

# **Request for Proposal (RFP)**

## **FIBER TO THE HOME INTERNET SERVICE AND NETWORK OPERATOR PROVIDER**

June 4, 2018

**Town of Shutesbury  
Municipal Light Plant  
Shutesbury, MA  
01072**

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## **1. SUMMARY**

The Town of Shutesbury Municipal Light Plant, hereinafter referred to as "the Owner," "Shutesbury," "the Municipal Light Plant," "the Shutesbury MLP," "the SMLP," and/or "the MLP," requests a proposal for the following.

### **1.1. General Overview**

The Town of Shutesbury is located in Western Massachusetts, roughly 30 miles north of Springfield, MA and northeast of Amherst, MA. The Shutesbury MLP is building its own Fiber to the Home (FTTH) system which is expected to be completed in 2018/2019. The FTTH Network will consist of approximately 45 road miles of aerial fiber optic cable and 5 miles of service drops to approximately 850 premises (homes, churches, government offices, and businesses) complete with Optical Network Terminals ("ONT"s), and equipment capable of supporting symmetrical gigabit and advanced network services to all subscribers. Our plan is to have a single provider for the ISP/NO function.

#### **1.1.1 Structure of Relationship and Flow of Payments**

The MLP will require the ISP/NO to collect payments from subscribers and utilize these funds for ISP service, operating and maintenance costs. In addition, the MLP will determine its costs for operation. This amount will be apportioned to subscribers on a monthly basis and be included by the ISP/NO as the MLP Fee in its subscriber billing statements. Receipts from said MLP Fee shall be paid by the ISP/NO to the MLP on a monthly basis. All residual funds will be returned to the MLP.

### **1.2. RFP Overview**

Shutesbury is issuing this RFP to qualify and select the ISP for a multi-year exclusive contract to begin on or before February 1, 2019. The ISP/NO shall provide all labor, materials, equipment, tools, supervision, and other resources necessary to provide such services over MLP Website, as described herein.

1.2.1 The Network Operator (NO) portion of the task is for operation and management of the physical infrastructure through a Network Operations Center ("NOC"), including:

- Monitoring of network devices and electronics
- Traffic optimization
- Providing IP connectivity to a Tier 1 Internet Provider

- Field dispatch
- Performance monitoring
- Subscriber usage data collection
- Problem troubleshooting
- Storage of spare material (material purchased by MLP)
- Quarterly spares inventory and recommended replenishment

1.2.2 The ISP portion of the task has responsibility for all retail functions for broadband internet and telephone services, including:

- Subscriber bill presentment
- Collection and processing of subscriber payments
- Handling subscriber service and technical support communications
- Oversight of necessary contractual obligations with subscribers
- Payment of operating and maintenance costs.

## **2. ISP/NO OPERATIONAL EXPECTATIONS AND REQUIREMENTS**

This section establishes the SMLP's expectations of the ISP/NO in relation to the MLP and subscribers

### **2.1. Operational Responsibilities**

#### **2.1.1. Sales and Provisioning**

The ISP/NO, as the sole ISP/NO on the Shutesbury FTTH network, will be responsible for all sales and provisioning of broadband internet and telephone services to subscribers on the network.

VOIP telephone service shall include capacity to provide 'plain old telephone' connectivity utilizing subscriber's built-in connections for premise copper wire connections and retention of existing telephone numbers. No additional VOIP analog to digital converter box shall be required. The ISP/NO shall have capacity to provide subscribers with dynamic addressing by default, and a permanent static IP address if requested by the subscriber. Both addressing types shall have automatic redundancy provided by at least two properly sized high availability servers in different physical locations. IP address servers shall be sized so that any one of the servers can handle the entire worst case demand alone. IP address servers should be configured to ensure automatic fail-over without manual intervention. ISP/NO shall institute automatic monitoring and notification of problematic IP address servers to ISP/NO staff/employees so that issues may be resolved promptly. During essential maintenance windows, at least one IP address server shall be

on-line and available at all times. Telephone shall be available to internet subscribers. The ISP/NO shall have ability to manage DNS in such a way that all assigned IP addresses have fully consistent forward and reverse lookups. Internet service shall include subscriber email accounts. The ISP/NO shall have the ability to manage routing of telephone calls throughout the public switched telephone network (PSTN) and interconnection points of the PSTN with the Internet Protocol (IP) realm. The ISP/NO shall make full efforts to sell internet and telephone services on the FTTH network. It should be noted that residents of Shutesbury are not required to purchase services on the FTTH network. With the approval of the MLP, the ISP/NO may offer broadband-related services beyond Internet and telephone at additional cost to subscribers, subject to assurances to the MLP that such other services are within the capacity of the Shutesbury network design and operation. Subscribers will be provided a means to OPT-OUT of all solicitations if desired.

