



**REQUEST FOR PROPOSAL**  
**for**  
**Navajo Nation Broadband Office**  
**High Speed Data Services**  
**Utah Locations Only**  
**Chapter Houses/Libraries**

<b>Timeline</b>	<b>Date</b>
Issue RFP	February 13, 2023
<b>Submission of Proposal Deadline</b>	<b>March 13, 2023</b>
Contract Award	March 24, 2023
<b>File 471 Deadline</b>	<b>March 24, 2023</b>

**RFP# 23-02-2944TT**

## Scope of Services

The Navajo Nation Broadband Office is requesting proposals for high speed data circuits and Internet Access to the community libraries located in the chapter houses listed below in this RFP provided over third-party networks for delivery of wide area network (WAN) services to the eligible entities. Services over third-party networks includes consideration for comparable leased lit fiber, leased dark fiber, IRU and any other type of technology neutral, point-to-point broadband service delivered over a service provider other third-party owned network. The current Internet services are provided by various providers under different speeds but enhanced services are now required to support rapidly growing bandwidth needs and to meet the Navajo Nation and State Education Technology Directors Association standard recognized in the FCC Second E-rate Modernization order as the benchmark standard for bandwidth for school districts and to meet the American Library Association's recommendation that all libraries that serve fewer than 50,000 people have broadband speeds of at least 100 Mbps. See the list below of sites who are participating in this bid:

Chapter	Chapter Houses/Libraries	
	Latitude	Longitude
Aneth	37 12'53.60" N	109 11'0.78"W
Red Mesa	37 3,53.41"N	110 18"50.88"W

RFP response will include any/all costs associated with switching services from our present supplier(s). Bidder's presentation of a bid response is as acknowledgement of this requirement.

The new service is being planned to begin on July 1, 2023. If the Service Provider cannot install the service by July 1, 2023, they MUST provide a construction schedule and timeline with their bid.

The Navajo Nation Broadband Office is seeking multiple options for bids. Respondents may bid one, all, or any number of options. **Because the geographic area is so large and remote, it is anticipated that multiple Service Providers may choose to bid as few as only a couple of the sites or as many**

**as all of the locations listed in this RFP. But, each site must be bid separately and contracts will be issued by each location or group of locations as there may be multiple agencies or departments who are participating in this RFP who will need to sign their own contracts with their Service Provider(s). Failure to bid each location separately will cause those Service Provider(s) to be deemed non-responsive.** If there is a cost savings to “bundle” some of the sites together or of the Service Provider can make a case to reduce the price the cost of installation by “bundling” those sites, they can provide alternate pricing for such sites. All respondents must be capable of providing telecommunication services under the Universal Service Support Mechanism, be a registered vendor with USAC, and have a USAC issued 498 ID (formerly Service Provider Identification Number-SPIN).

1. The first option is a fully managed, leased lit fiber solution. One-time special construction should be bid separately from the monthly recurring cost for the fully managed leased service.
2. The second option is a leased dark fiber solution that includes special construction, the monthly lease fee, and maintenance. One-time special construction costs should be bid separately from the monthly lease fee. Maintenance fees can be included in the monthly lease fee.
3. The third option is a leased dark fiber (IRU) solution that includes special construction, the IRU fee, and fiber maintenance. One-time special construction costs should be bid separately from the IRU fee. Monthly maintenance fees should be bid separately from the IRU fee.
4. The fourth option is for services delivered over third-party networks. This service option is to represent any technology neutral third-party transport mediums including both fiber and non-fiber options. The service is a fully managed service, with the service provider supplying the equipment, provisioning the bandwidth and providing technical support/management of the service. One-time special construction should be bid separately from the monthly recurring cost for the fully managed leased service. While the bandwidth and service requirements are the same as leased lit fiber, this request is technology neutral and can include non-fiber solutions.
5. The fifth option is for self-provisioned (applicant owned) fiber to the designated locations and includes all eligible special construction charges. Maintenance should be bid separately from the special construction charges for the self-provisioned fiber.
6. For any leased dark fiber, leased dark fiber (IRU), and self-provisioned solutions, we also require necessary network equipment, installation, and operations support to place fiber into service. Equipment should be bid separately from any fiber services.

The Navajo Nation Broadband Office will consider traditional network designs (such as hub and spoke) or alternative proposals that, in accordance with E-rate guidance, maximize cost effectiveness. Respondents should clearly illustrate proposed network design and construction routes. While there is a preference for a 100% fiber-based solution, the Navajo Nation Broadband Office is not advocating or mandating any preconceived network design or construction route and leaves this decision up to the vendor to present their best solution while recognizing the cited termination locations.

In E-rate terminology, **special construction** refers to the upfront, non-recurring costs associated with the installation of new fiber to or between eligible entities. If no new fiber is being installed, then any installation costs are considered standard **non-recurring costs (NRC)**. Applicants may seek funding for special construction charges in connection with leased lit fiber, leased dark fiber, and self-provisioning. Special construction charges eligible for Category One support consist of three components:

1. construction of network facilities
2. design and engineering
3. project management

Note: The term “special construction” does not include network equipment necessary to light fiber, nor the services necessary to maintain the fiber. Charges for network equipment and fiber maintenance are eligible for Category One support as separate services, but not as special construction.

All options can include special construction or one-time E-rate eligible non-recurring costs as well as E-rate eligible recurring circuit costs. To the extent that the winning service provider installs additional strands of fiber for future business ventures, the winning service provider assumes full responsibility to ensure those incremental costs are allocated out of the special construction charges to the school, library, or consortium in accordance with FCC rules and orders. If, after the issuance of the FCDL, USAC or the FCC determines that the winning service provider did not cost allocate those charges associated with the additional strands, the Navajo Nation Broadband Office will not be responsible for reimbursing the winning vendor and the winning vendor will assume all responsibilities deemed ineligible by USAC.

Based on the bids and both a short term and long-term cost effectiveness analysis, The Navajo Nation Broadband Office will determine which, if any, of the proposed solutions or some combination of solutions is acceptable. The specifications related to each solution option are as follows.

### **Leased Lit Fiber or Services Provided Over Third-Party Networks**

The Navajo Nation Broadband Office must have dedicated, symmetrical transport bandwidth of 100 Mbps initially with Service Level Agreement (SLA) guarantees between the designated endpoints. The solution must be scalable to 10 Gbps. Price quotes are requested for 12 month and 36 month terms of service. Each respondent is required to complete the leased lit fiber / Services Provided Over Third-Party Networks pricing matrix located in Appendix A of this RFP. If special construction is necessary, respondents are **required** to separate out pricing in Appendix B: Special Construction Pricing. *Right-of-way costs to trespass tribal land must be included, if necessary.* No increased pricing will be allowed during the term of the quoted special construction, NRC, and MRC rate in each pricing cell of the matrix. If an increase in bandwidth is requested during the contract period the contract does not renew. As bandwidth needs are steadily rising, respondents are free to bid higher tiers of bandwidth than what is requested to demonstrate their future scalability.

