

## RFI Cover Sheet

|  |  |   |  |   |  |              |  |
|--|--|---|--|---|--|--------------|--|
| Name of Respondent Organization          |  |   |  | Berkshire Broadband, Inc.                 |  |              |  |
| Mailing Address<br>P.O. 222              |  | City/Town<br>Southfield                   |  | State<br>MA                               |  | Zip<br>01259 |  |
| Phone<br>(413) 229-0030                  |  | Fax                                       |  | Web Address<br>www.berkshirebroadband.com |  |              |  |
| Name of Primary Contact Person           |  |   |  | Marguerite Krejci                         |  |              |  |
| Primary Contact Title<br>General Manager |  | Email Address<br>krejcimarguerite@aol.com |  | Phone<br>(516) 365-1387                   |  |              |  |

Which of the following best describes the respondent: *You must select at least one.*

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> Broadband Service Provider                  | <input type="checkbox"/> Government Organization | <input type="checkbox"/> Equipment Manufacturer                   |
| <input type="checkbox"/> Non-profit Organization                                | <input type="checkbox"/> Equipment Vendor        | <input checked="" type="checkbox"/> Network or Systems Integrator |
| <input type="checkbox"/> Interested Individual                                  | <input type="checkbox"/> Advocacy Group          | <input type="checkbox"/> Investor/Venture Capital Consultant      |
| <input type="checkbox"/> Owner of Physical Assets <i>Please specify assets:</i> |  |   |

Other *Please specify:*

|  |
|--|
| <p>Brief Description of Organization<br/>(please outline previous experience with broadband deployment and/or provision of broadband services)</p> <p><i>Berkshire Broadband, Inc. was founded in 2005 by Joseph Krejci and Edward Zyszkowski, two residents of Southfield, for the express purpose of providing Internet connectivity to the residents of New Marlborough and the Southern Berkshires. The company is registered in Delaware as a C corporation and is in good-standing. In 2007, Berkshire Broadband became a subsidiary of Steeplechase Networks, Inc., also a Delaware C-Corporation. Mr. Krejci, Mr. Zyszkowski and Robert Reynolds, co-owner of Mid-Hudson Cablevision are shareholders of Steeplechase.</i></p> <p><i>Berkshire Broadband has engineered and participated in the construction of municipal fiber networks in Tecumseh, Michigan and Danville, Virginia. It has worked closely with DesignNine based in Blacksburg, VA on several local fiber deployments. It has also installed fixed wireless and mesh-connected wireless networks in Calabasas, CA.</i></p> |
| <p>List of anticipated partner organizations</p> <p><i>Mid-Hudson Cablevision<br/>Catskill Mountain Construction<br/>DesignNine</i></p>  |

# Construction

## EXPERIENCE

Please discuss the respondent's corporate history and structure.

*Berkshire Broadband, Inc. was founded in 2005 by Joseph Krejci and Edward Zyszkowski, two residents of Southfield, for the express purpose of providing Internet connectivity to the residents of New Marlborough and the Southern Berkshires. The company is registered in Delaware as a C corporation and is in good-standing. In 2007, Berkshire Broadband became a subsidiary of Steeplechase Networks, Inc., also a Delaware C-Corporation. Mr. Krejci, Mr. Zyszkowski and Robert Reynolds, co-owner of Mid-Hudson Cablevision are shareholders of Steeplechase.*

Please describe the respondent's experience building networks of this type and size. Please provide specifics.

*Berkshire Broadband has engineered and participated in the construction of municipal fiber networks in Tecumseh, Michigan and Danville, Virginia. It has worked closely with DesignNine based in Blacksburg, VA on several local fiber deployments. It has also installed fixed wireless and mesh-connected wireless networks in Calabasas, CA.*

Does the respondent have a presence near New Marlborough or experience building networks in Massachusetts or for municipalities? Please provide specific examples.