#### 2.1.2. Subscriber Service

The ISP/NO will provide robust subscriber services, including toll-free, one-call and email trouble reporting. The Shutesbury MLP, with guidance from its ISP/NO and technical advisors, will track subscriber satisfaction and network performance, using items such as number of help desk tickets, response times, etc. The ISP/NO shall provide education and support to assist subscribers switching from existing DSL, satellite or other broadband services.

#### 2.1.3. Premise Installations

The ISP/NO may undertake interior premise installations beyond the ONT, under contract between the ISP/NO and the subscriber. The ISP/NO may sell or lease equipment to the subscriber beyond the ONT and shall provide appropriate technical support to users. Any service or equipment provided beyond internet and phone must be approved by the MLP.

#### 2.1.4. Billing and Collections

The ISP/NO shall handle all retail billing and collections for the FTTH network, and ensure proper billing and service. Flexible methods of monthly billing and payment should be offered at no cost to subscriber. Subscriber choice of method should not result in additional charges. Methods include: 1) Monthly paper statements sent by US Postal Mail, with payments accepted by US Postal Mail; 2) Monthly statements sent by email with automatic billing

to subscriber's credit or debit card; 3) Monthly statements sent by email with automatic checking account drafting; and 4) Telephone based payment of bill using credit card, debit card, or checking account drafting. The ISP/NO shall process all subscriber payments and shall remit to the MLP monthly the portion of the subscriber bill that represents the MLP Fee and any residual funds after costs per 1.1.1.

#### 2.1.5. Network Operations

The ISP/NO will be responsible for 24/7/365 network monitoring.

Troubleshooting and technical support also shall be provided 24/7/365. The ISP/NO shall have sufficient upstream bandwidth and peering arrangements to handle the load of the Shutesbury network, including telephone service.

The ISP/NO shall supply a 2 Gbps symmetrical 'middle mile' link (or equivalent).

#### 2.1.6. Maintenance & Repairs

Routine network maintenance as well as maintenance capital expenditure projects will be the sole responsibility of the ISP/NO.

### 2.2. Reporting

#### 2.2.1. Maintenance costs

Maintenance details performed by the ISP/NO shall be submitted on a monthly basis for review to the SMLP for approval.

#### 2.2.2. Performance reports

The ISP/NO will be required to submit quarterly performance reports to Shutesbury concerning the financial and operational performance of the network.

Key Metrics would include, but not be limited to, the following:

- Number of subscribers
- Subscriber complaints, categorized by type of complaint
- Tickets: outstanding, closed, total, average daily new tickets
- Network outages, stratified by repair time (1hr, 4hrs, etc) and by location
- Number of customer-initiated contacts required to resolve a single issue
- MTTR (Mean Time to Resolution) by issue category
- Fulfillment percentages
- Provisioning intervals

- Bill accuracy & timeliness
- Network Congestion

As part of the RFP process, the Company should propose sample Service Level Agreements and Key Performance Indicator/Indices (SLAs and KPIs) against which the ISP/NO would be measured.

### 2.3. Subscriber Information

The ISP/NO shall maintain subscriber usage information available to the MLP and Network Operator. This information will be the property of the MLP to allow identification of system capacity issues and high volume users. The ISP/NO will not have any right to sell or otherwise benefit from any such information. The ISP/NO will have the right to use subscriber information for service, billing, and collections purposes.

### 2.4. ISP/NO Contract Length

The ISP/NO potential contract with the MLP will last either three (3) or five (5) years depending on final agreement. The ISP/NO shall provide that subscriber contracts end without penalty if the contract between Shutesbury and the ISP/NO is not renewed. In the event of termination of the ISP/NO contract with the MLP, the ISP/NO shall provide full support and cooperation with the process and requirements of effecting a smooth transition to the incoming ISP/NO.

