

## Scope of Work

- I. Scope of Solicitation**
- II. Instructions to Offerors**
- III. Scope of Work / Specifications**
- IV. Terms and Conditions - Special**
- V. Appendices to Scope of Work**
- VI. Bidding Schedule**

### **I. SCOPE OF SOLICITATION**

Clemson Computing and Information Technology (CCIT) desires to establish a fixed price contract with a fiber optic cabling contractor to provide emergency fiber optic cable repair services for cable cuts or outages resulting from natural occurrences such as ice, wind, downed trees, tornado, etc or manmade damage caused by construction, digging, boring, scraping, etc.

This is a fixed price bid, and an award will be made to multiple offerors. Award will be made to all responsive and responsible offerors. Offeror's not responding to the initial solicitation, may be added to the awarded vendors' list provided the vendor furnishes evidence of responsibility and responsiveness to Clemson University's original fixed price bid as authorized by the solicitation.

The effective date of this contract is the first day of the Maximum Contract Period as specified on the final statement of award. For bids where award statement is not required, the effective date of the contract will be the issue date on the Purchase Order.

The initial term of this agreement is one (1) year from the effective date as stated on the award document. At the end of the initial term, and at the end of each renewal term, this contract shall automatically renew for a period of one year, unless contractor receives notice that the University elects not to renew the contract at least thirty (30) days prior to the date of renewal. Said renewals may be less than, but will not exceed, four (4) additional one year periods. Regardless, this contract expires no later than the last date stated on the final statement of award.

This contract is open for bidding until the original five year term of the contract expires. Regardless of when additional bids are received and awards made, all contracts awarded under this solicitation will terminate on the maximum expiration date stated on the final statement of award.

### **II. INSTRUCTIONS TO OFFERORS**

1. **INFORMATION FOR OFFERORS TO SUBMIT** - In addition to information requested elsewhere in this solicitation, Offerors should submit the following information for purposes of evaluation:

All Offerors must complete, and re-attach Section VI, Bidding Schedule along with Table 1, Emergency Contact Escalation Sheet, to online bid document.

### III. SCOPE OF WORK / SPECIFICATIONS

The successful bidders must perform the following work as needed:

- The Contractor must provide skilled technicians capable of restoring cut or broken aerial or buried fiber optic cable per industry standards and manufactures specifications.
- The Contractor must notify PUPS (811) prior to any digging.
- The Contractor must provide all heavy equipment (bucket truck, back hoe, trencher, etc).
- The Contractor must provide crews capable of excavation and restoration of existing cable-in-duct. Excavation procedures may take place under concrete, asphalt, gravel, and or bare ground.
- The Contractor must be capable of excavating and restoring these surfaces to their pre-excavated condition.
- The Contractor must be capable of cutting into and restoring existing plowducts without causing harm to the existing cables inside.
- The Contractor must also possess the crews, tools, and equipment necessary to provide new cable-in-duct installations related to restoration or replacement efforts of portions of the overall cable network.
- The Contractor must provide all the splicing materials, underground duct, handholes, locate wire, and mule tape necessary for any restoration. The owner will provide the cable for the individual tasks.
- The Contractor must be capable of repairing aerial installations including but not limited to; installing new steel messenger, cable lashing, pole hardware, etc.
- The Contractor must prepare a written report of the incident to send to CCIT including; itemized list of materials used, labor schedule, number of fibers spliced and splice loss readings for each splice, pictures of before and after conditions.

The intent of this contract is to ensure that any fiber optic cable belonging to Clemson University damaged by a natural or manmade event receives priority response and repair services; however, this contract may be used to assist Clemson in routine fiber optic cable maintenance as well.

It will be the Contractor's responsibility to provide whatever materials and services are necessary to repair a cut/broken fiber optic cable and restore the circuits as quickly as possible. Permanent restoration plans will be determined and executed after the emergency situation has been resolved. Permanent restoration may or may not involve the services of the emergency repair contractor.

It is expected that the materials the contractor provides will be billed to the owner at a reasonable market rate based on a minimum 10% discount off list price. See Section VI, Bidding Schedule, attached.

