



Investing in Resilient Infrastructure:

Development and Management of a Resilient Open Access Underground Conduit System

Notice of Funding Availability (NOFA)

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Deadline for Submissions: November 15, 2024



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1. Introduction

The Puerto Rico Office of Management and Budget (OMB), through its Puerto Rico Broadband Program (PRBP), collectively further known as “Government Entities”, issues this Notice of Funding Availability (NOFA) to obtain proposals for services as defined in this NOFA (Services). The funding for this project is part of the National Telecommunications and Information Administration’s (NTIA) Broadband Equity and Access Deployment (BEAD) Program.

The Government Entities are seeking responses from Qualified Entities (Applicant(s)) who are capable of undertaking the complex tasks of comprehensively planning, designing, constructing, managing, and providing long-term maintenance and support of a buried conduit system for the Smart Island Broadband Network. An essential function of the conduit system is serving the unserved and underserved areas, including Community Anchor Institutions (CAIs) across the island, ensuring reliable service through long-term resilient infrastructure. As potential routes are explored for the fiber optic conduit system, through strategic planning, the design must be capable of interconnecting as many of Puerto Rico’s municipalities as possible to accomplish the intended aims of the NOFA. The design shall consider including up to three (3) planned and one (1) existing subsea landing station. Applicants will conduct discovery during the plan and design phase in coordination with the Government Entities to ensure a resilient infrastructure for Internet Service Providers (ISPs) and connectivity for all customers within their service offering. The comprehensive approach described in this NOFA requires the applicant to demonstrate extensive knowledge of and a strong desire to partner with Puerto Rico and its residents.

The PRBP was created in 2022 within the OMB to ensure all Puerto Ricans have access to fast and reliable broadband internet service using both local and federal funds. The PRBP, via its Executive Committee¹, coordinates, authorizes, and executes the disbursement of Puerto Rico’s broadband funding, working with ISPs and other key stakeholders. The program is designed to increase connectivity by bringing essential broadband infrastructure to all residents through the deployment of broadband infrastructure projects. To effectively execute its mission, the Government must ensure that Puerto Rico maximizes broadband funding through deployment and non-deployment projects.

To ensure that Puerto Rican residents, businesses, and communities have future proof broadband access and connectivity, Government Entities aim to



modernize the broadband infrastructure utilizing a three (3) phased approach:

- Phase 1: Plan, design, and engineer a comprehensive conduit system that will account for the Puerto Rican geography, population, and data centers to build a robust and resilient Smart Island Broadband Network.
- Phase 2: Construct and manage the Government Entity-approved plan, design, and engineering of the conduit system.
- Phase 3: The ongoing management, operation, and maintenance, including providing ongoing operational oversight, maintenance, and system upgrades to ensure the conduit system remains functional, is a long-term commitment. The operations and maintenance of the conduit system by the sub-awardee will be for a minimum of 10 years.

The Government Entities invite Applicants to submit their proposals to this NOFA.

The deadline for proposal submissions for this NOFA is November 15, 2024. For additional deadlines, please refer to the Timeline section included below ([Section 10](#) of this NOFA).

If you have any questions about this NOFA, please email FAQ@smartisland.pr.gov. For additional information, please refer to the Questions and Answers in [Section 7.2](#) of this NOFA.

2. Scope of Work, Project Objectives & Outcomes

The Government Entities recognize an outstanding need for reliable, climate-resilient infrastructure and a system that supports participation by multiple users, including the development and management of an open access underground conduit route throughout Puerto Rico. Therefore, the Government Entities are seeking proposals from Applicants with proven results and applicable knowledge that will lead to long-term project success. The NOFA includes a phased approach while in partnership with the Government Entities for input and approvals: plan, design, and engineer (Phase 1), construct and manage (Phase 2), and provide ongoing operational oversight, management, and maintenance of a conduit system (Phase 3) (collectively, the “Services” and/or “Scope of Work”). This project is an opportunity for management, including a minimum of a 10-year operations and maintenance commitment period and a long-term successful partnership with the island of Puerto Rico, its residents, businesses, and communities.

The Scope of Work, Project Objectives, and Outcomes for Phases 1, 2, and 3 are



further divided into sub-phases, as detailed in the following sections. See Appendix 1 for a breakout of the responsibilities of the Applicant per phase.

Phase 1. Plan, Design, and Engineering

Sub-Phase 1.1: Plan and Design

During this phase, the Applicant will be tasked with designing a strategic buried, fiber conduit route, and deployment blueprint for the Smart Island Broadband Network. Capturing the current landscape of broadband infrastructure and environmental and regulatory compliance requirements of Puerto Rico while reflecting local, cultural, geographic, economic, and infrastructure development plans will require discovery and analysis. Performance of discovery, prior to planning and design, through the use of surveys and analysis, identifies potential usable infrastructure or barriers to site locations, ensuring the most feasible, efficient, and longest-lasting conduit system pathway. Aerial fiber builds may be considered, but only in Highly Specialized and Unique Circumstances. For this NOFA, the term Highly Specialized and Unique Circumstances means very specific situations that are impractical or unfeasible to deploy the new conduit system after consultation with the Government Entities.

In collaboration with the Puerto Rico Innovation and Technology Service (PRITS) and Negociado de Telecomunicaciones (NET), the data centers in Puerto Rico will be critical and should be included in the planning. The data centers in Puerto Rico will be critical in planning the design and deployment of the conduit path. Also, adhering to resilience and redundancy principles, the open access, open conduit requirements of this new conduit system must undergo meticulous strategic planning to optimize advantages along the proposed paths. The primary objective for designing the open access, open conduit system is to establish hardened pathways that will extend into population centers, communities, and areas currently lacking or having minimal access to broadband technologies and infrastructure. The conduit network will be designed with a strong commitment to high capacity and availability in mind, ensuring the best service for the people of Puerto Rico.

By creating these high-capacity routes, the aim is to build a multi-duct conduit system, providing multiple pathways to service providers, government agencies, and other third parties that are otherwise unable to deploy infrastructure in cost-prohibitive areas. Additionally, the construction of colocation facilities and other interconnection points to help facilitate interconnection with other providers, reduce last-mile and middle-mile backhaul costs, and offer opportunities for service providers to build a more resilient and redundant network by building it for future use of ISPs. The Smart Island Broadband



Network will also connect to three (3) planned and one (1) existing landing stations, allowing for additional interconnection points. These landing stations will coincide with an undersea fiber network, which will provide an alternative path to land-based terrestrial networks prone to tropical storms and other natural hazards.

This network will promise to provide a minimum one-gigabit symmetrical lit service for public schools, public or multi-family housing, libraries, medical or healthcare providers, community colleges or other higher education institutions, and any other nonprofit or governmental community support organization, collectively, CAIs, where a need is identified in near proximity to the Smart Island Broadband Network. Additionally, the Smart Island Broadband Network will stimulate economic development, foster connectivity, fortify infrastructure, provide competitively priced enterprise services, expand the reach of fiber into unserved areas, increase competition, and provide additional resilient options for service providers, government agencies and other third-party organizations involved in delivering broadband on the Island.

The design will also require site surveys to determine the status of the proposed anchor or secondary lateral sites and any potential barriers. The proposed locations for hand holes, slack loops, and a potential aggregation point for the network's expansion will also be outlined during the plan and design phase.

The Applicant will be best positioned to demonstrate its knowledge and expertise of Puerto Rico's operating conditions and technical expertise in projects of this magnitude during the planning and design phase, including but not limited to the following expertise:

- Geography and terrain impact on construction and engineering
- Understanding of population centers and municipal stakeholders
- Demonstrate seamless jurisdictional coordination
- Demonstrate knowledge of the island's infrastructure to the planning and design
- Utilize relationships with current and prospective ISPs to ensure broad perspectives are represented
- Demonstrate expertise in the Broadband Equity Access and Deployment Program (BEAD)
- Provide technical, management, and strategic operations capabilities applicable to project scope and long-term success

The Government Entities outlines the minimum requirements for the Design



(1.1 Design) in [Appendix 1, Phasing Responsibilities](#).

Sub-Phase 1.2: Engineering

The final engineering work and plans will be produced by an engineer appropriately licensed by the Government of Puerto Rico in accordance with Act 173 of 1988 and will be based on the final accepted plans and designs approved in coordination with the PRBP. The Applicant will provide engineering services for the conduit system during construction, long-term operations, and maintenance.

