

Request for Proposal (RFP)

For

**Engineering Design Services and Environmental Assessment for MCNC
HERO (High Speed Economies for Rural Opportunity) Project funded by the
The Middle Mile Broadband Infrastructure Grant (MMG) Program**

**Proposals will be received until 18 August 2023
at 5:00 pm (EST)**

Issued by:

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Interim Chief Financial Officer

MCNC

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

Issued: July 17, 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 Plant (OSP) Engineering Services and Environmental Assessment

This Request for Proposal is for identifying an appropriate Vendor to provide outside plant engineering and environmental assessment relating to the construction of middle-mile fiber infrastructure and direct fiber connections to community colleges, libraries, schools, health and safety facilities and other community anchor institutions. The RFP identifies specific fiber routes that are encompassed by The Middle Mile Broadband Infrastructure Grant (MMG) Program. Respondents will be submitting proposals that will provide a full environmental review that, after consultation with the NTIA, will most likely require the development of a full environmental assessment. Additionally respondents will be including in the proposal details and pricing for full route engineering of the proposed routes. In no case will a response be considered for only a partial route in any area or for partial services (e.g. engineering only or environmental only).

Nominally, the entire route should be engineered for placement of two 1.25-inch diameter conduits with placement of a single 288-count armored single mode fiber in one of the conduits, with appropriate consideration provided for placement of hand holes, marking posts, etc. per industry standards.

The selected Vendor must demonstrate its ability to propose a design solution that minimizes environmental impact and to complete an environmental assessment. The Vendor must include resumes of staff who will work on the project and who are knowledgeable about relevant environmental regulations and have experience designing solutions that avoid areas of potential impact.

At least one of these staff members should meet the Secretary of the Interior's Professional Qualification Standards to meet historic preservation requirements, as defined by the National Park Service in 36 CFR Part 61.

See <https://www.ecfr.gov/current/title-36/chapter-I/part-61>

This staffing requirement can be through a qualified subcontractor working closely with the Vendor, if this is the most timely and efficient solution. Any such arrangements for this or any other subcontractor engagement must be well documented and communicated with the delivery of the proposal.

Should there be any environmental findings, the Vendor is expected to work with the relevant permitting entities to quickly acquire any necessary permits. Furthermore, a proposed engineered route that requires an environmental impact statement to be prepared will fail to meet the minimum requirements of this RFP. The selected Vendor must be capable of providing alternative routes that may be selected to minimize environmental impact.

While MCNC has planned for a solution where the fiber is buried underground in conduit, there may be areas where a direct buried fiber cable or aerial construction is more cost effective. The design could be modified to accommodate such alternatives. MCNC is aware of these factors and will work with the selected Vendor to assess the cost value of such a proposed design change. The route maps, available at the MCNC's Engineering RFP web page below <https://www.mcnc.org/knowledge-center/hero-project/hero-project-rfps> show proposed connectivity points and possible routing of the fiber cable and serve as the basis of the grant that MCNC has been awarded by the NTIA. These routes are not considered final. The NTIA has indicated a willingness to accept route changes within the scope of the award to accommodate cost considerations and aforementioned environmental ameliorations. MCNC would rely on the expertise of the selected Vendor to identify changes to the proposed route that may be more cost effective and feasible to provide connectivity to MCNC's end points, however MCNC is responsible for making all final decisions as to the chosen routes.

Note: Full route descriptions are included at the end of this RFP following the General Terms and Conditions section.

Question/Inquiry Process

All inquiries and questions related to this Engineering RFP must be directed **IN WRITING** to the following email: MMG-QandA-engineering-rfp@mcnc.org.

All questions will be considered to be public and released with appropriate answers to the MCNC's Engineering RFP web page below, within 48 hours of receipt. Vendors are encouraged to check the site daily for Q&As.

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

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.

The last date for questions will be 4:00 pm Eastern Time on August 1, 2023.

Selection Process

MCNC will review the proposals based solely on a modified Qualifications Based Selection (QBS) or QBS process as outlined in the Qualifications Evaluation Criteria set forth later in the RFP. MCNC will select up to three finalists based on QBS principles and specific responses to RFP questions. If vendor(s) are chosen as a finalist, the non-binding cost submissions, delivered under separate cover (see Proposal Requirements #5 below) from these potential Vendors will be opened and reviewed. During a potential interview stage, non-binding cost estimates will be discussed. After the interview process, MCNC will select a Vendor and begin negotiations with the Vendor. If MCNC cannot finalize negotiations successfully with the selected Vendor, the next highest-ranking Vendor will be contacted, and negotiations will begin. The process will continue until a mutually agreeable contract is finalized between MCNC and the selected Vendor.

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 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 representative officer or agent of each entity is required on the proposal, though one entity should be designated as the lead entity. The lead entity will be the contracting Vendor who will be responsible for subcontracting with their other partners.