### **Leased Dark Fiber Solutions**

Leased dark fiber solutions should be for a lease of up to four (4) strands (2 pair)] of single-mode fiber from the hub to each eligible entity location for 36 month, 60 month, or 120 months of service depending on cost effectiveness. Each respondent is required to complete the leased dark fiber pricing matrix located in Appendix A of this RFP. If special construction is necessary, respondents are required to separate out pricing in Appendix B: Special Construction Pricing.

### **Leased Dark Fiber (IRU) Solutions**

Indefeasible right to use (IRU) solutions should be a 20-year price for up to four (4) strands (2 pair) of single-mode fiber between the specified hub and each eligible entity location. The Navajo Nation Broadband Office is interested in IRU-type pricing with a one-time capital cost payment for the IRU combined with “all-in” recurring payments for maintenance costs for the entire length of the IRU. Each respondent is required to complete the Leased Dark Fiber (IRU) pricing matrix located in Appendix A of this RFP for each site. If special construction is necessary, respondents are **required** to separate out pricing in Appendix B: Special Construction Pricing and the Navajo Nation Broadband Office expects significant reductions from prevailing market rates for the IRU fee and annual maintenance charges.

### **Self-Provisioned Fiber Construction**

As an alternative, the Navajo Nation Broadband Office requests that respondents propose design and pricing for a self-provisioned build of new fiber between the specified hub and each eligible entity location. We are requesting that up to twelve (12) strands (6 pair] be built to each eligible entity location and we intend to light up to two (2) strands (1 pair) to each site in the first year. Cost effectiveness will

be evaluated between purchasing a custom cable size vs. standard cable sizes. In accordance with USAC rules, the cost of any strands not lit during the funding year must be allocated out as ineligible charges. The Navajo Nation Broadband Office desires a fully “turn-key” project so respondents should provide explanation for the Navajo Nation Broadband Office’s involvement in the process including ownership and sourcing of permits, etc. When submitting a self-provisioned proposal, the respondent is required to complete the pricing matrix located in Appendix B of this RFP. For each site the solution should include all costs related to the deployment of the proposed circuit.

*Self-Provisioned Fiber Construction Specifications & Project Management:*

- The Navajo Nation Broadband Office specifications for a newly constructed fiber infrastructure are contained in Appendix D: OSP Installation Specifications.
- Selected respondent and its subcontractors will provide all project management to accomplish the installation of all project work as outlined in Appendix D.
- Project management should include all necessary paperwork and permits including but not limited to rights of way, easements, and pole attachments.
- The respondent will provide engineer(s), certified on selected fiber system specifications and procedures to manage all phases of project as outlined in this proposal. This includes ordering and managing the bill of materials as outlined in Appendix D, directing and managing cable placement and restoration, directing and managing splicing crews and providing detailed documentation at the end of the project.
- Selected respondent and its subcontractors will develop a project management plan, which will include a milestone chart. The milestone chart will outline any critical path events and then track these with the appropriate agency/organization whether; selected respondent, subcontractor or the Navajo Nation Broadband Office and a construction timeline for each site.

**Maintenance for Leased Dark Fiber, IRU or Self-Provisioned Fiber Projects**

The Navajo Nation Broadband Office requires on-going maintenance of the fiber on all leased dark fiber, leased dark fiber (IRU), or self-provisioned fiber solutions. Respondent may offer maintenance services either themselves or through 3<sup>rd</sup> party subcontractors. If respondent intends to use 3<sup>rd</sup> party subcontractors to deliver a part or all of the service, this should be clearly indicated in the response. Maintenance responses are required as follows:

*Leased Dark Fiber & IRU Maintenance*

All dark fiber responses (lease and IRU) require maintenance as part of the response, even if maintenance is subcontracted out to a third party. In the case of the 3<sup>rd</sup> party maintenance, the respondent must hold and manage the subcontract

and is ultimately responsible for the SLA. It is assumed that the dark fiber network is part of a more comprehensive fiber infrastructure of the service provider. The respondent will include only the portion of maintenance that is required to support the Navajo Nation Broadband Office fiber segments versus overall network maintenance. If the fiber serves multiple customers, the cost of maintenance should be shared among all the recipients.

- For leased dark fiber, it is assumed that maintenance costs are included in the monthly lease fee.
- For a leased dark fiber (IRU):
  - The fiber owner (not the Navajo Nation Broadband Office) must claim responsibility for repairs in the event of a catastrophic cut or relocate.
  - Describe the process for relocates including assumption of costs.
  - If maintenance cannot be quoted for entire time span of the IRU, please include alternate time span quote as well as explanation for the shorter time span.

#### *Self-Provisioned Fiber Maintenance*

Self-provisioned fiber construction responses are not required to include a maintenance response. Maintenance on self-provisioned fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service. Please note that respondents submitting a self-provisioned fiber proposal may also bid on maintenance services provided they bid it separately and do not bundle maintenance costs with their fiber proposal. Price quotes are requested for 36 month and 60 month terms of service. Respondents are required to fill out the Self-Provisioned Fiber Maintenance pricing matrix located in Appendix A of this RFP. Responses for maintenance on self-provisioned fiber must include scheduled routine maintenance as a monthly or annual cost as well as unscheduled break/fix maintenance as an annual time and material cost estimate. Explanation of how the annual scheduled and unscheduled maintenance was estimated should be included.

#### *Maintenance Terms and Conditions*

Respondent shall maintain the applicable fiber seven days per week, twenty-four hours per day. Upon notification from the headstart, library, or consortium of a malfunction relating to the applicable fiber, respondent shall respond to such malfunction within two (2) hours and thereafter proceed to correct the malfunction with reasonable diligence. When pricing maintenance, the respondent should include an overview of maintenance practices including:

- Routine maintenance and inspection
- Scheduled maintenance windows and scheduling practices for planned outages
- Marker and handhole inspection and repair
- Handling of unscheduled outages and customer problem reports

- What service level agreement is included and what alternative service levels may be available at additional cost
- What agreements are in place with applicable utilities and utility contractors for emergency restoration
- Repair of fiber breaks
- Mean time to repair
- Replacement of damaged fiber
- Post repair testing
- Replacement of fiber that no longer meets specifications
- Policies for customer notification regarding maintenance
- Process for changing procedures, including customer notification practices
- Process for moves, adds, and changes
- Process for responding to locate requests

### **Network Equipment for Leased Dark Fiber, IRU, or Self-Provisioned Fiber Projects**

The Navajo Nation Broadband Office is also seeking bids for necessary network equipment to place circuits into service at 10Gbps once leased dark fiber, leased dark fiber (IRU), or self-provisioned fiber is available. Network equipment should be capable of support optical transport over significant distance. Pricing information, as well as manufacturer and model, should be included in Equipment pricing matrix of Appendix A. Network equipment for leased dark fiber, leased dark fiber (IRU) and self-provisioned fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service. Please note that respondents submitting a fiber proposal may also bid on equipment provided they bid them separately and do not bundle equipment costs with their fiber proposal.