During this phase, high-level documentation based on industry standards is required to support the plan and design provided. This includes a preliminary estimate and planning tool, and the level of detail provided is intentionally broad to reflect the uncertainties inherent in the early stages of a project. A work plan, route design considerations, and documentation, such as the anticipated route of the conduit, depth of burial, size, type, and number of conduits, review of critical sites along the route, and other engineering parameters that influence the project's feasibility and cost. Additionally, cost estimates, permitting requirements, utility coordination, and risk mitigation strategies should be included in a broad perspective.

The Applicant will be best positioned to demonstrate its knowledge and expertise in engineering projects of this magnitude during this phase through:

- Risk identification and mitigation strategies
- A work plan, route design, and site-specific considerations and documentation
- Contingency and resource planning
- Environmental impact mitigation
- Construction sequencing, utility, and jurisdiction coordination
- Safety and Occupational Safety and Health Administration (OSHA) compliance

The Government Entities outline the minimum requirements for the Design in Appendix 1, Phasing Responsibilities.



Phase 2: Construction and Management

Sub-Phase 2.1: Construction

During this phase, the Applicant will construct and manage the PRBP-approved designed and engineered conduit system. Components of the construction phase include the launch of the construction project, contractor and vendor management to meet established and approved timelines agreed upon with PRBP, on-site services to support PRBP and the Applicant to ensure installation is completed per design/engineering plans, site visits and review of the work performed, establishing a regular communication structure to provide a continuous status reports, operational challenges, and mitigate issues quickly with the selected contractor and vendors.

The Applicant will be best positioned to demonstrate its knowledge and expertise in construction projects of this magnitude during this phase through:

- Risk identification and mitigation strategies
- Route design and site-specific considerations
- Contingency and resource planning
- Environmental impact mitigation
- Construction sequencing, utility, and jurisdiction coordination
- Safety and OSHA compliance

Post-construction includes supplying the PRBP with an entire electronic set of as-built drawings and corresponding files, testing and inspecting reports, final work being performed along the route, facilitating the process of turning up the system and handing it off to the Phase 3 Operator, and hosting an After Action Review meeting with the principals to initiate the close-out activities required of PRBP and National Telecommunications and Information Administration (NTIA).

Phase 3: Management, Operation, and Maintenance

The management, operation, and maintenance of the conduit system will be instrumental in the success of the Smart Island Broadband Network. Above all, the conduit system must be operated in a neutral manner where all parties are dealt with fairly and operations are carried out in a transparent manner. Pricing must be set at a fair and competitive level, and price increases must be implemented using a fair formula and criteria. While this is not a not-for-profit



venture, the conduit system is being funded using taxpayer dollars to overcome the needs of the population. The Applicant will be responsible for all operations and management of the network, including, but not limited to, negotiating usage contracts, billing, marketing availability, and ongoing maintenance and repairs of the network, including documentation of any changes in the network, for a period of not less than 10 years.

Once the conduit system is constructed and operational, the Applicant will be responsible for its operational and business management, including maintaining a working partnership with the PRBP, ISPs, community and business stakeholders, and others to ensure that the conduit system brings future-proof fiber broadband access to residents, businesses, and communities across the island.

Applicants should consider their understanding of the Puerto Rican government, local and stakeholder landscape, jurisdictional coordination, and experience. They should also consider contributions to local communities and engagement strategies, including opportunities to partner and understand local communities' needs. Managing the conduit system and stakeholder buy-in will benefit from a local perspective.

The Applicant will be best positioned to demonstrate its knowledge and expertise in managing conduit systems through:

- A history of successful business management
- Ongoing working partnership with the PRBP, ISPs, community and business stakeholders
- Demonstrated experience managing government, local, and stakeholder relationships
- Demonstrated local community and engagement strategies

Sub-Phase 3.1: Operation

It is expected that the Applicant chosen for this grant award will operate and manage the conduit system and continue to provide ongoing operations and maintenance of the conduit system for the island for a period of 10 years.

The ongoing operation of the conduit system shall include system upgrades, business relationships with the ISPs who supply broadband service through the conduit system, ensuring the conduit system's operational capability, and continued relationships with the PRBP.



Sub-Phase 3.2: Maintenance

Maintenance and continuous improvements to the conduit system network are critical to providing future-proof broadband capabilities and access to Puerto Rico's residents, businesses, and communities. Therefore, the Applicant shall provide a plan for future maintenance and system upgrades to ensure operational ability.

The Applicant will be best positioned to demonstrate its knowledge and expertise in owning, operating, and maintaining conduit system through a successful history of:

- Long-term ownership of similar projects or businesses
- High-functioning operations of similar projects or businesses
- Well-maintained similar projects or businesses
- Strong partnerships with the Government Entities, municipalities, and communities of Puerto Rico

3. Funding Mechanism

Puerto Rico's Broadband Equity, Access, and Deployment (BEAD) program, under the PRBD, supports funding for this grant program. The Governor of Puerto Rico created PRBP through Executive Order 2022-40 on July 11, 2022. The primary purpose of this program is to coordinate, authorize, and execute the disbursement of local and federal funds assigned to the construction of broadband infrastructure in Puerto Rico.

4. Funding Disbursement & Allowable Use of Funds

Funding will be disbursed to the Applicant according to proposed spending, proposed budget, and target outcomes in line with [Appendix 1, Phasing Responsibilities](#) of this NOFA. Funding will be disbursed on a reimbursable, quarterly basis only for completed work, as determined by PRBP, for each Phase (1, 2, 3) as outlined in this NOFA.

The issuing agency reserves the right to make multiple awards under this NOFA, to allocate different phases or components of the project to different applicants, or to decline to fund any phase if it is deemed to be in the best interest of the agency. Funding decisions will be based on the applications submitted, the



agency's evaluation of the proposed approaches, and evolving program needs and priorities. The agency may also adjust the scope of funding allocations as necessary to align with program goals and available resources.

The Government Entities reserve the right to adjust award amounts based on the level of funding. Estimated amounts and dates are not final and are subject to change. The Government Entities, through PRBP, anticipates that some or all of the costs incurred under this grant award pursuant to this NOFA will be funded partially and/or in whole with federal funds. Therefore, any award from this NOFA shall be governed by certain federal terms and conditions for federal grants, including any applicable circulars issued by the US Government's Office of Management and

Budget (US-OMB) or other federal agencies as described in [Appendix 2, Funding Conditions](#).

Eligible Activities and Costs

Eligible activities and costs related to the use of grant funds must:

- Be necessary, reasonable, and allocable to the award based on Appendix 1, Phasing Responsibilities.
- Be determined to be capital expenses in accordance with generally accepted accounting principles.
- Be adequately documented.
- Shall include equipment, mobilization, storage, materials, and any other pertinent portion for the construction of the Smart Island Broadband Network conduit system and any allowable expense for conduit system development, including the engineering work required to design the Smart Island Broadband Network conduit system.
- Design and engineering of the Smart Island Broadband Network conduit system
- Materials and Labor for the installation of Smart Island Broadband Network conduit system
- Other incurred expenses as approved by the Government Entity.

Ineligible Activities and Costs:

- Duplication of any existing Broadband Service that is not at maximum utilization and available to other carriers under lease contracts.
- Infrastructure that is not directly necessary for the construction of the



Smart Island Broadband Network conduit system.

- Operating costs related to the operation and maintenance of the Smart Island Broadband Network conduit network.
- The purchase of towers, land, or buildings, or building renovations.

5. Work Plan

Applicants must provide a detailed Work Plan indicating how they plan to execute the Phasing Responsibilities and meet the objectives stated in this NOFA. This Work Plan shall include, at a minimum, a detailed list and description of (i) primary workstreams and work phases, (ii) key deliverables for each phase, (iii) key activities for each phase, and (iv) projected touch points for collaboration with the Government Entities and collaboration with key stakeholders such as CAIs and ISPs.

Applicants must detail how they will comply with the Government Entities' design philosophy and leverage their existing infrastructure, if applicable, to meet the specified priorities described in the NOFA. Applicants may reference past experiences with similar large-scale projects and services that were provided and how they approach the Phasing Responsibilities.

Furthermore, Applicants should provide a measure of confidence in their ability to adhere to the proposed timeline for the Phasing Responsibilities and activity milestones in accordance with their past experiences and anticipated abilities (i.e., resources mobilization/availability, supply chain considerations, etc.). This section is important for Government Entities to consider during application reviews and requests for clarification, which may impact the Phasing Responsibilities and final project execution.

