



## **Request for Proposals**

Our Katahdin  
245 Aroostook Ave.  
Millinocket, ME 04462

Fiber Optic Network Construction

A project funded by Our Katahdin and the  
Northern Border Regional Commission

NBRC Award – NBRC17GME06

October 31, 2018

# CONTENTS

<b>Introduction</b>	<b>3</b>
Purpose	3
Federal Funds Disclosure	3
<b>Background</b>	<b>3</b>
About Millinocket	3
About the Network	4
About Respondents	4
<b>General Information</b>	<b>4</b>
Contact Information for the RFP	4
Notification of Intent to Respond	5
Questions and Inquiries	5
Proposal Delivery	5
Schedule	5
Desired Qualifications	5
Evaluation Criteria	6
<b>Project Scope</b>	<b>8</b>
Overall Description	8
Installation Materials	8
Pole Licensing	9
Construction Scope A: Fiber Network Design	9
Construction Scope B: Fiber Network Cabling	9
Construction Scope C: Network Electronics and Upgrades	9
<b>Requirements</b>	<b>10</b>
Installation Requirements	10
Testing Requirements	11
Change Orders	11
Documentation Requirements	11
Northern Border Regional Commission Bonding Requirements	12
<b>6. Response Format and Content</b>	<b>12</b>
<b>7. General Conditions and Disclaimers</b>	<b>13</b>
<b>Appendix A. Map of Downtown Millinocket and Proposed Fiber Installation</b>	<b>14</b>
<b>Appendix B. Cover Sheet for Proposals</b>	<b>15</b>

## **1. Introduction**

Our Katahdin has decided that superior broadband access is essential to its economic development objectives in the Katahdin Region including Millinocket, Maine. The region offers a number of attributes that are appealing to high tech industries in the region. However, Our Katahdin believes that the current broadband offerings are insufficient to attract these industries. Our Katahdin is therefore soliciting proposals to build the first portion of a municipal broadband network.

Respondents shall describe in their response their approach and cost estimate for building the fiber optic network described in Appendix A and Section 4. Respondents are not expected or invited to invest their own capital in network construction.

Our Katahdin expects the selected respondent to operate as a General Contractor. The General Contractor shall be responsible for network construction and materials purchasing. A full enumeration of the General Contractor's responsibilities is contained herein.

### **Purpose**

Our Katahdin is seeking proposals from qualified respondents to construct a fiber optic network connecting community anchor institutions (CAIs), private enterprises, and private residences in downtown Millinocket, Maine.

### **Federal Funds Disclosure**

This project will be partially funded with Federal funds from the Northern Border Regional Commission, and therefore is subject to the Federal laws and regulations associated with that program.

## **2. Background**

### **About Millinocket**

Millinocket is a City in northern Maine's Penobscot County. Millinocket was first settled in 1829 by Betsy and Thomas Fowler and their family, who cleared land for a farm. The Great Northern Paper Company built its Millinocket mill in 1901 and quickly became the world's largest paper mill producing 240 tons of newsprint per day. Two mills in Millinocket and East Millinocket employed 4,200 people at their peak production. Our once prosperous community has fallen into severe economic decline as a result of the closure of the Great Northern mill in 2008. The tax base disappeared. The jobs at the mill dwindled from a few thousand in the 1970's to a few hundred in 2000 to zero in 2003. Town valuations are down by half since 2009. Skilled workers left the region. The population has declined by nearly half since its peak and has aged significantly with a median age of 51.

Our Katahdin emerged in December 2014 as the Great Northern Paper mill smokestacks fell. Recognizing the devastation represented by the removal of the stacks, a group of

passionate alumni committed to energizing the local economy and empowering community members to participate in creating our future with hope and a sense of pride.

Our Katahdin works to bolster the digital, recreation, and forest products economies and create a robust community in the Katahdin region. We seek to pull together ideas, people and money to move our region forward through nurturing community, entrepreneurs, and light industry. Our Katahdin has identified ubiquitous, high quality broadband as a necessary utility for Millinocket to remain economically competitive in the 21st century.