4. All inquiries and questions related to this Engineering RFP must be directed **IN WRITING** to the following email: MMG-QandA-engineering-rfp@mcnc.org.

Questions received after the questions deadline stated, in this RFP, will not be answered.

5. Non-pricing related proposal requirements are to be submitted via MCNC's "Respond to the Engineering RFP" on the web page at the following link:

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

This webpage will prompt you to enter contact information. Relevant Engineering RFP response files can be uploaded to this secure MCNC server. **Pricing information should be submitted as noted below.** Other forms of submission will not be accepted nor will submissions submitted directly, to individual staff members.

The non-binding Engineering Cost submissions should be submitted separately to the following email address: purchasing@mcnc.org with the subject line Middle Mile Grant Engineering Cost Proposal. Cost proposals and Proposals are due at the same time – no exceptions.

6. After the initial proposal review and narrowing to the finalist (up to three), the non-binding cost submissions for the final proposals will be opened and evaluated. The assumption will be that the proposed costs are a Vendor's most favorable terms. Notwithstanding any other provision of this RFP, MCNC expressly reserves the right to negotiate with any Vendor, using the proposal submitted as a basis, for the purpose of obtaining a best and final offer.

7. 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.

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

9. The proposal and non-binding Engineering cost submissions constitute an offer by the Vendor to do business with MCNC. In the event a contract is awarded 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.

Should a Vendor be awarded the Engineering and Environmental Assessment contract by MCNC, the Vendor agrees to execute the contract provided in conjunction with this RFP, as modified for the proposal specifics, within **10 days of the award**.

The awarded vendor will be required to sign the Engineering and Environmental Assessment agreement specific to this Middle Mile Broadband Grant award even if the awarded vendor has already been vetted and under contract by MCNC for other work. This Agreement will not replace the vendor's current agreement with MCNC for other matters. Vendors can review a copy of the Engineering contract, which will be available no later than August 1st, using the link below: <https://www.mcnc.org/knowledge-center/hero-project/hero-project-rfps>

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

11. Vendors must submit audited financial statements for the past two (2) years (or equivalent data) to demonstrate financial capability to provide the required services.

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

1. Conduct discussions with any or all Vendors for the purpose of clarification of proposals.
2. Waive, or decline to waive, any insignificant defect or informality in any proposal or proposal procedures.
3. 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.
4. Cancel or amend this RFP or issue other requests for proposals.
5. 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.
6. Select no proposals at all.

13. 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.

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

15. Proposals responding to this Solicitation shall not be tied to any potential or future arrangements.

16. 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, including appropriate licensure with the North Carolina Board of Examiners for Engineers and Surveyors. 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.

Additionally, all contractors must be vetted by MCNC in order to perform any services. **Attachment #2** is a list of all required documentation that must be submitted to MCNC for review by MCNC's legal and finance teams.

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

- 1) 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;
- 2) to require the Vendor to take any action or supply information necessary to remove the conflict; or
- 3) to terminate any contract 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.

18. Payments under the Engineering contract will be made by MCNC no more frequently than on a monthly basis with final payment being within 30 days after satisfactory completion and acceptance by MCNC of all work including completed as-built prints. The awarded vendor may invoice monthly based on discernable progress against the identified tasks inspected by MCNC staff prior to invoicing. Progress and subsequent payments will be based on completion of the Environmental Assessment and draft prints that are in a state to be submitted to relevant permitting entities. 5% of the contract value will be retained for final payment related to full completion of as-builts.

19. The Vendor is expected to provide project management of this project and report weekly progress against a submitted project timeline and project plan, in an acceptable format.

20. Awardee must have signage on vehicles used during the commencement of field work as related to this project, per guidelines in MCNC's special award conditions. Magnetic signs to be applied to vehicles will be provided by MCNC to the selected vendor.

Closing Date

The proposals and separate non-binding engineering cost submissions shall be received no later than **August 18, 2023**.

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

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

The non-binding Engineering Cost submissions should be sent via separate email to: purchasing@mcnc.org with the subject line **Middle Mile Grant Engineering Cost Proposal**. 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 Contract process; however, the timing and the sequence of events resulting from this RFP may vary.