If Applicants anticipate obtaining support from subcontractors to execute the Phasing Responsibilities, all subcontractor information must be included under this section following this format:

Vendor/ Subcontractor	Description of Products/Services Offered	Past Projects Utilizing Vendor/Subcontractor
X	Y	Z



6. Requirements

Puerto Rico plans to build a Smart Island Broadband Network conduit system through a comprehensive and strategic approach, as outlined in the document. Here are the key steps and strategies:

1. **Open Access Conduit System:** The network will be an open access system, allowing multiple users to share the infrastructure. This approach aims to maximize efficiency, minimize costs, and promote competition among service providers.
2. **High-Density Conduit System:** The system will be designed as a buried, high-density conduit system, allowing for multiple providers to operate in each section. One conduit in the system will be reserved for the use of the Government Entity. Aerial fiber builds may be considered, but only in Highly Specialized and Unique Circumstances. For this NOFA, the term Highly Specialized and Unique Circumstances means very specific situations that are impractical or unfeasible to deploy the new conduit system after consultation with the Government Entity.
3. **Route Selection and Design:** The Puerto Rico Broadband Program will work with a licensed engineering firm, as described in Appendix 1, Phasing Responsibilities, to develop a high-level design and cost estimate for the conduit system. The design will prioritize resilient routes and consider the varied terrain of the island. The program will also conduct an Expression of Interest/Request for Information to gather input from potential users and stakeholders.
4. **Competitive Bidding Process:** The program will conduct a fair, open, and competitive bidding process to select a single or multiple Applicant(s) for the development, construction and management of the conduit system. The Applicant will be responsible for the design, constructing and operating the network, ensuring open access and equitable participation for multiple users.
5. **Financial Sustainability:** The Applicant will be required to provide 2 years of audited financial statements and a 5-year financial pro forma comprised of balance sheets, income statements, and cash flow statements. A proposed conduit lease agreement and an estimated cost per tenant per mile are also required. The program will evaluate bids based on affordability, financial sustainability, and the ability to attract and retain tenants.



6. **Coordination with Other Projects:** The conduit system development will coincide with road and electrical grid improvements to optimize costs and ensure efficient timing and location of projects.
7. **Resiliency and Redundancy:** The conduit system will include multiple routes to ensure redundancy and minimize service outages. Colocation facilities will have redundant power systems and battery backup support to prevent extended outages.
8. **Community Engagement:** The program will work closely with local communities, service providers, and stakeholders to identify community needs, address concerns, and ensure the network supports the most at-risk areas in Puerto Rico.
9. **Recovery Strategies:** The Applicant will be required to develop an emergency plan, secure job sites, and have a detailed risk assessment to ensure quick recovery and restoration after natural disasters.

By implementing these strategies, Puerto Rico aims to build a resilient, scalable, and financially sustainable conduit system that supports long-term broadband access and digital equity for all residents.

Puerto Rico will conduct a separate Expression of Interest (EOI) for the use of the conduit system through the following steps:

1. Announcement and Outreach:

- The Puerto Rico Broadband Program will announce the EOI through its website, smartisland.pr.gov, and other communication channels such as press releases, social media, and newsletters.
- The program will engage with stakeholders, including internet service providers, government agencies, community organizations, and potential users of the conduit system, to inform them about the EOI and encourage participation.

2. Information Collection:

- The EOI will solicit input from prospective tenants of the conduit system, including last-mile and middle-mile broadband service providers, utilities, and institutional users.
- It will also seek information from entities with available, resilient conduit and dark fiber that they are willing to make available via swaps, trades, sales, or long-term leases.
- Through the use of an NDA with the Government Entities consultant, Witt O'Brien's, LLC, information will be collected regarding existing broadband facilities in order to prevent overbuilding and to gain insight into the Territories existing



broadband capabilities.

3. Submission Requirements:

- Respondents will be required to provide detailed information about their interest in using the conduit system, including technical requirements, capacity needs, and preferred terms of access.
- Entities offering existing facilities will need to submit proposed rates, terms, and conditions for access by third parties for not less than 20 years, along with a technical description of the route.

4. Evaluation and Use of Information:

- The Puerto Rico Broadband Program will review the responses to identify potential users and their specific needs.
- Information gathered from the EOI will be used to inform the design of the conduit system, including route selection, capacity planning, and model lease terms.
- The program will ensure that the design supports the participation of multiple users and meets the needs of potential tenants.

5. Transparency and Fair Access:

- The EOI process will be transparent, and all stakeholders will have access to the same information to ensure fair participation.
- The program will prioritize open access and non-discriminatory terms to prevent monopolistic practices and encourage competitive pricing among service providers utilizing the conduit system.

6. Follow-Up and Coordination:

- The Puerto Rico Broadband Program will follow up with respondents to clarify any questions and gather additional information as needed.
- The program will coordinate with stakeholders to ensure that the final design and terms of the conduit system align with the needs and expectations of potential users.

By conducting an EOI, Puerto Rico aims to gather valuable input from industry stakeholders and ensure that the conduit system is designed to meet the needs of multiple users, promoting competition and long-term sustainability.

1.1. Key Requirements

The issuing agency asks applicants to leverage an approach that facilitates the concurrent construction of the conduit system. Applicants may propose regional assignments to subcontractors or approaches that enable regional



construction so as to operationalize portions of the network throughout the construction process. Applicants should propose regions for the conduit network and outline approaches, including vendors with a proven operational history and expertise in the specific geographic areas outlined in the proposal. Preference will be given to applicants who demonstrate the ability to coordinate and manage multiple subcontractors efficiently, ensuring timely delivery of project phases across all proposed regions. The applicant's approach should emphasize capacity, experience, and familiarity with local conditions to optimize project execution and minimize delays.

Applicants must have the legal capacity and authority to manage and operate the broadband facilities as proposed in the application, enter into contracts, and otherwise comply with applicable local and federal regulations. If the applicant is seeking to partner with another entity to design, engineer, or operate the system, an agreement or draft agreement must be provided with the application. This agreement must address the specific financial terms of this partnership, and the specific entity or entities must be identified along with their qualifications to operate and maintain the system. Applications that rely on such a relationship but do not provide pertinent details may be rejected, as the Government Entities can only determine the technical and financial feasibility of the project with such information. The Government Entities may consider an application based on such an agreement submitted with the application, but if the application is ultimately awarded, the PRBP reserves the right to require modifications to such agreements if they are found to contain terms that are unacceptable to the Government Entities. Applicants must meet the following requirements:

- Applicants shall be entities properly accredited to provide services in the broadband value chain in Puerto Rico at the time of the submission of their Proposals and comply with all applicable Puerto Rico or U.S. laws and/or requirements.
- Applicants must demonstrate adequate supplies and resources to perform the project or the ability to obtain them, enabling them to start the project quickly.
- Applicants must demonstrate a satisfactory record of performance, integrity, and business ethics.
- Applicants must demonstrate the necessary organization, experience, and technical skills in Puerto Rico, specifically in the Broadband sector.
- Neither Applicants nor any person or entity associated with partnering with Applicants have been the subject of any adverse findings that would prevent PRBP from selecting Applicants.



- Applicants shall provide a listing and brief description of legal actions for the past five years.
- Applicants must commit to hiring employees for a full-time role for at least 12 months to be able to provide the funds to those employees.
- Applicants must submit a complete Proposal covering all necessary topics outlined in this NOFA.
- Applicants must upload required documents as attachments with a response as detailed in Section 7 (Proposal Submission).

1.2. Performance Goals and Measurements

The Government Entities' performance goals are provided as a point of reference for Applicants when determining performance goals for this application. Metrics will be reported on a predetermined schedule throughout the work period. Additional metrics may be determined and required as the project develops. The following metrics include:

For All Project Phases:

- Demonstrate coordination and timely responses to the PRBP
- Submit deliverables and progress and performance reports by predetermined deadlines
- Submit invoices completed and by predetermined deadlines
- Demonstrate adherence to local, state, and federal compliance laws, including financial compliance requirements
- Demonstrate adherence to local, state, and federal engineering, environmental, code, and safety laws
- Demonstrate adherence to BEAD program requirements as described in Appendix 2.

1.3. Project Term

PRBP will prioritize Applicants who demonstrate capabilities to plan, design, build, and deploy by Summer 2026 or earlier. This includes the follow-on services of management, operations, and maintenance of the Smart Island Broadband Network conduit system. Nonetheless, applications for programs that require an extended schedule are also welcome. The awarded grant can be used to continuously develop and improve the programs, subject to allowable use and availability of funds and the Scope of Work.

1.4. Cost Sharing

There is no required match for this NOFA. However, applicants are encouraged



to leverage other resources to maximize the project's impact and success.

