methods compliant with ANSI/TIA/EIA- 568-E, 569-E, 606-D, 607-D, 942-B, standards. Contractors shall label each component with appropriate labels.

2. Install relay racks, cabinets, vertical wire management, horizontal wire management, ladder rack, bonding busbars, bonding jumpers, bonding halo, plywood backboards, distribution switches, PDUs, UPSs, and other fittings as directed by the PDC Project Manager.