### **About the Project**

Recognizing that high quality broadband access is critical to the future and growth of American cities in the 21st century, Our Katahdin has received grant funding from the Northern Border Regional Commission to build a fiber optic network to connect downtown Millinocket to the Maine Fiber Company's statewide Three Ring Binder network, which passes through Millinocket along Central Ave. or Rt. 157 to provide critical broadband infrastructure to promote business growth. The project will serve Penobscot Avenue (Millinocket's main street) by expanding fiber to premise infrastructure (FTTP). Because of the unusual nature of the electrical pole placement, no poles are actually on Penobscot Avenue, and electrical service comes from the backside of the buildings between Penobscot Avenue and Highland Avenue. Fiber will run along these poles and provide access drops to 18 existing businesses and a planned co-working space at 230 Penobscot Avenue, and then up along Katahdin Avenue to the Administration Building and Warehouse #7 on the Millinocket Mill Site located at One Katahdin Avenue. The total distance of fiber to run is approximately 1.1 miles. Our Katahdin will own the fiber installed. Funding available for the project is capped at \$130,000.

### **About Respondents**

Respondents shall describe in their responses to this RFP their approach and firm, fixed price bid for design and constructing the full scope detailed herein. Our Katahdin does not wish to be exposed to the risk of building the network.

For bids consisting of teams of firms, one firm should identify itself as the General Contractor. The General Contractor shall be responsible for the scope of work detailed in this RFP, insurance, and bonding.

## **3. General Information**

### **Contact Information for the RFP**

All questions and comments should be directed to Lucy Van Hook, Our Katahdin, via email [lucy@ourkatahdin.com](mailto:lucy@ourkatahdin.com).

## Notification of Intent to Respond

Our Katahdin requests that prospective bidders who intend to respond to notify Our Katahdin by the date noted in the Schedule section of this RFP. Notifications should be sent via email to Lucy Van Hook at [Lucy@ourkatahdin.com](mailto:Lucy@ourkatahdin.com) and include a contact person, the name of the company intending to bid and contact information.

## Questions and Inquiries

Prospective respondents should email questions to the designated contact by the dates noted in the below table. Responses to questions that involve a change or interpretation to the RFP will be issued in writing and emailed to all parties that have expressed an intent to respond to the RFP. Only written responses to questions will be considered binding.

Materials submitted in response to this request become the property of Our Katahdin and may become a part of any resulting contract. Respondents agree that they will bear all costs associated with responding to this RFP.

## Proposal Delivery

Please email your complete proposal, including any and all attachments, to Lucy Van Hook, Our Katahdin, at [Lucy@ourkatahdin.com](mailto:Lucy@ourkatahdin.com) the designated contact by the date noted in the Schedule in the RFP.

## Schedule

Unless amended by Our Katahdin, interested parties must adhere to the schedule below; all deadlines must be met by 5:00 pm EDT on the dates listed.

<b>1. RFP Released:</b>	<b>October 31, 2018</b>
<b>2. Notification of Intent to Respond:</b>	<b>November 7, 2018</b>
<b>3. Questions Submitted:</b>	<b>November 7, 2018</b>
<b>4. Responses to Questions Emailed to Respondents:</b>	<b>November 9, 2018</b>
<b>5. RFP Responses Submitted:</b>	<b>November 16, 2018</b>
<b>6. Award Announced:</b>	<b>November 20, 2018</b>

## Desired Qualifications

Our Katahdin seeks firms that:

- Are capable of meeting or exceeding the project's aggressive timeline, with construction completing no more than two months from signed contract, including testing and turn up. Proposals agreeing to a shorter completion schedule will be looked upon favorably.
- Ability to demonstrate a thorough knowledge of all facets of municipal

- broadband development, including regulatory, technical and financial/economic
- Can demonstrate past performance and experience on similar size fiber builds.
- Are flexible and can efficiently work around the kinds of issues that often arise in construction projects.
- Are stable and well-capitalized enough to meet the insurance and bonding requirements.
- Have experience performing with federally-funded contracts and can meet the associated regulatory requirements.

In order to be considered, responses must adequately address all required scope items in section 4 of this document as well as NBRC requirements in section 5.

Respondents that address the entire RFP will be evaluated by Our Katahdin on each of the evaluation criteria below.