Anticipated Event Dates

- RFP Advertised and Issued: July 17, 2023
- Last Date for questions related to RFP: August 1, 2023
- Proposals Due: August 18, 2023
- Non-binding Cost Proposals Submitted: August 18, 2023
- RFP Evaluations Completed by: August 25, 2023
- Interviews with Short-Listed Firms no later than: September 5, 2023
- Award and Letter of Intent for Contract no later than: September 8, 2023
- Contract Finalized within 10 days of the award: September 18, 2023.
- Engineering Firm(s) Begin Work no later than: September 25, 2023
- Environmental Assessment DRAFT for internal MCNC review to be completed no later than December 21, 2023.
- Environmental Assessment for Submission to NTIA, incorporating any MCNC change requests, to be completed no later than December 27, 2023 (failure to meet this delivery date may lead to contract termination).
- Subsequent Environmental Assessment modifications should be completed, if needed, to satisfy any revisions requested by NTIA and in order to successfully obtain a Finding Of No Significant Impact (FONSI). Modifications must be completed no later than January 3, 2024.
- Drawings for fiber route engineering and hut site designs to be completed, and ALL encroachments and permits submitted, no later than January 26, 2024. Due to the length of time for some permits to clear (e.g. Railroad permits) prudence throughout the design phase for submission of permits as they are completed should be followed. That is, priority to submit permits with longer lead time should take priority for submission prior to January 26, 2024.
- MCNC's grant period for this MMG award is July 1, 2023 through June 30, 2025. As such the selected vendor is expected to work judiciously on all tasks associated with this RFP once awarded a contract and complete work in advance of the dates noted in the bullets above.

RESPONSE FORM AND PROCEDURES

Proposal Format

To aid in the evaluation of engineering and environmental assessment 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. Also, indicate the systems you utilize to produce outside plant engineering designs (AutoCAD, Microstation, Mapcom M5, or others). MCNC requires the selected Vendor to be licensed to do business in the state of North Carolina.
- 3. Proposed Project Team:** Include an organizational chart and resumes of key project team members, including their role in this project. Identify who the primary manager for this project will be within your organization and ensure their resume provides their qualifications for this role.

Vendors must provide indication of a licensed PE on staff or advise as to access to such. Vendors must also have appropriate staff with the means to secure private easements (if needed) and potential land for regeneration sites.

Vendors must also provide resumes for staff qualified to complete the Environmental Assessment including at least one who meets the Secretary of the Interior's Professional Qualification Standards to meet historic preservation requirements, as defined by the National Park Service in 36 CFR Part 61. [See eCFR :: 36 CFR Part 61 -- Procedures for State, Tribal, and Local Government Historic Preservation Programs](#)

- 4. Experience:** Indicate your experience with planning and design of fiber optic outside plant networks, including buried and aerial deployments. (1) Show your experience with designing and managing implementation on long haul, regional and metropolitan fiber optic networks. (2) outline your experience with right-of-way and environmental permitting; and (3) Document your experience completing environmental assessments including work with state and federal agencies covering NEPA and historic preservation requirements (including but not limited to wetlands; floodplains; brownfields; water quality; endangered species/critical habitats; historical sources; and tribal concerns.)

- 5. Proposed Services & Project Approach:** Please define, in significant detail, how your firm will accomplish the major tasks described below. Also, identify any innovative design techniques you have utilized on past projects that have helped reduce design times, or improved the quality of your services.

6. References: Please provide a minimum of three (3) references where your firm and your proposed project team have provided outside plant engineering services. Please include the name, address, phone number, and email address for each reference as well as a description of work and dates completed.

7. Contracting with Small and Minority Businesses, Women’s Business Enterprises, and Labor Surplus Area Firms

Pursuant to 2 CFR § 200.321, Vendors 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.

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 Carolina) 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, NAICS code 541330 - Engineering Services, and HBCU/MI, MOB or LB 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 be considered in evaluating Firm Qualifications, Expertise and Experience Factor.

8. Value Add: Vendors should include any “value added” solutions in their response to this RFP. These solutions will be evaluated for feasibility and benefits to Program goals. If a value-added solution is deemed feasible and beneficial, it will be considered in evaluating the Proposed Services and Project Approach factor.

9. Time Schedule: Confirm your understanding and acceptance of the proposed timeline as outlined above in the Anticipated Event Dates section or propose alternative deliverable dates that improve on that timeline and thus make your proposal more favorable.

10. Financial Statements: Include information related to your financial stability, including audited financial statements over the past two (2) years, 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 professional liability insurance.

11. Other Current Projects: Indicate your existing client workload and what 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. The instructions on the preparation and delivery of the non-binding cost submissions are:

12. Price Breakdown: Please submit separately from the proposal a cost submission having a price breakdown of all components of your engineering charges for each task as outlined in the RFP, i.e., design per foot, relative to each of the three consolidated sections in the chart below. Submit pricing card to: purchasing@mcnc.org

12.1. Summary of Proposed Project Costs: Please complete a chart, similar to the format shown below, showing proposed project costs. A copy of the chart below has been included in this RFP as an **Attachment #1**.

	Task 1 (Pricing should be provided as a lump sum)	Task 2 (Pricing should be provided on a per unit basis by foot)	Task 3 (Pricing should be provided on a per site location basis)
Unit Cost			

12.2 Additionally, please provide a price card that clearly outlines what any additional costs performed beyond the defined tasks would be. Pricing should be provided in the rate card on a Per foot or hourly rate as applicable for the purpose of pricing and future change orders. Please submit this rate card to purchasing@mcnc.org.