*After being located for many years at the Buggy Whip in Southfield, the company is now headquartered at 481 Hartsville-New Marlborough Road in New Marlborough. The company had originally installed an experimental fixed wireless network that provided a connection to the Southfield Store and to various residents in Southfield, MA. This service was subsequently superseded by Verizon DSL*

Does the respondent have any previous case studies that could provide insight for the Committee? Can the respondent provide materials on any other municipal networks that have adopted the approach and/or best practices the respondent recommends?

*Several case studies can be found at the website: [www.designnine.com](http://www.designnine.com). Dr. Andrew Cohill, president of DesignNine is a consultant to Berkshire Broadband and will most likely be tasked to partner on this project.*

Will the respondent use subcontractors?

*Yes, Berkshire Broadband is in final stage negotiations with Mid-Hudson Cablevision, an experienced cable operator based in Catskill, NY to form a partnership which will deliver broadband and other services to New Marlborough and other Berkshire communities. Berkshire Broadband would potentially use a Mid-Hudson subsidiary, Catskill Mountain Construction for the construction and deployment of fiber broadband to the residents of New Marlborough.*

## CONSTRUCTION

What is the typical duration of a project like this and how would the ultimate timeline look, e.g. award=>permit=>make ready=>construction to acceptance?

*The biggest variable in deployment is the permitting and make-ready process. Once the appropriate agreements are in place, our expectation (barring unforeseen issues) is that construction would require no more than 9-12 months.*

What actions can the Town of New Marlborough or the construction company take to reduce construction time?

*The town could facilitate financing, make-ready, and permitting. The town should also take a key role in communicating the availability and advantages of the fiber network to its residents.*

In the respondent's past experience, what has been the best way to structure the relationships between the town, network operator, construction company, and third parties for construction of the network?

*We propose to provide a complete plan for all aspects of the network from construction, to operations, to third-party relationships in direct partnership with the town who would own the fiber infrastructure and lease it to us.*

What permitting and rights of way considerations are relevant? What best practices in permitting and ROW acquisition should New Marlborough adopt?

*The Town of New Marlborough must perform a review to determine if all areas requiring accessibility for installation of broadband services fall within public right of way. The owner of the utility poles must be contacted to determine if permission will be granted to run the broadband wiring. Finally, New Marlborough will need to execute an agreement with Berkshire Broadband permitting access to the public right of way.*

Can a builder construct the desired network without the previous selection of a network operator? Are there any issues or risks in approaching construction this way?

*In our proposal, we would expect to handle both construction and network operations. This integrated approach should minimize any potential problems.*

## TECHNICAL MODEL AND APPROACH

Are there specific standards or manufacturers the respondent prefers or requires? Are there technical reasons for such preferences?

*Our preference is to utilize an Active Ethernet configuration for the fiber network since this provides the greatest design flexibility and highest performance for the network. Alternatives such as PON (passive optical network) are sometimes utilized in areas of denser population; however, given the typical distances between homes in New Marlborough, such an approach would be sub-optimal in our opinion.*

If New Marlborough decides to include video, or any other services with their network infrastructure, what additional equipment and other network requirements will be necessary to provide the service?

*Berkshire Broadband is already in partnership with Mid-Hudson Cablevision and would distribute television programming already available on the Mid-Hudson network (<http://www.mhcable.net/services/>). We would also provide access to a professional television production facility located within 1 hour drive from New Marlborough for the production of local programming.*

What physical facilities are required for the network? What facilities can New Marlborough provide to reduce the cost and/or deployment time?

*The single most beneficial role the town can provide to facilitate the construction of the network is to negotiate pole rights to all of the existing telephone and electric poles located in the town. Some of the pole rights have already been bestowed to MBI, and we would work closely with the town and MBI to secure access to the existing make-ready infrastructure. Some rights-of-way or easements may be required for the construction of local sheds for power-supplies and other equipment that cannot be situated or mounted on the poles.*

What additional requirements on network construction are necessary for Smart Grid or medical monitoring support?

