

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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**Application ID:** 75708142020173130  
**Application Status:** Pending  
**Program Name:** Virginia Telecommunications Initiative 2021  
**Organization Name:** Amherst County  
**Organization Address:** 153 Washington Street  
Amherst, VA 24521-0390  
**Profile Manager Name:** Jeremy Bryant  
**Profile Manager Phone:** (434) 946-9418  
**Profile Manager Email:** jsbryant@countyofamherst.com

**Project Name:** Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021  
**Project Contact Name:** Jeremy Bryant  
**Project Contact Phone:** (434) 946-9418  
**Project Contact Email:** jsbryant@countyofamherst.com  
**Project Location:** 153 Washington St.  
Amherst, Va, VA 24521-0390  
**Project Service Area:** Amherst County

**Total Requested Amount:** \$570,000.00

**Required Annual Audit Status:** Pending Review

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Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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## Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
<b>Telecommunications</b>	<b>\$570,000.00</b>	<b>\$256,600.00</b>	<b>\$826,600.00</b>
Construction	\$570,000.00	\$168,100.00	\$738,100.00
Other: Other Project Costs	\$0.00	\$88,500.00	\$88,500.00
<b>Total:</b>	<b>\$570,000.00</b>	<b>\$256,600.00</b>	<b>\$826,600.00</b>

## Budget Narrative:

Amherst County will offer non-cash support through assistance with grant management and administration, facilitation of the necessary permitting and county approvals for the construction process, support at community meetings to publicize the project, consideration of taking service at county facilities, and providing access to any county easements. Firefly will provide a \$168,100 cash match for the construction of the project, making up 20.3% of the project cost. In addition, Firefly will provide \$88,500 in additional contributions through labor and equipment for home installs, marketing and promotion efforts, and project management and oversight labor.

## Questions and Responses:

### 1. Project Description and Need

Describe why and how the project area(s) was selected. Describe the proposed geographic area including specific boundaries of the project area (e.g. street names, local and regional boundaries, etc.). Attach a copy of the map of your project area(s). Label map: Attachment 1 – Project Area Map.

#### Answer:

There is a little trivia about the hamlets of New Glasgow and Clifford. The village of New Glasgow was one of the oldest settlements in Amherst County; it founded in the mid-1700's and there are still buildings standing that date to 1772. The village was a bustling commercial center at a crossroads for horses and wagons. The village had growth and prosperity from its formation until 1850, when the railroad bypassed it with a more southern route. A number of village residents decided to relocate to the area near the new depot and carried the name with them, renaming that area from New Market to New Glasgow. The more stubborn villagers who remained had a contest to rename the town and the name "Clifford" was drawn from a hat.

Now, with the passing of the railroad era, New Glasgow is no longer bustling. Clifford, which was reinvigorated with the automobile era, was bypassed by the four-lane construction or Rt 29 and the village is in decline. Both areas have been bypassed by the digital revolution. This project will reunite the two hamlets and put them back onto the main transportation path, this time for data.

The project also fills plays an important role in the overall buildout of internet to all Amherst County citizens. There has been CAF support or will be RDOF support for all areas around the project area, as can be seen in Attachment 2. This project will fill the "doughnut hole" left without federal funding and prepare the area with fiber

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

---

connectivity to allow Firefly or any other internet service provider to pursue opportunities to expand into the surrounding areas.

The area for this project is adjacent to the border of the Central Virginia Electric Cooperative (“CVEC”) fiber build and the retail internet access service area of Firefly Fiber Broadband (“Firefly”), a wholly owned subsidiary of CVEC. The project will connect to that network and extend north along New Glasgow Road, covering the areas west along Chestnut Lane and Stirling Drive. The project also covers the homes and businesses along Rt 29 west of New Glasgow Road to the hill north of Crawford Creek. The project area then continues across Rt 29 and follows the main road, with the name change to Fletchers Level Road plus all of the side roads off of it. At the intersection of Fletchers Level and Patrick Henry Highway (Rt 151), the project area follows the center line of the road south to Rt 29 and north to Alcock Road, then follows Alcock Road to its end. The full project area is shown on Attachment 1 – New Glasgow Clifford Project Area Map.

2. List existing providers in the proposed project area and the speeds offered. Please do not include satellite. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

**Answer:**

The incumbent telephone company in the area is Verizon but they have not upgraded their lines or internet offerings in years. SCSBroadband, which also goes by Acelanet, is a fixed wireless provider in the county. They have recently requested that Amherst County consider another tower to allow them to provide coverage to this area; the county has not acted on that request. The county recently stated that their long term goal is to have a “hard wired” land based connection for broadband for each county building that desired service. Acelanet is not capable of providing 25/3 speeds to this area, even though their filed Form 477 claims coverage for all of Amherst County. The only other options for internet access are cell phone companies and satellite companies. The information on providers was identified using the FCC Broadband map (<https://broadbandmap.fcc.gov/#/>) which provides information based on FCC Form 477 reported coverage areas for all broadband providers. Local businesses and residences also provided information regarding their options, or lack thereof.