Qualifications Evaluation Criteria

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

<i>Category</i>	<i>Maximum Points</i>
General Qualifications: Quality of response to the RFP requirements, company history and background, financial stability of the firm to support scope of work.	20
Firm Qualifications, Expertise and Experience: Depth and breadth of experience of the firm in providing similar services (including right-of-way and environmental permitting and assessments), and socioeconomic considerations.	20
Proposed Project Team: Key personnel qualifications and relevant experience, equivalent projects and services, client references, and existing client workload and team commitments.	25
Proposed Services, Pricing & Project Approach: Proposed approach to the major tasks and time schedule described in the RFP, proposed overall pricing of the project, and any “value added” solutions deemed by MCNC to be feasible and potentially benefiting the Program.	35
Total Possible Points:	100

NOTE: Non-binding cost submissions will not be evaluated until finalists are selected based on qualifications.

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 contract negotiations with the Vendor selected by MCNC.

Vendors are solely responsible for their own expenses in preparing and submitting a Proposal, and for subsequent contract negotiations with MCNC. 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.

Scope of Work

This project calls for engineering, design, environmental assessment and permitting of fiber optic outside plant facilities. MCNC will not require the Vendor to produce network design for electronics. The design of electronics, node location power requirements, cabinet specifications, etc. are beyond the scope of this RFP and will be addressed under a separate Request for Proposal(s).

For the purposes of this RFP, the Vendor will focus strictly on advising MCNC in the design for outside plant fiber optic facilities, which will include route design, splice locations, specifications for termination shelves, and construction requirements. MCNC has identified key tasks that will be required of the selected engineering firm.

Task 1: NEPA Analysis and Development of Environmental Assessment

The Vendor shall complete the NTIA requirement for a NEPA analysis, including the analysis of environmental findings in each of several areas, an analysis of potential alternatives and the justification for the selected alternative. The environmental analysis must be completed in conjunction with the engineering. This activity will most likely lead to an Environmental Assessment being completed.

In coordination with MCNC and the NTIA, the selected vendor will need to identify other federal agencies that may be impacted as early as possible, and develop and deliver an assessment of potential environmental impacts. As communicated by the NTIA in a post award webinar, the NTIA will determine which level of NEPA analysis is required. The three levels of NEPA analysis are:

- **Categorical Exclusion (CE)** - Issued for defined actions that the agency has determined do not individually or cumulatively have a significant effect on the environment.
- **Environmental Assessment (EA)** - Prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis find a project to have no significant impacts on the quality of the environment, a Finding of No Significant Impact (FONSI) is issued.
- **Environmental Impact Statement (EIS)** - Prepared for projects when the action will likely have a significant effect on the environment. This is the most comprehensive form of NEPA analysis. The final decision is documented in a Record of Decision (ROD), which codifies the final decision made, whether to approve the project or not, and the basis for that decision.

NTIA has communicated that most Middle Mile Grant Program recipients will require Environmental Assessments.

The selected Vendor will be expected to include resumes of staff that will work on the project and are knowledgeable about relevant environmental regulations and have experience designing solutions that avoid areas of potential impact. If the State Historic Preservation Office (SHPO) determines that an archaeological survey is necessary, the Vendor must have the staff and tools available to conduct the archaeological survey in compliance with the U.S. Department of the Interior's Standards for Archeology. See [Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation](#) for more information. If an archaeological survey is required, MCNC requires an estimate of that cost, but it should not be included in the bid. This could be a qualified subcontractor to the Vendor.

This task includes any and all steps required to result in a FONSI, including but not limited to:

- Satisfying the award's Special Award Condition (SAC) Section 10 entitled Environmental Assessment SAC (See <https://www.mcnc.org/sites/default/files/mcnc-environmental-assessment-sac.pdf>)
- Ensure successful completion of the National Historic Preservation Act (NHPA) Section 106 consultations (initiated by NTIA)
- Provide information directly to a SHPO or a Tribal History Preservation Office (THPO), if requested by the Department of Commerce (DOC)
 - Work directly with SHPO after NTIA initiates consultation.
 - Work with Tribes / THPOs after NTIA initiates consultation and the THPO/Tribes agree to work directly with the recipients.
- Ensure successful completion of informal Endangered Species Act (ESA) Section 7 in consultation with US Fish and Wildlife Service (FWS) district staff
- Scoping documents submitted to the North Carolina Environmental Clearinghouse, as needed
- Coordinate with other Federal, State, and local authorities to demonstrate compliance with other applicable environmental laws and regulations
- Obtain any required permits, authorizations, and letters from appropriate governmental authorities necessary to obtain the FONSI.
- Document all associated correspondence for sharing with the NTIA and inclusion within appendices to the Environmental Assessment
- In cooperation with MCNC, communicate with NTIA representatives as needed for the completion of environmental review and issuance of a Categorical Exclusion (Cat Ex) Decision Memo, Record of Consideration (REC), Finding of No Significant Impact (FONSI), or Record of Decision (ROD) that meets the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.)