*Steeplechase Networks is experienced in providing hardware and software for both SmartGrid and HealthCare applications. Steeplechase had worked in the past with Landis Gyr, (now part of Toshiba), to develop SmartGrid software for one of the world's largest SmartGrid providers. Steeplechase advisor, Graham Richard (former mayor of Fort Wayne, Indiana – one of the first cities with FioS) has worked on numerous SmartGrid initiatives. Steeplechase has also developed a RPM (remote patient monitoring) application for HealthNet Connect (a division of J&B Medical, a \$3B health care company).*

*No additional construction requirements are necessary; however, subscribers of these services may require additional on-premises hubs for these services.*

## Maintenance, Network Operators and Service Providers

### EXPERIENCE

Please discuss the respondent corporate history and structure

*Please see response regarding corporate history above.*

Please describe the respondent's experience operating or maintaining networks of this type and size. Please provide specifics.

*Please see response regarding network experience above.*

Please describe the respondent's experience providing customer service functions, billing, technical support, etc., for a project of this type and size. Please provide specifics.

*Berkshire Broadband has successfully provided billing and customer support (including a 24/7 800 number) to residents of Calabasas Village, CA. It is our intention to provide full-time technical support and repair service resident in New Marlborough to support this project. Escalated support can be provided via our partner, Mid-Hudson Cablevision. Telephone service will use a VoIP system including a commercial grade system from NewNet Communications Technologies.*

Does the respondent have a presence near New Marlborough or experience operating in Massachusetts or with municipal-owned systems? Please provide specific examples.

*Yes. The primary shareholders of Berkshire Broadband have full-time residences in Southfield and the corporate headquarters are located in New Marlborough.*

Does the respondent have any previous case studies that could provide insight for the Committee? Can the respondent provide materials on any other municipal networks that have adopted the approach and/or best practices the respondent recommends?

*Case studies can be found at [www.designnine.com](http://www.designnine.com) and <http://wideopennetworks.us>*

## BUSINESS AND TECHNICAL MODEL

### General

Is the desired Four Functional Areas approach appropriate? If not, what other roles should be added or what roles should be combined?

*In our proposal, we specify an integrated approach whereby in partnership with the town, Berkshire Broadband handles all phases of construction, network operations, service offering and maintenance. We believe that this model will provide the lowest-cost and most flexible option for world-class service to the town residents while minimizing the town's management of multiple providers and their interrelationships.*

Can the Four Functional Areas be separated as described in Section 4? Are there any benefits to assigning more than one of these roles to a single firm?

*As mentioned, above, we believe that assigning all functions to one provider will result in the fastest buildout, lowest cost of service and best performance for the residents. With multiple providers the town will need to fill the role of project manager assigning tasks and managing deadlines.*

What specific services and product offerings would the respondent make available beyond entry level, commercial Internet access and phone service (e.g., extended phone services, video, etc.)? What requirements do these additional services have on network design, construction, and operation? Does the respondent consider the proposed services necessary or optional?

*In addition to the standard triple play offering of Internet Access, telephone service and television service, we propose to provide an open environment enabling a variety of over-the-top services such as Netflix, Amazon Prime, etc for content and other specific services for home security, energy management and health care monitoring. Berkshire Broadband's parent company, Steeplechase has extensive experience in securing and deploying such services and has done so in other fiber networks.*

Does the respondent recommend any specific actions prior to network activation that would ease the transition, especially for users with limited technical expertise?

*We would propose availability of both on-line and "classroom" instruction on using the service. Also, as residents of New Marlborough, we can offer one-to-one help to all our neighbors in town.*

What start-up assistance would the respondent make available to the MLP?

*We would provide access to our extensive background in FTTH as well as bringing in the expertise of the highly-regarded Design Nine firm which has provided similar assistance to the FastRoads fiber project in New Hampshire.*

Maintenance

Should the town contact out maintenance as needed or have an ongoing service contract?

*We propose ongoing maintenance to be included in the service offering provided to the subscribers of the network.*

What ongoing operating and other costs will be required to sustain and operate the network?

*Based on the initial proposal, these costs will be incurred by us as the service provider.*

What kind of service life should be expected from network hardware (including embedded software)? Describe the financial plan for sustaining the infrastructure through reinvestment as network hardware reaches the end of its useful life.