1.5. Allowable Uses of Funds

The funds awarded in this NOFA must be used only for the activities listed in [Appendix 1, Phasing Responsibilities](#) and described in the [Eligible Use of Funds](#) section within this NOFA.

1.6. Compliance

The PRBP will prioritize Applicants who demonstrate an understanding of compliance requirements, have managerial and financial capacity, and have the technical and operational capacity to deliver the conduit system.

All Applicants are required to remain in compliance with all applicable federal, state, and local laws throughout the project. Applicants will be required to certify compliance with all applicable local and federal laws relevant to carrying out the grant agreement. Applicants must provide a narrative describing the plan to comply with any relevant laws or regulations.

1.7. Payment Terms and Methods

Payment may be requested by the Applicant on a quarterly basis or longer. Payment will be made based on the presentation of labor and material documentation, including payroll documentation and/or invoices evidenced by the services provided and duly authorized by the Government Entities. Labor and material costs must be detailed, specific, and itemized as previously approved by the Government Entities. Material requests must include a labor component for the installation of the material. The Government Entities will provide additional details in the award agreement. Applicants are encouraged to review eligible expenses.

7. Proposal Submission

Responses to the NOFA submitted after the prescribed deadline will not be accepted. Proposals must include all exhibits, appendices, and/or attachments to be deemed complete. All correspondence, documents, and related information submitted by Applicants for this NOFA shall be written in English. If documents are submitted in a language other than English, a full English translation shall also be provided. All applications must adhere to the Proposal Package requirements, use the required format, and include all the requested information. Only one proposal package will be accepted from each applicant.



Clearly identify one point of contact for all NOFA correspondence, including email and phone number. This individual may not be in a key leadership position but is well-positioned to maintain situational awareness of emails and correspondence requiring rapid responses.

Applicants should submit their responses to the smartisland.pr.gov website in a single PDF of **no more than 10 MB**, including the following:

- Proposal package as described above, as an uploaded attachment.
- Executive Summary of the Project
 - The Executive Summary of the project is one of the most important parts of the application. It gives the Government Entities its first overall view of your solution for the conduit system, the constraints considered, and how the proposed project will address these through innovation by providing an open access conduit system that can be used by ISPs to serve the unserved and underserved areas, including CAIs across the island. This is your opportunity to discuss the core aspects of the project and why you think the project deserves funding. Be clear and provide a detailed description of the project and the benefits to the Government Entity's objectives.
- A description of the Applicant including, but is not limited to, the history of the organization and any past or current similar projects, community-related activities, or awards. If the Applicant is describing a partnership as a solution, a description of the partnership, including how the partnership was developed and any financial or shared resource commitments. The partnership responsibilities must be defined with each member partner's responsibilities outlined in reference to Appendix 1, Phasing Responsibilities.
- Total Project Costs provided by phase. Costs should be provided as separate labor and material lines.
- A detailed project design and construction budget that includes expected projected expenses for all project phases as separate labor and material lines.
- A general overview of the conduit system to be constructed, including a preliminary route, the types of surveys or data reviewed, technologies, and methodologies that will be used.
- A detailed master project plan, including timelines and milestones for all project phases.
- Additional supporting documentation added to the proposal as uploaded attachments.

1.8. Registration for Technical Assistance

To be considered a Registered Applicant and receive technical assistance for this



NOFA, the Applicant must email info@smartisland.pr.gov by October 18, 2024, at 4:30 p.m. Please provide the following information in your email:

- Name of the Applicant
- Name of the Point of Contact, email, and phone number for contact
- In the subject line, add “Development and Management of Underground Conduit System NOFA | Interest from [name of Applicant]”

Please note that each Applicant agrees to and shall be bound by all the terms and conditions of this NOFA.

Applicants who register after the deadline are still permitted to participate in the NOFA but will not receive technical assistance during the process.

1.9. Questions & Answers

Any questions regarding this NOFA or the evaluation shall be submitted in writing via electronic mail only to the following address: FAQ@smartisland.pr.gov. Please reference this specific NOFA in the subject line of the email. No telephone inquiries will be accepted. Answers will be posted on PRBP’s website at <https://www.smartisland.pr.gov>. All information posted on PRBP’s website is deemed to be incorporated into this NOFA.

Questions must be submitted by October 25, 2024, at 4.30 p.m.; responses will be provided by November 1, 2024, at 4.30 pm. The Government Entities reserve the right to extend this deadline based on the volume and timing of questions.

1.10. Allowed and Prohibited Communications

Only questions and requests for clarifications on this NOFA submitted by Applicants per the Questions and Answers section are allowed. Communications by prospective Applicants with officials and/or representatives of PRBP, PROMB, other government entities, the Government of Puerto Rico and any of its instrumentalities, or any other parties associated with the PRBP regarding the contents of this NOFA or its qualification and selection process, are prohibited during the submission and selection processes. Failure to adhere to this requirement may result in the disqualification of submitted applications.

The Government Entities will not address or consider verbal inquiries or emails sent to addresses not specified in this NOFA.



8. Response Evaluation

The Government Entities will examine all Responses in a proper, objective, and timely manner to determine if the NOFA requirements are met. The final evaluation and selection will be based on the scoring criteria listed below:

Scoring Criteria	Max Points
Minimal BEAD Program Outlay	60
Affordability	60
Experience	50
Open Access	50
Speed to Deployment	40
Local Coordination	40
Fair Labor Practices	40
Workforce Development and Job Quality	30
Technical Capabilities	30
Total	400



Scoring Criteria	Points Available	Description
Minimal BEAD Program Outlay	60 points	The total BEAD funding required to complete the project, accounting for the total projected cost and the prospective subgrantee's proposed. The selection process would involve carefully assessing proposed budgets, ensuring they align with industry standards while maintaining a commitment to quality and durability. Entities capable of offering competitive costs without compromising the integrity of the buried conduit system would score higher, as this reflects financial acumen and positions them as valuable contributors to the economic feasibility and success of the telecommunications infrastructure project.
Affordability	60 points	Affordability requirements for utilizing the open conduit and fiber network system are integral to ensuring accessibility and inclusive service provision. Telecom carriers commit to offering affordable services to end-users, particularly in underserved or economically disadvantaged areas. The prospective entity must outline conduit pricing structures that promote widespread, affordable access, mitigate digital divides, and enhance connectivity for the benefit of all residents. A benchmark assessment of the market and competitive landscape and suggested pricing models for access to the conduit system will be included in the solicitation. The review will compare the bidder's proposed rates by comparison using a "Benchmark" basket of various hypothetical tenant commitments to volumes of conduit- and route miles and lease term years.



Experience	50 points	The prospective subgrantee should provide evidence of a successful track record in planning, deploying, and managing buried conduit systems for telecommunications infrastructure. This should include proof of completing projects of similar scale and technical complexity while adhering to industry standards.
Open Access	50 points	The open access model prevents a single entity from monopolizing the conduit, creating a level playing field and fostering a dynamic market environment. By allowing multiple competitors to share the same infrastructure, the buried conduit project aims to maximize efficiency, minimize redundancy, and deliver diverse, high-quality telecommunication services to the community.
Speed to Deployment	40 points	The promptness of project implementation is a crucial factor in selecting a subgrantee for the buried conduit system project. The selection criteria will prioritize candidates who can efficiently and promptly execute the project without compromising on quality or safety. Factors such as a well-defined project timeline, proactive problem-solving approaches, and streamlined construction processes are evaluated to assess an entity's ability to expedite the deployment of the buried conduit system.
Local Coordination	40 points	Prospective subgrantees must possess a strong understanding and dedication to collaborating with local stakeholders. This scored criterion seeks entities that effectively communicate and cooperate with municipal authorities, utility providers, and community



		Representatives to navigate local permitting processes, zoning regulations, and unique challenges specific to the project's location. The applicant will submit a strategic plan for building positive relationships with local entities, ensuring a seamless integration of the buried conduit system into the existing infrastructure while addressing any concerns or preferences of the community.
Fair Labor Practices	40 points	The criteria will evaluate candidates based on their demonstrable adherence to ethical employment standards, which ensure the welfare and equitable treatment of workers involved in the project. This encompasses compliance with pertinent labor laws, adherence to health and safety regulations, and a dedication to providing just compensation and benefits.
Workforce Development and Job Quality	30 points	Equitable workforce development and job quality are essential selection criteria for deploying a buried conduit system project, emphasizing the prospective entity's commitment to creating positive socio-economic impacts. The applicant will support the Puerto Rico Broadband Program's workforce plans and align with the requirements described in the BEAD Notice of Funding Opportunity (Section IV.C.1.f) to use a highly skilled workforce capable of carrying out work in a manner that is safe and effective.
Technical Capabilities	30 points	The prospective entity must demonstrate proficiency and be appropriately licensed by the Government of Puerto Rico in advanced engineering and



		construction techniques for buried conduit systems.
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Minimal BEAD Program Outlay

Phase 1 of Bidding

60 Points – 1 point per percentage point below a “reference” cost per mile of conduit. The Puerto Rico Broadband Program will establish the “reference” cost at a level 30% higher than an estimate provided by its engineering contractor after the high-level design phase. The reference cost will use a set of stated assumptions about a mix of construction conditions (e.g., depth, number and type of conduits, soil type, rural vs. urban mix, etc.).