The following areas were included in MCNC's CD-450 award conditions received from the NTIA and NIST. The selected vendor will be expected to analyze these factors with MCNC to determine to what degree they need to be included in MCNC's environmental feedback to NTIA.

- **Climate Resilience**

Because retrofitted and new infrastructure for broadband might be expected to have a lifetime of 20 years or more, the Recipient must account not only for current risks but must account for how the frequency, severity, and nature of these extreme events may plausibly evolve as our climate continues to change over the coming decades.

Accordingly, the recipient must ***develop a plan for regularly assessing the changing weather and climate risks that could impact the network***. Such a plan must demonstrate that the risks are understood and characterized to account for and respond to these areas for the 20 years following deployment, utilizing at least one resource or tool at:

[Understanding Climate Risk - Resources for NTIA Applicants | U.S. Climate Resilience Toolkit](#)

The plan should also detail how the weather and climate risks identified are addressed through avoidance and/or mitigation for the network. The plan should articulate how this process of evaluating the updated climate and weather risk and incorporating that information into the network design, maintenance, upgrades, or similar will be performed at least once during the period of performance and periodically over the life of the project.

- **Energy Efficiency**

The Recipient shall apply, where feasible, sustainable, and energy efficient, design principles for the purpose of reducing pollution and energy costs and optimizing lifecycle costs associated with the construction.

- **National Historic Preservation Act**

The Recipient may not expend any federal infrastructure funds other than for engineering design, permitting and work related to environmental, historical and cultural reviews, and limited, preliminary procurement funds prior to the following:

The completion of any required consultations, to include consultations with the State Historic Preservation Officer (SHPO) and the appropriate federally

recognized Native American tribes, under Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470, et seq.) (NHPA); and/or

Demonstration of compliance with all other applicable Federal, State, and local environmental laws and regulations.

Task 1 must be completed by **December 23, 2023**, as determination of the route is identified and formal engineering related to **Task 2** has commenced.

Task 2: Design and Engineering, ROW and Permit Application Development

The selected Vendor shall be required to develop engineered drawings for MCNC approved routes and specifications for the construction of the outside plant fiber optic facilities. These specifications must follow accepted outside plant engineering practice and be certified by a professional engineer. In conjunction with completion of **Task 1**, the Vendor shall be able to supply engineering routes and other mapping data in a shapefile or geodatabase. The design document package should be complete such that MCNC and its contractors can clearly administer the construction of the route. The decision as to the actual location of the proposed route will be made in conjunction with MCNC, with the final decision approved by MCNC. MCNC reserves the right to select which approach is to be ultimately engineered by the Vendor. MCNC reserves the right to request alternate engineered routes even where the proposed route does not have an environmental impact.

The selected Vendor shall be responsible for attending pre-design meetings with the technical project team, which includes MCNC's Chief Operating Officer, Technical Manager of Fiber Operations and Engineering, and other key staff to identify route selections, connectivity points, and any issues related to construction of the fiber optic facilities (aerial or buried). The meetings will be held in MCNC's office or via teleconference. The MCNC project manager shall conduct these meetings. The selected Vendor shall be responsible for producing computerized maps (AutoCAD compatible in 11x17 format). Drawing scale is to be 1 inch = 100 feet.

The Vendor shall manage the permit process with the various entities, under the direction of MCNC and localities for the Winston-Salem to Albemarle, Sanford to Fayetteville, and Fayetteville to Jacksonville routes. Due to the project timing, MCNC requests that the selected Vendor, in conjunction with MCNC, obtain the required permits as proactively as possible within the scope of when MCNC intends to commence construction for each segment so as to avoid the requirement to reapply should they expire. The list of possible permitting and rights of way issues include, but are not limited to the following:

- North Carolina Department of Transportation (for state and county rights of way)
- Railroad

- City and Municipality
- U.S. Department of Agriculture, U.S. Forest Service (for route(s) impacting National Forests) North Carolina Department of Environment and Natural Resources, and private easement agreements as required.

The selected Vendor must demonstrate its ability to design a solution that minimizes any environmental impact. Should there be any environmental findings, and MCNC is willing to accept the proposed solution, or otherwise required permits, the selected Vendor will be expected to work with the relevant permitting departments or entities to quickly acquire any necessary permits.

The work activities in **Task 2** are open to budgetary negotiation with MCNC. Proposals should include conservative best estimates, including any assumptions arriving at the proposed estimate. In many cases, it is difficult to estimate the level of effort required to complete **Task 2**, since the final design route is unknown at the beginning of the project. The Vendor shall identify all costs expected to be incurred in the development of this task.

When completing the pricing for **Task 2**, pricing for all engineering, permit and encroachment development, Vendor travel expenses, etc. should be included in the per/foot pricing. It is expected and understood that MCNC will have some fees that it will have to pay directly to the permitting entity (e.g. Railroads). These should not be included in the contractor pricing proposal.

