

Request for Proposal (RFP)

For

**Outside/Inside Plant Materials Related to MCNC's
HERO (High Speed Economies for Rural Opportunity) Project funded by the
Middle Mile Broadband Infrastructure Grant (MMG) Program**

Proposals will be received until November 3, 2023, 5:00 pm (EST)

Issued by:

Sarah Taylor, CFO

Chief Financial Officer

MCNC

Street Address: 3021 E. Cornwallis Road, Durham, NC 27709

Issued: October 9, 2023

Summary

MCNC is a North Carolina private, not-for-profit corporation, who through its operation of the North Carolina Research and Education Network (NCREN), has a long and outstanding history of providing internet and National Research Network services to community anchor institutions (CAIs) throughout the state. These CAIs include North Carolina's K-12 Public School Units (PSUs), private schools, public and private higher education institutions, and non-profit healthcare providers. NCREN also connects government entities including the North Carolina Department of Information Technology (NCDIT). MCNC operates NCREN explicitly for the good of the citizens of our state and the institutions we serve. NCREN serves as a critical communications backbone through which North Carolina residents pursue education and access modern healthcare and government services.

On June 16, 2023, MCNC was awarded a Middle Mile Broadband Infrastructure grant by the US Department of Commerce's National Telecommunications and Information Administration (NTIA). Funding for this program was enabled by the Build Back Better legislation signed into federal law in December of 2021. The purpose of this grant will be to fund the engineering and construction of approximately 210 miles of middle mile infrastructure between Winston-Salem to Albemarle, Sanford to Fayetteville, and Fayetteville to Jacksonville, NC. Through additional investments from MCNC, direct fiber connections to community colleges, libraries, schools, health and safety facilities and other community anchor institutions along the construction corridor in eleven (11) of the most rural, economically disadvantaged counties in North Carolina are expected to be built.

Request for Proposal (RFP) – Outside/Inside Plant (OSP) Materials

This Request for Proposal (RFP) is for identifying an appropriate Vendor or Vendor(s) to provide materials related to the construction and operation of middle-mile fiber infrastructure. Materials will be ordered from one vendor or multiple vendors based on the solution that represents the best overall value for MCNC and the program. The supplier/vendor(s) identified to supply Outside/Inside plant materials must demonstrate an ability to deliver all materials related to the project directly to MCNC through direct purchase or through a distributor or supplier, over an approximate 18 month period from the date of the release of this RFP. The Vendor(s) will be expected to include supporting material / demonstrating its ability to serve MCNC with the required materials in a timely fashion and ability to provide stable pricing throughout the term of the project. Specific use cases and references of similar projects are required for consideration.

The final design and engineering of the route is pending; therefore, the exact quantity of materials is unknown at the present time. The approximate amounts of materials to be purchased under this RFP are: 456 miles of conduit, 530 hand holds, 5,000 couplers, 1,100 split conduit plugs, 1,100 conduit plugs, 80 splices enclosures, 25,000 Splice sleeves, 1,100 marking posts, 80 test stations, 530 grounding rods, three external telecommunication huts, and three generators. As noted these are estimates to establish an initial order for the project, A more

accurate accounting will be available once formal engineering is complete which is expected to be by January or February of 2024. Pricing should be honored for quantities in excess of the amount noted.

Fiber for this project has already been secured and currently being warehoused and will not be ordered as part of this RFP.

Material Delivery Timeline Detail

Once awarded, the winning vendor will be responsible for the delivery of materials included in this RFP based on monthly allocations of a minimum of 20% of total quantities requested until 100% of the remaining balance has been received. The winning vendor must have the capability of delivering the first installment no more than 120 days from award pursuant to Note 18 in the Proposal Requirements section and also the ability to stockpile said materials until a construction contract has been awarded.

Build America, Buy America Requirements - Manufacturing Requirement of Materials

A. Applicability & Scope: Pursuant to the Infrastructure Investment and Jobs Act, 2021, Pub. L. No. 117-58, 135 Stat. 429 (Nov. 15, 2021) (IIJA) including the Build America, Buy America Act, Pub. L. No. 117-58, §§ 70901-52 (BABA), as well as guidance provided by Memorandum for Heads of Executive Departments and Agencies, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure, Executive Office of the President, Office of Management and Budget (April 18, 2022) (OMB M-22-11), non-Federal entities that receive a federal financial assistance award from the U.S. Department of Commerce (DoC) are hereby notified that none of the funds provided under this award may be used for a Middle Mile (MM) infrastructure project unless all of the optic glass, fiber optic cable, and optical fiber used in the project is produced in the United States, unless a DOC-approved BABA waiver applies. The Buy America domestic content procurement preference only applies to fiber optic glass and to fiber optic cable that are consumed in, incorporated into, or affixed to a MM infrastructure project. As applicable, the requirements of this subsection must be included in all subawards and contracts, including all contracts and purchase orders for work or products pursuant to this program.

