

<p><b>SUBMIT BID TO:</b>  <b>PURCHASING DEPARTMENT</b>  <b>UNIVERSITY OF CENTRAL FLORIDA</b>  <b>12479 RESEARCH PARKWAY, BLDG. 600</b>  <b>ORLANDO, FL 32826</b>  <b>Phone: (407)823-2661 – Fax (407) 823-5551</b>  <b>www.purchasing.ucf.edu</b></p>	<p><b>University of Central Florida</b>   <b>INVITATION TO BID</b>   <b>Contractual Services</b>   <b>Acknowledgment Form</b></p>
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Page 1 of 51 Pages	BIDS WILL BE OPENED <b>May 22, 2014 @2:00 PM</b>	ITB NO. <b>1318CCSA</b>
and may not be withdrawn within 120 days after such date and time.		

UNIVERSITY MAILING DATE: <b>April 18, 2014</b>	ITB TITLE: Telecommunication Outside Plant & Structured Cabling Services
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FEDERAL EMPLOYER IDENTIFICATION NUMBER OR S.S. NUMBER 45-4338340

VENDOR NAME Central Florida Infrastructure, Inc.	REASON FOR NO BID:
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VENDOR MAILING ADDRESS 104 Vinewood Dr.	
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CITY - STATE - ZIP CODE Sanford, FL 32773	<p style="text-align: center;"><b>POSTING OF PROPOSAL TABULATIONS</b></p> <p>Proposal tabulations with intended award(s) will be posted for review by interested parties at the Purchasing Department, our solicitation web page and the State of Florida’s Vendor Bid System and will remain posted for a period of 72 hours. Failure to file a protest within the time prescribed in UCF Regulation 7.130(5) at <a href="http://regulations.ucf.edu/chapter7/index.html">http://regulations.ucf.edu/chapter7/index.html</a> shall constitute a waiver of proceedings under that regulation.</p>
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AREA CODE	TELEPHONE NO.	<p><i>I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a bid for the same materials, supplies, or equipment and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the bidder and that the bidder is in compliance with all requirements of the Invitation to Bid, including but not limited to, certification requirements. In submitting a bid to an agency for the State of Florida, the bidder offers and agrees that if bid is accepted, the bidder will convey, sell, assign or transfer to the State of Florida all rights, title and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the state of Florida. At the State’s discretion, such assignment shall be made and become effective at the time the purchasing agency tenders final payment to the bidder.</i></p>
407	330-2260	

	TOLL FREE NO.
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407	FAX NO. 330-2260
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**Government Classifications**  
**Check all applicable**

- |  |   |
|--|---|
| <input type="checkbox"/> African American        | <input type="checkbox"/> American Women       |
| <input type="checkbox"/> Asian-Hawaiian          | <input type="checkbox"/> Government Agency    |
| <input type="checkbox"/> Hispanic                | <input type="checkbox"/> MBE Federal          |
| <input type="checkbox"/> Native American         | <input type="checkbox"/> Non-Minority         |
| <input type="checkbox"/> Non-Profit Organization | <input type="checkbox"/> Pride                |
| <input type="checkbox"/> Small Business Federal  | <input type="checkbox"/> Small Business State |

**GENERAL CONDITIONS**

**SEALED BIDS:** All bid sheets and this form must be executed and submitted in a sealed envelope. (DO NOT INCLUDE MORE THAN ONE BID PER ENVELOPE.) The face of the envelope shall contain, in addition to the above address, the date, and time of the bid opening and the bid number. Bid prices not submitted on attached bid price sheets when required shall be rejected. All bids are subject to the terms and conditions specified herein. Those which do not comply with these terms and conditions are subject to rejection. The terms Contractor, Payee and Vendor are used interchangeably in this document.

**1. EXECUTION OF BIDS:** Each bid must contain a manual signature of the authorized representative in the space provided above. Each bid must be typed or printed in ink. Use of erasable ink is not permitted. All corrections to prices made by the bidder must be initialed. The company name and F.E.I.D. or social security number must appear on each pricing page of the Bidder as required.

**2. NO BID SUBMITTED:** If not submitting a bid, respond by returning only this bidder acknowledgment form, marking it "NO BID," and explain the reason in the space provided above. Failure to respond without

justification may be cause for removal of the bidder’s name from the bid mailing list. NOTE: To qualify as a respondent, bidder must submit a "NO BID," and it must be received no later than the stated bid opening date and hour.

**Brady A Sapp**  
**AUTHORIZED SIGNATURE**

Brady A. Sapp

**AUTHORIZED NAME (TYPED/PRINTED)**  
**Vice President 5/22/2014**

**TITLE/DATE**  
**407-970-8611**  
**centralfloridainfrastructure@yahoo.com**

**CONTACT NUMBER/ EMAIL ADDRESS**

Central Florida Infrastructure, Inc. 45-4338340

**3. BID OPENING:** The bid opening shall be public, on the date, location and the time specified on the bid form. It is the bidder's responsibility to assure that the bid is delivered at the proper time and place of the bid opening. Bids which for any reason are not so delivered will not be considered. Offers by telegram or telephone are not acceptable. A bid may not be altered after opening of the bids unless allowed by the Director of Purchasing in accordance with established procedures.

NOTE: Bid tabulations will be posted at the Purchasing Department and can be furnished via email upon request. Only bid tabulations with minimal line items will be provided by telephone.

**4. PRICES, TERMS AND PAYMENT:** Firm prices shall be bid and include all services/commodities rendered to the purchaser.

**(a) TAXES:** The State of Florida is a tax-immune sovereign and exempt from the payment of all sales, use and excise taxes.

**(b) DISCOUNTS:** Cash discount for prompt payment shall not be considered in determining the lowest net cost for bid evaluation purposes.

**(c) MISTAKES:** Bidders are expected to examine the conditions, scope of work, bid prices, extensions, and all instructions pertaining to the services involved. Failure to do so will be at the bidder's risk.

**(d) INVOICING AND PAYMENT:** All vendors must have on file a properly executed W-9 form with their Federal Employer Identification Number prior to payment processing.

Vendors shall submit properly certified original invoices to:

Finance & Accounting  
12424 Research Parkway, Suite 300  
Orlando, Florida 32726-3249

Invoices for payment shall be submitted in sufficient detail for a proper pre-audit and post-audit. Prices on the invoices shall be in accordance with the price stipulated in the contract at the time the order is placed. Invoices shall reference the applicable contract and/or purchase order numbers. Invoices for any travel expenses shall be submitted in accordance with the State of Florida travel rates at or below those specified in Section 112.061, Florida Statutes and applicable UCF policies. Travel Reimbursement must be made using the UCF Voucher for Reimbursement of Traveling Expenses available on the web at <http://www.fa.ucf.edu/forms/forms.cfm#>.

Final payment shall not be made until after the contract is complete unless the University has agreed otherwise.

**Interest Penalties:** Vendor interest penalty payment requests will be reviewed by the UCF ombudsman whose decision will be final.

**Vendor Ombudsman:** A vendor ombudsman position has been established within the Department of Finance & Accounting. It is the duty of this individual to act as an advocate for vendors who may be experiencing problems in obtaining timely payments(s) from the University of Central Florida. The Vendor Ombudsman can be contacted at (407) 823-1040 or by mail at the address in paragraph 4.(d) above.

The ombudsman shall review the circumstances surrounding non-payment to determine:

- if an interest payment is due;
- the amount of the payment; and
- shall ensure timely processing and submission of the payment request in accordance with University policy.

**5. CONFLICT OF INTEREST:** Submission of this Invitation to Bid (ITB) shall certify that the Bidder is aware of the requirements of Chapter 112, Florida Statutes and in compliance with the requirements of Chapter 112, Florida Statutes and other laws and regulations concerning conflicts of interests in dealing with entities of the State of Florida. The Bidder certifies that its directors and/or principal officers are not employed and/or affiliated with the University unless a current Conflict of Interest (Report of Outside Activity/Employment) form has been completed, executed by such director or officer and approved in accordance with applicable University policies or rules. Violation of this section by the Bidder shall be grounds for rejection of the bid or the cancellation of any contract or purchase order resulting from this ITB, without penalty to the University of Central Florida. No person or firm who receives a contract to perform a feasibility study for potential implementation of a subsequent contract, participates in the drafting of a competitive solicitation, assist in design or develops a program for future implementation shall be eligible to contract with the University of Central Florida for any project dealing with that specific subject matter. Bidders must disclose with their bids any such conflict of interest dealing with that specific subject matter in accordance with chapter 255,FS.

**6. AWARDS:** At the sole discretion of the University of Central Florida, the

right is reserved to reject any and all bids or waive any minor irregularity or technicality in bids received. Bidders are cautioned to make no assumptions unless their bid has been evaluated as being responsive. Product substitutions may be submitted for evaluation of equivalency unless specifically indicated otherwise. Bidders shall have burden of proof of equivalency.

**7. GOVERNMENTAL RESTRICTIONS:** In the event any governmental restrictions may be imposed which would necessitate alteration of the material quality of the services offered on this bid performance of the items offered on this bid prior to their completion, it shall be the responsibility of the successful bidder to notify the purchaser at once, indicating in writing the specific regulation which requires an alteration. The University of Central Florida reserves the right to accept any such alteration, including any price adjustments occasioned thereby, or to cancel the contract at no expense to the University.

**8. LEGAL REQUIREMENTS:** Applicable provisions of all federal, state, county and local laws, and of all ordinances, rules and regulations shall govern development, submittal and evaluation of all bids received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a bid response hereto and the University of Central Florida, by and through its officers, employees and authorized representatives, or any other person, natural or otherwise: and lack of knowledge by any bidders shall not constitute a cognizable defense against the legal effect thereof.

**9. ADVERTISING:** In submitting a bid, the Bidder agrees not to use the results therefrom as a part of any commercial advertising.

**10. ASSIGNMENT:** Any contract or purchase order issued pursuant to this Invitation to Bid and the monies which may become due thereunder are not assignable, except with the prior written approval of the University of Central Florida. Under no circumstances shall the Bidder assign to a third party any right or obligation of the Bidder pursuant to any contract or purchase order resulting from this Invitation to Bid, without prior written consent of the University. If the Bidder is, or during the term of this Invitation to Bid or during the term of any contract or purchase order resulting from this ITB becomes an individual on the payroll of the State of Florida, the Bidder represents that he or she has complied with all applicable provisions of the Florida Statutes and Florida Administrative Code regarding outside or dual employment and compensation.

**11. FACILITIES:** The University reserves the right to inspect the Bidder's facilities at any time with prior notice.

**12. PUBLIC RECORDS:** Any contract or purchase order issued pursuant to this Invitation to Bid may be canceled unilaterally by the University for refusal by the Bidder to allow public access to all papers, documents, letters or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Bidder in conjunction herewith or any contract or purchase order issued pursuant to this Invitation to Bid.

**13. RECORDS:** The Bidder agrees to keep and maintain, separate and independent records, in accordance with generally accepted accounting principles, devoted exclusively to its obligations and activities pursuant to a contract or purchase order issued pursuant to this Invitation to Bid. Such records (including books, ledgers, journals, and accounts) shall contain all entries reflecting the business operations under a contract or purchase order issued pursuant to this Invitation to Bid.. University or its authorized agent shall have the right to audit and inspect such records from time to time during the term of a contract or purchase order issued pursuant to this Invitation to Bid, upon reasonable notice to the Bidder.

## Introduction

The University of Central Florida (UCF) will accept bids for: Annual Contract for Telecommunications Outside Plant and Structured Cabling Services.

Tasks to be done by the Contractor for UCF Computer Services & Telecommunications (UCF CS&T), shall be done according to Bid Specifications, drawings, and Contractor Work Orders prepared by UCF CS&T's Project Managers, on a project by project basis.

Work Order scope includes, but is not limited to furnishing necessary material and labor to install telecommunications infrastructure such as:

- Outside Plant: Underground concrete encased conduit duct banks, non- encased conduits, Telecommunications Maintenance Holes (MH)outside plant fiber optic inner-ducts, outside plant copper telephone cabling, and fiber optic cabling....including the splicing and termination of outside plant copper and fiber optic cables, plus the testing of each copper cable pair and fiber optic strands.
- Inside Plant: Structured cabling, copper / fiber optic / coax riser cabling and facilities, voice / data / TV outlets, plus Telecom Room and Server Room build outs.

Costs for said material furnished will be in accordance with prices submitted by the Contractor, on written Quotes, on a project by project basis. UCF will only reimburse for the actual cost of any items supplies to complete a project if said item is not already specified and prices on the bid sheet.

In order to receive consideration, make Bids in strict accordance with the following:

- Make Bids upon the forms provided, properly signed and with **ALL ITEMS FILLED OUT PER LOT RESPONDED.** If Bidder does not furnish certain items or services, Bidder must indicate such by inserting N/A (Not Available or Applicable). If Bidder furnishes certain items or services free of charge, Bidder must indicate such by inserting N/C (No Charge).
- Bidder's Pricing submitted at time of Bid Opening shall include any Subcontractor and Specialty Contractor pricing, plus their use of any equipment typically needed to perform tasks identified in this Bid Document. After Bid Award, Contractors shall not charge UCF separately for any Subcontractor and Specialty Contractor pricing, or for any equipment typically needed to perform tasks identified by this Bid Document.

Examples:

- Contractor does not have an in house excavation crew. Contractor brings in an Excavation Subcontractor. Contractor's Bid Pricing at time of Bid Opening must include Sub's Pricing built into Contractor's Bid Pricing.
- Contractor does not own a water pump or a ventilating fan for working in MHs. Contractor rents these items as needed. Contractor's Bid Pricing at time of Bid Opening must include equipment rental pricing built into Contractor's Bid Pricing.

1. POSTING OF BID TABULATIONS:

- A. Bids will be opened at the Purchasing Department at the assigned date and time identified in this ITB.
- B. Bid tabulations will be posted at such time as the Purchasing Department provides notice of intended decision or until 30 days after a public opening of the bids, whichever is earlier.
- C. Notice of a decision or intended decision of award will be posted for a period of 72 hours.
- D. Failure to file a protest within the time prescribed in UCF Regulation 7.130(5) shall constitute a waiver of proceedings under that regulation.

2. BID OPENING: Bids must be received by and opened **May 22, 2014 at 2:00 PM** in the Purchasing Department, Orlando Tech Center, 12479 Research Parkway, Bldg. 600, Orlando, Florida. Time of opening will be local date and time at this location. Purchasing will not extend the bid opening to accommodate vendors that did not discover the ITB early enough to place a bid. Bidders will submit **an original signed hard copy and 3 electronic (flash/jump drive or CD) copies**. BID DOCUMENTS CAN TO BE OBTAINED AT:

<http://www.purchasing.ucf.edu/bids>

**A Pre-Bid conference for this project is scheduled for May 6, 2014 at 9:00 AM** in the Purchasing Department conference room located at 12479 Research Parkway, Building 600, Orlando Tech Center, Orlando, Florida 32826

3. ADDITIONAL INFORMATION & QUESTIONS: We encourage questions or comments which might aid in the improvement of our existing specifications. The university will not give verbal answers to inquiries regarding the specifications, or verbal instructions prior to or after award of the bid. A verbal statement regarding same by any person shall be non-binding. The university is not liable for any increased cost resulting from the bidder accepting verbal direction. All changes, if necessary, shall be made by written addendum to the bid.