The steps identified above related to **Task 2** must be completed by **January 26, 2024**. The Vendor will be responsible for providing one (1) electronic copy of as-built drawings at the conclusion of the project but **no later than May 31, 2025**.

Task 3: Telecommunications Hut Design

The selected vendor will design telecommunication hut site construction packages for facilities to be located at Sampson Community College in Clinton, Rowan-Salisbury Community College in Salisbury, and Stanly Community College in Albemarle. Based on previous applications the hut will be a prefabricated reinforced concrete structure. Exterior walls are built standard to UL-752 level 4 resistance and 2 Hr fire rating. Hut configuration will consist of an exterior dimension of 12ft by 20ft and an exterior finish to suit the specific site requirements. The interior design will address all power distribution components, generators and UPS/DC plant. Overall design will also include interior climate control, fiber entry/exit, genset pad location, utility access points and compound fencing.

The selected Vendor shall be required to develop engineered drawings for MCNC approved hut construction sites and specifications for the construction of the hut compound facilities. These specifications must follow accepted outside plant engineering practice and be certified by a professional engineer. In conjunction with completion of **Task 1**, the Vendor shall be able to:

- Supply sitemaps and legal descriptions for each proposed shelter.
- Develop a site plan that includes civil, telecom, electrical and fencing requirements.
- The design package should include any easement exhibits (as required) to support regen huts, telecommunications and ingress/egress.
- Along with surveys (PE stamped)/staking, plat maps and permitting.
- MCNC will require weekly Project Status Reports through the completion of the project.

The design document package should be complete such that MCNC and its contractors can clearly administer the construction of the hut site. The decision as to the actual location of the proposed hut will be made by MCNC in conjunction with other stakeholders, with the final decision approved by MCNC.

The work activities in **Task 3** are open to budgetary negotiation with MCNC. Engineering proposals should include conservative best estimates, including any assumptions arriving at the proposed estimate. This task's completion should run concurrently with the completion date of **Task 2 (January 26, 2024)**.

General Terms and Conditions -- Professional Services Contracts

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

Compliance with Laws

The Vendor must, in performance of work under the contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including, but not limited to, MMG, the Notice of Funding Opportunity (Department of Commerce, National Telecommunications Information Administration Notice of Funding Opportunity (NOFO) No. NTIA-MMG-2-2022, Middle Mile Grant Program, dated May 13, 2022) and all other applicable guidelines. Any subletting or subcontracting by the Vendor subjects subcontractors to these same provisions.

Buy American Requirement

To the extent applicable, the Vendor shall comply with the requirements of ARRA § 1605, as implemented by 2 CFR Part 176 Subpart B unless The U.S. Department of Commerce (DoC) waives the application of this provision. Please see the [Build America Buy America Act](#) including Waiver requirements, for more details.

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.

Protection of Whistleblowers

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). The Vendor shall comply with the Whistleblower Protection requirements of the American Recovery and Reinvestment Act (Recovery Act), Section 553 of the Division A, Title XV, Public Law 111-5 (for more information, see [Office of Inspector General - U.S. Department of Labor - ARRA Whistleblowers Form \(dol.gov\)](#) which provides protection for employees of any other non-federal employers including employees of state and local governments, contractors, subcontractors, recipients and any other non-federal employers receiving Recovery Act fund recipients, making specific disclosures relating to possible fraud, waste, or abuse of Recovery Act funds.

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.

Performance Bond or Professional Liability Insurance

The Vendor shall purchase a performance bond from a surety licensed to do business in the State of North Carolina or provide MCNC with proof of professional liability insurance. The performance bond or the professional liability insurance policy shall be in the same amount as the award value of the resulting contract under this RFP and shall entitle MCNC to call upon the surety to complete the contract in one of two ways: (1) the surety and MCNC can choose a new Vendor to complete the contract and the surety pays the costs; or (2) MCNC alone chooses to terminate the contract by selecting another Vendor and the surety pays the costs.

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 Materials

Vendors are encouraged to review the following material prior to submitting their proposals.

- Executive summary of MCNC's federal grant application:
<http://www.ntia.doc.gov/broadbandgrants/applications/summaries/4218.pdf>
- Tribes Served: [Tribal Broadband Connectivity Program | BroadbandUSA \(doc.gov\)](#)
- Environmental Assessment (EA): Review the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.); Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470, et seq.); Section 7 of the Endangered Species Act (16 U.S.C. 1531, et seq.), and Section 404 of the Clean Water Act (33 U.S.C. 1251, et seq.), to/and meet full compliance with all applicable federal, state, and local environmental laws and regulations.

Socioeconomic and Location Considerations

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

1. As addressed in RESPONSE FORM AND PROCEDURES, paragraph 9, above, all Vendors, including SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB Vendors are to address the following when completing your proposal:

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

B. SB Products and/or Services: provide a list of products and/or services planned to be supplied by the SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB for instant procurement. This list should correspond to the various 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 SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB for instant procurement.