*Depending on the specific choices of network equipment, the active electronics are typically rated for 5 year life cycles. The fiber plant which constitutes the bulk of the capital cost is typically rated for a lifetime of 20 to 30 years; however, it's actual lifetime may well exceed that time period. During the term of the contract with the town, the service provider will be responsible for keeping the network equipment fully functioning within defined specifications. Any repair or replacement costs will be borne by the service provider and built into the business model for providing services to the subscribers.*

How should the operator and New Marlborough plan for network refresh and one-time maintenance, such as repairing storm damage?

*Berkshire Broadband has a 24/7 line available for the reporting of issues and outages. We have an ongoing relationship with Catskill Mountain Construction which has facilities and capabilities for rebuilding the fiber network plant as necessary.*

Network Operator

Does the Network Operator need a local presence?

*Yes, it would provide optimal service response to subscribers.*

What ongoing operating and other costs will be required to sustain and operate the network?

*To be determined by the ultimate engineering choices made in constructing the physical fiber plant.*

What technical aspects should the Town consider when building the network?

*The town should select a network architecture that has a long-term lifespan, one that meets or exceeds the term of any bonds required to capitalize its construction. Fiber provides the optimal base for that long-lived network design. However, the active electronics will typically have a 3-5 year lifespan. Choosing a reputable design firm would afford the best choices for technology and construction.*

What attributes should the Town consider when selecting an operator?

*Service quality, local presence, technical expertise.*

What monitoring and reporting capabilities would the respondent recommend New Marlborough include in the RFP?

*24/7 telephone response system for service calls.*

Service Provider

Are there a minimum number of subscribers that an operator would need to participate?

*The 40% subscriber number evidenced by pre-paid deposits to WiredWest would be sufficient to financially support the system.*

With whom should the customer relationship exist? The MLP or the Service Provider? What other considerations are important?

*The primary subscriber relationship would be with Berkshire Broadband as the service provider. However, Berkshire Broadband would partner closely with the town to make sure all key requirements are met and issues resolved.*

What ownership model does the respondent recommend for other CPE pas the ONTs?

*CPEs would be owned by the primary service provider or by other 3<sup>rd</sup> party service providers who would build-in the capital cost of the CPE into the monthly service charges.*

## CONTRACTS

What kind of legal structure needs to be in place in terms of Service Level agreement between the town and the vendors? What conditions would the operator want with respect to customers, i.e. should the town guarantee customers a minimum speed?

*The typical arrangement is that the service provider offers a variety of network speed based upon the customer selection.*

How should customer information be handled? Where will the subscriber usage information live, and who will have access to it and for how long? What privacy rules will apply?

*All customer and usage will reside in a secure database accessible by Berkshire Broadband and its partners as required. A standard privacy agreement would exist between the service provider and the subscriber and we would strictly abide by the covenants in that agreement.*

Should the vendor have any right to sell or otherwise benefit from any of New Marlborough's subscriber information based on usage patterns?

*Subscriber information and usage patterns would be use by Berkshire Broadband for the sole purpose of servicing its subscribers and would not benefit in any way from the subscriber's information.*

How long of a contract does the operator need to be incentivized to bid on the RFP?

*Along the lines of a typical cable operator franchise agreement, a ten year commitment would be adequate.*

What contracts does the operator need in order to use public infrastructure or rights of way from New Marlborough?

*The town as owner of the infrastructure would be required to obtain all pole rights and ROWs.*

What could be expected in terms of multi-vendor arrangements?

Will contracts with more than one vendor be required to complete this project?

*A single contract between the town and Berkshire Broadband would be required.*

Will the respondent use subcontractors?

*Yes*

Does the respondent have a supplier diversity plan?

*If required.*

Does the respondent plan to support local businesses? How? Please include specifics.

*From the initial construction through the ongoing service of subscribers we would support the local community through job creation and the hiring of local businesses as required.*

How much time does the respondent need to respond to an RFP?

*Depending upon the scope and detail of the RFP between 30 and 60 days would be necessary.*