Phase 2 of Bidding

60 Points – 1 point per percentage point increase in the total miles of buried conduit to be constructed for the grant funding offered, compared to the mileage estimated to be constructable at that grant cost calculated in the design budget. Bidders’ cost per mile proposed may not exceed 20% of the cost provided in the first phase for a comparable mix of construction conditions.

Affordability

Phase 3 of Bidding

60 Points – Bidders may provide a projected set of conduit lease rates and receive points. Bidders may decline to provide conduit lease rates in the first phase but will receive zero points for the criterion at this phase. Bidders providing rates will be ranked from highest to lowest, and those rates will be applied against the “Benchmark” basket of lease commitments. The lowest lease cost for the “Benchmark” will receive forty points, the highest one point. Other respondents will receive points proportionally based on the cost between the lowest and highest. Bidders who demonstrate that proposed lease rates are financially sustainable through a strong pro forma cash flow using the projected rates will receive a bonus of 50% of the points awarded (rounded up). A “strong pro forma cash flow” will include take-rate and operating cost projections based on the bidders' documented prior operating experience and/or documented commitments from vendors and potential tenants.



Phase 3 of Bidding

60 Points – Bidders must provide conduit lease rates if not already provided in the first phase. Bidders will be assigned points in this category based on the following criteria: 0 points for coming in at the Benchmark Rate or higher. 20 Points for a 5% discount, 40 Points for a 10% discount, and 60 Points for a 15% discount. The “Benchmark Rate” will be set at a level to encourage proposals that are below current available commercial rates for similar services. Bidders’ rates will be compared to the Benchmark Rate using the “Benchmark” basket of lease commitments.

Experience

35 Points – Must include at least three (3) examples of specific experience and indicate proven ability to implement similar projects for the firm and the individuals involved in the projects.

15 Points – A summary of related projects with the original deadline and cost estimate versus the actual completion date and final variance cost of the project.

Open Access

Phase 3 of Bidding

10 Points – Provide a commitment to offer non-discriminatory rates, including offering access to any tenants at wholesale rates not less than the offered to the entity's service or affiliated companies.

20 Points – Commitment to provide management of the conduit network through an affiliated company not sharing common management with any affiliated company using the conduit.

40 Points – Bids from companies not sharing common ownership with any potential tenants, except for joint ventures between tenants where no owner exercises effective control of the company.

50 points – Bids from companies or institutions not sharing common ownership with any potential tenants, except joint ventures between tenants, where no owner exercises effective control of the company, and a commitment or institutional safeguards not to engage in a sale or transaction providing effective control of the conduit management operation for a period not less than 20 years without consent.

Phase 3 of Bidding

10 Points – Have at least one letter of intent from a potential conduit system user not affiliated with the applicant.



20 Points – Have a second letter of intent from a potential conduit system user not affiliated with the applicant.

20 Points – Have a third letter of intent from a potential conduit system user not affiliated with the applicant AND letters of intent from non-affiliated users covering at least 90% of the proposed system mileage.

Speed to Deployment

Phase 1 of Bidding

Bidders presenting a credible plan to achieve either or both of the timeline goals (see the second phase) will receive points. The strongest response receives 40 points. The least strong but still credible plan receives 10 points. All other credible responses receive 25 points. Plans are nonbinding at this phase.

Phase 1 of Bidding

Points may be achieved by committing to achieve either one or both of the timeline goals below. A non-performance penalty for not achieving the commitment may be levied up to 5% of the grant cost.

20 Points – 20 Points for achieving 30 percent completion within 18 months of award.

20 Points – 20 Points for achieving 75 percent completion within 36 months of award.

Local Coordination

15 Points – The project plan must include how the entity will achieve comprehensive community engagement, regular public consultations, and proactive measures to address and incorporate community feedback.

15 Points – The project plan must include how the entity will achieve extensive collaboration with local government bodies, municipal authorities, and relevant agencies.

10 Points – The plan must include the projected effectiveness of measures to be taken to mitigate the environmental impact of construction activities, considering factors like soil erosion, vegetation preservation, and waste management.



Fair Labor Practices

40 Points – For bidders with a proven Fair Labor Practice compliance track record.

30 Points – For bidders that supply a robust implementation plan for Fair Labor Practices. Points are determined based on the strength of the plan.

Workforce Development and Job Quality

10 Points – Supporting workforce development through engagement with Puerto Rico Broadband Program’s workforce initiatives. Agreed-upon engagements with workforce initiatives may include employing Registered Apprentices, engaging with short-term credential programs, and other training opportunities.

10 Points – Leveraging equitable on-ramps into deployment, construction, and maintenance jobs; advancing job quality for new and incumbent workers; and engaging with labor organizations and community-based organizations to maintain worker voice throughout the planning and implementation process.

5 Points – Participating in sector-based partnerships with education and training providers, the public workforce system, unions and worker organizations, and community-based organizations that provide relevant training and wrap-around services to support workers in accessing and completing training (e.g., childcare, transportation, mentorship) to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities.

5 Points – Ensuring that the job opportunities created by the Puerto Rico Broadband Program are available to a diverse pool of workers

9. Selection Process

A committee of Government Entity staff and/or consultants will review the proposals and evaluate them based on the scoring criteria above. The Government Entity staff and/or consultants reserve the right to request additional information from Applicants on an as-needed basis during the evaluation process. Following this, the Government Entity may enter negotiations with the Applicants to expand or contract the scope of work and adjust the grant amount accordingly.



10. Timeline: Important Dates & Deadlines

The following is the proposed timeline for this project:

Target Date	Event
October 7, 2024	Publication of NOFA
October 14, 2024	Webinar
October 18, 2024	Webinar
October 25, 2024	Questions & Answers Submission Deadline
November 1, 2024	Submission of PRBP Responses to Questions
November 15, 2024	Proposal Submission Deadline
November 29, 2024	Application Review Period
December 13, 2024	Requests for Clarification
December 20, 2024	Notice of Provisional Award Pending NTIA Approval

Please note that each deadline above is set for 4:30 p.m. (Local Puerto Rico time). The NOFA timeline includes target dates and may change at PRBP's discretion. Applicants should periodically review PRBP's website for updates to the NOFA timeline and other important information.



Appendix 1. Phasing Responsibilities

1.1. Phase 1 – Planning, Design and Engineering

- The Planning, Design and Engineering of the project is considered the most critical of the three phases. The main objective of this phase is to provide a full conduit construction design from a Rough Order of Magnitude (ROM) conception to a High-Level Design (HLD) to a construction ready Low-Level Design (LLD). PRBP will be provided the opportunity to review and approve each level of the design.

All engineering work shall be completed in accordance with Puerto Rico Law 173, which requires firms that carry out design and engineering work to utilize engineers licensed by the Government of Puerto Rico and be certified by the College of Engineers of Puerto Rico.

- **Pre-Construction Planning Phase** – During this phase, the Applicants will be tasked with creating an in-depth foundation for the design and eventual supervision of engineering and construction of an open access broadband network for the transmission of wide bandwidth data over a high-speed internet connection through multiple types of technologies including fiber optic, fixed wireless, cable, and satellite (“Smart Island Broadband Network”). This foundation will be based on the Strategic Plan defined in this NOFA. During this phase, the Applicants will employ methods such as interviews with current service providers and other relevant stakeholders, conducting field visits, and validating existing documentation to evaluate Puerto Rico’s current broadband infrastructure’s status and feasibility. The Applicant must identify any existing ISP or middle mile routes and ensure that there is no duplication of service. The Applicant will design the conduit system to utilize existing island facilities wherever feasible. The Applicants must strategically design a network that will allow for the development of a robust and resilient Smart Island Broadband Network that includes one conduit of sufficient capacity reserved for the use of the Government Entity. During this phase, the Applicants will work with the Government Entities to identify the primary anchor sites to be served with the conduit system and a examine existing rights-of-way for potential use in order to speed the construction. The Government Entities will review and



approve final conduit routes from this discovery phase. The Applicants will verify continuity for the conduit path or modify the conduit path to avoid obstacles and obstructions. This task shall validate the proposed route and identify any make ready improvements and costs required to complete each conduit segment. The selected Applicant must furnish an HLD that elucidates construction elements and alternative options, providing insights for budgetary considerations.