### IV. TERMS AND CONDITIONS – SPECIAL

#### Contractor Qualifications

- The Contractor must provide specialized and skilled fiber technicians capable of restoring cut or broken aerial or buried fiber optic cable per industry standards and manufactures specifications.
- The Contractor agrees to respond on site to emergency outage requests within a one (1) hour period on any given day and at any given time during the Contract Term.
- The Contractor must maintain crews and equipment on standby within a reasonable distance from the project site (Clemson University) to meet the 1 hour response time requirement.
- The Contractor must be capable of responding with men and machinery to effect repairs to a damaged fiber optic cable within 1 hour of being notified
- The Contractor is required to provide the Owner and the Owner Representative (NOC) with an escalation sheet of telephone numbers that will be used when emergency situations arise. See Table 1 attached.
- Contractor must own and operate one or more mobile fiber optic splice trailers with fusion splicing and OTDR testing equipment.
- Contractor must own and operate bucket trucks, trenchers, horizontal boring machines and other tools and equipment needed to effect emergency fiber optic cable repairs.

**Labor Provisions**

- Standard Hours - All labor rates quoted are considered standard time and shall be charged from Monday through Friday, 7am – 5pm.
- Non-Standard Hours – An after hour rate of 1.5 times the standard rate shall be charged for any time worked Monday through Friday 5pm – 7am, Saturday, Sunday or Holidays.
- Travel time and lodging for personnel shall not be billed to Clemson. Only actual hours on site will be billable time and the responsibility of Clemson University.

**Assignment**

- The Contractor must not assign the whole or any part of this Agreement without the advance written approval of the Owner. Any assignment will be subject to all terms and conditions of the Contract between the Owner and the Contractor.
- The Contractor will be responsible for all permitting and for restoring the site to its original condition.
- The Contractor will be responsible for any damages to persons or property resulting from their work.

**V. APPENDICS TO SCOPE OF WORK**

**Table 1 – Emergency Contact Escalation Sheet**

**Appendix A – Example of event**

**Appendix B – Sample work sheet for billing**

**VI. BIDDING SCHEDULE**

Bid #20241236

**Bidding Schedule**

Vendor Name: \_\_\_\_\_ Fax #: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Telephone #: \_\_\_\_\_

Delivery Time: \_\_\_\_\_ FEIN #: \_\_\_\_\_

PLEASE INDICATE WHETHER YOU COLLECT S.C. SALES TAX. \_\_\_\_ YES \_\_\_\_ NO

The reference price listed for items 1, 2, 3, 4 & 6 below is the Maximum Price that Clemson University will pay for the services listed. Bidders must bid at or offer a better price than the prices listed. The reference discount listed for item 4 below is the Minimum percentage off list price that Clemson University will pay for the supplies listed. Bidders must bid at or offer a better discount than the discount listed.

Item	Qty	U/M	Description	Maximum Price	Bid Price
1	1	EA	Call out fee per occurrence (rate for equipment and laborers that is all inclusive of costs (travel, lodging, equipment, tools, all expenses, etc...)) to perform work pursuant to this contract	\$300	
2	1	EA	Per splice fee that is all inclusive for splice technician costs (travel, lodging, equipment, tools, all expenses, etc...) to perform work pursuant to this contract	\$50	
3	1	HR	Hourly Rate per laborer (Standard Hours as defined in Section IV above) that is all inclusive of costs (travel, lodging, equipment, tools, all expenses, etc...) to perform work pursuant to this contract	\$45	
4	1	HR	Hourly Rate per laborer (Non-Standard Hours as defined in Section IV above) that is all inclusive of costs (travel, lodging, equipment, tools, all expenses, etc...) to perform work pursuant to this contract	\$67.50	

Item	Qty	U/M	Description	Minimum % off List Price	Bid Price (% off list)
5	1	LOT	Percentage discount off of list price for all materials. It is expected that the materials the contractor provides will be billed to the owner at a reasonable market rate based on a minimum 10% discount off list price.	10%	
Item	Qty	U/M	Description	Maximum Price	Bid Price
6	1	EA	Minimum per call charge for a minor event requiring less involved repairs. The above schedule will be followed, unless a minor event requiring less involved repairs is called in. A minimum per call charge of \$1,500 will be charged for dispatching men and equipment.	\$1,500	

**Table 1**

**Emergency contact escalation sheet**

<b>Name</b>	<b>Phone number</b>

A CCIT representative will call each person on this list until contact is made.