### Evaluation Criteria

Item	Points Possible
Project Understanding and Approach	25
Respondent's Experience Building Similar Network	15
Respondent's Regulatory Plan	10
Respondent's Timeline to Completion	15
Warranties and Documentation	10
Bid Price	25
TOTAL	100

Project Understanding and Approach. Our Katahdin seeks to partner with a contractor that understands the our goals for the project; to wit, the creation of a backbone broadband network that will serve the identified Community Anchor Institutions and that can later form the core of a potential region-wide fiber to the premises network. Respondents should demonstrate their understanding of the project and its goals, and provide a project plan in sufficient detail to provide a high degree of confidence they will successfully construct the project as scoped, scheduled, and budgeted.

#### *Method of Points Award*

- Project schedule that conforms with the RFP requirements: 15 points (all or nothing)
- Clearly articulated project plan supporting the schedule: 10 points (all or

nothing)

Experience Building Similar Networks. The ideal respondent will have at least five years of experience successfully deploying municipal-scale or similar fiber optic networks on time and on budget. Respondents should demonstrate ability to provide sufficient manpower and equipment rapidly enough to achieve the project's construction objectives.

*Method of Points Award*

- Experience in the last three years building at least two similar networks: 10 points (all or nothing)
- Experience in the last three years building at least five similar networks: 5 points (all or nothing)

Regulatory Plan. Respondents should demonstrate ability and experience in following appropriate regulatory requirements. Ideal respondents will have experience constructing federally-funded projects, but in any case, all respondents should show understanding of the NBRC requirements outlined in this document and its Exhibits.

Respondents should not be currently debarred from participating in Federally-funded projects. Lastly, respondents should provide a plan for meeting the NBRC's requirements.

*Method of Points Award*

- Demonstrated understanding of regulatory requirements: 5 points (all or nothing)
- Experience constructing federally-funded projects in the last three years: 5 points (all or nothing)

Timeline to Completion. Respondents should include an timeline for the construction of the project. In addition, respondents should provide assurance (confidentially if desired by so noting in their response) of their ability to secure the required performance, payment, and bid bonds, as well as insurance requirements.

*Method of Points Award*

- Demonstrated experience building fiber optic networks within specified timeline: 5 points (all or nothing)
- Demonstrated ability (e.g., bank letter or other confirmation) of ability to secure required bonding and insurance: 5 points (all or nothing)

Warranties and Documentation. Respondents should demonstrate ability to warranty their design and work products and to generate documentation, such as as-builts, CAD drawings, and the like in accordance with industry standards.

*Method of Points Award*

- Warranty specifications included in response: 5 points (all or nothing)
- Confirmation to comply with required documentation aspects: 5 points (all or

nothing)

Bid Price. The all-in price bid for the project.

*Method of Points Award*

- The lowest price received will earn 25 points.
- The highest price received will earn zero points.
- The spread between lowest and highest prices received will be divided into 4 equal tranches. For each tranche a bid price falls into below the top, it will have 5 points deducted from a starting value of 25 points.

#### **4. Project Scope**

Project scope is divided into three sections for convenience's sake. Scope A consists of the design and engineering of the fiber to premise network. Scope B consists of fiber cable installation for the network and drops. Scope C consists of network electronics and equipment installation. Respondents must respond to both Scopes A, B and C to be considered.

#### **Overall Description**

Our Katahdin seeks a qualified service provider to design and build a fiber network to connect to Maine Fiber Company's Three Ring Binder near the intersection of Central Avenue and Penobscot Avenue in Millinocket, Maine and run fiber to premise along Penobscot Avenue with drops to up to 18 existing businesses and one planned co-working space, up a portion of Katahdin Avenue from the end of Penobscot Avenue, along 9 poles to the Administration Building at 1 Katahdin Avenue and then approximately 0.4 miles to Warehouse #7. From the Administration Building to Warehouse #7 the fiber will attach to three existing buildings and then possibly require one or more poles installed on private property to span the remaining distance to Warehouse #7. If respondents have a different approach to reaching the same number of businesses, the Administration Building at 1 Katahdin Avenue and Warehouse #7 marked on the map in Appendix A., Our Katahdin is willing to review and consider those approaches.