Any explanation desired by vendors must be requested of the University of Central Florida Purchasing Department in **writing or via email by May 8, 2014 @ 12 NOON**. Inquiries must be legible and concise and must clearly identify the bidder who is submitting the inquiry (clearly identify on cover of envelope that contents inside are only questions concerning the bid and not the actual bid response), and if an explanation is necessary, a reply shall be made in the form of a written addendum. Specifications, terms and conditions may not be changed except by formal written addendum, issued by UCF, a copy of which will be forwarded to each vendor who has received a set of the bid documents from the University. Vendors obtaining bid documents from any other source must notify the University of their name, address, telephone and facsimile numbers in order to receive any addenda. Direct all inquiries/questions, preferably via email to:

Christine Tangel  
University of Central Florida  
Purchasing Department  
12479 Research Parkway, Bldg. 600  
Orlando, Florida 32826  
Ph. 407-823-2661  
Fax 407-823-5551  
[christine.tangel@ucf.edu](mailto:christine.tangel@ucf.edu)

4. **DELIVERY:** Specify delivery date after receipt of order in terms of days or weeks on bid sheet. Failure to do this may be cause for rejection of the bid. Commodities delivery is to be made to UCF's Central Receiving location (UCF, Building 16E, Libra Drive, Orlando, FL 32816). When delivery is specified to a location other than the University's Central Receiving Department, vendor shall direct its carrier to telephone the University's Central Receiving Department before unloading. Delivery of all shipments shall occur between 9:00 a.m. and 4:00 p.m., Mondays through Fridays only, except on State of Florida or U.S. holidays. Indicated on the face of this Invitation to Bid is the "Delivery Desired By" date; failure to make delivery by or before "Delivery Desired By" shall be grounds for rejection of the bid or the cancellation of any contract or purchase order resulting from this ITB, without penalty to the University of Central Florida.. The University of Central Florida is committed to sustainable practices. Palletized shipments should not exceed 1500 pounds per pallet and when possible, should be shipped on a 40"x48" pallet. Payee shall include a packing list showing contents of shipment (if shipment is made in two or more containers). No boxing, packing, installation, assembly, or similar charges (not included in the item price) will be allowed unless expressly and specifically authorized in writing by the University on the face of any purchase order or contract resulting from this ITB.
5. **PARKING:** The Payee shall ensure that all vehicles parked on campus for purposes relating to work resulting from this ITB shall have proper parking permits. This applies to all personal vehicles and all marked and unmarked company vehicles that will be on any University campus for one (1) day or more or on a recurring basis. All such vehicles must be registered with University's Parking Services Department, and parking permits must be purchased by the Payee. Payee's vehicle(s) shall observe all parking rules and regulations. Failure to obtain parking permits, properly display them, and otherwise comply with all of University's parking rules and regulations could result in the issuance of a parking ticket and/or towing at the expense of Payee or Payee's employees. UCF's Parking Services Department can be contacted at (407) 823-5812 for additional information pertaining to parking and parking fees/rates.
6. **EMPLOYMENT OF ALIENS:** The employment of unauthorized aliens by any Contractor is considered a violation of Section 274A(e) of the Immigration and Nationality Act. If the contractor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the contract by the University without penalty to the University.
7. **AVAILABILITY OF FUNDS:** The obligations of the University under this award are subject to the availability of funds lawfully appropriated annually for its purposes by the Legislature of the State of Florida.
8. **AWARD:** Award will be on a "Per Lot" basis. The University will either accept or reject your bid on a "per lot" basis. The university may accept your bid even if it does not include 100% of the items requested within a lot, if it is in the best interest of the University. The final outcome may result in awarding contracts to multiple Contractors on a per Lot basis. Award will be made to the most responsive, responsible bidder, taking into account prices, reference checks and other criteria in this Invitation to Bid.
9. **SPECIAL NOTE**

The University Campus has an exceptionally high concentration of underground utilities. Along with the active underground utilities, there are abandoned conduits, cables, pipes and other structures in the ground. Contractors must use precautionary measures to prevent damage to the active systems. The University considers adjustments in the trench depth, placement and width in the process of working alongside, under, and avoiding these active utilities or other obstacles as incidental. Therefore, Contractors shall bear this in mind when responding to the Unit Price Schedule.

The University Campus has an exceptionally high concentration of pedestrians, bicycles, and vehicular traffic. Precautionary measures Contractors must take in protecting the project as well as protecting passersby is again considered by the University as incidental to the work at hand.

10. CHANGES IN THE WORK: UCF CS&T's Project Manager may order in writing, if within the scope of this resultant contract, extra work or make changes by altering, adding to or deducting from the original Work Order.

The method for conveying changes will be revised Contractor Work Orders.

11. ADDITIONAL QUANTITIES: The University reserves the right to increase or decrease total quantities as necessary. The University can order additional quantities of the same commodities solicited as long as it is within 120 days after expiration of the contract resulting from this ITB. Total additional quantities, if any, are unknown.
12. CANCELLATION/TERMINATION: UCF may terminate a contract resulting from this ITB without cause on thirty (30) days' advanced written notice to the vendor. The parties to the contract resulting from this ITB may terminate that contract at any time by mutually consenting in writing. Either party may terminate the contract resulting from this ITB immediately for breach by the other that remains substantially uncured after thirty (30) days' advanced written notice to the breaching party, which notice describes the breach in detail sufficient to permit cure by the breaching party. The University shall be liable only for payment for services satisfactorily rendered or goods satisfactorily delivered and accepted from the date of commencement until the effective date of cancellation/termination.
13. TERM OF CONTRACT: The contract resulting from this ITB, if any, will be for a **one (1) year** period beginning approximately **July 1, 2014** with UCF and the selected service/commodity(s) provider having the option to **auto-renew for an additional three (3) one (1) year contracts** as mutually agreed to by both parties. No renewal period will exceed the initial term nor will cumulative renewals exceed 10 years.
14. PAYEE INSURANCE. For all purchases under this ITB of \$10,000 or below, Payee will have and maintain types and amounts of insurance that at a minimum cover the Payee's (or subcontractor's) exposure in performing any contract resulting from this ITB. For all purchases that exceed \$10,000 (i.e. \$10,000.01 and up) and/or all purchases that require a UCF Safe Form, Payee will have and maintain general liability insurance of one (1) million dollars and Payee shall send a copy of Payee's insurance certificate (prior to commencement of Payee's performance or delivery hereunder) to the following address by email, fax or mail:

e-mail: [ehs@ucf.edu](mailto:ehs@ucf.edu)  
Fax: 407-823-0146  
Mail: University of Central Florida  
PO Box 163500  
Orlando FL 32816-3500

UCF has the right to deviate from any of the above insurance requirements, if UCF, at UCF's sole discretion decides to do so. If UCF decides to deviate from the above noted insurance requirements, UCF will inform the Payee in writing in those particular circumstances. Unless UCF notifies a Payee in writing that UCF is willing to deviate from the insurance requirements noted above, all of the above insurance requirements shall apply to the Payee. The University and its Board of Trustees shall be listed as additional insured on any certificate issued and the Certificate Holder is to read the following:

University of Central Florida  
Board of Trustees  
4000 Central Florida Blvd.  
Orlando FL 32816

#### INSURANCE, WORKER'S COMPENSATION

The Contractor/Payee/Vendor shall take out and maintain during the life of the contract resulting from this ITB, if any, Worker's Compensation Insurance for all of his/her employees connected with the work of this project and, in case any work is sublet, the Contractor/Payee/Vendor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the

latter's employees unless such employees are covered by the protection afforded by the Contractor/Payee/Vendor. Such insurance shall comply fully with the Florida Worker's Compensation Statutes Chapter 440. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under the Worker's Compensation statute, the Contractor/Payee/Vendor shall provide, and cause each subcontractor to provide adequate insurance, satisfactory to the University, for the protection of his/her employees not otherwise protected.

15. USE OF CONTRACT BY OTHER GOVERNMENT AGENCIES: At the option of the Contractor/Payee/Vendor, the use of the contract resulting from this ITB, if any, may be extended to other governmental agencies, including the State of Florida, its agencies, political subdivisions, counties, and cities.

Each governmental agency allowed by the Contractor/Payee/Vendor to use the contract resulting from this ITB, if any, shall do so independent of any other governmental entity. Each agency shall be responsible for its own purchases and shall be liable only for goods or services ordered, received and accepted. No agency receives any liability by virtue of this bid and subsequent contract award.

16. PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on Florida's convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids 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 bid limit for that public entity, for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

17. FLORIDA PREFERENCE. For purchases of tangible personal property, Florida legislature has enacted economic development laws establishing certain conditions and circumstances which, when applicable, require the granting of price preferences to businesses whose principal place of business is the State of Florida. Pursuant to §287.084 Florida Statute, award recommendations shall make appropriate adjustments to Resident Vendor pricing when considering solicitations from Bidders having a principal place of business outside the State of Florida. All Bidders must complete and submit Attachment 1 with the response to this solicitation. Failure to comply shall be considered non-responsive to the terms of this solicitation. Refer to <http://www.leg.state.fl.us/Statutes/index.cfm> or <http://regulations.ucf.edu/chapter7/index.html> 3.g.1.c for additional information regarding this Statute and its applicability.

18. IDENTICAL TIE BIDS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids 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 bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. If none, or all of the tied vendors have a drug-free workplace program, vendors with Florida as their primary location will receive preference. Failing the above, a coin flip will be used to determine the winning vendor. In order to have a drug-free workplace program, business's drug free policy shall be in accordance with applicable State and Federal laws.

As the person authorized to sign the statement, my initials certify that this firm complies fully with the above requirements. Initials:  B.A.S.

19. EQUAL OPPORTUNITY STATEMENT: The State Universities have established equal opportunity practices which conform to both the spirit and the letter of all laws against discrimination and prohibits discrimination based on race, creed, color, sex, age, national origin, marital status or religion. To be considered for inclusion as a supplier under this agreement, the bidder commits to the following:

- A. The provisions of Executive Order 11246, September 24, 1996, and the rules, regulations, and relevant orders of the Secretary of Labor are applicable to each order placed against this agreement regardless of value.
- B. If the bidder expects to receive \$10,000 in orders during the first 12 months of this agreement, a complete certificate of non-segregated facilities shall be included in the proposal response.
- C. If the bidder expects to receive \$50,000 in orders during the first 12 months of this agreement and employs more than 50 people, standard form 100 (EEOO-1) must be filed prior to March 1 of each year.
- D. If the bidder expects to receive \$50,000 in orders during the first 12 months and employs more than 50 people, a written program for affirmative action compliance must be maintained by the bidder, subject to review upon request by the user agencies of the contract resulting from this ITB.

**If you have already complied with the above, please initial:**            **B.A.S.**      

20. WORK FOR HIRE. Any work specifically created for the University under an agreement resulting from this ITB by the Payee or anyone working on behalf of the Payee (the term Payee shall encompass both) shall be considered a "work for hire." All designs, prints, paintings, artwork, sketches, etchings, drawings, writings, photographs, or any other work or material or property produced, developed or fabricated and any other property created hereunder, including all material incorporated therein and all preliminary or other copies thereof, (the "Materials") shall become and remain the property of the University, and, unless otherwise specifically set forth herein, shall be considered specially ordered for the University as a "work made for hire," or, if for any reason held not to be a "work for hire,"

The Payee who created, produced, developed or fabricated the Materials hereunder (or under any contract resulting from this ITB) assigns all of his/her right, title and interest in the Materials to the University. The University shall own all right, title and interest in the Materials. The Payee agrees upon request to execute any documents necessary to perfect the transfer of such title to the University. The Materials shall be to the University's satisfaction and are subject to the University's approval. The Payee bears all risk of loss or damage to the Materials until the University has accepted delivery of the Materials. The University shall be entitled to return, at the Payee's expense, any Materials which the University deems to be unsatisfactory. On or before completion of the Payee's services hereunder, the Payee must furnish the University with valid and adequate releases necessary for the unrestricted use of the Materials for advertising or trade purposes, including model and property releases relating to the Materials and releases from any persons whose names, voices or likenesses are incorporated or used in the Materials.

The Payee hereby represents and warrants that, (a) all applicable laws, rules and regulations have been complied with, (b) the Payee is free and has full right to enter into this ITB and any contract resulting from this ITB, if any, and perform all of its obligations hereunder and under such contract, (c) the Materials may be used or reproduced for advertising or trade purposes or any commercial purposes without violating any laws or the rights of any third parties and (d) no third party has any rights in, to, or arising out of, or in connection with the Materials, including without limitation any claims for fees, royalties or other payments. The Payee agrees to indemnify and hold harmless the University and those acting for or on its behalf, the UCF Board of Trustees, the State of Florida and the Florida Board of Governors and their respective officers, agents, employees and servants from and against any and all losses, claims, damages, expenses or liabilities of any kind, including court costs and attorneys' fees, resulting from or in any way, directly or indirectly, connected with (a) the performance or non-performance of the University's order by the Payee, (b) the use or reproduction in any manner, whatsoever, or (c) any breach or alleged breach of any of the Payee's agreements or representations and warranties herein or in any contract resulting from this ITB.



21. **AMENDMENTS.** No changes or amendments to an agreement resulting from this ITB are binding on the University unless made in legible writing that is signed by an attorney in the University's General Counsel's Office and an authorized UCF signatory. Payee shall return an agreement resulting from this ITB to the University's Purchasing Department at once with a written explanation if the agreement resulting from this ITB is not acceptable in its entirety.
22. **EXPORT CONTROL.** The parties shall comply with all applicable U.S. export control laws and regulations, including but not limited to the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799 and/or other restrictions imposed by the Treasury Department's Office of Foreign Asset Controls (OFAC), in the performance of an agreement resulting from this ITB. The parties agree that no technology, related data or information will be exchanged or disseminated under such agreement nor any collaboration conducted pursuant to such agreement, which are export controlled pursuant to the export control laws of the United States, including the EAR and the ITAR and any other applicable regulations. The Parties agree that the Payee will not provide the University with any ITAR or EAR restricted technology and/or related data, and that any ITAR or EAR restricted technologies and/or data produced in furtherance of the agreement resulting from this ITB, if any, will be in the exclusive possession of the Payee and at no time will any export controlled technologies, related data, or information be intentionally or inadvertently transferred to the University, its facilities, labs, staff, researchers, employees, officers, agents, servants or students in the performance of that agreement.

If the Payee wishes to disclose export controlled technology or technical data to the University, the Payee will, prior to disclosing any information, technical data or source code that is subject to export controls under federal law, notify the University in writing that the material is export controlled and shall identify the controls that apply. The University shall have the right to decline or limit (a) the receipt of such information, and (b) any task requiring receipt of such information. In the event the Payee sends any such technical data or product that is subject to export control, without notice of the applicability of such export control, the University has the right to immediately terminate the agreement resulting from this ITB, if any. The Payee understands and agrees that to the extent the Payee's personnel have access to work or materials subject to U.S. export controls while on University property, such personnel will meet all federal export control regulatory requirements or have the appropriate U. S. government approval.

23. **FORCE MAJEURE.** No default, delay or failure to perform on the part of UCF or the Vendor shall be considered a default, delay or failure to perform otherwise chargeable, hereunder, if such default, delay or failure to perform is due to causes beyond the Vendor's or UCF's reasonable control including, but not limited to, strikes, lockouts, actions or inactions of governmental authorities, epidemics, war, embargoes, fire, earthquake, acts of God, default of common carrier. In the event of such default, delay or failure to perform due to causes beyond the Vendor's or UCF's reasonable control, any dates or times by which the parties are otherwise scheduled to perform shall be extended automatically for a period of time equal in duration to the time lost by reason of the cause beyond the reasonable control of the parties.
24. **INDEMNIFICATION.** Payee shall hold the University and the UCF Board of Trustees and the University's officers, employees, agents and/or servants harmless and indemnify each of them against any and all liabilities, actions, damages, suits, proceedings, and judgments from claims arising or resulting from the acts or omissions of Payee, its employees, its agents or of others under Payee's control and supervision. If any part of a delivery to the University pursuant to an agreement resulting from this ITB, if any, is protected by any patent, copyright, trademark, other intellectual property right or other right, Payee also shall indemnify and hold harmless the University and the UCF Board of Trustees and the University's officers, employees, agents and/or servants from and against any and all liabilities, actions, damages, suits, proceedings and judgments from claims instituted or recovered against the University by any person or persons whomsoever on account of the University's use or sale of such article in violation of rights under such patent, copyright, trademark, other intellectual property right or other right.