As part of this phase, Applicants will be required to provide the following documentation and/or reports with a conceptual design after the discovery phase and the creation of:

- o Stakeholders Interviews, Summary, and analysis
- o Assumptions and Limitations
- o Site assessment reports, including photographs and diagrams
- o Existing Network Infrastructure evaluation reports
- o Technical requirements analysis reports
- o Risk Assessment Reports
- o Preliminary Cost Estimation report
- o Timelines for ROM, HLD, and LLD construction-ready designs

During this phase, the Applicants will be required to present reports and findings to the Government Entities and relevant stakeholders.

- **Design Phase** – During this phase, the Applicants will be tasked with designing a strategic middle mile buried conduit deployment blueprint for the Smart Island Broadband Network. Aerial builds will be considered only in Highly Specialized Circumstances. For purposes of this NOFA, the term Highly Specialized Circumstances means very specific situations that will make impractical or unfeasible the purposes of the Smart Island Broadband Network and/or the Strategic Plan after due consultation with the Government Entities. In adherence to resilience and redundancy principles, the open access conduit system must undergo meticulous strategic planning to optimize advantages along the proposed paths. The primary objective for designing the open access conduit system is to establish hardened pathways that will extend into communities and areas currently lacking access to broadband technologies and infrastructure. This conduit system will be designed with high capacity and availability in mind and include one conduit reserved for Government Entity use. By creating these high-capacity routes, the Government Entities aim to build a multi-duct conduit system, providing multiple pathways to service providers, government agencies, and other third Entities that are otherwise unable to deploy infrastructure in cost prohibitive areas. Additionally, the Government



Entities will construct colocation facilities and other interconnection points to help facilitate interconnection with other providers, reduce last mile and middle mile backhaul costs, and offers opportunities for service providers to build a more resilient and redundant network by building it with other providers and entities on the island. The Smart Island Broadband Network will also connect to three (3) planned and one (1) existing landing stations, allowing for additional interconnection. These landing stations will coincide with an undersea fiber network, which will provide an alternative path to land based terrestrial networks that are prone to tropical storms and other natural hazards. The Smart Island Broadband Network will stimulate economic development, foster connectivity, fortify infrastructure, provide competitively priced enterprise services, expand the reach of fiber into unserved and underserved areas, increase competition, and provide additional resilient options for service providers, government agencies and other third-party organizations involved in delivering broadband on the Island. The design will also require site surveys to determine the status of the proposed anchor or secondary lateral sites and any potential issues they may have. The proposed locations for vaults, hand holes, slack loops, co- location infrastructure, potential aggregation points and other infrastructure necessary for the use and expansion of the network will also be outlined during the design. The expected types of construction, trenching, boring, directional drilling, micro trenching, etc. should be identified as part of the work.

As part of this phase, the Applicant will assume responsibilities for assessing and recommending the following:

- o Formulating an initial tabletop design to determine the most optimal routes between specified endpoints.
- o Conduct field studies to identify special situations, private roads, unusual cable runs, remote parcels, or other potential obstacles that could impact installation costs and schedules.
- o Crafting a final recommended design, including a cost estimate for each span of the proposed network builds.
- o Identifying any necessary third-party approvals or permits, such as conservation, environmental, and historical preservation permits, waivers, and easements.
- o Locating suitable "hut" and distribution hub locations, equipment enclosures, etc.
- o Assisting in the make-ready application process if required.
- o Specifying testing and quality assurance procedures essential to ensuring the completed network performs as designed and that all work meets high standards of quality and workmanship in accordance with industry standards.



- o Prepare comprehensive field construction details to be provided to Phase 2 Construction Sub-Awardee. These details should encompass all specifications, the construction scope of work, and other necessary content for a comprehensive field construction program. This should include, at a minimum:
 - Design and engineering documents suitable for field construction of new construction segments, including industry standard construction staking sheets, with specific attention to details such as handhole and vault frequency, weight load specifications for handhole and vault covers, whether traffic or non-traffic loading, frequency of markers for buried fiber, frequency of interconnect cabinets, and recommendations distinguishing frequency for higher density versus lower density population areas.
- o Propose a division of new construction segments, providing a narrative description of each route. For approved aerial segments, include any make ready work necessary for the work. For buried segments, include an initial soil description and an assessment of areas for plow/trench versus bore, specifically identifying areas where rock is expected.
- o Provide testing, consulting, and advisory services throughout the Phase 2 Construction. The Applicant is responsible for the conduit network through construction and will provide all engineering services necessary for the successful completion of the project.
- o Generate a final detailed map in Geographic Information System (GIS) vector format, clearly illustrating the network's new build and leased sections. This map should be suitable for use by the Phase 2 Construction Sub-Grantee and the Indefeasible Right of Use (IRU) of the existing fiber technical package, and the resulting output, data, and/or results shall exclusively be the property of the Government Entities
- o Identify and describe any additional functions and services necessary or recommended to ensure successful, timely, and responsive construction and provisioning of the Smart Island Broadband Network.
- o Create a comprehensive budget for the build-out covering permitting, obtainment of potential easement, and rights of way, construction costs, connection fees, make ready costs, and other necessary line items necessary to show the full conduit system costs. Additionally, include line-item costs for co-location facilities, data centers and other necessary elements that the Government Entity are responsible for



that are not part of this NOFA, but that are necessary for operation of a fiber optic network

- o Develop options for operational management and maintenance of the system, including ongoing costs for maintenance and operations of the conduit system.
- **Engineering Phase** - Upon completion and approval of the Pre-Construction Planning and Design Phases, the Applicant will generate construction-ready documentation providing running line details, identifying key obstructions and potential issues, and providing construction-level details required by the Government Entities and local permitting. Tasks hereunder will include underground route mapping in Computer-Aided Design (CAD) format with profile views and right-of-way agreements as needed and industry standard staking sheets. In addition, the inventory of any existing ISP or partner-owned conduits should include all vaults, pull boxes, fiber cabinets, conduit occupancy (if applicable), and verification that the conduit is clear of debris or obstruction and usable. The required outcomes for this phase encompass a ROM preliminary cost estimate delineating the costs related to an ideal network design. The culmination of this engagement will involve creating an LLD, a detailed plan ready for construction that incorporates all specifications and associated costs. This LLD will be the foundational document for developing a Bill of Materials and construction elements, which are critical components for the Phase 2 Construction.
- **Project Management Support** – Throughout the Planning, Design and Engineering Phase Applicant will provide a dedicated Project Manager to oversee the design and engineering of the Smart Island Broadband Network and serve as a liaison between the Government Entities and the Applicant as a single point of contact. The Project Manager will provide weekly updates throughout the planning, design and engineering phase of the Smart Island Broadband Network design. The Project Manager will provide all engineering design drawings in electronic GIS compatible and paper form. The paper hardcopy of the network shall be neatly and professionally included in a binder.

1.2. Phase 2 – Construct and Manage

- The construction of the network will require the most planning prior to starting work. The objective of this phase is to plan, permit and construct



the conduit system in accordance with the engineering design documents developed as part of the Phase 1 portion of the NOFA.

- **Planning** – Utilizing the approved engineering plans, The Applicant should familiarize themselves with the conduit route, associated geographic and topographic conditions and objectives of the project. The Applicant should review US Federal, Puerto Rico Territorial and local permitting requirements, reporting requirements and other requirements of the funding source to ensure that compliance is maintained. Applicant should identify the location(s) of their project headquarters and required material and equipment storage yards. Construction operational facilities should not be located in or near any residential areas to reduce impact of the construction activities on local residents. A draft project schedule, final construction budget and expected draw schedule based on the project schedule should be prepared for review by the Government Entities.