#### **Installation Materials**

Contractor will be responsible for procuring all materials and providing warranty for the major materials per the design the Contractor creates to satisfy bringing fiber to the premises listed.

The Contractor is held responsible for all materials through Our Katahdin's acceptance of the network. If the materials supplied by the Contractor are found to be defective, or do not conform to the specifications upon testing, Our Katahdin reserves the right to have the Contractor immediately replace the materials at the Contractor's expense, and



through its procurement process. Excess materials purchased but not used during the construction will become property of Our Katahdin upon acceptance of the network.

### **Pole Licensing**

Bringing fiber to downtown businesses on Penobscot Avenue as proposed in Appendix A, will require pole licensing will for 10 poles along the backside of Penobscot Avenue, and 8 poles along Katahdin Avenue to the Administration building located at 1 Katahdin Avenue. Fiber hung between the Administration building and Warehouse #7 will be on Our Katahdin's property and may require installation of 1-2 new poles.

### **Construction Scope A: Fiber Network Design**

Our Katahdin requires respondents to design the fiber network to connect to the Maine Fiber Company's Three Ring Binder fiber network, provide 18 drops to existing Community Anchor Institutions and one co-working space that is in development between Penobscot Avenue and 1 Katahdin Avenue. Within Our Katahdin's campus, the respondent will design the fiber build out with at least 48ct fiber to provide for opportunity to hook in new businesses in the future.

### **Construction Scope B: Fiber Network Cabling**

Our Katahdin's fiber build out will require connecting to Maine Fiber Company's Three Ring Binder, which is primarily comprised of Corning SMF28e+ fiber. Fiber cable for this project shall be of equivalent quality to that used for Three Ring Binder and meet applicable industry guidelines, including Telcordia GR-20 and ITU-T G.652.D.

### **Construction Scope C: Network Electronics and Upgrades**

The proposed network shall support Gigabit Passive Optical Network (GPON) and Active Ethernet (AE) aka P2P, fiber access technologies. All equipment, transmission methods, and system must be "industry- standard". Industry-standard is defined as the most current version of relative standard(s) set by an American National Standards Institute (ANSI) or International Organization for Standardization (ISO)- accredited Standards Developing Organization (SDO), such as the Institute of Electrical and Electronics Engineers (IEEE), Telecommunications Industry Association (TIA), International Telecommunication Union (ITU), or Electronic Industries Alliance (EIA).

Northern Ring Network Upgrades: In order to accommodate services up to 1 gigabit per second Our Katahdin will provide funds to service provider to augment and upgrade its equipment in the below facilities to 10 gigabit per second capable equipment:

- Orono

- Old Town
- Lincoln
- Millinocket
- Dover-Foxcroft

Once equipment upgrades have been completed service provider will offer transport protected services (via a mutual negotiated lease agreement or any other acceptable vehicle) up to 1Gbps for customers and municipalities in this region as part of a larger effort to bring fiber broadband services to the area for residential and commercial customers.

## 5. Requirements

### Installation Requirements

1. All construction is to be per industry standards including, but not limited to, Telcordia Blue Book and NESC code.
2. All fiber optic cable shall be installed per manufacturer's best practices and tensioned per manufacturer's specifications.
3. The Contractor is responsible to install all necessary pole hardware suitable for the provided cable.
4. High visibility cable tags or markings containing the Owner's information shall be installed at every pole, splice enclosure, and riser guard, and be visible while standing on the ground.
5. All fiber optic cable installed beyond 50LF of the building entry must be transitioned to riser rated cable.
6. Industry approved cable lubrication shall be used as required during cable placement in innerduct or conduits.
7. All conduits shall be weather sealed at both ends.
8. Serving terminals are to be installed approximately 18 inches to the right of the pole, and drop ports are to be installed on the left side of the terminal.
9. An 8-foot slack loop shall be placed at all serving terminal locations for splicing. The remaining slack not used for splicing is to be coiled in the back of the serving terminal for storage and proper access to the fibers.
10. Only working fibers are to be spliced into ports for active fibers. The remaining fibers are allocated per design terminal counts for future use as required.
11. Labeling of the cable sizes and direction is required. All fiber strands spliced into ports will be tagged and identified per terminal splice design.
12. At each aerial splice location 150 feet of cable will be left on each cable end for splicing, or as otherwise indicated on the construction drawing. The cable ends must

be sealed watertight to prevent water from entering the cable.