### 2.5. Expertise and Other Requirements

#### 2.5.1. Network Provisioning

- The ISP/NO must have expertise and demonstrable past experience in provisioning network equipment. The make, model, and specifications of network equipment are stated in Appendix A, attached hereto.
- The ISP/NO must have sufficient breadth of skills or have the ability to acquire such expertise within a short period of time to work with this equipment.
- The ISP/NO shall maintain backup configurations of all routing tables and similar network elements and provide such information to the MLP on a monthly basis or as otherwise agreed, in a format approved by the MLP.
- The ISP/NO shall maintain network security and report potential and actual security breaches to the MLP as soon as practicable and not later than seven (7) business days after the breach. The ISP/NO shall take all necessary measures to prevent security threats in its systems or in the network, including capability to detect, mitigate, and report hostile activity such as DDOS attacks to or from subscribers.

- The ISP/NO shall have capability to provide virtual local area network (VLAN) per subscriber or equivalent protections for the separation of subscribers' traffic from inappropriate interception.
- The ISP/NO shall demonstrate understanding and commitment to concepts of net neutrality and shall assure all regulatory agency compliance.

#### 2.5.2. Retail Services

- The ISP/NO shall have experience providing retail services including telephone and broadband internet over an FTTH network.
- Based on its similarity to Leverett, Shutesbury expects a high level of uptake for FTTH services. However, it cannot guarantee a minimum percentage of subscriber uptake and hence the ISP/NO must be willing to provide services irrespective of the number of subscribers. Further, ISP/NO must assume its share of commercial risk from lower than expected service uptake or changes in the Town's population.
- The ISP/NO must have demonstrable experience selling telecommunications services to rural populations. All marketing materials shall be approved by the MLP prior to use.

#### 2.5.3. Billing and Subscriber Contracts

- The ISP/NO shall have a secure web portal for subscribers to login and view their billing history, add or delete services, report technical issues, and register complaints.
- All contracts for retail services shall be between the ISP/NO and subscribers. The MLP neither guarantees nor mediates on behalf of either party with respect to contracts. The ISP/NO must perform its own credit checks, as needed, before signing up subscribers. The ISP/NO must bear all risk of subscriber payment default.
- The ISP/NO shall provide clearly defined service level agreements as part of subscriber contracts, covering every aspect of subscriber service, usage, and billing, including an acceptable use policy.
- The ISP/NO shall provide subscribers the option of paper and/or electronic bills, as described in section 2.1.4, above.
- The contract between the MLP and the ISP/NO regarding the revenue stream between the two will not in any way be a substitute for contracts between the ISP/NO and subscribers.

### 2.6. Service Outages

The Company shall propose targets for allowable number and extent of Service Outages as defined by the FCC in 47CFR4.5 (a) and a financial penalty structure in the event the allowable number or extent of outages is exceeded in a calendar year. Outages in internet service, email, and telephone shall be explicitly covered. Planned maintenance and outages due to equipment, software, and services not owned or provided by the ISP/NO to serve Shutesbury subscribers shall not be included.

### **3. COMPANY QUALIFICATIONS**

#### **3.1. Company Experience**

3.1.1. No subcontractor's experience can be used to meet the qualification requirements of the Company included in this RFP.

3.1.2. The ISP/NO shall unambiguously specify if it intends to use any third party contractors in providing any services covered under this RFP. ISP/NO selection of third party contractors is subject to approval by the MLP.

3.1.3. The Company shall identify at least one (1) project where they are currently providing or have within the last three (3) years provided internet and telephone network services. A brief description of the services and a point-of-contact and the telephone number of the network owner must be provided.

3.1.4. The Company shall have all required permits and licenses from federal, state and local authorities to provide retail network telecommunications services in Massachusetts.

#### **3.2. Documentation of Prior and Concurrent Commercial or Residential Internet and Telephone Projects**

3.2.1. Company shall include client contact information for all commercial or residential ISP/NO projects engaged with currently or in the last five (5) years.

#### **3.3. Financial Stability**

3.3.1. Proposer shall include documents demonstrating financial stability over the previous three years, including annual income statements, balance sheets, and statements of cash flow.

### 3.4. Technical Expertise

3.4.1. Company shall employ professionals who are experienced in managing an ISP/NO and in providing customer support in an internet and telephone environment. Documentation or statements concerning their qualifications and certification shall be provided.

3.4.2. Company shall employ professionals who have experience in marketing and selling FTTH services to rural audiences. Documentation or statements concerning their qualifications shall be included in the RFP.

## 4. EVALUATION OF PROPOSALS

### 4.1 Proposals

The SMLP hereby reserves the right to reject any or all Proposals, or to accept any Proposal that in the opinion of the SMLP may be in the best interest of the Town.