25. **INDEPENDENT CONTRACTOR.** Each of the parties is an independent contractor and nothing contained herein shall constitute or designate any of the employees or agents of one party as employees or agents of the other party.
26. **NO JOINT VENTURE.** Nothing contained in an agreement resulting from this ITB, if any, shall be construed to create a joint venture, partnership, or other like relationship between the parties.
27. **LEASED EQUIPMENT.** The risk of loss or damage to leased equipment, goods or property shall not transfer to the University except as provided in §680.219, Florida Statutes. Any security interest in the leased equipment, goods or property granted to Payee contrary to AGO 79-72 and AGO 80-9 is null and void. Limitation of remedies provisions, which are unconscionable under applicable Florida law, are void.
28. **MATERIAL SAFETY DATA SHEET (MSDS).** In compliance with Florida Statutes, Ch. 442, a Material Safety Data Sheet (MSDS) must accompany any applicable item delivered under an agreement resulting from this ITB, if any.
29. **WAIVER/REMEDIES.** No failure or delay by a party hereto to insist on the strict performance of any term of an agreement resulting from this ITB, if any, or to exercise any right or remedy consequent to a breach thereof, shall constitute a waiver of any breach or any subsequent breach of such term. No waiver of any breach hereunder shall affect or alter the remaining terms of such agreement, but each and every term of such agreement shall continue in full force and effect with respect to any other then existing or subsequent breach thereof. The remedies provided in an agreement resulting from this ITB, if any, are cumulative and not exclusive of the remedies provided by law or in equity.
30. **DISPOSITION OF BIDS; FLORIDA PUBLIC RECORDS LAW COMPLIANCE**

All bids become the property of the State of Florida, and the State of Florida shall have the right to use all ideas, and/or adaptations of those ideas, contained in any bid received in response to this solicitation. Any parts of the bid or any other material(s) submitted to UCF with the bid that are copyrighted or expressly marked as “confidential”, “proprietary”, or “trade secret”, will only be exempted from the “open records” disclosure requirements of Chapter 119, Florida Statutes, if Florida law specifically recognizes these materials as exempt from disclosure. Thus, the mere designation as “confidential”, “proprietary”, or “trade secret” by a vendor does not ensure that such materials will be exempt from disclosure. In the absence of a specific Florida statute exempting material from the public records law, UCF is legally obligated to produce any and all public records produced or received in the course of conducting university business, irrespective of any designation by the vendor of those same records as “confidential”, “proprietary”, or “trade secret.” The ultimate determination of whether a vendor’s claim of “confidential,” “proprietary” or “trade secret” will support an exemption from disclosure will be made by UCF or, potentially, a court. UCF’s selection or rejection of a bid will not affect this provision.
31. **PUBLIC RECORDS, CONTRACT FOR SERVICES:** To the extent that Payee meets the definition of “contractor” under Section 119.0701, Florida Statutes, in addition to other contract requirements provided by law, Payee must comply with public records laws, including the following provisions of Section 119.0701, Florida Statutes:
  - A. Keep and maintain public records that ordinarily and necessarily would be required by the public agency in order to perform the service.
  - B. Provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
  - 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.
  - D. Meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided

to the public agency in a format that is compatible with the information technology systems of the public agency.

If Payee does not comply with a public records request, University shall enforce the contract provisions in accordance with the contract.

32. COMPLIANCE: The parties shall at all times comply with all applicable ordinances, laws, rules and regulations of local, state and federal governments, or any political subdivision or agency, or authority or commission thereof, which may have jurisdiction to pass laws, ordinances, or make and enforce rules and regulations with respect to the parties.

Vendors shall certify below that they are in good standings to conduct business in the State of Florida. **The awardee of any contract resulting from this solicitation shall forward a certification of good standing. The certifications must be submitted to the UCF Purchasing Department prior to providing any goods or services required under the resulting contract.** Noncompliance with this provision may constitute rejection of bids or termination of a contract at UCF's sole discretion.

#### CERTIFICATION

I certify that the company submitting a bid under this solicitation is in compliance with all applicable laws to conduct business in the State of Florida, is in good standings and will provide a certificate of good standings from the State of residence prior to initiating any performance under any contract resulting from this solicitation.

Company: Central Florida Infrastructure, Inc.

Authorized Representative's Name: Brady A. Sapp

Authorized Representative's Signature: Brady A. Sapp

Date: 5/22/2014

## **CONTRACTOR'S REQUIREMENTS LICENSURE**

Bidding Contractors, plus all Subcontractors and Specialty Contractors which the Bidding Contractors intend to use on UCF CS&T projects, shall be properly licensed.

Bidding Contractors shall furnish a copy of their License at time of bid opening.

Contractor shall furnish to UCF CS&T's Purchasing Coordinator, a copy of their Subcontractor's and Specialty Contractor's Licenses after Bid Award before the first Work Order's tasks can be performed by the Subcontractors and Specialty Contractors.

Specialty Contractors are considered contractors who would perform specialty skills for Bidding Contractors/Subcontractors, such as:

1. Asphalt and road base replacement service
2. Barricade and traffic control device service
3. Concrete pumping service
4. Concrete sawing, cutting, and core boring service
5. Concrete sidewalk and curb replacement service
6. Conduit inspection and cleaning service
7. Crane with crane operator service
8. Directional bore or jack & bore service
9. Fiber optic fusion splicing service
10. Land clearing service
11. Landscape restoration service
12. MH setting service
13. Well pointing and / or horizontal dewatering service
14. Underground utilities detection service, via Ground Penetrating Radar

During the life of the Contract, Contractor shall furnish to UCF CS&T's Purchasing Coordinator, a copy of their License each time their License is renewed, and each time their License status changes.

During the life of the Contract, Contractor shall furnish to UCF CS&T's Purchasing Coordinator, copies of Licenses from their Subcontractors and Specialty Contractors each time their Licenses are renewed, each time their Licenses' status changes, and as new Subcontractors and Specialty Contractors are added.

Contractors holding any of the following licenses may submit Bid Pricing for the Bid Lots relevant to their License, in order to perform tasks for UCF CS&T:

1. Certified Electrical Contractor, as defined in Chapter 489 of the Florida Statutes.
2. Limited Energy System Specialty Contractor, as defined in Chapter 489 of the Florida Statutes.
3. Underground Utility & Excavation Contractor, Certified under the provisions of Chapter 489 of the Florida Statutes.

INSURANCE, SUBCONTRACTOR'S PUBLIC LIABILITY AND DAMAGE PROPERTY

The contractor shall take out and maintain during the life of this agreement:

COMPREHENSIVE GENERAL LIABILITY AND COMPREHENSIVE AUTOMOBILE LIABILITY

INSURANCE as shall protect the contractor from claims for damage for personal injury, including accidental death, as well as claims for property damages which may arise from operating under this agreement whether such operations are by the contractor or by anyone directly or indirectly employed by the contractor, and the amount of insurance shall be the minimum limits as follows:

Policy	Coverage
(a) Worker's Compensation	Statutory
(b) Comprehensive General Liability Insurance:	
(1) Bodily Injury Liability	\$1,000,000 each occurrence
(2) Property Damage Liability	\$1,000,000 each occurrence
(c) Comprehensive Automobile Liability Insurance:	
(1) Bodily Injury Liability	\$1,000,000 each occurrence
(2) Property Damage Liability	\$1,000,000 each occurrence
(d) Excess Umbrella Liability	
(1) Combined Single Limit Bodily Injury	\$3,000,000 each occurrence
(2) Injury and/or Property Damage	\$3,000,000 aggregate
(e) Comprehensive Liability to include but not limited to:	
(1) Consumption or Use of Products	
(2) Existence of Vehicles, Equipment or Machines on Location	
(3) Contractual Obligations to Customers	

The Contractor shall require each Subcontractor and Specialty Contractor to secure and maintain during the life of the subcontract, insurance of the type specified above or insure the activities of Subcontractors and Specialty Contractors in their own policy, as specified above.

INSURANCE, WORKER'S COMPENSATION

The contractor shall take out and maintain during the life of this agreement Worker's Compensation Insurance for all of his employees connected with the work of this project. In case any work is sublet, the contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Such insurance shall comply fully with the Florida Worker's Compensation Law. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under the Worker's Compensation statute, the Contractor shall provide, and cause each subcontractor to provide adequate insurance, satisfactory to the University, for the protection of your employees not otherwise protected.

INSURANCE, SOURCE OF INSURANCE

All policies for insurance set forth in this INSURANCE REQUIRED CLAUSE shall be with insurers qualified and admitted by the Florida Department of Insurance to write business in the State of Florida. Contractors shall furnish a certificate of insurance to the Purchasing Department within five days of award of a contract.

## **BID SPECIFICATIONS**

### **CERTIFICATIONS AND FACTORY AUTHORIZATIONS**

Bidding Contractors who are not Certified in, do not have Certified personnel in, or who are not Factory Authorized, should not accept awarded Lots and therefore should not bid on Lots which require the specific Certifications and Factory Authorizations. After Bid Award, specifically before the first Work Order's tasks requiring specific Certifications and Factory Authorizations can be performed, Contractor shall furnish to UCF CS&T's Purchasing Coordinator, copies of their specific Certifications and Factory Authorizations, and copies of their personnel's Certifications and Factory Authorizations.

1. Hubbell Premise Wiring: 25 Year Mission Critical Certification.
2. Registered Communications Distribution Designer (RCDD). Each company must have at least one RCDD on staff to bid on any or all structure cabling lots.
3. Powder Actuated Tools Qualified Operator Certification.

### **SAFETY**

1. Contractor shall furnish to UCF CS&T's Purchasing Coordinator, a copy of their Safety Program after Bid Award, specifically before the first Work Order's tasks can be performed.
2. During the life of the Contract, Contractor shall furnish to UCF CS&T's Purchasing Coordinator, a copy of any addendums to their Safety Program.
3. Contractor shall furnish to UCF CS&T's Purchasing Coordinator, copies of their Subcontractors' and Specialty Contractors' Safety Programs after Bid Award, specifically before the first Work Order's tasks can be performed by the Subcontractors and Specialty Contractors.
4. During the life of the Contract, Contractor shall furnish to UCF CS&T's Purchasing Coordinator, a copy of any addendums to their Subcontractors' and Specialty Contractors' Safety Programs.
5. All Contractor, Subcontractor, and Specialty Contractor personnel on site shall be furnished with the following by their respective company, and be attired in: Hard hats, safety glasses, hearing protection as needed, work gloves, safety vests, and steel toe work shoes.
6. Contractor shall follow Occupational Safety and Health Administration (OSHA) excavation and construction regulations as outlined in OSHA 40 CFR 1910 (OSHA for General Industry) and OSHA 40 CFR 1926 (OSHA for Construction). Contractor shall have a Foreperson who is a Competent Person, trained in proper safe excavation techniques on site at all times excavation and back-filling work is being performed.
7. When working in UCF CS&T's Telecom Maintenance Holes (MHs), OSHA Regulation #1910.268 "Telecommunications" shall be followed.
8. UCF reserves the right to request that Contractor halt work deemed unsafe. Contractor will be able to resume work once UCF observes that Contractor has resolved all safety issues, and is compliant with all Safety Regulations, plus all Contractor Requirements identified in this Bid Document.
9. Contractor shall be in compliance with Florida State Statute Chapter 556: Underground Facility Damage Prevention and Safety Act.

## **REFERENCES**

1. Bidding Contractors shall furnish reference company/organization/agency names, contact person names, and telephone numbers for the following, as it applies to the work being bid on at time of bid opening:
  - a. Two (2) recent large Master Contract customers
  - b. Two (2) recent customers where your company installed complete concrete encased duct bank and precast concrete MH facilities
  - c. Five (5) recent customers where your company installed high strand-count complete outside plant fiber optic cable facilities
  - d. Two (2) recent customers where your company terminated fiber optic cable
  - e. Five (5) recent customers where your company installed high pair-count outside plant copper cable facilities
  - f. Two (2) recent customers where your company spliced high pair-count outside plant copper cables using preformed brand splice closures and 3M MS Square splice modules.
2. Do not list on your Reference List, UCF CS&T as a Reference.

## **EQUIPMENT**

1. Contractor shall provide their own tools and equipment in order to perform all tasks in a safe, and quality manner for UCF Telecom. UCF WILL NOT loan out any tools or equipment.
2. All Back Hoe, Track Hoe, and other bucket type excavating equipment shall be operated with a sand bar (also known as a sand plate) equipped bucket.
3. Bidding Contractors shall use well-maintained machinery and equipment.
4. All excavating equipment, earth moving equipment, winch trucks, and other work trucks shall be equipped with a functioning back up alarm.
5. If equipment or trucks break down, replacement machinery and trucks shall be available for rapid delivery, so as not to delay production.

## **PROJECT SCOPE**

1. Specific projects shall in general be performed as complete turnkey projects. The following are some examples of complete turnkey projects:
  - a. The complete installation of a typical outside plant MH and concrete encased duct bank system, including all excavating and backfilling tasks, plus installing MH racking.
  - b. The complete installation of a typical outside plant copper cable run including cable, MH racking as needed, splices, building entrance protectors, lightning protection modules, ground bonding, cable pair terminating, plus cable pair testing.
  - c. The complete installation of a typical outside plant fiber optic cable run including innerducts, cable, MH racking as needed, splicing / terminating fiber strands, plus fiber strand testing.
  - d. All indoor structured cabling systems.
2. Warranty – Contractor shall fully guarantee all items furnished hereunder against defect in materials and/or workmanship during the Manufacturer's Warranty period, from date of acceptance by the University. Should any defect in material or workmanship, excepting ordinary wear and tear which may appear during the Warranty period, Contractor shall repair or replace same at no cost to the University immediately upon written notice from UCF CS&T.

**ALL OUTSIDE PLANT EXCAVATION & SITE RESTORATION TASKS**

1. Excavation tasks to be done for UCF CS&T include:
  - a. Exploratory digging for the purpose of planning of new UCF CS & T facilities installations, plus verifying the type, location, and depth of existing utilities.
  - b. Installation of MHs
  - c. Installation of horizontal bore casings and directional bore piping
  - d. Installation of concrete encased duct banks
  - e. Direct burial of copper telephone cables and splices, plus conduits as needed
  - f. Repair / replacement of damaged telecom facilities and other utilities
  
2. Due to areas of high utility concentration on UCF's campuses, UCF CS&T's Project Manager will determine the method of excavation for each project. Excavation methods used on UCF CS&T projects are as follows:
  - a. Hand digging
  - b. Machine digging (back hoe / track hoe / trencher)
  
3. UCF CS&T will submit Facilities Improvement (FI) and Dig Permit requests to the UCF Facilities Operations Department, for their approval for all excavation tasks to be performed for UCF Telecom. UCF CS&T's Project Manager will provide a copy of the approved Dig Permit to the Contractor BEFORE any excavation starts. Even though UCF CS&T will submit then obtain approved FIs and Dig Permits, the Contractor is ultimately responsible for the repair or replacement of any existing underground utilities (including underground telecom facilities) damaged by the Contractor's, their Subcontractors' and / or their Specialty Contractors' Telecom Infrastructure construction activities.

Contractor shall also request the locating of existing non UCF utilities by the appropriate utility providers, by contacting Sunshine State One Call of Florida (Dial 811). Insure that all utilities are located BEFORE any excavation starts. Utility providers serving the Main Campus is as follows:

- a. UCF Facilities Operations Department: Some secondary electric, all street lighting, potable water, storm water, sanitary sewer, HVAC chilled water, and landscape irrigation.
- b. UCF CS&T: Copper telephone circuits, and high bandwidth fiber optic data circuits.
- c. Bright House Networks: Cable Television.
- d. CenturyLink: High bandwidth fiber optic data circuits.
- e. Florida Power & Light (FP&L): High bandwidth fiber optic data circuits.
- f. Level 3 Communications: High bandwidth fiber optic data circuits.
- g. Orlando Utilities Commission (OUC): Reuse water transmission main.
- h. Orange County Traffic Engineering Department: All traffic signal devices and their associated traffic sensor loops, plus fiber optic cabling connecting all traffic signals together for traffic flow management.
- i. Orange County Utilities Department: 24 inch potable water transmission main.
- j. Progress Energy: Primary and some secondary electrical feeder circuits.
- k. TECO: Natural gas.
- l. Time Warner Telecommunications: High bandwidth fiber optic data circuits.

The University of Central Florida has extensive underground outside plant fiber optic facilities in the Central Florida Research Park (CFRP). These facilities interconnect the UCF main campus with buildings in the CFRP which are owned or leased by UCF.