Note that BABA only applies to “non-Federal entities” receiving Federal financial assistance for an infrastructure project under Section 70912(4) of the Infrastructure Act. As elaborated in OMB M-22-11, under the definition in 2 CFR § 200.1, “non-Federal entities” means “States, local governments, territories, Indian tribes, Institutions of Higher Education (IHE), and nonprofit organizations.”¹ OMB M-22-11 goes on to explain that “for-profit organizations are not considered non-Federal entities” for the purposes of the guidance. Thus, these BABA requirements only apply to MMG recipients that are non-Federal entities, and do not apply to recipients that are for-profit organizations. Whether BABA applies to a specific subrecipient, or subcontractor depends on whether BABA applies to the primary tier recipient. (I.e., if the recipient is a non-Federal entity, BABA applies to that award and all subrecipients and subcontractors under that award.)

Question/Inquiry Process

All inquiries and questions related to this RFP must be directed IN WRITING via email to: The Middle Mile Broadband Infrastructure Grant (MMG) RFP Review Committee MCNC
Email: mmg-materials-rfp@mcnc.org

To maintain fairness to all bidders, any attempts to contact MCNC staff regarding this RFP outside of this specifically provided email vehicle will be grounds for MCNC to reject your submission.

All questions will be considered to be public and released with appropriate answers to all respondents within 48 business hours of receipt. Questions and answers will be posted at the following website:

<https://www.mcnc.org/knowledge-center/hero-project/hero-project-rfps>

The last date for questions will be 4:00 pm Eastern Time on October 20, 2023.

Selection Process

MCNC will review the proposals based solely on a Best Value Selection process, scoring each proposal as outlined in the Qualifications Evaluation Criteria set forth later in the RFP. MCNC will select a Vendor or Vendors whose proposal(s) have the highest scoring by the Selection Committee - reflecting those proposals which best meet the requirements outlined in this RFP, and whose proposals are determined to be most advantageous to the program goals. MCNC will then begin negotiations with the Vendor(s). If MCNC cannot finalize negotiations successfully with the selected Vendor(s), the next highest-ranking Vendor(s) will be contacted, and negotiations will begin. The process will continue until a mutually agreeable Purchase Order is finalized between MCNC and the selected Vendor(s).

Proposal Requirements

1. Proposals should be organized in the same sequence as this RFP with responses referencing the appropriate corresponding RFP item(s). Vendors should respond to each item at the level of detail at which each is presented or list a variance with a particular item and propose alternate terms and, as applicable, supply any supportive detail. Responses not conforming to the proper format or failure to respond to any and all items in this RFP may result in a vendor's disqualification and/or rejection of the proposal, at the discretion of MCNC.

2. Where the Vendor is requested to supply information, include that information in the body of the proposal, or reference that it is an attachment.

3. A duly authorized officer or agent of the Vendor must sign the proposal. Proposals that are not signed are not considered valid. In the case where partnering takes place, and multiple Vendors join together to present a proposal, a signature by a duly authorized officer or agent of each entity is required on the proposal, though one entity should be designated the lead entity. The lead entity will be the contracting Vendor who will be responsible for subcontracting with their other partners.

4. All questions and inquiries regarding this RFP should be submitted via email to mmg-materials-rfp@mcnc.org. Questions asked after the questions deadline stated in this RFP will not be answered.

5. Proposals are to be submitted in electronic format sent via MCNC's "Respond to the Materials RFP" on the web page at the following link:

<https://www.mcnc.org/knowledge-center/hero-project/hero-project-rfps>

Other forms of submission will not be accepted nor will submissions submitted directly to individual staff members.

This webpage will prompt you to enter contact information. Relevant Material RFP response files must also be uploaded to this secure MCNC server.

6. MCNC will not pay for any information requested herein, nor is it liable for any costs incurred by any Vendor in responding to this RFP. All proposals submitted become the property of MCNC; they will not be returned and may be subject to the Freedom of Information Act and/ or the North Carolina Public Records Act. Pricing and other information that is an integral part of the proposal cannot be considered confidential after an award has been made.

7. A Vendor may withdraw its proposal prior to the RFP response deadline. Proposals received after the deadline will not be considered. Proposals will be reviewed internally at the convenience of MCNC.

8. The proposal and cost submissions constitute an offer by the Vendor to do business with MCNC. In the event a Purchase Order is submitted to a Vendor, MCNC, at its option, may incorporate all or parts of a Vendor's proposal and any or all answers and information contained within that proposal shall become part of the final agreement between the successful Vendor and MCNC.

9. Any information released either verbally or in writing prior to the release of this RFP shall be deemed preliminary and not binding upon MCNC in any manner.