### 4.2. Evaluation Process

Responses to this RFP will be confidential at least until the time a contract is signed. The MLP shall evaluate each Proposal that is properly submitted. The MLP may request subsequent interviews with a Proposer for further clarification of a Proposal. After review of all Proposals, SMLP will select a finalist to conduct in-person interviews, undertake due diligence, and discuss negotiation of definitive agreements. These interviews, due diligence, and discussion will result in selection of the ISP and final negotiations.

### 4.3. Evaluation Criteria

The MLP will review Proposals with reference to all factors set forth in this RFP, with particular attention to:

#### Service Criteria

Experience and Expertise

Ability to meet Operational and Maintenance Expectations and Requirements

Maintenance Response Time and Strategy

Management/Administrative Services Provided

#### Price Criteria

Initial Connection Fee

Monthly Subscriber Fees (Internet and Phone)

Monthly Network Operator Fee

Hourly Maintenance Fees Including Equipment, and Retainer if Required, and  
Additional Charges  
Fixed Monthly Maintenance Fee and Additional Charges (Optional)  
Revenue Return Plan (Optional)

A separate pricing strategy may be provided for subscriber add-on services, if any such options are proposed. Also list any plans for profit sharing for these add-on services.

## **5. COMPANY QUESTIONS**

5.1. If any person contemplating responding to the RFP for the services covered by this RFP is in doubt as to the meaning or intent of any part thereof, s/he may at once notify the MLP and request clarification prior to submitting a RFP.

5.2. Questions may be submitted to: [broadband@shutesbury.org](mailto:broadband@shutesbury.org)

5.3. Questions must be in writing (email questions allowed) and will be accepted until June 22nd, 2018 at 10:00 AM. Questions and responses will be made available to all Proposers on July 13th, 2018 and will become a formal addendum. No other questions will be accepted or will be binding. Oral and other interpretations or clarifications will be without legal effect. The MLP will not be responsible for any other interpretation.

## **6. RFP SCHEDULE AND SUBMISSION INSTRUCTIONS**

### **6.1. RFP SCHEDULE**

|                              |                             |
|------------------------------|-----------------------------|
| Written Questions Due:       | June 22, 2018 10:00 AM      |
| Answers to Questions Posted: | July 13, 2018               |
| Submission of Proposals Due: | August 10, 2018 10:00 AM    |
| Finalist Named:              | September 21, 2018          |
| Contract Award:              | October 19, 2018 (expected) |

6.2. Proposals must be submitted in a SEALED envelope PLAINLY marked "Proposal for Shutesbury ISP/NO" and addressed to:

Becky Torres, Town Administrator  
Town of Shutesbury  
1 Cooleyville Rd  
Shutesbury, MA 01072

6.3. In order to be considered, Proposals must be received no later than August 10th, 2018 at 10:00 AM. Proposers must take into consideration standard postal delivery times. Oral, telegraphic, telephonic, emailed, or facsimile submissions are invalid and will NOT receive consideration. Proposals received after the date and time specified above will be returned unopened.

6.4. Prior to the date and time specified above, any submitted Proposal may be withdrawn or modified by notice in writing over the signature of the Proposer. Notice may be provided by telegraphic or facsimile means.

6.5. Proposers are required to submit one (1) original and three (3) copies of their Proposals in the proper sealed envelopes. One electronic copy on USB drive must also be submitted.

## **7. PROPOSAL FORMAT REQUIREMENTS**

7.1. Proposals must be completed in two parts:

PART I: In one sealed envelope proposer should submit the following. Proposers company name followed by the words "Service Criteria" must be clearly labeled on the outside of the envelope:

- (1) Cover Page Letter and authority to sign (per section 7.3 to 7.5)
- (2) Service Criteria Response explaining how proposer expects to fulfill:
  - (a) Experience and Expertise (per section 3)
  - (b) Ability to meet Operational and Maintenance Expectations and Requirements (per section 2)
  - (c) Maintenance Response Time and Strategy
  - (d) Equipment Provided
  - (e) Management/Administrative Services Provided
  - (f) Additional Information Attachments

PART II: In a separate sealed envelope proposer should submit Price Criteria.

Proposers company name followed by the words "Price Criteria" must be clearly labeled on the outside of the envelope.