**CONTACT INFORMATION.** Each Party shall provide the other Party with the names and telephone numbers of at least three (3) agents or representatives, in the order that the other Party shall attempt to contact them to perform Unscheduled Maintenance and to report and seek initial redress of exceptions noted in the performance in meeting maintenance requirements, attached as Exhibit B, and such list of contact persons may be updated from time to time by the applicable Party. A Party shall notify the applicable representatives or agents listed on Exhibit B as soon as reasonably possible following discovery of an Unscheduled Maintenance duty hereunder.

**WARRANTY OF SERVICES.** (maintenance vendor) warrants that: (i) it is in the business of providing the Maintenance Services described herein, and is able to perform the work in accordance with industry standards and will perform the agreed assignments within such times and in the form agreed to herein; (ii) its representatives (including without limitation employees, contractors, or subcontractors) who access the Applicant Fiber, Cable, Access Points, or other



property, shall be qualified to perform all work in accordance with applicable requirements of local, state and federal occupational safety and health laws and prevailing industry standards; and (iii) Maintenance Services performed by a (maintenance vendor) or its agents, employees or contractors shall be performed in a good and workmanlike manner, using good engineering practices, in accordance with applicable Law and shall be performed so as to maintain the Applicant Fiber, Cable, Access Points, and splicing related thereto in accordance with the Fiber Specifications set forth in the Dark Fiber IRU Agreement or to a higher standard. (maintenance vendor) shall have the sole power to arrange and shall arrange in its reasonable discretion for testing, inspection, maintenance, and repair of the Applicant Fiber, Cable and Access Points and splicing related thereto in accordance with industry standards, the Fiber Specifications, applicable Law, and this Agreement. Except as provided in and in accordance with Section (X), neither Applicant nor its agents shall rearrange, move, disconnect, remove, maintain, repair, or attempt to rearrange, move, disconnect, remove, maintain, or repair the Applicant Fiber, Cable, or Access Points except with the prior written consent of (maintenance vendor).

**FAILURE TO PROVIDE MAINTENANCE SERVICES.** If at any time during the term of an IRU applicable to the Applicant Fiber, the Parties fail to renew this Agreement, or (maintenance vendor) fails to provide Maintenance Services to Applicant as required hereunder, Applicant shall have a right of access to the Applicant Fiber, Cable and Access Points, itself or by its qualified contractors, for the purpose of performing such services on its own behalf. In such instances, Applicant's right of access under this Section 7 is conditioned upon it giving written notice of its intention to access the Applicant Fiber no less than ten (10) days prior to such event, except in cases of emergency, in which case the written notice shall be required to be given in the maximum amount of time that is reasonable under the circumstances. If (maintenance vendor) fails to provide Maintenance Services during a Maintenance Term or Renewal Term for which Applicant has paid the Annual Maintenance Charge, upon invoice by Applicant, (maintenance vendor) shall promptly reimburse Applicant for its costs of performing Scheduled Maintenance, and to the extent this Agreement is terminated, shall reimburse such portion of the Annual Maintenance Charge as provided in Section (X).

No bid will be accepted from or a contract awarded to a bidder:

- 1) Who is not licensed in accordance with the law.
- 2) Who does not hold a license qualifying them to perform work under this contract in the state of New Mexico.
- 2) Who does not hold a valid Service Provider Identification Number (SPIN) and is in good standing with the FCC/USAC.

3) Who has not successfully performed on projects of similar character and scope to the proposed work.

**Service “Growth Clause”** – Growth Services may or may not be requested by the Owner during the contract term. The bidder shall include a “growth clause” with maximum charges per month in their contract. The “growth clause” shall not require a change in contract terms. The “growth clause” shall include a price for all existing service types plus any additional services of the same type /speed and bandwidths of 100Mbps, 200Mbps, 500Mbps and 1Gig.

### **Procurement Point-of-Contact**

The Navajo Nation Broadband Office has assigned a Point-of-Contact who is responsible for the conduct of this procurement whose name, address, telephone number and e-mail address are listed below:

**ISSUING OFFICE:** This Request for Proposal (RFP) is issued by the Navajo Nation Broadband Office (NNBO), Navajo Nation, 1575E State Highway 264, Tse Bonito, New Mexico. The contact person for this RFP is Ms. Sonia Nez, Department Manager, NNBO.

If Service Providers have any questions or inquiries regarding this RFP, those inquiries shall be directed to Sonia Nez

1. **Submission of Proposal:** ALL RESPONDENT PROPOSALS MUST BE RECEIVED FOR REVIEW AND EVALUATION BY THE POINT-OF-CONTACT NO LATER THAN **3 PM** MOUNTAIN DATE TIME (MST) ON **March 13, 2023 delivered** to Sonia Nez at the Navajo Nation Broadband Office (NNBO), Navajo Nation, 1575E State Highway 264, Tse Bonito, New Mexico. Proposals received after this deadline will not be accepted. The date and time of receipt will be recorded on each proposal.

Cost: In a separate sealed envelope to be included in the proposal envelope, please identify the total cost for completing the project. The outside of the envelope should be clearly marked - “COST – RFP # 23-02-2944TT **High Speed Data Services - Utah Locations Only - Chapter Houses/Libraries** and the name and address of the firm submitting the proposal: Visibly mark “Priority 1” or “Priority 2” on the outside of the proposal package, if applicable, the offeror’s priority status under the Navajo Nation Business Opportunity Act.

The deadline for all questions regarding this RFP will be on **March 3, 2023** at 3:00 PM MST. All questions will be answered in addendum(s) sent out to all Service Providers. Any and all updated project information, forms, including addenda, will be distributed through the project website, located at <https://www.nnooc.org/RFPs-Advertisements.html> & <https://portal.usac.org/suite/>.

Site Conditions: It will be the responsibility of the bidder to become informed of all conditions under which work is to be done before submitting proposals. No additional costs will be incurred by the Owner or considerations given to any claims based on a lack of knowledge of existing conditions. The submission of a bid from the bidder is an acknowledgement to this stipulation.