The CFRP is the utility provider of the following utilities:

- a. Potable water
- b. Sanitary sewer
- c. Storm sewer
- d. Irrigation
- e. Street lighting



All other utility providers on the CFRP are:

- a. AT&T: Copper telephone circuits, and high bandwidth fiber optic data circuits.
- b. Bright House Networks: Cable Television.
- c. CenturyLink: High bandwidth fiber optic data circuits.
- d. Level 3 Communications: High bandwidth fiber optic data circuits.
- e. Orange County Utilities Department: Potable water transmission mains.
- f. Orlando Utilities Commission: Reuse water transmission mains.
- g. Progress Energy: Primary and secondary electrical feeder lines.
- h. Teco: Natural gas
- i. Time Warner Telecommunications: High bandwidth fiber optic data circuits.
- j. UCF CS&T: Copper telephone circuits, and high bandwidth fiber optic data circuits.

There are also private companies and Government entities occupying buildings in the CFRP who have installed, and maintain their own underground outside plant utilities between buildings.

Contractor must use precautionary measures to prevent damage to these utilities.

4. Contractor is to field verify distances, existing utilities locations, and water table depths. Note all existing drainage ditch and existing grade elevations for site restoration purposes.
5. Contractor is to clear away any trees and brush as needed in order to perform tasks for UCF CS&T, with prior approval from the UCF Landscape & Natural Resources Department. Haul this material off campus to a legal dump site.
6. Contractor is to dewater as needed by the most effective method, to maintain a dry excavation for quality installation of underground telecom infrastructure components.
7. UCF CS&T's Project Manager will provide Contractor with the most current As-Built drawings available, of excavation sites. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, Contractor shall update the As-Built drawings with the following information:
  - a. Type of utility found.
  - b. Quantity, material and color of the utility found.
  - c. Depth of utility found.

Measurements from center line of the utility found, to objects such as edge of pavement of a road or Parking lot, wall of a building, or some other permanent object which are to be shown on the Contractor's As-Built drawing updates.

8. Should uncharted or incorrectly charted utilities encountered during excavation cause a problem with the proper installation of underground telecom infrastructure components, Contractor must consult with the UCF CS&T Project Manager immediately.
9. Contractor is to update the current As-Built drawings with the following information on newly installed underground telecom infrastructure components, and show the following information:
  - a. Type of component.
  - b. Bottom elevation of component.
  - c. Top elevation of component.
  - d. Width of component.

Measurements from edge of new component to edge of pavement, wall of a building, or some other permanent object are to be shown on the Contractor's As-Built drawing updates.

10. Contractor is to return all As-Built drawings showing the Contractor's encountered uncharted or incorrectly charted utilities, plus the newly installed underground telecom infrastructure components to the UCF CS&T Project Manager at time of project completion.

11. Contractor shall follow Occupational Safety and Health Administration (OSHA) Excavation and Construction Regulations as outlined in OSHA 40 CFR 1910 (OSHA for General Industry) and OSHA 40 CFR 1926 (OSHA for Construction). Contractor shall have a Foreperson or Lead Person who is Competent Person trained in proper safe excavation and shoring techniques, on site at all times excavation and back-filling work is being performed.
12. Contractor shall barricade and "tape" or "fence" all excavations for the night, plus maintain vehicle, bicycle, and pedestrian traffic control along the construction / installation corridor.
13. The typical depth to the top of direct buried cables, conduits, and concrete encased duct banks is 36 inches. Deviations of this depth are needed from time to time, due to other existing utilities present or other factors. Coordination of depth deviations must be done with the UCF CS&T Project Manager.
14. Contractor shall install buried cable warning tape during the backfilling of trenches dug for direct buried cables, conduits, plus concrete encased duct banks. Install the tape directly above the cable / conduit / duct bank, half way up to existing grade unless otherwise instructed by the UCF CS&T Project Manager. The buried cable tape is to be of the following type:
  - a. Reef Industries Terra Tape #540 "Extra Stretch": orange in color, with "CAUTION - TELEPHONE CABLE BURIED BELOW" printing, black in color.
15. Contractor is to coordinate any roadway lane, and parking space closures with the UCF CS&T Project Manager, who will coordinate with UCF Police Department's Patrol Division Commander, and the UCF Parking and Transportation Services Director.
16. Contractor is to coordinate driving of equipment on grass and sidewalks with the UCF CS&T Project Manager, who will coordinate with the UCF Landscape & Natural Resources Department.
17. Contractor is to haul off campus, any demolished concrete, road material, or construction debris generated by tasks performed at each work site, to a legal disposal facility.
18. No wood forming or shoring materials are to be left in the ground.
19. Back filling of excavations is to be done in 12-inch lifts or layers, maintaining adequate side support, with compaction being performed with mechanical compaction equipment such as plate compactors, jumping jacks, or vibratory rollers suitable for the various compacting tasks encountered. Back fill material must be free of stones, wood, roots, trash or rubbish.
20. Contractor is to haul any dirt displaced by new telecom infrastructure components' volume to an on campus dirt storage site. The UCF CS&T Project Manager will coordinate with the UCF Landscape & Natural Resources Department on which dirt storage site is to be used.
21. Contractor shall restore each work site back to as near original condition as seen before work started. The UCF Landscape & Natural Resources Department requires full original grade elevation restoration. Special attention is to be paid to the restoration of drainage ditches and swales.
22. Contractor shall replace any sod, plants, asphalt pavement, concrete: sidewalks, driveways & curbs, any stabilized: clay, lime rock, shell and soil cement driving and parking surfaces removed or damaged during the performance of tasks. Replacement is to be done according to UCF Facilities Operations, UCF Landscape & Natural Resources, and UCF Athletics' Grounds Department specifications. Argentine Bahia, Floratam St. Augustine, Tifton # 419 Bermuda, GN-1 (Greg Norman) and GN-2 Bermuda grasses are present on campus.
23. Contractors shall repair or replace any other utilities including irrigation equipment damaged during the performance of tasks. Repair or replacement shall be done according to UCF Facilities Operations, UCF CS&T, and other utility providers' specifications.

24. The following groups will perform inspections of the following items:

- a. All Telecom project tasks: UCF CS&T.
- b. FI and Dig permit compliance: UCF Facilities Operations.
- c. Site safety: UCF Environmental Health & Safety, UCF CS&T, and OSHA.
- d. Site restoration and damaged irrigation repair / replacement: UCF Landscape & Natural Resources.
- e. Damaged road, sidewalk and parking surface repair / replacement: UCF Facilities Operations.
- f. Damaged UCF owned utilities repair / replacement: UCF Facilities Operations.
- g. Other damaged utilities repair / replacement: The actual utility provider.
- h. In building fire wall penetrations and cable supporting: UCF Building Code Office.

25. Contractor shall at all times protect the work, adjacent property, and the public from any injury or loss arising in conjunction with this contract. Contractor shall be responsible for any damage or injury due to Contractor's and / or Contractor's 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's or Contractor's Agents.

26. Contractor is to at all times keep the construction area, including storage areas used, free from accumulation of waste material, trash or rubbish. Contractor must exercise reasonable care to prevent construction debris and excavated material from washing onto streets, sidewalks and parking lots and into University storm drains. Upon completion of construction, Contractor shall leave the work site and premises in a clean, neat, and quality workmanship condition, satisfactory to the University.

27. Tree, Shrub, and Plant Protection

Certain trees, shrubs, and other plants will often be in areas of construction and should be suitably protected by Contractor from damage during construction operations. Any trees, shrubs, lawns, and plantings which are damaged as a result of the project work, storage of materials and equipment, or from parking of workers vehicles shall be replaced or put in perfect condition at the expense of the Contractor.

Damage Penalties:

Trees located adjacent to construction areas on UCF property will be treated by UCF as part of this project. If trees designated within the construction areas are damaged and replacement is required, the diameter of tree of the same species and variety, as specified by the University shall be furnished and planted by the Contractor. The total inch diameter of the replacement tree shall equal the diameter of the tree to be replaced. Contractor shall be liable for any loss or damage, which occurs as a result of their actions or the actions of their Agents. It is recommended that Contractor hires a Landscape Subcontractor for vegetation removal then replanting, and vegetation restoral in general.

28. Paving and Surfacing

Technical Specifications for Construction and Materials

Construction procedures shall follow the usual practices of the Florida Department of Transportation (FDOT) for work of similar character and extent. The provisions and specifications of Division II and Division III of the "Standard Specifications for Road and Bridge Construction", FDOT edition of 1986 shall apply, where applicable, except where modified herein or specifically designated otherwise. References to compensation shall not apply. Where reference is made to the "Engineer", the appropriate representative of UCF Facilities Operations shall apply.

General:

- a. Contractor shall adequately and fully protect all parts of their work against damage until completed and accepted by the University for maintenance. Contractor, at no additional expense thereto shall properly repair damages to the University.
- b. Contractor is to protect exposed surfaces adjacent to the work for physical damage resulting from construction activities, and from becoming stained during application of paving materials.
- c. Contractor is to clean, repair or replace, as may be required, surfaces damaged during the course of the work at no additional expense to the University.
- d. Contractor shall provide temporary, properly lighted barricades to keep traffic off the work throughout the duration of the particular project.
- e. All road bases, paving and surfacing shall be in accordance with FDOT, Roadway and Traffic Design Standards.

Asphaltic Concrete Surface Course:

- a. Surfacing shall consist of Type S-3 asphaltic concrete in a 1-½ inch finishing course following the tack course.

Special Notes:

- a. All roads, streets, sidewalks of concrete or asphalt construction must be restored / repaved within 3 days from the time of backfilling and compaction.
- b. Newly poured concrete roads, streets, curbs, or sidewalks must be protected as well as guarded from graffiti from passersby until the concrete has sufficiently cured. Failure to prevent damage or graffiti will result in the new concrete having to be removed and replaced at the Contractor's expense. This requirement will warrant the Contractor in taking the necessary steps in preventing such incidents which will include guarding the project into after hours. This precaution is considered as incidental to the work and therefore the Contractor must take this into account when responding to the unit pricing.

**LOT #1: OUTSIDE PLANT TELECOM MAINTENANCE HOLE (MH) PLACEMENT SERVICES**

1. Telecom Maintenance Hole or MH, is the accepted term for an underground structure containing outside plant copper cabling, fiber optic cabling, CATV cabling, splices, etc.
2. Precast concrete MH placement tasks to be done for UCF CS&T include placement of the following, including the installation of joint sealer between the components, and may include: one 6 inch thick by 42 inch inside diameter precast concrete grade ring, and one cast iron U.S. Foundry #651 or #652 ring with #CI-SSG cover:
  - a. 36 inch X 36 inch square X 36 inch head room precast concrete MH.
  - b. 48 inch X 48 inch square X 48 inch head room precast concrete MH.
  - c. 5 foot X 5 foot square X 4 foot head room precast concrete MH.
  - d. 6 foot X 6 foot square X 4 foot head room precast concrete MH.
3. Additional tasks related to precast concrete MH installations for UCF CS&T are as follows:
  - a. Add extra 42 inch inside diameter pre-cast concrete grade rings, typically 6 inches thick, during MH installations.
  - b. Raise cast iron ring & cover elevation of existing MH with precast concrete grade rings, typically 6 inches thick.
  - c. Install Telecom Industry Standard galvanized steel MH racking inside of MHs.

4. Plastic or composite MHs which do not have bottoms, to be installed for UCF CS&T at times, are as follows:
  - a. 24 inch X 24 inch square X 24 inch deep MH with one piece plastic or composite lid.
  - b. 36 inch X 36 inch square X 24 inch deep MH with two piece plastic or composite lid.
5. Contractor is to perform all excavation, backfilling and site restoration tasks as per Section 5.1 of this bid package.
6. Contractor is to install a minimum of 12 inches of #57 or equivalent rock in the de-watered, or dry dig MH pits for a base, prior to MH installation.
7. Contractor is to install MH sections, grade rings and cover rings, so ground water leakage into the MH is prevented, by using asphaltic joint sealer provided by the precast concrete MH manufacturer.
8. When working in UCF CS&T's MHs, OSHA Regulation #1910.268 "Telecommunications" shall be followed.
9. Where conduits enter MH, Contractor is to mortar the entrance and shall provide a brush finish.
10. Contractor is to slope the finished grade away from MH covers, in order to prevent surface water from draining into MHs.
11. MHs equipped with a 42 inch diameter access hole in the roof shall have the following installed:
  - a. One 6 inch high by 42 inch diameter precast concrete grade ring, as specified for the particular MH installation by the UCF CS&T Project Manager.
  - b. One US Foundry #USF 651: 10 inch/ thick cast iron ring with #CI-SSG cover equipped with "Pick Bars", or a US Foundry #USF 652: 5 5/8 inch thick cast iron ring with #CI-SSG cover equipped with "Pick Bars, as specified for the particular MH installation by the UCF CS&T Project Manager. Those MH covers shall have the word "Comm" or "Communications" cast in to them.
12. A standard MH racking system to be installed in pre-cast concrete MHs is made up of:
  - a. Lengths of racking material and fasteners (Lead anchors, lag bolts, and washers). Install MH racking on the walls of MH as specified by the UCF CS&T Project Manager.

**LOT #2: OUTSIDE PLANT TUNNELING AND BORING SERVICES**

1. Due to areas of high utility concentration under roadways, sidewalks, and parking lots, the UCF CS&T Project Manager will determine the method of underground boring for each project. Underground boring methods to be used on UCF's campuses are as follows:
  - a. Jack & boring
  - b. Directional boring
  - c. Air Missile boring
  - d. Air jetting
2. Contractor is to perform all excavation, backfilling, and site restoration tasks as per Section 5.0 of this bid package.
3. 4 inch diameter bore casing material installed via jack and bore method, shall be FDOT Spec. black iron bore casing material threaded on each end of each length of casing. The lengths shall be connected together with threaded couplings.

4. Bore casing material larger than 4 inches in diameter installed via bore and jack method, shall be FDOT Spec. black iron bore casing material. The lengths shall be solid welded together at each joint.
5. Bore casings shall be cleaned of dirt and debris after installation is complete.
6. Directional bore material shall be 1 inch, 2 inch, and 4 inch inside diameter controlled continuous poly pipe, and 4 inch Schedule 40 heavy wall bore-able locking ring type 10 to 20 foot length PVC stick pipe. The length of a pull of the bore-able stick pipe should not exceed 140 feet.
7. Contractor is to air missile in 4 inch schedule 40 PVC conduit or 4 inch black iron bore casing material, in areas too tight for set up of jack & bore and directional bore equipment. Air missile distances should not exceed 30 feet.
8. Contractor is to air jet in 1 inch and 2 inch schedule 40 PVC conduits in areas too tight for the set-up of jack & bore and directional bore equipment. Air jet distances should not exceed 30 feet.

**LOT #3: OUTSIDE PLANT CONDUIT PLACEMENT SERVICES**

1. Contractor is to install 4 inch Schedule 40 PVC conduit for duct bank construction projects.
2. Contractor is to install 4 inch Schedule 40 PVC fittings using PVC glue for duct bank construction projects:
  - a. 4 inch PVC coupling: Carlon # E240N or equivalent
  - b. 4 inch PVC slip coupling: Carlon # E241N or equivalent
  - c. 4 inch PVC female adapter, one end threaded, to convert from PVC to metallic rigid conduit and 4 inch black iron bore casings: Carlon # E942N or equivalent
  - d. 4 inch PVC Transition Couplings: To connect 4 inch Schedule 40 PVC conduit to 4 inch continuous poly pipe installed via directional bore.
3. Contractor is to install plastic conduit spacers which provide a 2 inch spacing between conduits for proper concrete encasement:
  - a. 4 inch conduit base spacer: Carlon # S288NJJN or equivalent
  - b. 4 inch conduit intermediate spacer: Carlon # S289NJJN or equivalent
4. Contractor is to install black iron bore casings via jack & bore under roads, sidewalks and other utilities where specified on projects.
5. Contractor is to install continuous runs of poly pipe material, or bore-able locking ring type stick pipe via directional bore under roads, sidewalks other utilities where specified on projects.
6. Typical concrete encased duct bank layouts used on UCF's campuses are as follows:  

Single conduit (1 way duct bank) =	O
Two conduits (2 way duct bank) =	O O
	O O
Four conduits (4 way duct bank) =	O O
	O O
	O O O
Six Conduit (6 way duct bank) =	O O O
7. Contractor is to perform all excavation, backfilling and site restoration tasks.