10. Notwithstanding any other provision of this RFP, MCNC expressly reserves the right to:

- Conduct discussions with any or all Vendors for the purpose of clarification of proposals;
- Waive, or decline to waive, any insignificant defect or informality in any proposal or proposal procedures;

- Accept, reject, or negotiate any or all proposals or the terms of any proposal, or any parts thereof, for the purpose of obtaining the best and final offer;
- Cancel or amend this RFP or issue other requests for proposals;
- Select a Vendor or Vendors based on MCNC's analysis and evaluation of proposals submitted. MCNC reserves the right to request presentations of proposals if MCNC feels further information is appropriate to the decision-making process.
- Select no proposals at all.
- Cancel an award if a Vendor fails to negotiate in good faith and execute definitive written documents necessary to effectuate the transactions contemplated hereby in a manner consistent with the project's timeline and within fifteen (15) days from the award date.

11. MCNC reserves the right to use any and all concepts presented in any proposal to obtain the most beneficial and effective path to achieving its desired goals for the project. Selection or rejection of proposals shall not affect this right. All proposals will be evaluated and, at MCNC's discretion, an award made to the Vendor(s) who demonstrates the best ability to satisfy the scope of work in the most timely and efficient manner possible.

12. By submittal of a proposal, a Vendor attests to have read, understood, and agreed to all requirements, terms, and conditions in this RFP, including any and all attachments, exhibits, and appendices.

13. Proposals responding to this RFP shall not be tied to any potential or future arrangements.

14. A Vendor and any subcontractor must be properly licensed and registered as required by the State of North Carolina necessary to complete the scope of work contained in this RFP. Proper license and registration are required by each Vendor before submitting a bid. Each Vendor may, before submitting a proposal, examine the site to determine the extent of work involved and the conditions under which the work would be performed. The submission of a proposal will be construed as evidence that such an examination has been made, and no subsequent allowance will be made in this regard on behalf of the Vendor for any error or negligence on its part.

15. Vendors must identify any conflict of interest that may arise from providing services to MCNC. MCNC reserves the right:

- to disqualify any Vendor or reject any proposal at any time solely on the grounds that a real or perceived legal or policy conflict of interest is presented;
- to require the Vendor to take any action or supply information necessary to remove the conflict; or
- to terminate any Purchase Order arising from this solicitation if any such relationship would constitute or have potential to create a real or perceived conflict of interest that cannot be resolved to MCNC's satisfaction.

16. Payments under the Purchase Order will be made by MCNC on no more than a monthly basis and final payment within 30 days after satisfactory completion and acceptance by MCNC of the materials.

17. **Note:** MCNC will not pay for or receive any materials related to this RFP in advance of receiving all environmental clearances required from the NTIA to move forward with the project. However, given tight timelines of the project MCNC has the need to place these non-binding orders for some materials in the November/December 2023 timeframe to be able to complete the project by June 30, 2025 as required by the Grant. As such MCNC requires the ability to cancel purchase orders issued for longer lead time items (e.g. generators) in this November/December timeline should full clearance on the Project not be granted, which is anticipated to be sometime in the spring of 2024.

18. Vendor must coordinate with other Federal, State, and local authorities to demonstrate compliance with other applicable environmental laws and regulations.

Closing Date

The proposals shall be received no later than November 3, 2023.

The proposals and any supporting documents must be submitted using the link below under the “Respond to the Materials RFP” section:

<https://www.mcnc.org/knowledge-center/hero-project/hero-project-rfps>

Late proposals and those that do not adhere to the process for non-binding cost submissions will not be accepted and, at MCNC’s discretion, may be returned to the proposer unopened.

The following timetable outlines the anticipated schedule for the RFP and Purchase Order process; however, the timing and the sequence of events resulting from this RFP may vary.

Anticipated Events Dates

- RFP Advertised and Issued: October 9, 2023
- Last Date for Questions Related to RFP: October 20, 2023
- Proposals Due: November 3, 2023
- RFP Evaluations Completed by: November 10, 2023
- Purchase Orders Submission Start Date: No later than: November 17, 2023
- Purchase Order Finalization: Within 10 days of the Award

RESPONSE FORM AND PROCEDURES

Proposal Format

To aid in the evaluation of material service proposals, MCNC requires that proposals follow this outline:

1. Cover Letter: Indicate your firm's interest in the project and highlight key points of your proposal.
2. Vendor Overview: Include company history, number of employees by discipline, company locations, location of office where this project will be managed, length of time your firm has provided similar services, and other relevant information. MCNC requires the selected Vendor to be licensed to do business in the state of North Carolina.
3. Summary of Proposed Project Costs: All responders must complete **Attachment 1** (copy of the format shown below) uploaded to the website with this RFP, showing proposed material costs.

Note 1: Detailed descriptions and specifications of materials requested are shown in Appendix A of this RFP.

Note 2: Contractors may bid on all materials listed in the chart or on individual categories of materials as outlined in the chart. If you choose not to bid on everything, please include a zero (0) in the price column so we will know that you do not intend to bid on those items.