The Applicant should provide a plan on how they will ensure compliance with labor and employment practices, as well as that of its subcontractors, including:

- o 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
- o 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.
- o 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.
- o Use of local hire provisions, pursuant to the Government's public policy established in Act No. 42-2018, as amended.
- o Use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure).
- o The Applicant may provide a certification that all laborers and mechanics employed by contractors and subcontractors in the performance of the conduit project are paid wages at rates not less than those prevailing, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act"), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of Puerto Rico. If such certification is not provided, the subgrantee



must provide a Project Employment and Local Impact report detailing:

- The number of employees of contractors and sub-contractors working on the project;
 - The number of employees on the project hired directly and hired through a third party;
 - The wages and benefits of workers on the project by classification;
 - Whether those wages are at rates less than those prevailing (as determined by US Secretary of Labor in accordance with the Davis-Bacon Act.
- o The Applicant may provide a certification that a project includes a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the subgrantee does not provide such a certification, the subgrantee must provide a project workforce continuity plan, detailing:
- How the recipient will ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure high-quality construction throughout the life of the project, including a description of any required professional certifications and/or in-house training;
 - How the recipient will minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the project;
 - How the recipient will provide a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities, including descriptions of safety training, certification, and/or licensure requirements for all relevant workers (e.g., OSHA 10, OSHA 30);
 - Whether workers on the project will receive wages and benefits that will secure an appropriately skilled workforce in the context of the local or regional labor market; and
 - Whether the project has completed a project labor agreement.
- o The Applicant will provide a description of how they plan to comply with the Build American Buy American requirements of the funding source.
- Iron and Steel Products: That all iron and steel products utilized by the subgrantee or any contractors and subcontractors in its proposed project have undergone all manufacturing processes, from the initial melting state through the application of coatings, in the U.S. unless a waiver is granted;



- **Manufactured Products:** That all manufactured products used in its BEAD funded project are manufactured in the U.S. In determining whether a product is produced in America, the subgrantee must comply with the definitions included in Section 70912 of BABA, which provides that a manufactured product is considered produced in the United States if the manufactured product was manufactured in the United States and the cost of the components of the manufactures product that are mined, produced, or manufactured in the United States is greater than 55 percent (55%) of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation;
- **Construction Materials:** For construction materials, the subgrantee and its contractors must certify that construction materials including but not limited to non-ferrous metals; plastic and polymer-based products (including polymers used in fiber optic cables); glass (including optic glass); lumber; and drywall used by the subgrantee and any contractors and subcontractors have undergone all manufacturing processes domestically;
- In addition to the provisions above, the subgrantee may not use BEAD funding to purchase or support any covered telecommunications equipment or service, as defined in Section 9 of the Secure and Trusted Communications Network Act of 2019 (47 U.S.C. § 1608); and
- The IJJA expressly prohibits the subgrantee from using BEAD funding to purchase or support fiber optic cable and optical transmission equipment manufactured in the People's Republic of China unless a waiver of this requirement is received from the Assistant Secretary of Commerce for Communications and Information.

As part of this phase, the Applicant will be required to provide the following documentation and/or reports:

- o Comprehensive list of all permitting required for the project
- o Project schedule including phasing
- o Final Construction Budget
- o Funding draw schedule based on anticipated work progress



- o Plan on how they will ensure compliance with labor and employment practices for their workforce and that of any subcontractors.
- o Description of how the Build American Buy American provisions will be complied with.
- **Execution of Construction Operations** – The Applicant is responsible for the proper management of the construction project. The Government of Puerto Rico assumes no responsibility for the construction management of the project. Utilizing the approved engineering plans and project schedule, the Applicant should ensure the receipt of any required permits including NEPA and Section 106 permit and any other required Environmental and Historic Preservation (EHP) permits. Some permitting may be obtained in alignment with the phasing schedule. The Applicant is responsible for obtaining all permits in a timely manner to ensure that construction activities remain on schedule. The Applicant is responsible for compliance with all applicable Government and Industrial Standards including OSHA standards. Once ensuring that all required permits are in place, the Applicant will begin construction based on the schedule submitted to the Government Entities.
 - o Any variance from the submitted schedule must be communicated to the Government Entities. A quarterly schedule update must be submitted to the Government Entities overseeing the project. The schedule update should show completed work and adjustments for non-completed work. If the schedule update shows a delay of more than three months in the completion of the project based on the original schedule, a plan for resolving the delay must be submitted.
 - o All construction work will be completed in accordance with the approved engineering design. Deviation from the design must be approved by the engineer and Government Entity. Deviation from the design is defined as a significant change in the location of conduit placement such as from one side of a road to another, rerouting the approved conduit location, change in depth of the conduit and other similar changes to the approved engineering design. All changes should be properly noted on redline construction documents, a full copy of which will be delivered to the Government Entity at the end of the project. Final as-built drawings will be submitted by the Applicant at the end of the project. As-built drawings will be submitted with any reimbursement requests submitted by the Applicant as verification of completed work.
 - o Documentation of testing must be maintained. Testing in



accordance with the engineering requirements must be completed and the results recorded. All required testing results must be submitted with any reimbursement requests submitted by the Applicant.

- o The Applicant is responsible for proper jobsite safety for its workers and the general public. No open trenches or other construction hazards without proper security and safety barriers in place will be permitted. The Applicant must comply with all applicable safety and security laws and best practices.
- o Restoration of the project area must be completed on pace with the construction. Areas with completed construction must be restored within 30 days of construction completion.
- **Quality Assurance** - The performance of the contractor and the quality of work delivered shall be subject to review. Review shall be accomplished by the Government Entity or their representatives who shall be permitted to review or observe work at all reasonable hours. Review by the Government Entity does not relieve the contractor of any responsibility of failure to meet contract requirements which may be disclosed prior to final acceptance.
- **Project Management Support** – Throughout the Construction Phase the Applicant will provide a dedicated Project Manager to manage the construction of the Smart Island Broadband Network and serve as a single point of contact between the Government Entities and the Applicant. The Project Manager will provide weekly updates throughout the construction phase of the Smart Island Broadband Network. Weekly updates should include any upcoming risk issues that require mitigation.

1.3. Phase 3 – Operation and Maintenance

- The operation and maintenance will be instrumental in the success of the Smart Island Broadband Network. Above all, the conduit system must be operated in a neutral manner where all parties are dealt with fairly and operations are carried out in a transparent manner. Pricing must be set at a fair and competitive level, and price increases must be set using a fair formula and criteria with review and recommendations by NET. All pricing must be set after discussions with stake-holders and NET and be in alignment with the objectives set forth in the PRBP 5 year Action Plan and the Initial Proposal Volume 2 as approved by the U.S. Department of Commerce, National Telecommunications and Information



Administration While this is not a not-for-profit venture, the conduit system is being funded using taxpayer dollars to overcome a need that of the population. The Applicant will be responsible for all operations and management of the network, including, but not limited to, negotiating usage contracts, billing, marketing availability, and ongoing maintenance and repairs of the network, including documentation of any changes in the network, for a period of not less than 10 years. Annual reports, including financial audits, income statements, balance sheets, and cash flow statements, should be provided to the Government Entity for review.

- **Operations** - Operations includes the general operation of the business that includes leasing of the conduit system for fee to ISP's and other fiber optic providing companies, including back-haul and service providing companies. Operations should be conducted in such a way that the conduit system is sustainable, with ongoing costs accounted for and future costs planned. The Applicant should establish a management team that is responsible for the operation of the business, including:
 - o Customer Interaction
 - o Sales and Marketing
 - o Client Relationship Management
 - o Order Processing, including the rapid response to the conduit system users to ensure rapid broadband deployment.
 - o Reception and Administrative Support
 - o Administrative Support
 - o Finance and Accounting
 - o Human Resources Support
 - o IT and Technical Support
 - o Operations Management, including logistics, supply chain management, and inventory control

As part of this phase, the Applicant will be required to provide the following documentation and/or reports on an annual basis:

- o Order receipts
- o Audits, finance, and accounting reports
- o Documentation demonstrating adherence to DARBA
- o Documentation demonstrating adherence to BABA
- o Documentation demonstrating ongoing CISA compliance



- o Documentation demonstrating ongoing OSHA and Safety compliance, including a log of events
- **Maintenance** - The Applicant should create a maintenance procedures document that includes regular inspections, proper sealing to prevent water infiltration, debris removal from vaults, handholds, and empty conduit, and documentation of conduit usage and other necessary items.
 - o Maintenance should be considered routine matters that are planned for and conducted on a day-to-day basis. Only emergency repairs should be considered special events requiring extraordinary measures to correct.
 - o The Applicant shall provide a plan for future maintenance and system upgrades to ensure operational ability.