8. Contractor is to excavate duct bank trenches in such a way that the walls of the trenches can be used as the concrete encasement form if the soil conditions encountered will allow it without collapse of the trench walls. Install form material if soil conditions encountered will not permit using trench walls as forms. No wood form or shoring material are to be left in ground.
9. Concrete encasement goals are as follows:
  - a. Three inches of concrete shall be placed between the trench floor and the underside of the bottom most conduits. The plastic base spacers are designed to provide the 3 inch space.
  - b. Three inches of concrete shall be placed between the outside edge of the plastic spacers and the side form. If form material is used, stakes shall be installed to provide this spacing. These stakes shall be removed soon after concrete is poured. Voids left by removed stakes shall be filled with concrete before concrete pours have set up.
  - c. Three inches of concrete shall cover conduits on top of encasements.
10. Contractor is to take steps to ensure that conduits do not float upward or move sideways during concrete pours, or during set-up time.
11. Contractor is to ensure that the bottom of duct bank trenches are smooth, and debris free before placing plastic base spacers on the floor of trenches for the bottom row of conduits. Duct banks should slope toward MHs for drainage purposes.
12. Before concrete is poured, insure that any collapsed dirt or debris has been cleaned out from between conduits and from between conduits and trench walls or forms.
13. Pour 3,000 PSI concrete with # 57 aggregate for duct bank encasement. Calcium may be added by the Concrete Supplier to shorten concrete setup time, as needed.
14. Where duct banks tie into MHs, Contractor shall install a minimum of four 5 feet long #5 rebars to prevent shearing. Holes shall be drilled into MH walls, to a depth half of the wall thickness. Rebars shall be epoxied into the drilled holes and extend four feet into the duct bank encasements.
15. Contractor is to ensure that good flow of concrete around conduits and spacers is achieved, plus good concrete flow where duct banks tie into MHs, and at PVC to metallic pipe conversion points such as bore casings and metallic sweeps.
16. Where duct bank stubs are indicated, Contractor shall install a minimum of four 5 foot long #5 rebars to prevent sheering into the end of the stub outs. Rebars shall extend 2 feet - 6 inches into concrete pour and extend 2 feet – 6 inches beyond the end of the concrete pour.
17. Contractor is to furnish a brush finish of mortar inside of MHs where conduits enter the MHs.
18. Where conduits enter MHs via cast in duct terminators, Contractor shall seal the space around the conduits, with appropriate material to prevent ground water and mud intrusion into MHs.
19. When working in UCF CS&T's MHs, OSHA Regulation #1910.268 "Telecommunications" shall be followed.
20. Contractor shall test all conduit runs containing new conduit installed end to end: between MHs, buildings, and stub out points. Testing is to be done by pulling a combination mandrel / stiff spine brush unit owned by UCF CS&T through the conduit. In cases where the mandrel / brush becomes lodged in conduit, it shall be the Contractor's responsibility to recover / repair the mandrel brush, and repair any conduit / duct bank problems at no additional cost to UCF.

21. Contractor is to install one nylon jet line with a minimum 200 pound tensile strength in all but one conduit in all duct bank runs end to end (i.e.: MH to MH, MH to building, etc.). Contractor is to insure that the ends of the jet line are tied to secure objects. In the remaining conduit, Contractor is to install one long life detectible measuring / pulling tape with a minimum 1,250 pound breaking strength. Contractor is to provide the UCF CS&T Project Manager with tape readings for the conduit end to end lengths. Contractor is to insure that the ends of the tape are tied to a secure object.
22. Contractor is to install plastic duct plugs such as Carlon # P258NT plugs in all conduit stub out ends, in order to prevent debris and dirt contamination from entering conduits.

**OUTSIDE PLANT FIBER OPTIC INNERDUCT PLACEMENT PERTAINING TO LOT #4: OUTSIDE PLANT COPPER CABLE PLACEMENT AND SPLICING / TERMINATING SERVICES, PLUS LOT #5: OUTSIDE PLANT FIBER OPTIC CABLE PLACEMENT AND TERMINATING SERVICES**

1. Fiber optic innerduct placement tasks, when specified, to be performed for UCF CS&T includes placement of the following:
  - a. 1 inch innerduct in underground conduit and duct bank systems.
  - b. 1 inch innerduct inside of buildings, including placement above ceilings.
2. Contractor is to install innerduct material for particular tasks as specified by the UCF CS&T Project Manager. Contractors shall install associated innerduct materials as needed, such as couplers and plugs. Innerduct materials to be installed are as follows:
  - a. For underground conduits, including conduits under the slab on grade of buildings, either empty, or containing other cabling: one or more 1 inch SDR 13.5 innerducts ribbed inside, smooth outside, with footage markings, and pull line inside. UCF typically purchases 10,000 foot master reels of that type of innerduct, in which the reels contain four separate sections containing 2,500 linear feet of innerduct each, and the innerduct colors are orange red, yellow, and white. That way, up to four innerducts can be reeled off and placed into a 4 inch conduit, all in one motion.
  - b. In buildings with a Non-Plenum environment: one or more 1 inch corrugated Riser Rated innerducts with pull line inside.
  - c. In buildings with a Plenum environment: one or more 1 inch corrugated Plenum Rated innerducts with pull line inside.
3. UCF CS&T's Project Manager will assign which conduits will be used for innerduct placement.
4. When working in UCF CS&T's MHs, OSHA Regulation #1910.268 "Telecommunications" shall be followed.
5. When Contractor places single 1 inch innerducts in conduits containing other cabling, rodding of the conduit is suggested.
6. Contractor is to allow innerducts pulled into conduits to "relax" at least one hour, before trimming them down to final length.
7. Contractor is to leave at least 12 inches of 1 inch innerduct extending from conduits terminating in MHs and in buildings.
8. Contractor is to provide and install duct sealing material around innerducts extending from conduits terminating in buildings.



9. Contractor is to insure that all innerducts contain pulling lines. Contractor is to install UCF furnished innerduct plugs into each end of each innerduct, plus tie the pull lines securely to the innerduct plugs.

**LOT #4: OUTSIDE PLANT COPPER CABLE PLACEMENT AND SPLICING / TERMINATING SERVICES**

1. Install outside plant copper cables specified for the particular tasks assigned by UCF CS&T.
2. Contractor is to install associated materials needed such as: bonding materials, splice modules, splice encapsulating materials, splice closures, building entrance protectors, lightning protection modules, and duct sealing materials. The following components are to be installed to match the existing copper infrastructure on UCF's campuses:
  - a. Preformed brand # 8000 series closures
  - b. 3M brand fire retardant vault and riser splice closures.
  - c. 3M MS Square splice modules.
  - d. Circa brand 188 and 189 type building entrance protectors
  - e. CommScope brand # 4C1S or Circa brand #4B1S-BAL lightning protection modules.
3. UCF CS&T's Project Manager will assign which conduits copper cables are to be placed in.
4. UCF CS&T's Project Manager will assign locations of splices and types of splice closures to be used in cable runs. Splices typically will be in buildings, cable vaults, and MHs. Splices in direct buried cables will also be direct buried.
5. When working in UCF CS&T's MHs, OSHA Regulation #1910.268 Telecommunications" shall be followed.
6. When assigned to direct bury copper outside plant cable and splices, Contractor is to perform all excavations, backfilling, and site restoration tasks, including the installation of UCF furnished "buried cable" warning tape directly above the buried cable...half way between the cable and existing grade. Contractor is to place UCF furnished telecom electronic marker (EMS) devices in contact with direct buried splices, to enable rapid splice locating in the future.
7. Copper cables are to be supported by a standard MH racking system in MHs. UCF CS&T's Project Manager is to be consulted concerning exact installation of MH racking in each MH. Copper cable splicing shall be done, utilizing the fold back method on both the PBX and field sides of the splice.
8. For copper telephone cable splicing of cables containing multiple 25 pair binder groups in underground cable vaults, MHs, pull boxes, direct burial splices, in building OSP entrance splices in MDFs & IDF's, plus upper floor riser applications, the type of splice modules to be used are to be 3M brand, MS2 Super-Mate #4000-D/TR dry splice modules.
9. Contractor shall test all copper cables and splices via the talk out method, and provide UCF CS&T's Project Manager with printed documentation of all tests.
10. The Contractor at no additional charge to the University shall perform troubleshooting, repair, and Re-testing of any newly spliced copper cable pairs which test bad as opens, shorts, or crossed pairs.

**LOT #5: OUTSIDE PLANT FIBER OPTIC CABLE PLACEMENT AND TERMINATING SERVICES**

1. Contractor is to install fiber optic cable specified for the particular tasks assigned by UCF CS&T. Dielectric, dry blocked cables are to be installed to match UCF's existing fiber optic infrastructure. Increasingly UCF is specifying 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 UCF CS&T PM.
2. Contractor is to install associated materials specified by the UCF CS&T PM such as connectors, buffer tube fan out kits, fiber distribution centers (FDCs), wall mount fiber termination boxes (WICs), connector bulkhead panels for FDCs and WICs.
3. When working in UCF CS&T'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 UCF CS&T PM. This may include empty conduit, conduit with pre-existing cables or FoDuct. A Service Loop consisting of a minimum 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 UCF CS&T's Project Manager.
6. Fiber optic cables and innerducts are to be supported by standard MH racking in MHs. UCF CS&T's Project Manager is to be consulted with, 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 innerducts, 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 UCF CS&T 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 Stabilized Optical Light Source and an Optical Power Meter. Contractor shall provide UCF CS&T's 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.

### **LOT #6: MISCELLANEOUS OUTSIDE PLANT ITEMS PRICING**

1. Contractor may be assigned to trace out cable pairs on telecom frames by hand tracing or tone tracing methods. Contractor shall insure that active pairs do not have phone conversations or data transmission in progress when tracing by the tone method.
2. Contractor **will not listen** in on any telephone conversation. Doing so is a Federal Offense. Contractor **will not test** lines where active conversations or data transmissions are present.
3. UCF CS&T provides dry pairs for fire alarms, irrigation controls, point-of-sale terminals, radio transmitter feeds, utility metering and T-1 trunk line feeds. Be aware that circuits with no dial tone, and having unusual sounding tones or sounds on them may be special use circuits. Before interrupting any such circuits, UCF CS&T's Project Manager is to be consulted with.

### **STRUCTURED CABLING SPECIFICATIONS FOR NEW CONSTRUCTION ACTIVITIES & EXISTING SITE RESTORATION**

1. Contractors shall prepare As-Built drawings. The drawings shall display the building name, project number, room layout, voice and data jack locations, communications rooms/closets, jack numbers, etc.
2. When directed to do so, Contractors will comply with the UCF building permit procedure along with the associated inspection process.
  - a. 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 Contractors' or Contractors Agents.
3. 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.
4. Work schedules will be flexible to take into account the needs of UCF. Especially when working in existing facilities, class schedules may require that work be accomplished outside of normal business hours. The UCF CS&T 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.

### **FIBER OPTIC INNERDUCT PLACEMENT INSIDE BUILDINGS**

1. Fiber optic innerduct placement tasks to be performed for UCF CS&T includes placement of 1 inch innerduct inside of buildings, including placement above ceilings.
2. Contractors shall install innerduct material for particular tasks as specified by the UCF CS&T Project Manager. Contractors shall install associated innerduct materials as needed, such as couplers and plugs. Innerduct materials to be installed are as follows:
  - a. All buildings will require 1 inch corrugated Plenum Rated innerducts with pull line inside.
3. Contractors shall allow innerducts pulled into conduits to "relax" at least one hour, before trimming them down to final length.

4. Contractors shall leave at least 12 inches of 1 inch innerduct extending from conduits in buildings.
5. Contractors shall install Jack Moon brand duct sealing plugs and accessories around innerducts extending from conduits terminating in buildings. Contractors shall insure that all innerducts contain pulling lines. Contractors shall insure that innerduct plugs are installed, and that pull lines are tied securely to the innerduct plugs or to a secure object outside of the innerducts.

#### **FIBER CABLE PLACEMENT**

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 UCF CS&T Project Manager. Systems typically used by UCF are fuse on style individual connectors or 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 Stabilized Optical Light Source and an Optical Power Meter. Contractors shall provide the UCF CS&T Project Manager with documentation for all tests. The test results must meet the cable and connector manufacturers published standards for acceptable loss.
4. 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.

#### **MISCELLANEOUS SPECIFICATIONS**

1. When assigned, Contractors shall trace out cable pairs on telecom frames by hand tracing or tone tracing methods. Contractors shall insure that active pairs do not have phone conversations or data transmission in progress when tracing by the tone method.
2. UCF Telecom Services provides dry pairs for fire alarms, irrigation controls, point-of-sale terminals, radio transmitter feeds, utility metering and T-1 trunk line feeds. Be aware that circuits with no dial tone or having unusual sounding tones or sounds on them may be special use circuits. Before interrupting any such circuits, the UCF CS&T Project Manager is to be informed.
3. Contractors installing Structured Cabling shall use methods compliant with ANSI / TIA / EIA- 568-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 jack 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 jacks in a multi-port face plate or surface mount box as determined by the UCF CS&T Project Manager. Contractors shall label the faceplates with the cables' room / outlet / jack numbers.

Contractors shall test cables end to end for ANSI / TIA / EIA-568-B Category 5E Compliance via Link Testing. Contractors shall provide the UCF CS&T Project Manager with documentation for all tests.

4. UCF CS&T also uses ANSI / TIA / EIA-568-B Category 6A Structured Cabling Systems in selected locations.

## **UNIT PRICE SCHEDULE**

### INSTRUCTIONS

1. Lots have been established according to “like” services. Bidders are invited to respond to all Lots in which their company has the capability to provide such services. Every Lot will stand on its own in the evaluation and awarding. The University does not expect that all Bidders will respond to every Lot.
2. All Unit Prices within a Lot must be responded to. If Bidder does not provide certain items or services, Bidder must indicate such by inserting N/A (Not Available or Applicable). If Bidder offers certain items or services free of charge, Bidder must indicate such by inserting N/C (No Charge).
3. Unless otherwise indicated, unit prices are for labor, equipment, personnel and equipment transportation, plus miscellaneous furnished materials such as screws, anchors, nuts & bolts, tape, cable ties, etc. as required for a complete job. Contractor will not be compensated for transporting work crews, or work crews’ travel time to and from UCF.
4. UCF may provide all or part of the materials for each project. Contractor shall agree to bill the University at actual cost plus 15% profit for materials furnished by Contractor. Contractor shall provide appropriate documentation of actual cost incurred and documentation to show that Contractor diligently obtained the best price from Suppliers. This documentation must accompany the invoice.
5. Contractor shall maintain such full and detailed accounts as may be necessary to substantiate billing rendered under provisions of this exhibit. The University shall be afforded access to all Contractor’s books, records, payrolls, correspondence, instructions, receipts, vouchers, memoranda, etc. relating to billing. Contractor shall preserve all such records for a period of three calendar years after final payments under this Contract.
6. Materials UCF CS&T typically furnishes:
  - a. MHs, long radius PVC conduit sweeps, innerduct, copper and fiber optic cables, equipment racks, wire management hardware, building entrance protectors, fiber distribution centers, and specialty materials unique to UCF.
7. Materials Contractors typically provide outside of this Contract:
  - a. PVC conduit, PVC couplings & adapters, PVC glue, plastic conduit spacers, directional bore pipe, jack & bore casings, concrete, rebar, reusable shoring and form materials, copper cabling splice cases and all associated splicing materials, plus other materials specified by UCF CS&T.
8. UCF CS&T reserves the right to provide all materials for a particular project, have Contractors provide materials that are typically provided by the University on any given project as defined above, or have Contractors provide all materials for a particular project. This provides for maximum flexibility in meeting construction, or telephone / data service cut over schedules that may arise.