- (g) Initial Connection Fee
- (h) Monthly Subscriber Fees (Internet and Phone)
- (i) Monthly Network Operator Fee
- (j) Hourly Maintenance Fees Including Equipment, and Retainer if Required, and Additional Charges

- (k) Fixed Monthly Maintenance Fee and Additional Charges (Optional)  
 (l) Revenue Return Plan (Optional)

**Please submit pricing proposal in the following table format:**

**PART A) Initial Connection Fee, Monthly Subscriber Fees (Internet and Phone), Monthly Network Operator Fee**

| Contract Length             | One Time Connection Fee (if required) | Monthly Internet-only Fee | Monthly Phone-only Fee | Monthly Internet & Phone Fee | Monthly Network Operator Subscriber Fee |
|-----------------------------|---------------------------------------|---------------------------|------------------------|------------------------------|-----------------------------------------|
| 3 Years                     |                                       |                           |                        |                              |                                         |
| 5 Years                     |                                       |                           |                        |                              |                                         |
| Other term (please specify) |                                       |                           |                        |                              |                                         |

**PART B) Hourly Maintenance Fees Including Equipment, and Retainer if Required - Per Incident Model**

| Contract Length             | Maintenance/ Repair Rates Per Hour (business hours) | Maintenance/Repair Rates Per Hour (off business hours) |
|-----------------------------|-----------------------------------------------------|--------------------------------------------------------|
| 3 Years                     |                                                     |                                                        |
| 5 Years                     |                                                     |                                                        |
| Other term (please specify) |                                                     |                                                        |

Please detail any additional costs expected with maintenance/ repair such as training and material costs, storage fees, handling fees, truck fees, and retainer. If these costs are NOT detailed then it is assumed that they are not required or inclusive in the hourly rate.

Maintenance/repair costs will be inclusive of any capital costs, material costs, training, retainer, or 3rd party support. Costs will be before the PURMA/or equivalent insurance recovery (deductible of \$10,000).

**(OPTIONAL) PART C) Fixed Monthly Maintenance Fee - All Inclusive Model**

| Contract Length             | All Inclusive Flat Rate Network Maintenance Fee (Monthly) |
|-----------------------------|-----------------------------------------------------------|
| 3 Years                     |                                                           |
| 5 Years                     |                                                           |
| Other term (please specify) |                                                           |

Please detail any additional costs expected with maintenance/ repair such as training and material costs, storage fees, handling fees, truck fees, and retainer. If these costs are NOT detailed then it is assumed that they are not required or inclusive in the flat monthly rate.

Maintenance/repair costs will be inclusive of any capital costs, material costs, training, retainer, or 3rd party support. Costs will be before the PURMA/or equivalent insurance recovery (deductible of \$10,000).

**(OPTIONAL) Part D) Revenue Return Plan (Please detail expected profit sharing plan if any excess funds collected via subscriber fees will be returned to the SLMP)**

7.2. All information Proposer expects to be considered in the award of a contract must be included in the Proposal.

7.3. Proposals by corporations must be executed in the corporate name by the president, vice-president, or other corporate officer, accompanied by evidence of authority to sign, and the corporate seal must be affixed and attested by the secretary or assistant secretary.

7.4. Proposals by partnerships must be executed in the partnership's name and signed by a partner whose title must appear under the signature.

7.5. All names must be typed or printed in ink below the signature line.

## **8. CONTRACT AWARD**

8.1. The MLP may conduct such investigations as the MLP deems necessary to assist in the evaluation of any Proposal and to establish the readiness, willingness, ability, responsibility, qualifications, integrity, and financial stability of Proposers and any proposed subcontractors or other persons and organizations to perform the contract in accordance with the RFP, to the MLP's satisfaction prior to awarding a contract.

## **9. EQUAL EMPLOYMENT and SMALL and/or MINORITY BUSINESS REQUIREMENTS**

9.1. It is policy of the Shutesbury Municipal Light Plant that small and/or minority business enterprises shall have the maximum practicable opportunity to participate in the performance of public contracts. Proposer agrees that if this Proposal is accepted, s/he will not engage in employment practices which have the effect of discriminating against employees or prospective employees because of race, color, sex, religion, national origin, age, gender identity, handicap, political belief or affiliation, or any other protected class under the law. In addition, Proposer agrees by submittal of this Proposal, that s/he will abide by all applicable terms and provisions of the Government's Nondiscrimination Clause and Small and/or Minority Business Clause, Executive Order No. 11246, as amended by Executive Order No. 11375.

9.2. Proposer agrees that if this Proposal is accepted and deficiencies in any aspect of its employment practices and/or minority business utilization are found as a result of review or investigation conducted by the SMLP, the Proposer may be required to submit a written Affirmative Action Plan to the SMLP for approval.