C. Estimated SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB Total Dollars: provide the estimated total contract dollars planned to be furnished by the SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB named in your proposal. 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. Those two figures will be used to arrive at the “total contract percentage” that will be performed by the various SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB; SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB total contract dollars, divided by total contract dollars, equals the percentage of contract to be performed by SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB. The MCNC will evaluate the extent of participation of all SB, VOSB, SDVOSB, HUBZONE SB, SDB, WOSB, HBCU/MI, MOB or LB in terms of the value of the total contract amount.

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

CERTIFICATION REGARDING DEBARMENT/LOBBYING

All engineering proposals are subject to subpart C of 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).”

In addition, applicants/bidders for a lower tier covered transaction for a subaward, contract, or subcontract greater than \$100,000 of Federal funds at any tier are subject to 15 CFR part 28, “New Restrictions on Lobbying.” Applicants/bidders should familiarize themselves with these provisions, including the certification requirement. Therefore, Applications for a lower tier covered transaction must include a Form CD-512, “Certification Regarding Lobbying—Lower Tier Covered Transactions,” (see **Attachment #3**) completed without modification.

The CD-512 is available with the other Engineering RFP materials located on the MCNC website and available upon registration confirmation at:

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

Route Descriptions

As noted previously in this RFP, respondents are required to submit a separate pricing proposal for each route in the event they would like to be considered for an award for any individual geographic area should MCNC choose to divide up the project and issue separate awards. The following routes have been identified, and they are described in further detail below and maps are depicted on the website at:

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

- Winston-Salem to Albemarle (Attachment #6 and 6a)
- Sanford to Fayetteville (Attachment #5 and 5a)
- Fayetteville to Jacksonville (Attachment #4 and 4a)

Winston-Salem to Albemarle Route

Starting at the South entrance of the colocation facility at 413 E 3rd St head west on E 3rd St until you reach the intersection of N Chestnut St. Make a Left on N Chestnut St and head south to Technology Way. Make a left on Technology Way and take your first right on E Salem Ave. Continue South on E Salem Ave until you reach the roundabout at Old Salem Rd and S Main St. Exit roundabout at S Main St and head South until you reach the intersection of Follansbee Rd and Old US-52. Continue South on Old US-52 until you reach the intersection of Salem St and Martin Luther King Jr Blvd in Lexington NC.

Head South on Salem St until it ends on W 2nd St. Make a left on W 2nd St and the next right on N State St. Follow N State St until it changes to S State and continue on to the intersection of W 7th Ave. Make a left on W 7th Ave and then a right S Main St and US-29. At the intersection of S Main St/ US-29 and Interstate 285 it changes to Old Salisbury Rd. Continue South on Old Salisbury Rd to the intersection of NC Hwy 150. Merge left on NC Hwy 150 and make an immediate right onto Wilcox Way/US 29. Wilcox Way/ US 29 changes to N Salisbury Ave/US 29. Follow US 29 South until it changes to S Salisbury Ave then N Main St Salisbury NC. Continue South on N Main St to the intersection of W Kerr St. Make a right on W Kerr St and follow until you reach the intersection of N Fulton St. Make a left on N Fulton St. N Fulton turns to S Fulton St. Follow until the intersection of W Horah St. Make a left and follow W Horah St to E Horah St and S Long St. Make a right on S Long St and Old Concord Rd. Follow Old Concord Rd South to the intersection of Jake Alexander Blvd. Make a right on Jake Alexander Blvd and make an immediate left onto the Rowan-Cabarrus Community College North Campus.

The engineering firm should address the requirement of a prefabricated telecommunications hut at Rowan-Cabarrus Community College. The address is 1333 Jake Alexander Blvd., S Salisbury, N.C. 28146. This will require diverse entries on and off of the campus. The exact location on the campus is still to be determined.

When leaving campus via Southeastern entrance on Old Concord Rd head North towards Jake Alexander Blvd S. Make a right and follow Jake Alexander Blvd S to the intersection of E Innes St/US-52. Make a right on US-52 and head east to the intersection of N 2nd St in Albemarle NC. Make a left on N 2nd St and follow to the intersection of Salisbury Ave. Turn right on Salisbury Ave then make the second left on N Depot St. Head South on N Depot St to the intersection of W Main/NC Hwy 73. Make a right and follow the intersection of College Dr. Make a right onto Stanly Community College.

The engineering firm should address the requirement of a prefabricated telecommunications hut at Stanly Community College. The address is 141 College Dr, Albemarle, NC 28001. This will require a diverse entry on campus from the existing MCNC fiber IRU owned by Conterra. The exact location on the campus is still to be determined.

The approximate mileage of the route pending formal engineering has been estimated to be 74 miles.