**RCDD Requirement**

1. Please list the names of all RCDDs on your company's staff. If your company does not employ any, use "N/A". Please note that this is a required field. It will affect your standing as a Bidder if this certification is not maintained within your company.

<b>NAME OF STAFF MEMBER</b>	<b>RCDD NUMBER</b>
*RCDD to be provided with Subcontractor information at time of award.	

# **BID SHEET**

## **LOT 1: OUTSIDE PLANT TELECOMMUNICATIONS MAINTENANCE HOLE (MH) INSTALLATION SERVICES**

Install MHs that meet the specifications described earlier in this document. Unit Prices for this Lot shall include:

- All Contractor, Subcontractor, and Specialty Contractor furnished / leased / borrowed from others: personnel, equipment, machinery, vehicles, tools, and materials plus their transportation to and from the job site.
- All Contractor, Subcontractor, and Specialty Contractor performed: pedestrian and vehicular traffic control, overnight job site protection with temporary plastic fencing / barricades / cones / flagging tape, dewatering, shoring, excavating, rock base prep and placement, MH placement, picking up and transporting of UCF provided: plastic MHs and their lids / precast concrete grade rings / cast iron ring & cover sets from an on campus storage compound to the job site, backfilling, plus pumping water out of / ventilating of MH tasks.
- All Contractor, Subcontractor, and Specialty Contractor performed: grounding and bonding, MH racking installation, site restoral with existing dirt and sod, plus hauling displaced dirt to an on campus dirt storage site tasks.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished materials **are not to be included in Bidder's Bid Prices**. Prices of these materials provided by Contractor are to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed: #57 rock for the MH pit's base, plus lead anchors, lag bolts, and washers for installing MH racking.

A typical precast concrete MH ordered by UCF CS&T from a precast concrete components manufacturer, comes equipped with pulling eyes in the floor and underside of the roof, a sump, and cast in (sealed) plastic duct terminators. Additional items ordered by UCF CS&T, are typically one 6 inch thick by 42 inch inside diameter precast concrete grade ring, one round cast iron ring & cover set, and rolls of asphaltic joint sealer. Occasionally MHs are ordered with 5 inch diameter open holes, and / or open windows for immediate conduit installation. UCF CS&T also typically furnishes MH rack sections and cable steps.

### **One Precast Concrete MH, one precast concrete grade ring and one cast iron ring & cover set**

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
1001	36" x 36" square x 36" head room, no de-watering	\$ 1050.00
1002	36" x 36" square x 36" head room, with de-watering	\$ 2450.00
1003	48" x 48" square x 48" head room, no de-watering	\$ 1650.00
1004	48" x 48" square x 48" head room, with de-watering	\$ 3250.00
1005	60" x 60" square x 48" head room, no de-watering	\$ 2450.00
1006	60" x 60" square x 48" head room, with de-watering	\$ 4250.00
1007	72" x 72" square x 48" head room, no de-watering	\$ 3450.00
1008	72" x 72" square x 48" head room, with de-watering	\$ 5450.00

### **Additional Precast Concrete Grade ring installation during MH installation**

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
1009	Each additional 42 inch inside diameter by 6 inch thick grade ring	\$ 450.00

**MH Racking installation inside of a precast concrete MH**

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
1010	Standard MH racking on one wall	\$ 450.00
1011	Standard MH racking, each additional wall, same MH	\$ 150.00

**One Plastic or Composite MH with plastic or composite lid**

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
1012	24" x 24" square x 24" deep	\$ 150.00
1013	36" x 36" square x 24" deep	\$ 200.00

**LOT 2: OUTSIDE PLANT TUNNELING AND BORING SERVICES**

The length of a bore or tunnel is measured from the far wall of the bore pit to the far wall of the receiving pit.

Unit Prices for this Lot shall include:

- All Contractor, Subcontractor, and Specialty Contractor furnished / leased / borrowed from others: personnel, equipment, machinery, vehicles, tools, and materials plus their transportation to and from the job site.
- All Contractor, Subcontractor, and Specialty Contractor performed: pedestrian and vehicular traffic control, overnight job site protection with temporary plastic fencing / barricades / cones / flagging tape, dewatering, shoring, excavating, pipe / casing placement, sealing of the ends of the pipes / casings as directed by the UCF Telecom Project Manager, backfilling, site restoral with existing dirt and sod, plus hauling displaced dirt to an on campus dirt storage site tasks.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished materials **are not to be included in Bidder's Bid Prices**. Prices of these materials provided by Contractor are to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed: pipes / conduits / casings and their associated couplings / fittings to be jack & bored, directional bored, missiled, air jetted, tunneled into place.

UCF Telecom typically furnishes EMS Marker balls to the Contractor, for placement at the end of pipes / conduits / casings not ready to have additional conduits connected to them yet, so those ends can be found later.

**Jack & boring small steel casings**

Jack & boring steel casings under roadways or driveways.

ITEM NO.	SIZE OF CASING	PRICE PER LINEAR FOOT
2001	One 4" Diameter	\$ 28.00
2002	One 4" Diameter: w / de-watering	\$ 78.00
2003	Two 4" Diameter	\$ 50.00
2004	Two 4" Diameter: w / de-watering	\$ 110.00
2005	Three 4" Diameter	\$ 72.00
2006	Three 4" Diameter: w / de-watering	\$ 142.00
2007	Four 4" Diameter	\$ 94.00
2008	Four 4" Diameter: w / de-watering	\$ 174.00
2009	Six 4" Diameter	\$ 138.00
2010	Six 4" Diameter: w / de-watering	\$ 238.00



**Directional boring**

Directional boring, then pullback of poly pipe / bore pipe. Length of poly pipe / bore pipe placed is measured from the bore entry point to the bore exit point in the ground.

ITEM NO.	TYPE OF LINEAR FOOT CONFIGURATIONS	PRICE PER FOOT
2011	One 1 inch Poly Pipe	\$ 10.00
2012	Two 1 inch Poly Pipes	\$ 12.50
2013	One 2 Inch Poly Pipe	\$ 12.50
2014	One 4 Inch Poly / Bore Pipe	\$ 18.50
2015	Two 4 Inch Poly / Bore Pipes	\$ 32.50
2016	Three 4 Inch Poly / Bore Pipes	\$ 46.50
2017	Four 4 Inch Poly / Bore Pipes	\$ 50.50
2018	Six 4 Inch Poly / Bore Pipes (can be done in multiple shots)	\$ 78.50

**Missile placement of conduit**

Place pipe via Missile method.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
2019	One 4 Inch PVC Pipe (Schedule 40)	\$ 20.00
2020	One 4 Inch Black Steel Pipe	\$ 28.00

**Air jet placement of conduit**

Place pipe via the Air Jet method. Length of bore is measured from wall of air jet pit to wall of receiving pit.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
2021	One 1 Inch PVC Pipe, Schedule 40	\$ 6.50
2022	One 2 Inch PVC Pipe, Schedule 40	\$ 10.50

**Miscellaneous tunneling**

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
2023	Tunneling via hand digging under curbs, sidewalks, etc.	\$ 6.50

**LOT 3: OUTSIDE PLANT CONDUIT PLACEMENT SERVICES**

Install direct buried conduits, and concrete encased conduit duct banks. Unit Prices for this Lot shall include:

- All Contractor, Subcontractor, and Specialty Contractor furnished / leased / borrowed from others: personnel, equipment, machinery, vehicles, tools, and materials plus their transportation to and from the job site.
- All Contractor, Subcontractor, and Specialty Contractor performed: pedestrian and vehicular traffic control, overnight job site protection with temporary plastic fencing / barricades / cones / flagging tape, dewatering, shoring, excavating, conduit placement, plastic conduit spacer placement, concrete pouring, backfilling and compaction, buried cable tape placement, pull line placement, conduit mandrelling, site restoral with existing dirt and sod, plus hauling displaced dirt to an on campus dirt storage site tasks.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished materials **are not to be included in Bidder's Bid Prices**. Prices of these materials provided by Contractor are to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed: PVC conduit / couplings / adapters / sweeps / glue, plastic conduit spacers, conduit plugs, rebar, lashing wire,

concrete, calcium additive if requested, and jet line.

UCF CS&T typically furnishes to the Contractor: specialized PVC conduit sweeps, buried cable tape, EMS Marker balls to mark duct bank stub outs, and detectable measuring / pull tape.

The Contractor will be compensated at a Unit Price per foot of conduit or multi conduit duct bank placed, including excavating and back filling of trenches. Generally, prices for excavating via machine trenching will be appreciably lower than prices for hand trenching. Unit Prices will apply when the digging conditions are reasonable and ready in that, right-of-way brush clearing is already done. At time of individual project Quotation Request issuance, Contractors will be asked to price any right of way brush clearing needed as a line item on their Quotation. Unit Prices for machine and hand trenching shall apply to all soil conditions, grass, bare dirt or gravel, regardless of the method required for trenching such as shoring, or special trenching equipment.

The depth of trenching is determined by measurement from bottom of trench to finish grade line. The amount of cover in inches is determined by measurement from top of direct buried item or concrete encasement to finish grade.

Conduit sizes most commonly utilized on UCF campuses are:

- 1-inch, Schedule 40 PVC conduit
- 2-inch, Schedule 40 PVC conduit
- 4-inch, Schedule 40 PVC conduit

**The following price tables allow for number of conduits placed, quantity of linear trench feet and depth of trench.**

**Non-encased configuration using 1 inch or 2 inch conduits where dewatering IS NOT required**

Maximum depth of trench: 39 inches. Labor only, for: excavating trench, placing and gluing conduits, backfilling, placing "Buried Cable" Tape, cleaning conduits, and placing measuring / pulling lines.

ITEM NO.		PRICE PER FOOT
3001	1 – Machine excavating	\$ 4.75
3002	1 – Hand excavating	\$ 6.75
3003	2 – Machine excavating	\$ 6.25
3004	2 – Hand excavating	\$ 8.25

**Non-encased configuration using 4 inch conduits where dewatering IS NOT required**

Maximum depth of trench: 41 inches. Labor only, for: excavating trench, placing and gluing conduits, backfilling, placing "Buried Cable" Tape, cleaning / mandrelling conduits, and placing measuring / pulling lines.

ITEM NO.	NUMBER OF CONDUITS & TRENCHING METHOD	PRICE PER FOOT
3005	1 – Machine excavating	\$ 6.25
3006	1 – Hand excavating	\$ 8.25
3007	2 – Machine excavating	\$ 8.75
3008	2 – Hand excavating	\$ 10.75

**Non-encased configuration using 4 inch conduits where dewatering IS required**

Maximum depth of trench: 41 inches. Labor only, for: dewatering, excavating trench, placing and gluing conduits, backfilling, placing “Buried Cable” Tape, cleaning / mandrelling conduits, and placing measuring / pulling lines.

ITEM NO.	NUMBER OF CONDUITS & TRENCHING METHOD	PRICE PER FOOT
3009	1 – Machine excavating	\$ 16.25
	1 – Hand excavating	\$ 18.25
3011	2 – Machine excavating	\$ 18.75
3012	2 – Hand excavating	\$ 20.75

**Encased configuration using 4 inch conduits where dewatering IS NOT required**

Labor only, for: excavating trench, placing and gluing conduits, pouring of concrete, backfilling, placing “Buried Cable” Tape, cleaning / mandrelling conduits, and placing measuring / pulling lines.

ITEM NO.	NUMBER OF CONDUITS & TRENCHING METHOD	DEPTH OF TRENCH	PRICE PER FOOT
3013	1 – Machine excavating	47 Inches	\$ 11.75
3014	1 – Hand excavating	47 Inches	\$ 14.25
3015	2 – Machine excavating	47 Inches	\$ 14.25
3016	2 – Hand excavating	47 Inches	\$ 16.75
3017	4 – Machine excavating	54 Inches	\$ 19.25
3018	4 – Hand excavating	54 Inches	\$ 26.75
3019	6 – Machine excavating	54 Inches	\$ 24.25
3020	6 – Hand excavating	54 Inches	\$ 36.75

**Encased configuration using 4 inch conduits where dewatering IS required**

Labor only, for: dewatering, excavating trench, placing and gluing conduits, pouring of concrete, backfilling, placing “Buried Cable” Tape, cleaning / mandrelling conduits, and placing measuring / pulling lines.

ITEM NO.	NUMBER OF CONDUITS & TRENCHING METHOD	DEPTH OF TRENCH	PRICE PER FOOT
3021	1 – Machine excavating	47 Inches	\$ 23.75
3022	1 – Hand excavating	47 Inches	\$ 29.75
3023	2 – Machine excavating	47 Inches	\$ 29.75
3024	2 – Hand excavating	47 Inches	\$ 32.25
3025	4 – Machine excavating	54 Inches	\$ 40.25
3026	4 – Hand excavating	54 Inches	\$ 50.25
3027	6 – Machine excavating	54 Inches	\$ 51.25
3028	6 – Hand excavating	54 Inches	\$ 66.75

**Concrete Core Boring**

Labor only, for: boring a hole in concrete, insertion of conduit, and sealing around conduit with hydraulic cement.

ITEM NO.	BORE HOLE IN CONCRETE	PRICE PER CORE BORE
3029	Up to 1 1/2” diameter in up to 12 inch thick concrete	\$ 125.00
3030	Up to 2 1/2” diameter in up to 12 inch thick concrete	\$ 150.00
3031	Up to 3 1/2” diameter in up to 12 inch thick concrete	\$ 175.00
3032	Up to 5” diameter in up to 12 inch thick concrete	\$ 225.00

**Site Restoration**

Grasses used on UCF campuses are Argentine Bahia, St. Augustine Floratam, Tifton # 419 Bermuda, plus GN-1 (Greg Norman-1) and GN-2 (Greg Norman-2) Bermuda grasses. The UCF CS&T Project Manager will advise what grasses are present at the specific work sites.

Labor only, for: preparing the ground, laying sod, then removal of empty sod pallets to a legal disposal facility. Contractor, Subcontractor, and Specialty Contractor furnished sod **is not to be included in Bidder's Bid Prices**. The price of the sod provided by Contractor is to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed.

**Sodding**

ITEM NO.	Item	PRICE PER SQUARE FOOT
3033	Prepare ground, lay sod, and remove empty sod pallets.	\$ 0.55

**LOT 4: OUTSIDE PLANT COPPER CABLE PLACEMENT AND SPLICING / TERMINATING SERVICES**

Per UCF CS&T Services rules, if a Contractor places copper cable, that same Contractor or their Subcontractor or their Specialty Contractor is to splice, terminate and test the copper cable pairs.

Install and splice / terminate outside plant (OSP) copper telephone cables. Install fiber optic innerducts per the specific. Cable to be spliced will be 24 or 22 AWG. Unit Prices for this Lot shall include:

- All Contractor, Subcontractor, and Specialty Contractor furnished / leased / borrowed from others: personnel, equipment, machinery, vehicles, tools, and materials plus their transportation to and from the job site.
- All Contractor, Subcontractor, and Specialty Contractor performed: pedestrian and vehicular traffic control, overnight job site protection with temporary plastic fencing / barricades / cones / flagging tape, pumping water from MHs, ventilating MHs, pull line placement as needed, conduit mandrelling as needed, fiber optic innerduct placement, OSP copper telephone cable placement, installing innerduct plugs in each end of innerducts, sealing around innerducts and cables in conduits, installing cable steps in existing MH cable racking, bonding, cable pair splicing / terminating, installing splice cases, encapsulating splices, and testing of OSP copper cable pairs. Unit pricing is on a per cable pair basis, and shall include all workers: skilled or semi-skilled as required.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished material is considered an incidental item, and **is to be built into Bidder's innerduct and cable pulling Bid Prices**: Cable pulling lubricant, cleaning agents, tape, tie-wraps, and other miscellaneous materials as required for a complete job.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished materials **are not to be included in Bidder's Bid Prices**. Prices of these materials provided by Contractor are to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed: Minimum 200 lb. tensile strength jet line, materials for sealing conduits containing copper cables and fiber optic innerducts, splice modules, bullet bonds, splice cases, and encapsulate.