### Sequence of Events

The Point-of-Contact will make every effort to adhere to the following schedule:

<b>Timeline</b>	<b>Responsible Party</b>	<b>Date</b>
Issue RFP	Navajo Nation Broadband Office	February 13, 2023
<b>Submission of Proposal Deadline</b>	<b>Respondents</b>	<b>March 13, 2023</b>
Contract Award	Navajo Nation Broadband Office & Schools	March 24, 2023
<b>File 471 Deadline</b>	Navajo Nation Broadband Office & Schools	<b>March 28, 2023</b>

### Explanation of Events

The following paragraphs describe the activities listed in the sequence of events above.

2. **Issuance of RFP:** This RFP is being issued on behalf of the Navajo Nation Broadband Office on February 13, 2023.
3. **Submission of Proposal:** ALL RESPONDENT PROPOSALS MUST BE RECEIVED FOR REVIEW AND EVALUATION BY THE POINT-OF-CONTACT NO LATER THAN **3 PM** MOUNTAIN DATE TIME (MST) ON **March 13, 2023 delivered** to Sonia Nez at the Navajo Nation Broadband

Office (NNBO), Navajo Nation, 1575E State Highway 264, Tse Bonito, New Mexico. Proposals received after this deadline will not be accepted. The date and time of receipt will be recorded on each proposal.

Cost: In a separate sealed envelope to be included in the proposal envelope, please identify the total cost for completing the project. The outside of the envelope should be clearly marked - "COST – RFP # 23-02-2944TT NNBO **High Speed Data Services - Utah Locations Only - Chapter Houses/Libraries** and the name and address of the firm submitting the proposal: Visibly mark "Priority 1" or "Priority 2" on the outside of the proposal package, if applicable, the offeror's priority status under the Navajo Nation Business Opportunity Act.

The Navajo Nation is not bound to enter a contract under the RFP or RSQ and may issue a subsequent RFP or RSQ for the same services; and ; the Navajo Nation is a sovereign government and all contracts entered into as a result for the RFP or RSQ shall comply with the Navajo Nation law, rules and regulations, including the Navajo Preference in Employment Act, and applicable federal law, rules, and regulations.

Proposals must be addressed and delivered to the Point-of-Contact at the address listed. Proposals must be sealed and labeled on the outside of the package to clearly indicate that they are in response to the Navajo Nation Broadband Office. Proposals submitted by facsimile, or other electronic means will not be accepted. The negotiation process is deemed to be in effect until the contract is awarded pursuant to this Request for Proposal. Awarded in this context means the final required Navajo Nation Broadband Office, or designee signature on the contract(s) resulting from the procurement has been obtained. **Contract Awards:** Prior to contract formation under subsection below, the Business Regulatory Department shall certify that the Navajo Nation Business Opportunity Act was adhered to in the solicitation and award.

4. After review of the Evaluation Committee and the signed contractual agreement(s), the Point-of-Contact will award as per the schedule in the Sequence of Events or as soon as possible thereafter. This date is subject to change at the discretion of the Point-of-Contact.

The contract(s) shall be awarded to the Respondent (or Respondents) whose proposals are most advantageous to the Navajo Nation Broadband Office taking into consideration the evaluation factors set forth in this RFP. The most advantageous proposal may or may not have received the most points.

The Procuring Party shall issue a Notice of Intent to Award within 5 business days of the bid opening, unless the Procuring Party determines, and gives notice, that a larger review time is necessary. The Procuring Party shall give notice of a time extension to each offeror by posting it at the location announced at the offer opening.

After the project is awarded and funded by USAC and verification is received that USAC has funded the amount requested by the Nation the procuring party shall develop a written contract covering the procurement of services identified in the RFP.

- 4. E-Rate Filing:** Once the contract has been negotiated and signed, the E-Rate Form 471 form(s) will be completed before the March 28, 2023 deadline for the of E-Rate filing window.

## **General Conditions**

### **1. Demarcation:**

All solutions whether leased lit fiber, leased dark fiber, leased dark fiber (IRU), or self-provisioned fiber construction must terminate service or infrastructure in the demarcation point at each address specified in this RFP. Solutions bringing service to the property line but not to the demarcation point are not acceptable. Respondent must specify specific demarcation setup included in base fees, e.g. wall mounted CPE and CAT6a handoff, rack mount patch panel, etc.

### **2. Network Diagram:**

For each response, respondents must include a network diagram displaying the paths to be used to serve each endpoint. For self-provisioned fiber responses, respondents must include identification of aerial vs. buried fiber segments, detailed drawings showing fiber and equipment locations, and any other pertinent details (See Appendix D for OSP specifications).

### **3. WAN:**

Network designs must provide point-to-point connections between all entities in this RFP and at the pueblo education network point of

interconnection in the UNM Suite at 505 Marquette, Albuquerque, New Mexico.

**4. Leased lit fiber and services provided over third-party networks proposals only:**

- a. .25% frame/packet loss commitment
- b. 25ms network latency commitment
- c. 10ms network jitter commitment
- d. There is no right of provider to limit or throttle the capacity of the circuit at any time for any reason

**5. Special Construction Information for Form 471 and PIA Review:**

All E-rate applications including special construction are subject to detailed questioning during PIA review where the cost of proposed special construction will be reviewed based on the cost of historical fiber builds in the region. Additionally, certain information on necessary special construction is needed to accurately fill out the Form 471. Respondents are required to fill out the table in Appendix B for every site listed in this RFP. Additionally, respondents are encouraged (but not required) to submit the additional information described in Appendix B that will likely be requested during PIA review. If respondents do not submit this additional information with their bid, and their solution is chosen, they must be prepared to promptly provide that information and any additional information not described in this RFP when requested. Please note that vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers. Service Providers who choose to not agree to provide this detailed information will be deemed non-responsive and their bids will be rejected.

**6. Acceptance of Conditions Governing the Procurement:**

Potential Respondents must indicate their acceptance of the Conditions Governing the Procurement section in the letter of transmittal.

**7. Incurring Cost:**

Any cost incurred by the potential Respondent in preparation, transmittal, and/or presentation of any proposal or material submitted in response to this RFP shall be borne solely by the Respondent. Any cost incurred by the

Respondent for set up and demonstration of the proposed equipment and/or system shall be borne solely by the Respondent.

**8. Prime Contractor Responsibility:**

Any contractual agreement that may result from this RFP shall specify that the prime contractor is solely responsible for fulfillment of all requirements of the contractual agreement with the Navajo Nation Broadband Office, which may derive from this RFP. The Navajo Nation Broadband Office entering into a contractual agreement with a vendor will make payments to only the prime contractor.

**9. Subcontractors:**

The use of subcontractors is allowed. The prime contractor shall be wholly responsible for the entire performance of the contractual agreement whether or not subcontractors are used. Additionally, the prime contractor must receive approval, in writing, from the Navajo Nation Broadband Office awarding any resultant contract, before any subcontractor is used during the term of this agreement.

**10.No Obligation:** This RFP in no manner obligates the Navajo Nation Broadband Office to the use of any Respondent's services until a valid written contract is awarded and approved by appropriate authorities.