As part of the maintenance phase, the Applicant will be required to provide the following documentation and/or reports on an annual basis:

- o Maintenance logs, including emergency repairs and timing
- o System upgrades and planned future maintenance
- o Planned downtime and communication with stakeholders



Appendix 2. Funding Conditions

The Government Parties anticipate that some or all of the costs incurred under the contract that could be awarded pursuant to this NOFA could be funded, partially and/or in whole, with federal funds. Consequently, any contract executed in relation to this NOFA shall be governed by certain federal terms and conditions for federal grants, including any applicable circulars issued by the US Government's Office of Management and Budget (US-OMB).

Moreover, in the event any federal funding is used in the contract that could be awarded pursuant to this NOFA, this procurement process is intended to be conducted in accordance with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, as codified under 2 C.F.R. Part 200, et seq., issued by the US-OMB pursuant to the authority granted under 31 U.S.C. 503 (Federal Uniform Administrative Requirements), which outlines the methods of procurement to be followed by non-federal entities, among other things.

Furthermore, said potential contract shall be also governed by any specific terms and conditions set forth by the awarding federal agency(ies). Below is a representative list of the applicable federal terms and provisions. A final list will be included in the Award Agreement presented to the selected Applicant. Respondent shall describe experience in dealing with these and any other applicable provisions and requirements and affirmatively certify that Respondent shall comply, collectively, the "Federal Fund Requirements":

- Regulations and/or guidance issued by the US Government regarding the Infrastructure Act; the Families First Coronavirus Response Act of 2020 (Pub. L. 116-127); the Coronavirus Aid, Relief, and Economic Security Act of 2020 (Pub. L. 116-260); relevant disposition of the Consolidated Appropriations Act of 2021 (Pub. L. 116-260); and/or the American Rescue Plan Act of 2021 (Pub. L. 117-2).
- Rights to Inventions Made by Non-Profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements, 37 C.F.R. Part 401.
- Prohibitions on Certain Telecommunications and Video Surveillance Services or Equipment, as codified under 2 C.F.R. Sec. 200.216.
- Build America Buy America Act, as established by the Infrastructure Act, amended through Pub. L. 117-328, and incidental regulations, including



but not limited to 2 C.F.R. Part 184.

- Domestic Preference for Procurements, 2 C.F.R. Sec. 200.332.
- Equal Employment Opportunity requirements, including, but not limited to, those levied in the Equal Pay Act of 1963, the Civil Right Act of 1964, the Age Discrimination in Employment Act of 1967, the Equal Employment Opportunity Act of 1972, the American with Disabilities Act of 1990, and/or the Civil Rights Act of 1991.
- Contract Work Hours and Safety Standards, 40 U.S.C. 3701, et seq.
- Access to Records, 2 C.F.R. Sec. 200.337.
- Retention Requirements for Records, 2 C.F.R. Sec. 200.334.
- Clean Water Act of 1972, Pub. L. 92-500, as amended.
- Clean Air Act of 1963, Pub. L. 88-206, as amended.
- Environmental and Historic Preservation processes (“EHP”), as established, reviewed, amended and/or modified by the US Government and/or the US Department of Commerce from time to time.
- Comprehensive Environmental Response Compensation, and Liability Act of 1980, Pub. L. 96-510.
- Endangered Species Act of 1973, Pub. L. 93-205.
- Marine Protection, Research, and Sanctuaries Act of 1972, Pub. L. 92-532.
- National Environmental Policy Act of 1970, Pub. L. 91-190.
- Resource Conservation and Recovery Act of 1976, Pub. L. 94-580.
- Contracting with Small and Minority Business, Women’s Business Enterprises, and Labor Surplus Area Firms, 2 C.F.R. Sec. 200.321.
- Byrd Anti-Lobbying Amendment, 31 U.S.C. Sec. 1352, as amended.
- The Federal Uniform Administrative Requirements.
- Davis Bacon Act, 40 U.S.C. Sec. 3141, et seq., as amended.
- Copeland Anti-Kickback Act, 40 U.S.C. Sec. 3145, as amended.
- Executive Order No. 12549 of 1986, Debarment and Suspension; and Executive Order No. 12689 of 1989, Debarment and Suspension (codified at 2 C.F.R. Part 180, and 2 C.F.R. Part 3000).
- US Treasury’s Supplemental Guidance concerning the administration of funding for broadband projects, including, but not limited to, the SLFRF and CPF Supplementary Broadband Guidance issued on May 17, 2023, as they may be amended from time to time.
- Guidance is provided at NTIA’s Internet for All, Frequently Asked Questions, and BEAD Program, as amended from time to time.
- FCC’s Letter of Credit Requirements and/or consistent with 47 C.F.R. Sec. 58.804(c)(2).
FCC’s Ownership Disclosure Requirements for Applications, as codified in 47C.F.R. Sec. 1.2112(a)(1)-(7).



By submitting their respective applications, respondents acknowledge, agree, and guarantee the Government Parties strict observance and compliance with the Federal Fund Requirements, to the extent applicable.



Attachment A – Experience Template

This template is referenced in **Section 7 Proposal Submission** of the NOFA.

Provide information on similar projects or engagements carried out by your firm related to the Scope of Works of this NOFA.

If you believe additional information on projects is desirable, please attach further information.

Representative Project 1:

Project Name: _____

Project Address: _____

Public Entity Name: _____

Public Entity Address: _____

Public Entity Phone: _____ Public Entity Fax: _____

Public Entity Email: _____

Describe key lessons learned:

Representative Project 2:

Project Name: _____

Project Address: _____

Public Entity Name: _____

Public Entity Address: _____

Public Entity Phone: _____ Public Entity Fax: _____

Public Entity Email: _____

Describe key lessons learned:



Representative Project 3:

Project Name: _____

Project Address: _____

Public Entity Name: _____

Public Entity Address: _____

Public Entity Phone: _____ Public Entity Fax: _____

Public Entity Email: _____

Describe key lessons learned:



Attachment B – Non-Collusion Affidavit

NON-COLLUSION AFFIDAVIT

I, _____, of legal age and resident of _____, certify for myself and for my organization _____, under oath and subject to the consequences and penalties or perjury, that to the best of my knowledge and belief:

- i. The fees presented in this proposal have been arrived at independently without collusion, consultation, communication, or agreement with any other proponent or with any competitor for the purpose of restricting competition.
- ii. No attempt has been made or will be made by myself or any member of my organization or associates to induce any other person or organization to submit or not to submit a proposal for the Project, or otherwise take any action in restraint of free competitive proposals for the Project.

Proponent Contact
Signature

Proponent Contact Name and Title

AFFIDAVIT NO. _____

Sworn and subscribed before me by _____, of the personal circumstances set forth above, personally known to me, in _____, Puerto Rico, on this _____ day of _____, 202____.

Notary
Public

Note: Providing false information may result in immediate disqualification of proponent criminal prosecution or administrative sanctions.



Attachment C – Eligibility Affidavit

ELIGIBILITY AFFIDAVIT

I, _____ (Proponent Contact), of legal age, civil status: _____, profession: _____ and a resident of _____ (City, State), in my capacity as _____ (officer) of _____ (the “Proponent”), do hereby certify under penalty of perjury, that, except as noted below, the Proponent and Proponent’s owners, shareholders, partners, directors, officers, principals and managers (“Proponent’s Related Parties”):

- a. are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any state or federal court of agency;
- b. have not been suspended, debarred, voluntarily excluded or determined ineligible by any state or federal court or agency within the past three (3) years;
- c. do not have a proposed debarment pending;
- d. will not use any subcontractors who are so debarred;
- e. have not been convicted or plead guilty in federal or state court, for the commission of misappropriation; extortion; construction fraud; fraud in the delivery of goods; undue intervention in public procurement processes; bribery; offer to bribe; undue influence; crimes against public funds; or preparation, presentation, possession or transfer of forged documents. The prohibition set forth herein shall also apply to convictions for other crimes equivalent to those of the above stated crimes;
- f. are not under investigation in federal, state, foreign or local jurisdictions, at any legislative, judicial or administrative level for the alleged commission of the abovementioned crimes; and
- g. I am a duly authorized representative of the Proponent and the Proponent Related Parties, with knowledge and authority to execute this sworn statement. Exceptions to the above are set forth in an attachment to this Appendix II, providing the name of the initiating agency, number of the complaint, names of all parties and dates of action.

Proponent Contact Signature



Proponent Contact
Name and Title

AFFIDAVIT NO. _____

Sworn and subscribed before me by _____, of the
personal circumstances set forth above, personally known to me, in , Puerto
Rico, on this

____ day of _____, 202____.

Notary Public

*Note: Providing false information may result in immediate disqualification of Proponent
criminal prosecution or administrative sanctions*