## **10. INDEMNIFICATION**

To the fullest extent permitted by law, the ISP shall indemnify, defend (with MLP counsel), and hold harmless the MLP and its officers, agents, and representatives, from and against all claims, damages, losses and expenses, including but not limited to court costs and attorneys' and experts' fees, arising out of or resulting from the performance of the contract that results from this RFP. The provisions of this Article are intended to survive any termination of the Contract that results from this RFP.

## **11. DISQUALIFICATION OF PROPOSERS**

11.1. More than one Proposal for the same work from an individual, or a firm, partnership, corporation or an association under the same or different names will not be considered. Reasonable grounds for believing that any Proposer is interested in more than one Proposal for the contract may be cause for disqualification of that Proposer and the rejection of all Proposals in which that Proposer is interested.

11.2. The following, without limitation, are additional causes that may be considered as sufficient for the disqualification of a Proposer and the rejection of their Proposal:

11.2.1. Evidence of Collusion among Proposers.

11.2.2. Poor performance in the execution of work under a previous contract or contracts.

11.2.3. Failure to achieve reasonable progress on an existing contract.

11.2.4. Default on previous contracts or failure to execute contract documents after award.

## **12. ATTACHMENTS**

The following attachments are included with this Request for Proposals:

Appendix A                System Specifications

## APPENDIX A - System Specifications

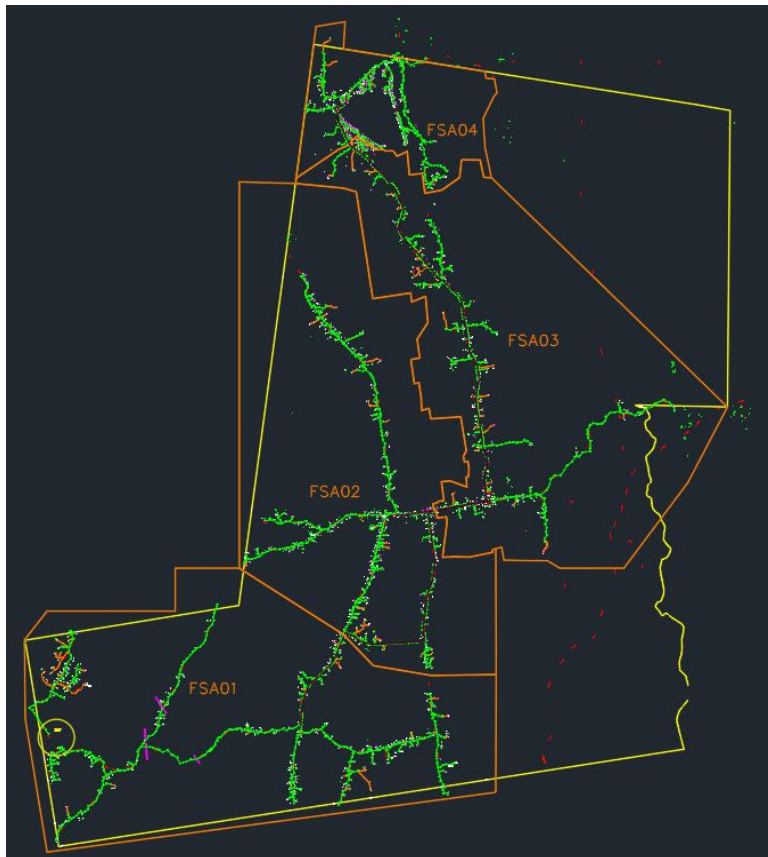
The fiber plant will be primarily an aerial system attached in the communication space of existing utility poles. The system will use GPON technology, with splitters mostly located centrally at the equipment hut adjacent to the Town Hall. To facilitate installing and adding service drops, pre-terminated MTP connectors will be used to break out the fiber at the distribution splice cases. Each residence will have an ONT (model TBD) powered by a UPS.

To reduce ongoing maintenance costs please note two system attributes:

- A connectorized fiber build
- A distributed PON design implemented for the populated Lake Wyola area.

The Shutesbury MLP intends to offer Gigabit GPON service and/or VoIP-based phone service to all premises in the entire town.

System Overview - Four Fiber Service Areas (FSAs)



For a full design scheme and equipment list please see the CAD files, available here:

<https://umass.box.com/v/ShutesburyFiberDesign>

See the DWG files. You will need a DWG file viewer which can be downloaded for free here:

<https://www.autodesk.com/products/dwg>