All invoices and billing questions will be sent to:

Clemson University  
Network Services and Telecommunications  
P&A Bldg  
Room 11  
Clemson, SC 29634

Attn: Karen Smith  
Email: [Skaren@clermson.edu](mailto:Skaren@clermson.edu)

**Appendix A - Example of event:**

A call from a Clemson network engineer comes into the contractor around 3:00PM Friday afternoon with a report that a 96 strand singlemode aerial cable has been knocked down by a track hoe operator near Pendelton, SC. Both the steel support strand and the fiber are broken; all circuits are down and the cable is lying on the ground.

The following events would likely occur next.

- 3:00 PM - the contractor assembles and dispatches a repair crew of three men in a bucket truck to the scene. – One call out fee per occurrence of \$300.
- 4:00 PM - a 3 man repair crew arrives onsite and begins work (within the 1 hr max); sufficient cable slack is available, so no additional fiber is needed for this repair.
- 8:00 PM - the crew has the cable down and routed into the splice trailer ready for the splicer. (1 hour at \$45 per hr and 3 hours at \$67.5 per hr, per man) = \$742.50
- Midnight 12:00 AM - the fusion splicer has completed splicing all 96 strands of fiber back together and all communications circuits have been restored.  $96 \times 50 = \$4800$
- The repair crew hangs fiber back up and returns any disturbed areas to their original condition.
- The following day a written report of the incident is sent to CCIT including; itemized list of materials used, labor schedule, number of fibers spliced and splice loss readings for each splice, pictures of before and after conditions.

Materials used

- 1- 1 - splice enclosure - \$350
- 2- 96 - heat shrink sleeves - \$100
- 3- 2 – splice trays - \$50
- 4- Consumables- \$50
- 5- 500ft steel support strand and pole hardware - \$650
- 6- delash/relash 500ft cable - \$625

Total Materials - \$1825

Total call out fee - \$300

Total Labor - \$5542.50

Grand total for this occurrence = \$7667.50

Notes:

- In this scenario the emergency repair completed the job, no other work needs to be planned or scheduled. This will not always be the case, in some instances due to conditions and events, it may be necessary to splice the cable back together in a temporary fashion to restore critical circuits and schedule additional work to restore the cable to its previous condition. In such cases CCIT will work with the contractor to plan and schedule the permanent repair. The Contractor will be asked to provide a quote for the permanent repairs.
- This event was manmade and the University risk management department will be asked to seek reimbursement for the damages from the company or persons that caused it to happen unlike a natural event such as a tree falling where there would be no means of reimbursement.

**Appendix B - Sample emergency fiber optic repair cost spreadsheet**

**Vendor Name**

Vendor address

**Clemson University Project Worksheet**

Project: (Emergency fiber repair)  
 Number: (CU Work Order Number)  
 Description: Scope of work:  
 Emergency fiber repair

**Assignments**

Call Out = Call out fee (one per occurrence)  
 Splicer = Per splice fee  
 HH = Hourly rate for laborer 7AM-5PM  
 HH+ = Hourly rate for laborer after 5PM (1.5 reg rate)

Date: Request Received:  
 Quotation Prepared:

**Labor Quote**

Quote prepared by: Jerry BoBo

<u>Description</u>	<u>Assignment</u>	<u>Unit Hrs./Ea.</u>	<u>Rate</u>	<u>Total</u>
Call out fee	Call out	1	\$300.00	\$300.00
Splice 96 strands	Splice	96	\$50.00	\$4,800.00
3 man repair crew (regular time)	HH	3	\$45.00	\$135.00
3 man repair crew (overtime)	HH+	9	\$67.50	\$607.50

**Labor Quote: \$5,842.50**

**Bill of Materials**

<u>Part Number</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Quantity</u>	<u>Price each</u>	<u>Total</u>
123-456	Splice enclosure	Tyco	1	\$350.00	\$350.00
789-1011	Splice trays	Tyco	2	\$25.00	\$50.00
ABC-0123	Splice sleeves	n/a	100	\$1.00	\$100.00
wire1-4	steel support strand	steel	500	\$1.30	\$650.00
lashwire	lashing wire	steel	500	\$1.25	\$625.00
	consumables		1	\$50.00	\$50.00

List all information for each item.

**Materials Total: \$1,825.00**

**Grand Total: \$7,667.50**