In addition, all Community Anchor Institutions identified must have single threaded laterals engineered from the main route identified above. All laterals are estimated to be less than 5 miles off the proposed route.

Please download the map for this region at:

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

Sanford to Fayetteville Route

The proposed route begins in Sanford NC at the MCNC Hut located at 1105 Kelly Drive. Leave the Hut and head Southwest on Kelly Drive to the intersection of Nash St. Turn left on Nash St and head south to NC Hwy 42. Make a right on NC Hwy 42 then an immediate left onto Dogwood St. Continue on Dogwood St to the intersection of NC Hwy 87. Make a left and follow NC Hwy 87 South until it intersects with NC Hwy 24 in Stout Springs NC.

Continue East on NC Hwy 24 until it intersects with NC Hwy 210 in Spring Lake. Continue on NC Hwy 210/Bragg Blvd until the intersection of 2nd St. Make a right on 2nd St. Follow 2nd St to the intersection of Lake Ave. Make a left on Lake Ave then an immediate right onto NC Hwy 210/24 continuing to the NC 210/24 split. Continue on NC Hwy 210/ Murchison Rd to the intersection of WT Brown Drive where we will intercept existing MCNC conduit and pull fiber to the existing MCNC Hut facility at 1200 Murchison Rd Fayetteville NC. The approximate mileage of the route pending formal engineering has been estimated to be 33 miles.

Please download the map for this region at:

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

Fayetteville to Jacksonville Route

Beginning at the MCNC Hut facility at 1200 Murchison Rd in Fayetteville NC utilize existing conduit by populating a spare duct starting at the facility heading East on Mary T Eldridge St to the intersection of Edgecombe Ave. Take a right on Edgecombe Ave continuing until the intersection of NC Hwy 210 / Murchison Rd. Head left of NC Hwy 210 / Murchison Rd. Continue on NC Hwy 210 until it changes to Bragg Blvd. Bragg Blvd then changes to Robeson St. Follow Robeson St to the intersection of W Russell St where the existing conduit path ends in a hand hold on the Northeast side of the intersection.

From there start new construction heading East on W Russell St to the intersection of W Russell and Winslow St. Head North on Winslow until you've reached Hay St. Make a right on Hay St which turns into Person St. Continue along Person St to the intersection of Dunn Rd. Make a left on Dunn Rd and take the next right onto Grove St which merges into NC Hwy 24.

Continue on NC Hwy 24 to the town of Stedman NC where you will merge off of NC Hwy 24 onto Clinton Rd through Stedman then back onto NC Hwy 24 where Clinton Rd ends. Head East on NC Hwy 24 until you get to Autryville where you will again merge onto Clinton road through town. At the end of Clinton Rd you will then make a left onto Horseshoe Rd and an immediate right back onto NC Hwy 24

Continue on NC Hwy 24 East towards Roseboro making a right onto W Dr Martin L King Jr Blvd. Continue through town on Martin L King Jr Blvd until it intersects with NC Hwy 24. Make right on NC Hwy 24 and continue towards Clinton NC. Once in Clinton make a right of Forest Dr entering the Sampson Community college campus.

The engineering firm should address the requirement of a prefabricated telecommunications hut at Sampson Community College. The address is 1801 Sunset Ave, Clinton NC 28328. This will require diverse entries on and off of the campus. *The exact location on the campus is still to be determined.*

When leaving the Campus on Forest Ave make a right on NC Hwy 24 and continue East until NC Hwy 24 and Sunset Ave split. Go straight on Sunset Ave towards downtown Clinton. At the intersection of Sunset Ave and Fayetteville St Merge right onto Fayetteville St and continue to intersection of N Wall St. Make a right on N Wall St then an immediate left on E Main St followed by an immediate right on Lisbon St. Follow Lisbon St to the intersection of E John St and make a right. E John St turns to W John St. At intersection of W John St make a right then an immediate left on W Elizabeth St. Follow W Elizabeth St South to the intersection of IndianTown Rd. Make a left on IndianTown Rd and follow it until the intersection of US 701. Make left heading North on US 701. At the intersection of US 701 and Rowan Rd make a right. Follow Rowan Rd to the intersection of Rackley Rd. Take Rackley Rd North to NC Hwy 24 and make a right.

Follow NC Hwy 24 East through Warsaw to the intersection of Lanefield Rd. Take a right on Lanefield Rd and follow it until Old NC 903. Make a left on Old NC 903 to the intersection of S NC 11 903 Hwy. Head North and follow until the intersection of NC Hwy 24. Make a right on NC Hwy 24.

Follow NC Hwy 24 until it merges with US 258. Follow NC 24/US 258/Richlands Hwy until the intersection of US 17. Make a left on US 17 and an immediate right into the NC Highway Patrol and MCNC's Jacksonville Hut at 305 Wilmington Hwy, Jacksonville, NC 28540.

The approximate mileage of the route pending formal engineering has been estimated to be 102 miles.

Please download the map for this region at:

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