### **Testing Requirements**

Contractor shall test the network and demonstrate to Our Katahdin that the network is functioning.

### **Change Orders**

If a need arises to change the scope of the project in a reasonably significant way, a change order shall be requested in writing prior to starting work or incurring costs. All change orders shall be subject to approval by Our Katahdin.

### **Documentation Requirements**

Contractor shall provide as-built documentation to Our Katahdin at the project completion. This shall include at minimum the following:

As-built drawings, in either AutoCAD or ESRI shapefiles, including any and all changes implemented.

Detailed splicing report consisting of:

- Network
- FDH
- POP
- Splice cases
- Terminals
- Fiber span footages
- Terminal splice locations
- Strand grounding locations
- Multi-port locations
- Slack loop locations
- Routes of all wire/cables installed (in ESRI shapefile format)
- Test results for optical fiber testing
- Warranty Package to include dates (Product Warranty)
- Certificate of Acceptance (pre- and post-installation)
- Summary sheet of test results for quick reference
- POP Shelter and Compound diagrams

## **Northern Border Regional Commission Bonding Requirements**

This project is funded with money from the Northern Border Regional Commission. The Northern Border Regional Commission has the minimum requirements as follows:

- (a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “big guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as many be required within the time specified.
- (b) A performance bond on the part of the contractor for 100% of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor’s obligations under such contract.
- (c) A payment bond on the part of the contract for 100% of the contract price. A “payment” bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

## **6. Response Format and Content**

The format of proposals should adhere to the following standards:

### **1. COVER PAGE:**

- All respondents must complete the attached cover page, including critical firm details and relevant contact information.

### **2. EXECUTIVE SUMMARY:**

- Summary of the organization, its methodology and proposed approach to the RFP.

### **3. QUALIFICATIONS OF THE ORGANIZATION:**

- Summary of the organization’s history, resources and experience performing similar work.

### **4. STAFF QUALIFICATIONS:**

- List specifically the staff of the organization performing work on this project, their qualifications and experience in this field.

### **5. PROJECT APPROACH:**

- Describe your firm’s approach to achieving the outcomes requested in this proposal. How will you collaborate with Our Katahdin and other relevant entities to seek information? How will you design the network? List the tasks you will need to take in order to see the project from inception to completion.

### **6. TIMELINE:**

- Provide an estimated timeline for each phase of the project.

### **7. BUDGET:**

- Provide a budget aligned to project milestones, costs, and tasks.

### **8. REFERENCES:**

- Include references from at least three clients of the firm, preferably those who have contracted with the firm for services similar to those sought by this RFP.

- Describe the client, the project, and the outcome of the work.
  - Provide contact information for the client, including phone and email address.
9. EOP:
- State whether your firm is an Equal Opportunity Employer.

## **7. General Conditions and Disclaimers**

- Our Katahdin reserves the right to accept or reject any or all submittals received, cancel or modify the RFP in part or in its entirety, or change the RFP guidelines, when Our Katahdin believes it is in their best interest to do so.
- Our Katahdin reserves the right to accept or reject any or all proposals as deemed to be in the best interest of the City of Millinocket and the Katahdin region. Our Katahdin may elect to negotiate with multiple respondents prior to making a final award decision.
- Our Katahdin reserves the right to delay or discontinue this selection process at any time during the process.
- Our Katahdin will not be held responsible if, in its opinion, the best interests of the project will be served by not awarding all or parts of the study as defined in this Request for Proposals.
- The Respondent shall be solely responsible for all expenses it incurs in responding to this RFP. This includes any presentations or demonstrations associated with the RFP.
- Our Katahdin reserves the right to:
  - Request proposal modifications at any time before the selection is made, if Our Katahdin believes it is in their best interest. Consider Statements or modifications received at any time before the selection is made, if Our Katahdin believes it is in their best interest.
  - Request clarification and/or additional information from the Respondent during the evaluation process.
  - Utilize ideas submitted in the Statements received, regardless of whether the Respondent is selected.
  - Negotiate with the selected Respondent(s) to include further services not identified in this RFP.