**11.Termination:** This RFP may be canceled at any time and any and all proposals may be rejected in whole or in part when the Navajo Nation Broadband Office determines such action to be in the best interest of the Navajo Nation Broadband Office.

**12.Required Notice to Proceed and Funding Availability**

The Navajo Nation Broadband Office will follow the purchasing policies of the lead applicant and requirements and procedures of the FCC's E-rate program as administered by the Universal Service Administrative Company to be eligible for all available funding and the purchasing policies of the Navajo Nation. The implementation of any associated contracts resulting from this competitive bid process will be dependent on the Navajo Nation Broadband Office's issuance of a written Notice to Proceed. E-rate funding notification alone will not signify Notice to Proceed. The Navajo Nation Broadband Office will have the right to allow the contract to expire without implementation if appropriate funding does not come available. Additionally, any projects requiring special construction are also contingent on issuance of funds from the eligible federal, state, or tribal match source. The Navajo

Nation Broadband Office will have the right to allow the contract to expire without implementation if this specific funding does not come available.

**13. Right to Waive Minor Irregularities:**

The Evaluation Committee reserves the right to waive minor irregularities. The Evaluation Committee also reserves the right to waive mandatory requirements provided that all of the otherwise responsive proposals failed to meet the same mandatory requirements and the failure to do so does not otherwise materially affect the procurement. This right is at the sole discretion of the Evaluation Committee.

**14. Ownership of Proposals:**

All documents submitted in response to the RFP shall become property of the Navajo Nation Broadband Office.

**15. Bonding of Subcontractors:**

When applicable, subcontractors shall be required to provide a performance and payment bond on a public works building project if the subcontractor's contract for work to be performed on a project is one hundred twenty-five thousand dollars (\$125,000) or more. (Reference 13-1-148.1 NMSA 1978)

**16. Davis-Bacon Act:**

Any contract resulting from this RFP will comply with the labor provisions of the Davis-Bacon Act regarding wages, payments, payrolls, and basic records.

**17. Copeland Act:**

Any contract resulting from this RFP will comply with Copeland Act.

**18. Buy American Act:**

Any contract resulting from this RFP will comply with Buy American Act.

**19. Safety Requirements:**

Any contract resulting from this RFP will comply with the Occupational Safety and Health Standards (OSHA).

**20. References:**

For each response, Respondent must provide 2 references from current or recent tribal customers (preferably K-12 schools, libraries, or consortia) with projects equivalent to the size of Navajo Nation Broadband Office.



## **21. Tribal Preference**

Native American Owned Business: If the organization is native or tribally owned, please submit a copy of your business license issued by your tribe or any documentation that references the Company is a whole owned subsidiary of a tribe or tribal member.

## **Response Format and Organization**

### **A. Preparation**

**Hard Copy/Electronic Responses:** Respondent's proposal must be clearly labeled and numbered and indexed as outlined in the response format and organization. Proposals must be submitted as outlined below. Envelopes, packages or boxes containing the original must be clearly labeled and submitted in a sealed envelope, package, or box bearing the following information:

Respondents should deliver: One (1) ORIGINAL HARD COPY, and one (1) electronic copy (USB Jump Drive). The electronic copy cannot be emailed. The electronic version/copy of the proposal must mirror the physical binders submitted. The electronic version cannot be emailed. The original, hard copy and electronic copy information must be identical. In the event of a conflict between versions of the submitted proposal, the Original hard copy shall govern.

### **B. Proposal Format**

All proposals must be typewritten or printed sheet faces of text and/or graphic material on standard 8 1/2" x 11" paper (larger paper, 11" x 17", is permissible for charts, spreadsheets, etc.) and placed in a three ring binder with labels identifying each section. The Table of Contents should reflect the Proposal Outline below.

#### *Non-Conforming Proposal*

Any proposal deemed non-conforming by the Point-of-Contact in regard to format will be considered non-responsive. Respondents shall contact the Point-of-Contact to clarify any questions concerning format prior to submission.

#### *Amendments:*

Changes to this Request for Proposals shall be issued only by the Point-of-Contact in writing.

### **C. Proposal Outline**

#### **1) Table of Contents**

- 2) **Signed Letter of Transmittal** – To be completed and signed by an individual person authorized to obligate the company and to include:
  - a. Identify the submitting business entity.
  - b. Identify the name, title, telephone, and e-mail address of the person authorized by the Respondent organization to contractually obligate the business entity providing the Offer.
  - c. Identify the name, title, telephone, and e-mail address of the person authorized to negotiate the contract on behalf of the organization
  - d. Identify the names, titles, telephone, and e-mail addresses of persons to be contacted for clarification/questions regarding proposal content.
  - e. Identify sub-contractors (if any) anticipated to be utilized in the performance of any resultant contract award.
  - f. Describe the relationship with any other entity that will be used in the performance of this awarded contract.
  - g. Explicitly indicate acceptance of the General Conditions the procurement
- 3) **Organizational Experience** – Statement or Key Personnel Resumes
- 4) **Tribal References** – Name, organization, and contact information
- 5) **Special Construction Payment Plan Option Response** - Include agreement or non-agreement of this request.
- 6) **Value-Added Offerings**, if applicable, narrative
- 7) **Native American Owned Business**, if applicable, verification
- 8) **Good Faith Tribal Negotiation Letter**, if applicable (Appendix E)
- 9) **Technical Response** - Specifications to include:
  - a. Response type - Proposal for Lit, Leased Dark Fiber, IRU, Self- Provisioned services or a combination thereof
  - b. Project Description and Approach Narrative
  - c. Timeline and construction schedule for each site
  - d. Network Map
- 10) **Cost Response** – Mandatory use of provided tables (Appendix A and Appendix B, if applicable)

## **RFP Scoring Rubrics**

**Leased Lit Fiber, Leased Dark Fiber, Leased Dark Fiber (IRU), Services Provided Over Third-Party Networks, Self-Provisioned**

<b>Points</b>	<b>Criteria</b>
35	E-rate eligible recurring and one-time costs <sup>1</sup>
30	Preference for a scalable solution from 100Mbps to 10Gig using the same medium
25	Signed good faith negotiation letter from tribal government(s) <sup>2</sup>
5	Use of symmetrical scalable technology <sup>4</sup>
5	Value-added offerings <sup>6</sup>
100	Total Points
5	Extra Points for Native American Owned Business <sup>7</sup>