UCF CS&T typically furnishes to the Contractor: 1,250 lb. tensile strength detectable measuring / pull tape, conduit plugs, fiber optic innerduct, OSP copper telephone cable, MH cable racking steps, fiber optic innerduct plugs, building entrance protector units, and lightning protection modules. UCF CS&T also typically furnishes "Buried Cable" tape, and EMS Marker balls for direct buried cable applications.

**Pulling a Mandrell through existing empty conduits**

Labor only, for: Per conduit foot pulling a Mandrell for testing / cleaning purposes, then leaving a 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in the conduit after Mandrelling, plus installing conduit plugs as specified by UCF CS&T's Project

Manager. **Do not** charge UCF the following unit pricing for placing jet lines and measuring / pull tapes in new conduits you just installed.

ITEM NO.	ITEM	PRICE PER CONDUIT FOOT
4001	Pull mandrell through an existing empty 3 inch or 4 inch conduit	\$ 1.00

**Jet line and high strength measuring tape placement in existing conduits found to be empty, or in existing conduits found to be already containing cables and / or innerducts**

Labor only, for: Per conduit foot placement of 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in any diameter conduit. Placing methods are via compressed air, or using a rodder, fish tape, or vacuum as appropriate to the size of the conduit. **Do not** charge UCF the following unit pricing for placing jet lines and measuring / pull tapes in new conduits you just installed.

ITEM NO.	ITEM	PRICE PER CONDUIT FOOT
4002	Place jet line or measuring / pull tape in an existing empty conduit	\$ 0.75
4003	Place jet line or measuring / pull tape in an existing occupied conduit	\$ 1.00

**Place innerduct in conduit**

Labor plus the furnishing of cable pulling lubricant for: Installation of 1 inch SDR 13.5 innerduct , and / or 1 ½ inch SDR 13.5 innerduct in empty underground conduits or conduits containing existing cabling as indicated, installing innerduct and conduit plugs, and sealing around innerducts and cables as specified by the UCF CS&T Project Manager. Unit Price is based on the linear footage of bundled innerduct placed.

ITEM NO.	ITEM DESCRIPTION	PRICE PER INNERDUCT BUNDLE FOOT
4004	One innerduct in empty conduit	\$ 1.00
4005	One innerduct in conduit with existing cabling	\$ 1.25
4006	Two innerducts in empty conduit	\$ 1.50
4007	Two innerducts in conduit with existing cabling	\$ 2.00
4008	Three innerducts in empty conduit	\$ 2.25
4009	Three innerducts in conduit with existing cabling	\$ 2.75
4010	Four innerducts in empty conduit	\$ 3.00

**Place copper telephone cable directly in a trench**

Labor only, for: OSP copper telephone cable direct burial, including trenching, back filling, placing “Buried Cable” tape, and restoring the site to existing conditions. Unit Pricing is based on linear footage of the direct burial of the cable.

ITEM NO.	ITEM DESCRIPTION	PRICE PER LINEAR FOOT OF DIRECT BURIAL
4011	One cable; 3 pair thru 25 pair, via machine trenching up to 36” deep	\$ 4.25
4012	One cable; 3 pair thru 25 pair, via hand trenching up to 36” deep	\$ 5.75

**Place copper telephone cable in conduits**

Labor plus the furnishing of cable pulling lubricant, for: Placing copper telephone cable in conduit, and sealing around cables as specified by the UCF CS&T Project Manager. Copper Telephone Cable will be 24 or 22 AWG. Unit Pricing is based on linear footage of the actual amount of cable handled and placed.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
4013	One cable; 3 pair thru 50 pair	\$ 1.00
4014	One cable; 100 pair	\$ 1.25

**Splice outside plant copper telephone cable to building entrance protector 100 pair tip cables inside of a building**

Use a 3M brand or Preformed brand fire retardant vault type closure and 3M # 4000-D/TR splice modules.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4019	100 Pair Cable Splice	\$ 4.75

**Splice outside plant copper telephone cable to building entrance protector 100 pair tip cables in a Switch Room's dry cable vault**

Use a Preformed brand fire retardant and encapsulated type vault closure and 3M # 4000-D/TR splice modules.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4022	100 Pair Cable Splice	\$ 5.00

**Splice outside plant copper telephone cable in a MH**

Use a Preformed brand encapsulated type closure and 3M # 4000-D/TR splice modules. Include pumping out ground water, plus ventilating the MH.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4027	25 Pair Cable Splice	\$ 38.00
4028	50 Pair Cable Splice	\$ 21.00
4029	100 Pair Cable Splice	\$ 13.50

**Rebuild an existing splice in a MH**

Use a Preformed brand encapsulated type closure and 3M # 4000-D/TR splice modules. Include pumping out ground water, plus ventilating the MH.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4034	25 Pair Cable Splice	\$ 38.00
4035	50 Pair Cable Splice	\$ 21.00
4036	100 Pair Cable Splice	\$ 13.50
4037	200 Pair Cable Splice	\$ 8.75
4038	300 Pair Cable Splice	\$ 7.50
4039	400 Pair Cable Splice	\$ 6.50
4040	600 Pair Cable Splice	\$ 5.50

**Add outside plant copper telephone cable to an existing splice closure in a MH**

Open up existing splice in MH and add copper cable to field side of splice using 3M # 4000-D/TR splice modules unless otherwise indicated. Re-encapsulate the splice. Include pumping out ground water, plus ventilating the MH.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4044	Add one 3 pair thru 12 pair cable to a splice (Use Lucent # 709 modules)	\$ 135.00
4045	Add one 25 pair cable to a splice	\$ 38.00
4046	Add one 50 pair cable to a splice	\$ 21.00
4047	Add one 100 pair cable to a splice	\$ 13.50

**Terminate outside plant copper telephone cable onto a building entrance protector equipped with a dual threaded post type termination**

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4055	3 Pair Cable to a 1 pair or a 2 pair protector	\$ 160.00

**Terminate outside plant copper telephone cable onto a building entrance protector equipped with a 110 type Input Field**

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
4056	6 Pair thru 25 pair Cable	\$ 21.00
4057	50 Pair Cable	\$ 12.50
4058	100 Pair Cable	\$ 8.50

## LOT 5: OUTSIDE PLANT FIBER OPTIC CABLE PLACEMENT AND TERMINATING SERVICES

Per UCF CS&T rules, if a Contractor places fiber optic cables, that same Contractor or their Subcontractor or their Specialty Contractor must also terminate and test the cables' fiber optic strands.

Install, terminate, and test outside plant (OSP) fiber optic cables. Install fiber optic innerducts. Unit Prices for this Lot shall include:

- All Contractor, Subcontractor, and Specialty Contractor furnished / leased / borrowed from others: personnel, equipment, machinery, vehicles, tools, and materials plus their transportation to and from the job site.
- All Contractor, Subcontractor, and Specialty Contractor performed: pedestrian and vehicular traffic control, overnight job site protection with temporary plastic fencing / barricades / cones / flagging tape, pumping water from MHs, ventilating MHs, pull line placement, conduit mandrelling, fiber optic innerduct placement, OSP fiber optic cable placement, installing cable steps in existing MH cable racking, installing innerduct plugs in each end of innerducts, sealing around innerducts and cables in conduits, plus fiber optic strand terminating and testing. Unit pricing is on a per fiber optic strand basis, and shall include all workers: skilled or semi-skilled as required.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished material is considered an incidental item, and **is to be built into Bidder's innerduct and cable pulling Bid Prices:** Cable pulling lubricant, cleaning agents, tape, tie-wraps, and other miscellaneous materials as required for a complete job.

The following typical Contractor, Subcontractor, and Specialty Contractor furnished materials **are not to be included in Bidder's Bid Prices.** Prices of these materials provided by Contractor are to be shown on the Contractor's Invoice submitted to UCF CS&T after the particular project is completed: minimum 200 lb. tensile strength jet line, and materials for sealing conduits containing fiber optic innerducts and cables.

UCF CS&T typically furnishes to the Contractor: 1,250 lb. tensile strength detectable measuring / pull tape, conduit plugs, fiber optic innerduct, OSP fiber optic cable, MH cable racking steps, and fiber optic innerduct plugs. UCF CS&T also typically furnishes buffer tube fan out kits, equipment racks, Fiber Distribution Centers, ST panels, and ST connectors.

Unit Pricing shall include terminating fiber optic cables on both ends including:

- Dressing the fiber optic cable into cable racking, equipment racks, fiber distribution centers (FDCs) and wall mount fiber distribution boxes (WIC boxes), and cable strain relief
- Cable preparation and buffer tube kit installation
- Installing ST connector panels into the FDCs and WIC boxes
- Connecting the terminated fiber strand's ST connectors into the ST connector panels
- Bi-directional end to end Optical Power Loss Testing of each strand, by using a Stabilized Optical Light Source and an Optical Power Meter

Additional Per Hour Unit Pricing shall be provided for the following. Enter your Per Hour Pricing for the items below, in Lot #6:

- Equipment rack installation
- Cable racking installation
- FDC and WIC box mounting and installation
- Associated component installation



**Pulling a Mandrell through existing empty conduits**

Labor only, for: per conduit foot pulling a Mandrell for testing / cleaning purposes, then leaving a 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in the conduit after Mandrelling, plus installing conduit plugs as specified by the UCF CS&T Project Manager.

**Do not** charge UCF the following unit pricing for placing jet lines and measuring / pull tapes in new conduits you just installed.

ITEM NO.	QUANTITY	PRICE PER CONDUIT FOOT
5001	Pull mandrell through an existing empty 3 inch or 4 inch conduit	\$ 1.00

**Jet line and high strength measuring tape placement in existing conduits found to be empty, or in existing conduits found to be already containing cables and / or innerducts**

Labor only, for: Per conduit foot placement of 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in any diameter conduit. Placing methods are via compressed air, or using a rodder, fish tape, or vacuum as appropriate to the size of the conduit. **Do not** charge UCF the following unit pricing for placing jet lines and measuring / pull tapes in new conduits you just installed.

ITEM NO.	ITEM	PRICE PER CONDUIT FOOT
5002	Place jet line or measuring / pull tape in an existing empty conduit	\$ 0.75
5003	Place jet line or measuring / pull tape in an existing occupied conduit	\$ 1.00

**Place innerduct in conduit**

Labor plus the furnishing of cable pulling lubricant, for: installation of 1 inch SDR 13.5 innerduct, and / or 1 ½ inch SDR 13.5 innerduct in empty underground conduits or conduits containing existing cabling as indicated, installing innerduct and conduit plugs, and sealing around innerducts and cables as specified by the UCF CS&T Project Manager. Unit Price is based on the linear footage of bundled innerduct placed.

ITEM NO.	ITEM DESCRIPTION	PRICE PER INNERDUCT BUNDLE FOOT
5004	One innerduct in empty conduit	\$ 1.00
5005	One innerduct in conduit with existing cabling	\$ 1.25
5006	Two innerducts in empty conduit	\$ 1.50
5007	Two innerducts in conduit with existing cabling	\$ 2.00
5008	Three innerducts in empty conduit	\$ 2.25
5009	Three innerducts in conduit with existing cabling	\$ 2.75
5010	Four innerducts in empty conduit	\$ 3.00

**Place fiber optic cable in conduit, innerduct and FoDuct**

Labor plus the furnishing of cable pulling lubricant, for: placing fiber optic cable in conduit or FoDuct / Innerduct, and sealing around cables as specified by the UCF CS&T Project Manager. Fiber optic cable may be single mode, multi-mode or hybrid (single mode and multi-mode strands in the same cable sheath). Unit Price is based on linear footage of the actual amount of cable handled and placed.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
5011	One cable; 6 thru 24 strands	\$ 1.00
5017	One cable; 48 strands	\$ 1.00
5018	One cable; 72 strands	\$ 1.25
5019	One cable; 96 strands	\$ 1.50
5020	One cable; 144 strands	\$ 1.75
5020A	One cable; 288 strands	\$ 2.00

**Single Mode fiber optic cable termination**

The Per Strand Unit Price is for prepping the cable, terminating **both ends of one strand** of the following strand count cables, then testing each strand.

ITEM NO.	ITEM DESCRIPTION	PRICE PER STRAND
5021	One 6 strand thru 24 strand cable terminated & tested	\$ 42.50
5022	One 48 strand cable terminated & tested	\$ 38.50
5023	One 72 strand cable terminated & tested	\$ 36.50
5024	One 96 strand cable terminated & tested	\$ 32.50
5025	One 144 strand cable terminated & tested	\$ 28.50
5026	One 288 strand cable terminated & tested	\$ 26.50

**LOT 6: MISCELLANEOUS OUTSIDE PLANT ITEMS PRICING**

These rates and charges apply to work performed by Contractors involving special projects that do not fall within specific Unit Pricing listed elsewhere. All Labor hours are to be at a Regular Hours rate, **NOT** at an Overtime Rate.

**Hourly Cost Items**

ITEM NO.	LABOR TYPE	PRICE PER HOUR
6001	One Foreman of a hand digging crew, on the job	\$ 38.50
6002	Each Laborer of a hand digging crew	\$ 26.50
6003	Each Flagger or Special Guard	\$ 26.50
6004	Each Laborer: Capable of performing misc. and general tasks without constant supervision	\$ 28.50

**Cable Removal**

Unit Price to include pumping out ground water, ventilating the MH, plus removal, then proper disposal of removed items.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
6005	Remove one cable with an outside diameter of up to 1 inch from existing conduit	\$ 1.50
6007	Remove one cable with an outside diameter of more than 1 inch, but less than 2 inches, from existing conduit	\$ 2.25
6008	Remove one cable with an outside diameter of 2 inches or more from existing conduit	\$ 3.00

**Clean Out MHs**

Contractor to clean out MHs of any size, of mud and debris to facilitate work. UNIT price shall include all labor and equipment required for pumping out ground water, ventilating, debris removal and proper disposal, plus cleaners, and other miscellaneous material necessary.

ITEM NO.	ITEM DESCRIPTION	PRICE PER HOUR
6009	Clean one MH of any size	\$ 250.00

**LOT 7: STRUCTURED CABLING SERVICES**

**Contractors bidding Structured Cabling Services must bid all lots (lots 7 thru 11).**

The Unit Prices shall include all the necessary labor, vehicles, equipment, miscellaneous materials, supervision as necessary to place the cable and to provide a complete job including cable handling, termination of the cable at both ends, testing and cleanup.

Do not include costs for cable, connectors, 110 items, equipment racks, etc.  
Additional Unit Pricing shall be provided for the installation of:

- Cable hangers
- Cable trays
- Sleeves through walls

When performing demolition work, all demolition material must be returned to UCF CS&T for disposition.

**Category 5E Structured Cabling**

Unit Prices to do an ANSI / TIA / EIA-568-B, Category 5E, Hubbell 25 year Mission Critical Warranty installation of Structured Cabling, including submitting installed cabling Test Certification documents to Hubbell and UCF.

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
7001	Install, terminate and test one Cat 5E cable, com room patch panel to RJ-45 jack station plate	\$ 68.00
7002	Install, terminate and test two Cat 5E cables, com room patch panel to same RJ-45 jack station plate	\$ 86.00
7003	Install, terminate and test three Cat 5E cables, com room patch panel to same RJ-45 jack station plate	\$ 105.00
7004	Install, terminate and test four Cat 5E cables, com room patch panel to same RJ-45 jack station plate	\$ 125.00

**Category 6A Structured Cabling**

Unit Prices to do a ANSI / EIA / TIA Category 6A, Hubbell 25 year Mission Critical Warranty installation of Structured Cabling, including submitting installed cabling Test Certification documents to Hubbell and UCF.