Proposed Project Costs (Attachment #1)

Line Item	Description	Per Unit Pricing	Lead Time (Note: In no cases can lead time be longer than 8 months for delivery, from the date of the release of this RFP)	Comments
1	Conduit:			
1.1	1.25" x 2 -Dual Reel SDR 11 Conduit			
1.2	1.25" Split Conduit Plugs			
1.3	1.25" Conduit Plugs			
2	Couplers:			
2.1	1.25" Locking Conduit Couplers (e.g. Dura-line push lock or equivalent)			
3	Hand holds:			
3.1	Hand Holds 30"x48"x36" HDPE (e.g. Channell BULK series)			
4	Splice Cases:			
4.1	Splice Closures (e.g. Commscope D-450 or equivalent capable of supporting 288 splices)			
4.2	Splicing Trays (quote to match closures) - 72 splices per tray			
4.3	Splice Sleeves			
5	Outside/Inside Marking Posts:			

5.1	Marking Posts (e.g. Promark 3" X 6' Marker - MCNC Logo)			
5.2	Fiber Test Stations (e.g. Promark 3" X 6' Marker/ Test Station - MCNC Logo With 4 Bonding straps ORG/ORG/WHT)			
6	Communication Huts:			
6.1	Telecommunications Shelter			
6.2	Concrete			
6.3	Power			
6.4	Lighting			
6.5	Alarm Device Contacts			
6.6	8" Grounding Rods			
6.7	Accessories			
7	HVAC:			
7.1	HVAC Systems (2) 3 Ton Wall Mounted Units			
8	Generators/ATS			
8.1	Generators/ATS			
9	DC Plant Setup/Regen Hut:			

9.1	DC Plant Setup (2) per Hut			
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4. Price Breakdown: Provide a price breakdown for all materials, for orders placed, noting break points for discounts if all material is ordered at once or through specific volume break points.

5. Provide guaranteed production lead times along with a projected delivery schedule of materials based on monthly allocations available to MCNC. Also, please confirm your ability to warehouse materials until such time as the project yard is established, upon selection of construction contractor(s).

6. Identify which materials have warranties including warranty periods and terms.

7. References: Please provide a minimum of three (3) references where your organization has provided Outside/Inside plant materials similar to our request. Please include the name, address, phone number, and email address for each reference as well as a description of work and dates completed.

8. Vendors should speak to any special costs required for delivery of materials. If there are no special costs, this should be clearly denoted in your response.

9. Small, Minority, and Disadvantaged Businesses:

Contracting with Small and Minority Businesses, Women’s Business Enterprises, and Labor Surplus Area Firms Pursuant to 2 CFR § 200.321, the Recipient and its subrecipients must take all necessary affirmative steps (as described in [2 CFR § 200.321](#)) to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

Under the Socioeconomic and Location Considerations section of this RFP, Vendors are to identify the extent to which Small Businesses (SBs), Veteran-Owned Small Businesses (VOSBs), Service-Disabled Veteran-Owned Small Businesses (SDVOSBs), HUBZone Small Businesses, Small Disadvantaged Businesses (SDBs) Woman-Owned Small Businesses (WOSBs), Historically Black Colleges/Universities or Minority Institutions (HBCU/MIs), Minority-Owned Businesses (MOBs), or Local (North Caroline) Businesses (LBs) would be utilized in the performance of this proposed contract.

For small businesses, as defined by the North American Industry Classification System (NAICS) code applicable to this RFP, the offeror’s own participation as a SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB is to be identified and will also be considered in evaluating the Socioeconomic Considerations, Location, and Value-Added evaluation factor.

Disadvantaged Business Enterprise (DBE) is defined as:

- WMBE** Minority Women Business Enterprise
- MBE** Minority Business Enterprise
- WBE** Women Business Enterprise
- SDBE** Small Disadvantaged Business Enterprise
- VBE** Veteran Business Enterprise
- SDV** Service-Disabled Veteran
- 8A** Small Disadvantaged Business
- HUB** Historically Underutilized Business
- HUBZone** SBA HUBZone Program eligibility

For the purpose of MCNC's DBE Participation Plan, a small business is defined in accordance with the Small Business Administration's size regulation [13 CFR 121.201](#). In addition as defined by the North American Industry Classification System (NAICS) code applicable to this RFP, the offeror's own participation as a SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB is to be identified in the Socioeconomic and Location Considerations section of this RFP and DBE participation will be considered in evaluating the Socioeconomic Considerations, Location, and Value Added evaluation factor.

10. Value Add: Vendors should include any "value added" solutions in their response to this RFP. Solutions will be evaluated for feasibility and benefits to the program goals of this project. In the event the value-added solution is deemed feasible and beneficial, it will be considered in evaluating the Socioeconomic Considerations, Location, and Value-Added evaluation factor.

11. Financial Statements: Include information related to your financial stability, including audited financial statements over the past two (2) years or equivalent information, any pending lawsuits or legal actions against your company, and contact information for your financial institution. Include your coverage for general liability, workers compensation, professional liability and errors & omissions insurances. MCNC requires a minimum of \$1,000,000 in liability insurance.

12. Other Current Projects: Indicate your existing client workload and any other projects your team is committed to, including project time frames. If you have any project that may cause a conflict of interest or could otherwise hinder your proposed timeframes, please describe those projects and how your firm manages multiple client priorities.