**Fiber Maintenance for Leased Dark Fiber (IRU) and Self-Provisioned solutions**

**Network Equipment**

<b>Points</b>	<b>Criteria</b>
35	E-rate eligible recurring and one-time circuit costs <sup>1</sup>
30	Signed good faith negotiation letter from tribal government(s) <sup>2</sup>
25	Ability to offer turn-key solution (limited effort on behalf of library) <sup>3</sup>
10	Terms, conditions, and insurance <sup>5</sup>
100	Total Points
5	Extra Points for Native American Owned Business <sup>7</sup>
<b>Points</b>	<b>Criteria</b>
35	E-rate eligible recurring and one-time circuit costs <sup>1</sup>
30	Use of symmetrically scalable technology <sup>4</sup>
25	Ability to offer turn-key solution (limited effort on behalf of applicant) <sup>3</sup>
10	Value-added offerings <sup>6</sup>
100	Total Points
5	Extra Points for Native American Owned Business <sup>7</sup>

**Notes:**

1: **E-rate eligible circuit cost** is the total cost of ownership that includes special construction and NRC in addition to MRC and includes any and all services that will be applied on a monthly recurring basis. E.g. for self-provisioned fiber, internet access, recurring circuit costs to operate, maintain, and any other monthly service fees. E-rate special construction costs should be clearly indicated and separated from any other E-rate eligible NRC cost. All services offered must be eligible for E-rate Category 1 discounts.

2: **Signed good faith negotiation letter from tribal government:** Is a letter or from signed by the applicant, Governor, or other designee of tribal lands that will be trespassed to complete the scope of work in this RFP. Letter must state that the tribe and Respondent have begun good faith negotiations to respect tribal authority and processes. Good faith negotiation letters should be completed for each tribal land for in the network design for maximum points.

3: **Turn-key solution:** the district has a clear preference for providers who can offer a “bundled” holistic, all-in-one solution and effort required by the Navajo Nation Broadband Office before, during, and after installation is minimal. Therefore preference will be given to bidders who either offer all services independently or via 3<sup>rd</sup> party subcontractors as a complete package including fiber construction, terminating equipment inside the premise location, fiber installation and operations, and scheduled and unscheduled maintenance.

4: **Symmetrical scalable solutions:** preference will be given to solutions based on technologies that are symmetrical and scalable and can support a 20-year life span with an estimated 20% broadband consumption increase annually, as the Navajo Nation Broadband Office believes that this will provide maximum future scalability. Respondents are encouraged to outline how solutions could be scaled into the future, including potential pricing increments for additional bandwidth that may be likely during the contract period.

5: **Terms, conditions, and insurance:** preference will be given to bidders that provide the most favorable conditions and insurance for implementation and ongoing service. These elements include (but are not restricted to): 24x7 response availability, demonstration of bonding, coordination with USIC and oversight of 811 participation, etc.

6. **Value-Added Offerings:** Respondents can submit any other information they deem necessary to highlight accomplishments, honors, services, etc. that advance excellence toward and a value add to the development of a Navajo Nation Broadband Office and it’s goals to improve academic achievement and post-secondary education pursuits in Native America.

7. **Navajo Owned-Business:** If the organization is native or tribally owned, please submit a copy of your business license issued by your tribe or any documentation that references the Company is a whole owned subsidiary of a tribe.

## Appendix A: MRC/NRC Cost Tables

These mandatory tables are provided to provide summary data for comparative purposes. Additional manufacturer information, detailed pricing, or cut sheets can be attached. **Reminder, EACH site SHALL be listed separately.**

Leased Lit Fiber / Services Provided Over Third-Party Networks						
Location	Bandwidth	Eligible Monthly Recurring Cost		Ineligible monthly recurring cost	Eligible install/non-recurring cost	Ineligible install/non-recurring cost
		1-year contract	3-year contract			

Leased Dark Fiber						
Location	Eligible Monthly Recurring Cost			Ineligible monthly recurring cost	Eligible install/non-recurring cost	Ineligible non-recurring cost
	3-year contract	5-year contract	10-year contract			

Leased Dark Fiber (IRU) - 20 year contract – Includes Maintenance		
Location	Eligible IRU Fee	Ineligible IRU fee

**Fiber Maintenance for Leased Dark Fiber (IRU) and Self-Provisioned proposals**

For self-provisioned construction costs please use Appendix B.

Pricing structure: ___ Monthly ___ Yearly		
Contract Length	Eligible Cost	Ineligible Cost

**Equipment for Leased Dark Fiber, Leased Dark Fiber (IRU) and Self-Provisioned proposals**

Location	Manufacturer	Model	Eligible cost	Ineligible cost

## Appendix B: Special Construction Pricing

Required with all bid submissions that include special construction. **Reminder, EACH site SHALL be listed separately**

Special Construction					
Location	Strand Count	Segment Mileage	Total Segment Cost	Eligible Cost	Ineligible Cost
<b>Total project mileage and costs</b>					

### Information that can be included now, but will be requested at a later date upon USAC Program Integrity Assurance (PIA) review:

- Special Construction Cost Breakout worksheet in Appendix C (xls available, if requested)
- Route map of all build segments in kmz format
- Explanation of alternative routes that were explored and why the chosen route is the most cost-effective
- Explanation of special materials and procedures required that may have increased construction costs, such as:
  - Historical preservation or environmental issues
  - Bridge, waterway, railway, or highway crossings
  - Galvanized conduit
  - Directional boring through hard rock or under a paved surface
  - An excessive number of handholes, marker posts, or other OSP materials
  - Expensive pole attachment fees or make ready costs
  - Extreme terrain
  - Tribal cultural or protected areas issues
  - Timeline and Construction Schedule
  - Tribal right-of-ways

## Appendix C: Special Construction Cost Breakout

Note: This worksheet is not a mandatory element of a self-provisioned proposal. If selected, however, this worksheet will be required during the PIA review. The xls file is available upon request. **Reminder, EACH site SHALL be listed separately**

	A	B	C	D
<b>1</b>	<b>Project Overview</b>			
<b>2</b>	What is the total distance of the project (feet)		Equals the sum of cells B7 - B9	
<b>3</b>	What is the total cost of the project?		Equals the sum of cells C7 - C9	
<b>4</b>				
<b>5</b>	<b>OSP Summary Costs</b>			
<b>6</b>	<b>OSP Type</b>	Distance of build (feet)	Cost	Cost Per Foot
<b>7</b>	Aerial			
<b>8</b>	Direct Buried			
<b>9</b>	Buried with conduit			
<b>10</b>				
<b>11</b>	<b>Cost breakout of each OSP type</b>			
<b>12</b>	<b>Aerial Portion</b>	Cost	The sum of cells B12 - B17 must equal the value in D6	
<b>13</b>	Cost per foot of fiber material			
<b>14</b>	Cost per foot of attaching fiber to poles			
<b>15</b>	Cost per foot of structure materials (anchors, j-hooks, guywires)			
<b>16</b>	Cost per foot of structure placement (adding new poles, anchors, guywires that will be owned by applicant)			
<b>17</b>	Cost per foot of pole make ready (work to provider owned poles such as new guys/anchors, attachment point clearing, placement of new poles)			
<b>18</b>				
<b>19</b>	<b>Direct Buried</b>	Cost	The sum of cells B19 - B22 must equal the value in D7	
<b>20</b>	Cost per foot of fiber material			
<b>21</b>	Cost per foot of placing fiber in the ground			
<b>22</b>	Cost per foot for buried conduit necessary for special crossings such as railroad, roadways, waterways			
<b>23</b>	Cost per foot of trenching (digging, necessary machinery, permitting)			
<b>24</b>				
<b>25</b>	<b>Buried with Conduit</b>	Cost	The sum of cells B25 - B28 must equal the value in D8	
<b>26</b>	Cost per foot of fiber material			
<b>27</b>	Cost per foot of pulling fiber through conduit			
<b>28</b>	Cost per foot of structure material (conduit, handholes, marker posts, etc)			
<b>29</b>	Cost per foot of structure placement (labor and permitting)			