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
7011	Install, terminate and test one Cat 6A cable, com room patch panel to RJ-45 jack station plate	\$ 75.00
7012	Install, terminate and test two Cat 6A cables, com room patch panel to same RJ-45 jack station plate	\$ 90.00
7013	Install, terminate and test three Cat 6A cables, com room patch panel to same RJ-45 jack station plate	\$ 110.00
7014	Install, terminate and test four Cat 6A cables, com room patch panel to same RJ-45 jack station plate	\$ 130.00

**CATV Coax Structured Cabling**

ITEM NO.	ITEM DESCRIPTION	PRICE EACH
7021	Install, terminate and test one RG-6 CATV coax cable, "F" connectors on com room and station plate ends (installed with other station cables to a given station plate)	\$ 18.00
7022	Install, terminate and test one RG-6 CATV coax cable, "F" connectors on com room and station plate ends (installed as an individual cable)	\$ 52.00
7023	Install, terminate and test one RG11 CATV coax cable, "F" connectors on com room and station plate ends (installed with other station cables to a given station plate)	\$ 35.00
7024	Install, terminate and test one RG-11 CATV coax cable, "F" connectors on com room and station plate ends (installed as an individual cable)	\$ 70.00
7025	Install coax 500 (Hard line). Install cable only, does not include termination or testing. Price by the foot.	\$ 1.50 /ft.

**Other Structured Cabling Related Installation Tasks**

Note: When asking for pricing to place EMT sleeve in gypsum or concrete wall, the price must include making the hole.

ITEM NO.	ITEM DESCRIPTION	PRICE
7030	Install cable J-hooks to walls (Each J-hook: including J-hook, anchors and screws)	\$ 7.50
7031	Install cable J-hooks from steel beams, bar joists or concrete building components (Each J-hook: <u>Do not</u> price J-hook, associated hardware or All-Thread at this time)	\$ 7.50
7032	Install Cat 5 cable slings from steel beams, bar joists or concrete building components (Each cable sling: <u>Do not</u> price cable sling, associated hardware or All-Thread at this time)	\$ 12.00
7033	Install 1 to 2 inch EMT sleeve with plastic bushings through a typical gypsum wall (Each: including EMT, bushings, sealing materials for around the EMT, and fire stop materials)	\$ 75.00
7034	Install 1 to 2 inch EMT sleeve with plastic bushings through a typical concrete block wall (Each: including EMT, bushings, sealing materials for around the EMT, and fire stop materials)	\$ 100.00
7035	Install 3 to 4 inch EMT sleeve with plastic bushings through a typical gypsum wall (Each: including EMT, bushings, sealing materials for around the EMT, and fire stop materials)	\$ 110.00
7036	Install 3 to 4 inch EMT sleeve with plastic bushings through a typical concrete block wall (Each: including EMT, bushings, sealing materials for around the EMT, and fire stop materials)	\$ 175.00

**LOT 8: INNERDUCT AND CABLE PLACEMENT AND PREPARATION SERVICES**

Unit Prices shall include vehicles, cable trailers, rodders, machinery, labor, supervision, jet line, and other materials necessary. Do not include costs of measuring tapes, cable, and etc. materials.

**Jet line and high strength measuring tape placement in existing empty conduits**

Unit Prices per conduit foot for placement of 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in any diameter conduit. Placing methods are via compressed air or using a rodder, fish tape, vacuum as appropriate to the size of the conduit.

ITEM NO.	QUANTITY	PRICE PER DUCT FOOT
8001	Install jet line and high strength measuring tape in empty conduit	\$ 0.75

**Jet line and high strength measuring tape placement in existing conduits already containing cable**

Unit Prices per conduit foot for placement of 200 pound tensile strength jet line, or sequentially marked 1,250 pound tensile strength measuring / pulling tape in any diameter conduit. Placing methods are via compressed air or using a rodder, fish tape, vacuum as appropriate to the size of the conduit.

ITEM NO.	QUANTITY	PRICE PER DUCT FOOT
8003	Install jet line and high strength measuring tape in conduit already containing cable	\$ 1.00

**Place innerduct inside building spaces**

Install 1 inch corrugated innerduct in building riser or horizontal spaces. Unit Price shall include all labor in handling and placing innerduct regardless of how many workers, trucks or reel handling machinery equipment is needed, supervision, placing pull tape in all innerduct, placing innerduct plugs and plugging material. Do not include the cost of the innerduct or innerduct plugs.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
8014	One innerduct	\$ 0.85
8015	Two innerducts	\$ 1.45
8016	Three innerducts	\$ 2.15
8017	Four innerducts	\$ 2.75

**Place copper telephone Riser or House cables in Building conduit**

Unit Price shall include all labor and materials necessary to place copper cable in building conduit. Unit Price is for the actual amount of cable placed. Any necessary rodding or pulling tape placement is covered in sections above. Do not include the cost of any cables. The following Unit Prices are for the handling and placement of telephone (copper) cable in building conduit regardless of size of machine required to handle reels and pulling, size of reels, number of workers, transportation, supervision, etc. Copper Telephone Cable may be 24 or 22 AWG.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
8026	One cable; 3 to 12 pair	\$ 0.75
8027	Two cables; 3 to 12 pair each	\$ 1.25
8028	One cable; 25 or 50 pair	\$ 1.25
8029	Two cables; 25 or 50 pair each	\$ 2.00
8030	One cable; 100 pair	\$ 1.50
8031	Two cables; 100 pair each	\$ 2.25

**Place copper telephone Riser or House cables in Building Supporting by Ladder Racking or “J” Hooks**

Unit Price shall include all labor and materials necessary to place copper cable in buildings. Unit Price is for the actual amount of cable placed. Do not include the cost of any cables. The following Unit Prices are for the handling and placement of telephone (copper) cable in buildings regardless of size of machine required to handle reels and pulling, size of reels, number of workers, transportation, supervision, etc. Copper Telephone Cable may be 24 or 22 AWG.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
8040	One cable; 3 to 12 pair	\$ 0.75
8041	Two cables; 3 to 12 pair each	\$ 1.25
8042	One cable; 25 or 50 pair	\$ 1.25
8043	Two cables; 25 or 50 pair each	\$ 2.00
8044	One cable; 100 pair	\$ 1.50
8045	Two cables; 100 pair each	\$ 2.25

**Place fiber optic cable in conduit or innerduct**

Unit Price shall include all labor and materials necessary to place fiber optic cable in conduit or Innerduct. Unit Price is for the actual amount of cable placed. Any necessary rodding or pulling tape placement is covered in sections above. Do not include the cost of any cables. The following Unit Prices are for the handling and placement of fiber optic cable in conduits regardless of size of machine required to handle reels and pulling, size of reels, number of workers, transportation, supervision. Fiber optic cable may be single mode, multi-mode or hybrid. Fiber optic cables are handled and placed using different methods and guidelines than telephone cables, thus the reason for separating the Unit Pricing.

ITEM NO.	ITEM DESCRIPTION	PRICE PER FOOT
8055	One cable; 6 or 12 strand	\$ 1.00
8056	Two cables; 6 or 12 strands each	\$ 1.75
8057	One cable; 18, 24, 36 or 48 strand	\$ 1.00
8058	Two cables; 18, 24, 36 or 48 strand each	\$ 1.75
8059	One cable; 60 or 72 strand	\$ 1.25
8060	Two cables; 60 or 72 strand each	\$ 2.00
8061	One cable; 144 strand	\$ 1.75
8062	One cable; 288 strand	\$ 2.00

**LOT 9: TELEPHONE CABLE SPLICING AND TERMINATING SERVICES**

The per Unit pricing shall be on a per pair basis and shall include all labor skill or semi-skilled as required, transportation, bullet bonds, tape, screws, tie-wraps, splice modules, and other miscellaneous materials as required for a complete job. Copper Telephone Cable may be 24 or 22 AWG.

**Splice outside plant copper telephone cable to building entrance protector 100 pair tip cables inside of a building**

Use a fire retardant vault type closure and 3M # 4000-D splice modules.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
9004	100 Pair Cable Splice	\$ 4.85

**Splice outside plant copper telephone cable in a Riser type closure inside of a building**

Use a 3M brand or Preformed brand fire retardant riser type closure and 3M # 4000-D splice modules.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
9022	100 Pair Cable Splice	\$ 4.85

**Terminate outside plant copper telephone cable onto a building entrance protector equipped with a 110 type Input Field**

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
9094	3 Pair Cable (1-1 pair protector)	\$ 45.00
9095	3 Pair Cable (2-1 pair protector)	\$ 45.00
9096	6 Pair Cable	\$ 26.00
9097	12 Pair Cable	\$ 22.50
9098	25 Pair Cable	\$ 20.00
9099	50 Pair Cable	\$ 14.00
9100	100 Pair Cable	\$ 6.50

**Terminate outside plant copper telephone cable used as riser cable onto 110 Wiring Blocks**

Include installing bonding and 110C-5 connecting blocks.

ITEM NO.	ITEM DESCRIPTION	PRICE PER PAIR
9102	3 Pair Cable	\$ 45.00
9103	6 Pair Cable	\$ 26.00
9104	12 Pair Cable	\$ 22.50
9105	25 Pair Cable	\$ 20.00
9106	50 Pair Cable	\$ 14.00
9107	100 Pair Cable	\$ 6.50



**LOT 10: FIBER OPTIC CABLE TERMINATING SERVICES**

Unit Pricing shall include terminating fiber optic cables on both ends including:

- Dressing the fiber optic cable into cable racking, equipment racks, fiber distribution centers (FDCs) and wall mount fiber distribution boxes (WIC boxes), and cable strain relief
- Cable preparation and buffer tube kit installation
- Installing connector panels into the FDCs and WIC boxes
- Connecting the terminated fiber strand's into connector panels
- Bi-directional end-to-end Optical Power Loss Testing of each strand, by using a Stabilized Optical Light Source and an Optical Power Meter

Additional Unit Pricing shall be provided for:

- Equipment rack installation
- Cable racking installation
- FDC and WIC box mounting and installation
- Associated component installation

Unit Pricing shall include all labor with the appropriate skill level, supervision, miscellaneous materials, material handling, transportation, and clean up.

**Single Mode, Multi-Mode, or Hybrid (Single Mode / Multi Mode fiber in one sheath) Indoor Rated Fiber optic cable termination**

Unit Price is for terminating **both ends of one strand** of the following strand count cables and testing after termination is completed.

ITEM NO.	ITEM DESCRIPTION	PRICE / STRAND
	Items 10001 thru 10010 describe indoor specification fiber optic cable	
10001	One 6 strand cable terminated & tested	\$ 58.50
10002	One 12 strand cable terminated & tested	\$ 50.50
10003	One 24 strand cable terminated & tested	\$ 42.50
10004	One 48 strand cable terminated & tested	\$ 38.50
10005	One 72 strand cable terminated & tested	\$ 36.50
10006	One 144 strand cable terminated & tested	\$ 28.50
10007	One 6 SM / 6 MM Hybrid cable terminated & tested	\$ 54.00
10008	One 12 SM / 12 MM Hybrid cable terminated & tested	\$ 46.00
10009	One 24 SM / 24 MM Hybrid cable terminated & tested	\$ 42.00
10010	One 48 SM / 48 MM Hybrid cable terminated & tested	\$ 36.00

**Single Mode, Multi-Mode, or Hybrid (Single Mode / Multi Mode fiber in one sheath) OSP Rated fiber optic cable termination in riser application**

Unit Price is for terminating **both ends of one strand** of the following strand count cables and testing after termination is completed.

ITEM NO.	ITEM DESCRIPTION	PRICE / STRAND
	Items 10031 thru 10036 describe outdoor specification fiber optic cable	
10031	One 6 strand cable terminated & tested	\$ 58.50
10032	One 12 strand cable terminated & tested	\$ 50.50
10033	One 24 strand cable terminated & tested	\$ 42.50
10034	One 48 strand cable terminated & tested	\$ 38.50
10035	One 72 strand cable terminated & tested	\$ 36.50
10036	One 144 strand cable terminated & tested	\$ 28.50

**LOT 11: MISCELLANEOUS ITEMS PRICING**

These rates and charges apply to work performed by Contractors involving special projects that do not fall within specific Unit Pricing listed elsewhere.

**Hourly Cost Items**

ITEM NO.	LABOR TYPE	REGULAR	OVERTIME
11001	Telecom Installation Technician Laborer (per man hour)	\$ 55.00	\$ 82.50
11002	FEMA COSTING DISASTER RECOVERY (per man hour)	\$ N/A	\$ N/A

When performing demolition work, all demolition material must be returned to UCF CS&T for disposition.

Does your bid meet our specifications exactly?  X  Yes   No

If No, please detail how your bid meets or exceeds the specifications of the required item(s) and provide proof that verifies your claim.

Prices quoted are good for at least 365 days following bid opening.

Delivery will be 10 days after receipt of order.

F.O.B. delivered to UCF

Payment terms: Net 30

I certify that I am an officer of the company or am otherwise authorized to contract in the name of the company for these items, and that all items bid meet all details of the documents comprising this invitation except as noted above.

Central Florida Infrastructure, Inc.  
COMPANY NAME

Brady A. Sapp  
AUTHORIZED SIGNATURE

104 Vinewood Dr.  
MAILING ADDRESS

Brady A. Sapp  
PRINTED NAME

Sanford, FL 32773  
CITY, STATE, ZIP CODE

Vice President  
TITLE

45-4338340  
FEDERAL EMPLOYER ID NUMBER

( 407 ) 970-8611  
PHONE NUMBER

centralfloidainfrastructure@yahoo.com  
E-MAIL ADDRESS

( 407 ) 330-2260  
FAX NUMBER

5/22/2014  
DATE

ATTACHMENT 1

**BIDDER'S STATEMENT OF PRINCIPAL PLACE OF BUSINESS**  
*(Must be completed & submitted with each competitive solicitation)*

Name of Bidder: Central Florida Infrastructure, Inc.

Identify the state in which the Bidder has its principal place of business: Florida

**Proceed as follow: IF your principal place of business above is located within the State of Florida, the Bidder must sign below and attach to your solicitation. No further action is required. IF your principal place of business is outside of the State of Florida the following must be completed by an attorney and returned with your solicitation. Failure to comply shall be considered to be non-responsive to this solicitation.**

**OPINION OF OUT-OF-STATE BIDDER'S ATTORNEY ON BIDDING PREFERENCES**  
*(To be completed by the Attorney for an Out-of-State Bidder)*

**NOTICE:** Section 287.084(2), Fla. Stat., provides that "a vendor whose principal place of business is outside this state must accompany any written bid, proposal, or reply documents with a written opinion of an attorney at law licensed to practice law in that foreign state, as to the preferences, if any or none, granted by the law of that state [or political subdivision thereof] to its own business entities whose principal places of business are in that foreign state in the letting of any or all public contracts."

**LEGAL OPINION ABOUT STATE BIDDING PREFERENCES**  
*(Please Select One)*

\_\_\_\_\_ The Bidder's principal place of business is in the State of \_\_\_\_\_ and it is my legal opinion that the laws of that state **do not grant a preference** in the letting of any or all public contracts to business entities whose principal places of business are in that state.

\_\_\_\_\_ The Bidder's principal place of business is in the State of \_\_\_\_\_ and it is my legal opinion that the laws of that state **grant the following preference(s)** in the letting of any or all public contracts to business entities whose principal places of business are in that state: [Please describe applicable preference(s) and identify applicable state law(s)]:

\_\_\_\_\_  
\_\_\_\_\_

**LEGAL OPINION ABOUT POLITICAL SUBDIVISION BIDDING PREFERENCES**  
*(Please Select One)*

\_\_\_\_\_ The Bidder's principal place of business is in the political subdivision of \_\_\_\_\_ and it is my legal opinion that the laws of that political subdivision **do not grant a preference** in the letting of any or all public contracts to business entities whose principal places of business are in that political subdivision.

\_\_\_\_\_ The Bidder's principal place of business is in the political subdivision of \_\_\_\_\_ and the laws of that political subdivision **grant the following preference(s)** in the letting of any or all public contracts to business entities whose principal places of business are in that political subdivision: [Please describe applicable preference(s) and identify applicable authority granting the preference(s)]:

\_\_\_\_\_  
\_\_\_\_\_

Signature of out-of-state Bidder's attorney: \_\_\_\_\_

Printed name of out-of-state Bidder's attorney: \_\_\_\_\_

Address of out-of-state bidder's attorney: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Telephone Number of out-of-state bidder's attorney: (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Email address of out-of-state bidder's attorney: \_\_\_\_\_

Attorney's states of bar admission: \_\_\_\_\_

Bidder's Printed Name: \_\_\_\_\_

Signature \_\_\_\_\_