Qualifications Evaluation Criteria

The MCNC evaluation team will assess each submitted proposal and rank the proposal according to the following point system:

Category	Maximum Points
General Qualifications: Quality of response to RFP, experience, lead-time, staging and warehouse capabilities, company history and background, financial stability of entity responding. Additional points available for socio-economic considerations. <i>Inability to meet certain requirements outlined in this RFP can result in deduction of points under this category.</i>	20
Reputation and Quality of Materials: Includes experience and/or references with proposed entities and related manufacturers/suppliers/distributors, warranty periods and terms.	30
Socioeconomic Considerations, Location and Value Add: Considerations for small, minority and disadvantaged businesses, any value-add opportunities identified, and includes preference for domestic procurements (United States and North Carolina).	10
Pricing: Proposed pricing, delivery and payment terms, and ability to lock in pricing for the life of the project.	40
Total Possible Points:	100

All requested information in the Proposal Format section must be included in your response. MCNC reserves the right to reject any and all proposals, and to enter into a Purchase Order agreement with the Vendor selected by MCNC.

Vendors are solely responsible for their own expenses in preparing and submitting a Proposal. If MCNC elects to reject all proposals, MCNC will not be liable to any firm for any claims, whether for costs or damages, incurred by the respondent in preparing and submitting a proposal. Although notification will be provided to Vendors whose Proposals are not accepted, further debriefing information will not be made available.

General Terms and Conditions -- Professional Services and the Purchase Order

An award resulting from this RFP is automatically canceled if federal funds under MMBG are not appropriated or otherwise made available to support the commencement or continuation of performance under the MMBG.

Compliance with Laws

The Vendor must, in performance of work under the Purchase Order, fully comply with all applicable federal, state, or local laws, rules and regulations, including, but not limited to, the Middle Mile Broadband Grant (MMBG), the Notice of Funding Opportunity (NOFO), 74 Fed. Reg. 33,106, and all other applicable guidelines. Any subletting or subcontracting by the Vendor, subjects subcontractors to these same provisions. See Appendix B for more details and Attachment #2 for an embedded link to the NOFO.

Prevailing Wage Rates and Labor Standards

1. To the extent applicable, the Vendor shall pay all laborers and mechanics employed by Vendor on the Project not less than the prevailing wage determined under the "Davis-Bacon Act" (40 USC 276(a)) for similar work in the civil subdivision for which the laborers and mechanics perform the work. In addition, to the extent applicable, the Vendor shall pay all laborers and mechanics overtime compensation in accordance with the provisions of the "Contract Work Hours and Safety Standards Act" (40 USC 327-333).
2. The Vendor shall comply with all regulations issued pursuant to the above referenced Acts and with all applicable federal and state laws and regulations.

Whistleblower Protection under the Recovery Act

The Department of Commerce Financial Assistance Standard Terms and Conditions are incorporated into every NTIA grant award. Section F.05 of these Terms and Conditions states that each award is subject to the whistleblower protections afforded by 41 U.S.C. § 4712 (Enhancement of contractor protection from reprisal for disclosure of certain information).

Generally, this law provides that an employee or contractor (including subcontractors and personal services contractors) of a non-Federal entity may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body information that the employee reasonably believes is evidence of gross mismanagement of a Federal award, subaward, or a contract under a Federal award or subaward, a gross waste of Federal funds, an abuse of authority relating to a Federal award or subaward or contract under a Federal award or subaward, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal award, subaward, or contract under a Federal award or subaward.

Non-Federal entities and contractors under Federal awards and subawards must inform their employees in writing of the rights and remedies provided under 41 U.S.C. § 4712, in the predominant native language of the workforce.

A person that believes they have been the subject of retaliation for protected whistleblowing can contact the Department of Commerce, Office of Inspector General Hotline, as indicated at <https://www.oig.doc.gov/Pages/Hotline.aspx>, or the U.S. Office of Special Counsel, toll free at 1-800-872-9855.

Posters and additional information can be downloaded from the following website:
[Office of Inspector General \(doc.gov\)](#)

Supplier Bond and Liability Insurance

Within ten (10) days of a final Purchase Order, the Vendor shall obtain and maintain a supplier bond from a surety that must be licensed, authorized, and admitted to do business in the State of North Carolina and must be a U.S. Treasury listed surety company reasonably acceptable to the Owner. The bond shall remain in effect for at least one year after the date of final payment from Owner. The cost of the premiums for such bonds shall be borne by the Vendor. The supplier bond shall be in the same amount as the award value of the resulting Purchase Order under this RFP and shall entitle MCNC to call upon the surety to complete the Purchase Order in one of two ways: (1) the surety and MCNC can choose a new Vendor to complete the Purchase Order and the surety pays the costs; or (2) MCNC alone chooses to terminate the Purchase Order by selecting another Vendor. In any event, the surety's obligations hereunder to perform and complete the performance under the Purchase Order shall remain in full force and effect.