## Appendix D: OSP Installation Specifications

### Material Requirements

- Material will comply with those standards as established by UL or NEMA and shall be commercial grade. All materials will be new and free from defects.
- Selected contractor and its subcontractors will provide all material management to ensure that the project remains on track according to the project milestones,
- All due caution will be exercised in transporting and off-loading all materials to prevent any damage during shipping or placement. Any damage to any materials after their initial receipt and inspection by the respondent will be the sole responsibility of the respondent, who will replace such damaged hand holes at no additional expense to the Navajo Nation Broadband Office.
- Buried conduit shall be shall be single or multiduct. Multiduct shall include at least three innerducts.
- Conduit utilizing EMT (Electrical Metallic Tubing) multi-duct should include at least three innerducts. EMT fitting shall be gland or set screw type, and each conduit shall be equipped with a graduated pull tape or rope.
- Unless specified by right-of-way owner, crossings will be up to two conduits, PVC-Sch 80 or better.
- The exact requirements for location and type of conduit within the building shall be verified with building owner.
- All Hand Holes shall be DOT approved, correctly load rated CDR or comparable enclosures on roadways and railways, and pedestrian rated hand holes for non-roadways and railways.
- Large-radius sweeps shall be provided where required for offset or change in direction of conduit. Bend radius rating of the cable must be adhered to for all conduit bends, pull boxes, and hand holes.
- Fiber must be single-mode with the following specifications:
  - TU-T G.652.C/D compliant
  - Maximum Attenuation @ 1310nm: 0.34 dB/km
  - Maximum Attenuation @ 1385nm: 0.31 dB/km
  - Maximum Attenuation @ 1550nm: 0.22 dB/km
- Connector types should be LC unless otherwise specified by the Navajo Nation Broadband Office.
- Any warranties associated with the fiber and any other outside plant materials must revert to the Navajo Nation Broadband Office as the fiber owner upon completion of construction

## **Specifications**

### *Survey*

- Comply with all ordinances and regulations. Where required, secure permits before placing or excavating on private property, crossing streams, pushing pipe or boring under streets and railways. Pre-survey shall be done prior to each job.
- Respondent will locate underground lines of third parties in cable route area

### *Permits and Traffic Control*

- The respondent must adhere to all applicable laws, rules and requirements and must apply for permits to place infrastructure per specification per tribe, county or city ordinance applicable to where the infrastructure is being placed.
- All traffic control, in accordance with local, state, county, or permitting agency laws, regulations, and requirements, will be the respondent's responsibility. The respondent's construction schedule will take into consideration sufficient time for the development and approval of a traffic control plan.

### *Tracer Wire Installation*

- Tracer wire shall be placed with all conduit installed unless armored or traceable cable is used. The respondent will provide the tracer wire and shall install, splice and test (for continuity) the tracer wire. If the tracer wire is broken during installation, the wire should be repaired and tested for continuity after repair.
- For multi-duct installation, install a 5/8" X 8" copper clad ground rod in the hand-hole located on public right-of-way. Place a #12 insulated copper locate wire from the ground rod to the fiber optic termination room or to the outside of the building directly below the pull box and terminate on one side of an insulated indoor/outdoor terminal block to the master ground bar in the fiber optic termination room or place a ground rod on the outside of the building. Locate block in an accessible location. This is for "locate purposes only," not for grounding purposes. Note on as-built where ground is placed and tag located wire as "locate wire."

### *Depth of Burial*

- Except where otherwise specified, the cable shall be placed to a minimum depth of 36". Greater cable depth will be required at the follow locations:
  - Where cable route crosses roads, the cable shall be placed at a minimum depth of 48" below the pavement or 36" below the parallel

drainage ditch, whichever is greater, unless the controlling authority required additional depth, in which case the greatest depth will be maintained.

- Where cable crosses existing sub-surface pipes, cables, or other structures: at foreign object crossings, the cable will be placed to maintain a minimum of 12" clearance from the object or the minimum clearance required by the object's owner, whichever is greater.

#### *Highway, Railroad, and Other Bored Crossings*

- All crossings of state or federal highways and railroads right-of-way shall be made by boring and placing a pipe casing. The cable shall be placed through the pipe casing. Country road and other roadways shall be bored, trenched, or plowed as approved by the appropriate local authority.
- All work performed on public right-of-way or railroad right-of-way shall be done in accordance with requirements and regulations of the authority having jurisdiction there under.
- Respondent shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn.
- Where the cable route crosses railroad right-of-way, the cable shall be placed at a minimum depth of 60" below the railroad surface or 36" below the parallel drainage ditch, whichever is greater, unless the controlling authority requires additional depth, in which case the greatest depth will be maintained.

#### *Cable Markers*

- Cable markers shall be placed within 48 hours of cable installation. Unless the right-of-way or property owner specifies otherwise, cable markers shall be placed at all change in directions, splices, fence line crossings, at road and stream crossings, and other points on the route not more than 1,000 feet apart.
- In addition, on highway right-of-way, the markers shall be located at the highway right-of-way line. Markers shall always be located so that they can be seen from the location of the cable.

#### *Hand Holes*

- Hand holes will be placed in accordance with standard industry practice following the specifications provided in the construction plans, typical drawings, and detail drawings. Special attention and planning must be exercised to ensure accessibility by other groups after construction has

been completed.

- Buried hand holes unless otherwise stipulated by the drawings will be buried with 12" to 18" of cover at final grade.
- Immediately after placement, the soil around and over the hand hole will be tamped and compacted. Should any washouts occur, the respondent will be responsible for correcting the problem immediately without additional cost to the owner.
- After cable placement, all ducts will be sealed.
- All splice hand holes/manholes will be grounded
- A minimum of 100' coil of cable shall be left in each hand hole/building for splicing use.