# Appendix A. Map of Downtown Millinocket and Proposed Fiber Installation

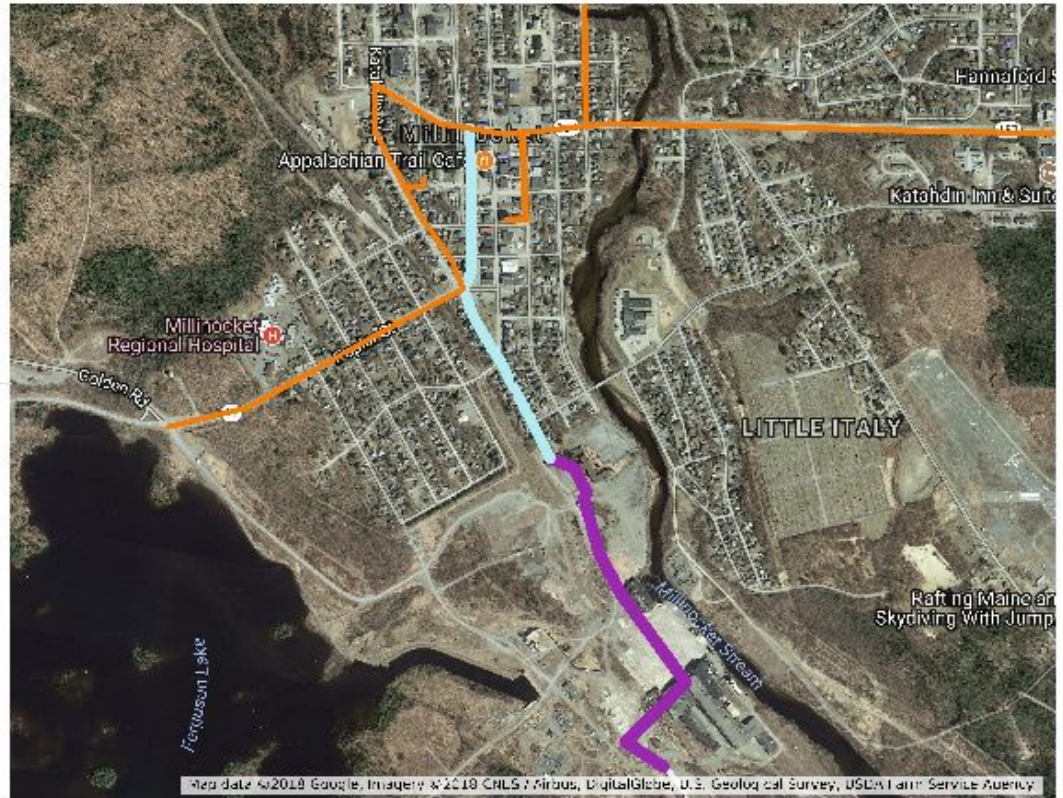
## Our Katahdin Fiber Project

### Three Ring Binder

- Three Ring Binder
- Fiber to DesignLab
- Fiber to School
- Fiber to Library

Proposed Fiber on Penobscot Ave

Proposed Fiber to Warehouse #7



## Appendix B. Cover Sheet for Proposals



### PROJECT PROPOSAL FORM For Broadband Fiber Build Out

**\*\* This cover sheet must be included in your proposal \*\***

The undersigned, an authorized representative for the firm responding to this RFP, hereby declares that they have read and understand all conditions as outlined in this Request for Proposals; and that the proposal is made in accordance with the same.

COMPANY NAME: \_\_\_\_\_

PRINT NAME AND TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

TYPE OF ORGANIZATION: \_\_\_\_\_

STATE OF INCORPORATION, IF APPLICABLE \_\_\_\_\_ FEDERAL TAX ID: \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_

Note: proposals must bear the handwritten signature of a duly authorized member or employee.

DATE: \_\_\_\_\_