Vendors, at its cost and expense, shall maintain industry standard insurance.

No Gifts and Gratuities Policy

MCNC's Code of Ethics policy has a strictly enforced requirement that MCNC and its staff are prohibited from accepting any favors or gratuities from contractors, potential contractors, sub-agreement parties, or from anyone that could potentially be involved in any aspect of MCNC's business.

Additional Material

Vendors are encouraged to review MCNC's MMBG web page (see link below) prior to submitting your proposals. <https://www.mcnc.org/knowledge-center/hero-project/>

Executive Summary of MCNC's Federal Grant Application:

MCNC's NTIA High-speed Economies for Rural Opportunity (HERO) Project is a project that will directly support improvements to broadband access and affordability across central and southeastern North Carolina. If funded, HERO will extend MCNC's reach via the construction of 209 miles of new middle mile fiber through substantially unserved and underserved areas, including some of the highest poverty areas in the state.

The 11-county area to benefit from this project currently has over 16,000 unserved and 12,000 underserved housing units, including many substantially unserved local communities. In total, the affordability, latency, and resilience benefits of HERO would impact over 350,000 housing units and 696 CAIs, bringing new economic opportunities to these economically challenged rural areas of North Carolina. Upon completion, HERO will support affordable, high- performance broadband for at least 4998 fully unserved locations (and nearly 4300 additional underserved locations) within just 5 miles of the planned routes.

Socioeconomic and Location Considerations

Following are points to consider when preparing your Socioeconomic and Location information:

All Vendors are to provide:

1. As addressed in the RESPONSE FORM AND PROCEDURES section (Item #9 - Small, Minority, and Disadvantaged Businesses) all Vendors including DBEs SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB Vendors, are to address the following when completing your proposal:

A. Names: provide the names of the DBE SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB planned to participate in the procurement of materials. MCNC will evaluate the extent to which your proposal identifies DBEs SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB planned to participate in the instant procurement.

B. Products and/or Services: provide a list of products and/or services planned to be supplied by the DBE, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB for the instant procurement. This list should correspond to the various DBEs, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB named above. MCNC will evaluate the extent to which your proposal details the products and /or services planned to be performed by these, for the instant procurement.

C. Estimated DBE, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB Total Dollars. Provide the estimated total contract dollars estimated to be furnished by the contractor to these entities. This amount is an estimated total amount of the entire contract. Your proposal should also include the total contract amount to be performed by all businesses. These two figures will be used to arrive at the "total contract

percentage” that will be performed by these entities (DBEs, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB.

DBEs, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB contract dollars, divided by total contract dollars, equals the percentage of the contract to be performed by these entities. MCNC will evaluate the extent of participation of all of these entities in terms of the value of the total contract amount.

2. **Note:** If applicable, Vendors should include your own efforts when addressing the names, products and/or services and estimated total dollars planned to be provided by DBEs, SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB.

CERTIFICATION REGARDING DEBARMENT

All submissions are subject to subpart C of 2 CFR part 180, “OMB Guidelines to Agencies on Government Debarment and Suspension (Non-procurement).”

By submission of its proposal, [bidder/vendor] certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any federal department or agency. If selected, [bidder/vendor] shall provide immediate written notice if it learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. It otherwise agrees to comply with the requirements of 2 C.F.R. Parts 180, 1200, and 1326.

In addition, [bidder/vendor] for a lower tier covered transaction for a subaward, contract or subcontract greater than \$100,000 of Federal funds are subject to 15 CFR part 28, “New Restrictions on Lobbying.” Vendors should familiarize themselves with these provisions, including the certification requirement. Therefore, bidders for a lower tier covered transaction must include a Form CD-512, “Certification Regarding Lobbying-Lower Tier Covered Transactions,” completed without modification.

CERTIFICATION REGARDING MATERIAL REQUIREMENTS AND SPECIFICATIONS

For all line items bided on under Appendix A below, vendors are required to include a certification statement attesting that their material bids meet the minimum requirements outlined in the specifications as outlined under Appendix A.

Appendix A - Anticipated Material Requirements and Specifications

1. Conduit:

2 x 1.25", SDR 11, Orange, Black, Standard, High Density Polyethylene (HDPE) conduits for standard underground installation applications, empty (without pull tape).

2. Couplers:

Vendor should propose couplers consistent with working with the requirement of conduit solution identified in #1, with properties designed for air-jetting, plow chutes, directional boring, and other installations utilizing push lock type technology or equivalent.

3. Hand holds:

No specific vendor type requested, HDPE preferred.

Requirements are:

Size: 30" x 48" x 36"

Capable of Tier 22 applications meeting North Carolina Department of Transportation safety requirements for loading.

4. Splice Cases:

Commscope Gel 450D Enclosures or equivalent. Must be capable of housing up to 288 fibers via loose tube cable assembly.