### *Splicing*

- Fiber to fiber fusion splicing of optical fibers at each point including head ends is required.
- Complete testing services, such as end to end, reel testing, and splice loss testing, ORL, power meter/laser source testing and WDM testing is required.
- Individual splice loss will be 0.10 dB for single-mode unless after 3 attempts these values cannot be achieved, then the fibers will be re-spliced until a splice loss within 0.05 dB of the lowest previous attempts is achieved. Splice loss acceptance testing will be based on the fusion splicer's splice loss estimator.
- All cables to buildings shall be fusion spliced within a minimum of 50' of entering a building at a location to be determined by the owner with an existing single mode fiber and terminated at customer's rack.

### *Aerial Plant*

- The Navajo Nation Broadband Office is open to aerial fiber runs using existing utility poles, but respondent must adhere to pole owners' requirements for clearances, spans, grounding, guys and attachments.

### *Testing Cable*

- The respondent shall be responsible for on-reel verification of cable quality prior to placement.
- Completed test forms on each reel shall be submitted to the owner.
- Respondent assumes responsibility for the cable after testing. This responsibility covers all fibers in the cable.
- The respondent shall supply all tools, test equipment, consumables, and incidentals necessary to perform quality testing.
- The cable ends shall be sealed upon completion of testing.
- In addition to splice loss testing, selected respondent will perform end-to-

end insertion loss testing of single-mode fibers at 1310 nm and 1550 nm from one direction for each terminated fiber span in accordance with TIA/EIA-526-7 (OFSTP 7). For spans greater than 300 feet, each tested span must test to a value less than or equal to the value determined by calculating a link loss budget.

#### *Restoration*

- All work sites will be restored to as near their original undisturbed condition as possible, all cleanup will be to the satisfaction of the school, library, or consortium and any permitting agencies.
- Respondent shall provide a brief description of restoration plan in the response, with the expectation that a more detailed restoration plan will be delivered prior to construction begins.
- Work site restoration will include the placement of seed, mulch, sod, water, gravel, soil, sand, and all other materials as warranted.
- Backfill material will consist of clean fill. Backfilling, tamping, and compaction will be performed to the satisfaction of the Navajo Nation Broadband Office, the representative of any interested permitting agency, and/or the railroad representative.
- Respondent will be responsible for any restoration complaints arising within one year after the Navajo Nation Broadband Office's final acceptance.
- Excess material will be disposed of properly.
- Debris from clearing operations will be properly disposed of by the respondent/subcontractors as required by permitting agencies or the railroad. Railroad ties, trees, stumps or any foreign debris will be removed, stacked, or disposed of by the respondent as per requirements by other interested permitting agencies, and/or the Navajo Nation Broadband Office.
- Road shoulders, roadbeds, and railroad property will be dressed up at the end of each day. No payment for installation will be permitted until cleanup has been completed to the satisfaction of the any permitting agencies, and/or the Navajo Nation Broadband Office.
- Site clean-up will include the restoration of all concrete, asphalt, or other paving materials to the satisfaction of the other interested permitting agencies, and/or the Navajo Nation Broadband Office.

#### *Documentation*

As-built drawings will include:

- Fiber cable routes
- Drawings, site drawings, permit drawings, and computerize design maps and electronically stored consolidated field notes for the entire route must

- include:
- Verification of as-built and computerized maps
  - Splicing locations
  - Optical fiber assignments at patch panels
  - Optical fiber assignments at splice locations
  - Installed cable length
  - Date of installation
  - Aerial installation documents should include
    - Pole attachment inventories
    - Pole attachment applications
    - Pole attachment agreements between respondent and other utilities
    - GPS points of reference for utility poles
    - Photo images of poles to which fiber is attached
  - Underground installation documents should include
    - Conduit design and detailing
    - Manhole detailing
    - Preparation of all forms and documentation for approval of conduit construction and/or installation
  - Fiber details will include:
    - Manufacturer
    - Cable type and diameter
    - Jacket type: single mode
    - Fiber core and cladding diameter
    - Fiber attenuation per kilometer
    - Fiber bandwidth and dispersion
    - Index of refraction
  - OTDR documentation will include:
    - Each span shall be tested bi-directionally from endpoint to endpoint.
    - Each span's traces shall be recorded and mapped. Each splice loss from each direction and the optical length between splices as well as any of the information required by Span Map.
    - Reel acceptance
    - Individual fiber traces for complete fiber length
    - Paper and computer disk records of all traces
    - Losses of individual splices
    - Anomalies
    - Wavelength tests and measurement directions
    - Manufacturer, model, serial number, and date of last calibration of OTDR
  - Power Meter documentation will include:
    - Total link loss of each fiber
    - Wavelengths tested and measurement directions

- Manufacturer, model, serial number, and date of last calibration for all equipment used

### **References, Standards, and Codes**

Specifications in this document are not meant to supersede state law or industry standards. Respondents shall note in their response where their proposal does not follow the requested specification to comply with state law or industry standard. The following standards are based upon the *Customer-Owned Outside Plant Design Manual* (CO-OSP) produced by BICSI, the *Telecommunications Distribution Methods Manual* (TDMM) also produced by BICSI, ANSI/TIA/EIA and ISO/IEC standards, and NEC codes, among others.

It is required that the respondent be thoroughly familiar with the content and intent of these references, standards, and codes and that the respondent be capable of applying the content and intent of these references, standards, and codes to all outside plant communications system designs executed on the behalf of the Navajo Nation Broadband Office.

Listed in the table below are references, standards, and codes applicable to outside plant communications systems design. If questions arise as to which reference, standard, or code should apply in a given situation, the more stringent shall prevail. As each of these documents are modified over time, the latest edition and addenda to each of these documents is considered to be definitive.

## Appendix E: Good Faith Negotiation Letter

### Navajo Nation Broadband Office

#### Good Faith Negotiation Letter from Tribal Government for E-Rate

The vendor \_\_\_\_\_, has made the following good faith negotiating efforts to comply with tribal requirements with reference to the scope of work requested in 2023 E-rate RFP for the Navajo Nation Broadband Office.

Meets Criteria	Points	Criteria
_____	25	Vendor has proactively engaged a positive working relationship with tribal school, library, education office, or tribal government regarding land use. Vendor demonstrates commitment to fair negotiation of rights of way and has proposed a project that reflects tribal authority and priorities.
_____	15	Vendor responded to tribal engagement and has a positive working relationship with tribal school, library, education office, or tribal government regarding fair negotiation of rights of way.
_____	0	Vendor has not made contact with the tribe regarding potential rights-of-way requirements.
_____	-25	Vendor is currently barred from working on tribal land.
_____	-10	Vendor was in the past barred from working on tribal land.
<b>Total:</b>		For totals that are negative, 0 will transfer to the RFP scoring sheet.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Entity

\_\_\_\_\_  
Date