5. Outside/Inside Marking Posts:

Pricing for two types requested. Specific vendor type required. First type will be ProMark Model PM TS3 CP Test Station with 4 bonding straps installed during production, capable of allowing above ground tracer wire tapping. Second type will be ProMark Model PM303 Dome Marker Post, 2D marking. Information contained on the marking posts will be the MCNC corporate logo, MCNC contact numbers, and one-call numbers. Both marking posts shall be 6'.

6. Communication Huts:

Shelters are to be fully self contained with the following requirements for each.

Construction - Concrete

- Size nominal 11'6" wide (12' wide with roof overhang) exterior x nominal 20' long exterior x nominal 9' high interior, one room concrete fiber hut
- 200 pounds per square foot distributed floor loading while on foundation

- 125 pounds per square foot distributed floor loading while lifting
- 100 pounds per square foot distributed roof load
- 150 mph wind load
- Seismic Design ASCE 7-16 Category 4
- Exposed aggregate exterior
- The proposed fiber hut walls are capable of stopping 30.06 rifle fire per UL752 requirements. Unless otherwise specified, the fiber hut door is not bullet resistant.
- The proposed fiber hut walls will provide a two-hour fire rating
- The walls will be insulated to R-11 with hardboard insulation
- The ceiling will be insulated to R-19 with hardboard insulation
- The interior walls and ceiling will be sheathed with ¾" OSB white FRP board
- Light colored industrial grade gray vinyl tile floor covering
- One (1) 42" wide x 84" high insulated steel exterior door, with aluminum continuous tamper-proof hinge, Uican combination lockset, anti-pick plate, electric door strike and fiberglass weather hood
- One (1) hydraulic door closer

Power Distribution

- One (1) surge arrestor; Raycap Model: AC2100-F-NA-07
- One (1) 200 Amp, 10,000 AIC, 120/240 VAC, single phase, 60 Hz, 40 space main breaker, snap-in utility power distribution panel, in a NEMA 1 surface mount enclosure
- Circuit breakers for all manufacturer installed equipment and customer loads as specified
- One (1) fiber hut wall penetration to serve as utility power service entry
- One (1) 200 Amp, 240 VAC, fused, double pole, single throw service entrance safety switch in a NEMA 3R enclosure
- One (1) 200 Amp, 240 VAC, non-fused, double pole, single throw generator entrance safety switch in a NEMA 3R enclosure
- Eight (8) 20 Amp specification grade duplex receptacles
- One (1) 20 Amp specification grade exterior ground fault duplex receptacle
- Four (8) equipment AC circuit 30 Amp/240 volt drops routed in conduit or wireway to routed through two (2) 6"x6" junction box (4 Feeds per Box) mounted in the ceiling. Each box will have (2) ¾" flexible conduit runs with (2) 30 amps, 10AWG feeds in each. Flexible conduit including circuit conductors will be coiled and tagged for identification conduit including circuit conductors will be coiled and tagged for identification with enough length to reach the floor and an additional four feet (4') of circuit conductors to be cut to length and terminated by the customer.

Lighting

- Six (6) four foot, surface mounted LED light fixtures
- One (1) LED exterior door light with photocell control
- One (1) emergency/exit light

Alarm Device Contacts

The following alarm device contacts will be wired and brought to a location specified by the customer. The alarm wires will be coiled and tagged for identification per manufacturers' standards. Unless otherwise stated, termination at the customer's equipment is assumed to be provided by others.

- One (1) line voltage smoke detector
- One (1) intrusion alarm switch with form "C" contacts rated .1 Amps at 28 VDC
- One (1) high temperature alarm
- One (1) low temperature alarm
- Two (2) air conditioner compressor high and low head pressure lockout switch alarms
- Two HVAC failure alarms
- One (1) utility power failure alarm
- One (1) 12"x12"x6" hinged cover alarm terminal enclosure

Grounding

- Provisions for the connection of a grounding electrode conductor at the fiber hut service equipment
- One "halo" ground system consisting of a 2 AWG stranded green insulated copper halo, approximately 6 inches below the ceiling, with vertical 2 AWG bare/tinned copper drops through the floor at each corner. A length of wire is coiled at each drop to allow attachment to an exterior ring ground system by others.
- One (1) ¼" x 4" x 24" isolated copper ground plate with 2 AWG tinned cadwelded drop

Accessories

- One (1) recessed junction box located near the door for future card reader up to sixty feet (60') of 18" wide cable ladder/tray
- One (1) 48" x 48" x ¾" equipment mounting board
- One (1) portable 5-pound CO2 fire extinguisher
- One (1) service manual
- Manufacturer will provide three (3) sets of fiber hut drawings with each fiber hut unit order.
- All wiring will be installed in surface mounted conduit or wireways if specified and will be in full compliance with ANSI/NFPA-70 - The National Electric Code, latest revision.
- Shelters are to be built according to the latest IBC edition and state requirements of which the fiber hut is residing (N.C.), local and county codes are not applicable unless otherwise stated.

7. HVAC:

- Two (2) nominal 3-ton wall mount Bard 11EER air conditioning units, with low ambient and compressor anti cycle controls, integral 5 kW resistance heat strips and washable dust filters; Bard
- Redundant lead/lag controls allowing approximately equal operating time on each air conditioning unit. Model MC4002BC (Ethernet capably) controller.
- If separate from the hut manufacturer, installation cost should be included.

8. Generator/ATS:

- Quantity: 1
- Type: Standby rated
- Fuel Type: NG and LP options
- Manufacturer: Onan
- Model: C50N6
- Output kW: 50 kW
- Phase: Single
- Voltage: 120/240 VAC
- Frequency: 60 Hz
- Enclosure: NEMA 3R
- Oil & Antifreeze: Included
- Battery and battery rack: Included
- Battery cables: Included
- Muffler Type: Critical
- Flexible exhaust section: Included
- One (1) OTEC 200 Amp, 240 Volt, Automatic Transfer Switch
- If separate from the hut manufacturer, installation cost should be included.

Warranty (One year - manufacturer's standard)

9. DC Plant Setup/Regen Hut:

- 2x UNT20806.00011
- 8x 241119.105 - Eltek Flat Pack2 HE Rectifier 3000W/48VDC
- 8x 331E23640800 - BLIND Panel FP2 HE Black G1
- 2x 3672495500 - Alarm Cable 50'
- 2x 503833 - Non-Seismic Rack 7' x 23" w/ a 6" Rail Width
- 6x 259245 - 23" Battery Tray w/ CBB100
- 2x 289732 - Eltek Wiring Kit
- 4x 289733 - #4 Wiring Kit w/20' wire and lugs
- 16x NSB170HTRD - NSB 170FT HT RED

Appendix B - Compliance with Laws and Regulations

Fair Labor Practices

Applicants must have a demonstrated record of and plans to be in compliance with federal labor and employment laws where applicable. This will help ensure that projects are carried out in accordance with the law, assist NTIA in ensuring that a prospective awardee is capable of carrying out activities funded by an award in a competent manner in compliance with all applicable federal, State, and local laws, and promote the effective and efficient completion of high-quality middle mile broadband infrastructure projects by ensuring a reliable supply of skilled workers and minimizing disruptive and costly delays.

In order for NTIA to evaluate an applicant's demonstrated record of and plans to be in compliance with federal labor and employment laws, each applicant must provide the following:

1. Information on their record of compliance with federal labor and employment laws, as well as the records of any other entities participating in the project, including contractors and subcontractors. This information must include, at a minimum, information on these entities' compliance with federal labor and employment laws on broadband deployment projects in the last three years. For example, the applicant should provide data on its historical use of contracting and subcontracting arrangements, including staffing plans, and at least one example of each contractor and subcontractor's past performance in the context of a similar project.
2. A certification from an Officer/Director-level employee (or equivalent) of the applicant evidencing consistent past compliance with federal labor and employment laws by the applicant, as well as contractors and subcontractors.
3. Written disclosure of any instances in which the applicant, contractors, or subcontractors have been found to have violated laws such as the Occupational Safety and Health Act, the Fair Labor Standards Act, or any other applicable labor and employment laws for the preceding three years.
4. A written plan for ensuring compliance with federal labor and employment laws. These plans must address, at a minimum, how the applicant will ensure compliance in its own labor and employment practices, as well as that of its contractors and subcontractors, including (1) information on applicable wage scales and wage and overtime payment practices for each class of employees expected to be involved directly in the physical construction of the broadband network and (2) how the applicant will ensure the implementation of workplace safety committees that are authorized to raise health and safety concerns in connection with the delivery of deployment projects. An effective plan for compliance with federal labor and employment laws can include an applicant's binding commitment to strong labor standards and protections for the project workforce (including contractors and subcontractors), which include:

- Using a directly employed workforce, as opposed to a subcontracted workforce;
- Paying prevailing wages and benefits to workers, including compliance with Davis-Bacon and Service Contract Act requirements, where applicable, and collecting the required certified payrolls;
- Using project labor agreements (i.e., pre-hire collective bargaining agreements between unions and contractors that govern terms and conditions of employment for all workers on a construction project);
- Use of local hire provisions;
- Commitments to union neutrality;
- Use of labor peace agreements;
- Use of an appropriately skilled workforce (e.g., through Registered Apprenticeships or other joint labor-management training programs that serve all workers, particularly those underrepresented or historically excluded);
- Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure); and
- Taking steps to prevent the misclassification of workers.

II. Prevention of Waste, Fraud, and Abuse

Recipients must monitor award activities for common fraud schemes, including but not limited to:

- false claims for materials and labor;
- bribes related to the acquisition of materials and labor;
- product substitution;
- mismarking or mislabeling on products and materials; and
- time and materials overcharging.

Should a Recipient detect any fraud schemes or any other suspicious activity, the grant recipient must contact its assigned NTIA Federal Program Officer and the Department of Commerce, Office of Inspector General Hotline, as indicated at the link below, as soon as possible.

<https://www.oig.doc.gov/Pages/Contact-Us.aspx>