In personal discussions with the founder of SCSBroadband he stated that he was searching for solutions because he had a friend who lived in this area who was not able to work remotely at this time due to lack of access to broadband.

Residents of the area presently use cell phone connectivity or satellite to access the internet.

3. Describe if any areas near the project have received funding from federal grant programs, including but not limited to Connect America Funds II (CAF II), ACAM, ReConnect, and Community Connect. If there have been federal funds awarded near the project, provide a map verifying the proposed project area does not conflict with these areas. Describe if there are Rural Digital Opportunity Fund (RDOF) eligible census blocks located in the proposed project area. Label Map: Attachment 2 – Documentation on Federal Funding Area.

**Answer:**

No federal funds have been received from the CAF II auction, ACAM, ReConnect or Community Connect programs for the project area. There are RDOF eligible census blocks within the project area. The total number of passings within those census blocks is 46 which is 26% of the total passings in the project area; the project

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

---

construction would also be reduced by 2.6 miles which would represent a 26% reduction in cost as well. Should the RDOF blocks be awarded, Firefly will rescope the project to exclude the relative census blocks and those associated homes and businesses.

4. **Overlap:** To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds of 25/3 mbps or less and with less than 10% service overlap within the project area. Describe any anticipated service overlap with current providers within the project area. Provide a detailed explanation as to how you determined the percentage overlap. Label Attachment: Attachment 3 – Documentation Unserved Area VATI Criteria.

**Answer:**

The proposed service area does not have service available at greater than 25/3. Businesses and residents of the area report speeds that are well under the threshold. Verizon does not claim to provide service at that level. Acelanet does in its Form 477 filing to the FCC, but is not able to provide that level of service at the present time according to residents and according to the statements Acelanet has made to Amherst County. The FCC broadband map also shows Comcast indicates it has gigabit level service in portions of the project area, but Comcast does not have facilities within miles of the area.

Attachment 3 shows the FCC broadband map with a census block highlighted that includes the inaccurate claims of the providers.

5. **Total Passings:** Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form
  - a. Of the total number of passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area. Describe the methodology used for these projections.
  - b. Provide the number of serviceable units in the project area that have 10/1 mbps or less. Describe the methodology used for these projections.

**Answer:**

1. There are 174 passings in the project service area. 30 of those are business locations and there is one identified home based business. There is one community center which is a community anchor and 4 churches.
2. Given the lack of internet options, 90% of accounts appear to have less than 10/1 connectivity if we do not consider cell phone options as acceptable given their speed reductions after passing usage thresholds.
6. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

---

wireless infrastructure will be installed.

**Answer:**

Not a wireless project so not applicable.

7. Speeds: Describe the internet service offerings, including download and upload speeds, to be provided after completion of the proposed project. Detail whether that speed is based on dedicated or shared bandwidth, and detail the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate. List the private co-applicant's tiered price structure for all speed offerings in the proposed project area, including the lowest tiered speed offering at or above 25/3 mbps.

**Answer:**

For residential service, Firefly offers two levels of service. The basic package is their Light service which provides 100 mbps symmetrical upload and download for \$49.99 per month. The second option is the Flash service which provides 1 gigabit per second symmetrical transfer for \$79.99 monthly. Voice over IP telephone service is offered for \$34.99 with a \$5.00 per month bundling discount if paired with internet service.

The speed is not an "up to" measurement like the one typically used by wireless technologies and DSL, but a base level that users will actually and consistently receive. Firefly residential service uses GPON technology and topography that does share a single fiber among several accounts, as all fiber based residential services does. Firefly monitors the performance level at the user and individual fiber level as well as at the network level to assure top level network performance. The new Firefly network has built a reputation on consistent speed delivery at even the highest demand times. Recently the Firefly network upgraded to a 100 gbps backhaul capacity; the present peak load is 12 gbps but with a fast growth plan Firefly is meeting its subscribers expectations by staying well ahead of the demand.

8. Network Design: Provide a description of the network system design used to deliver broadband service from the network's primary internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Provide a detailed explanation of how this information was determined with sources. If using a technology with shared bandwidth, describe how the equipment will handle capacity during peak intervals. For wireless projects, provide a propagation map for the proposed project area with a clearly defined legend for scale of map. Label Map: Attachment 5 – Propagation Map Wireless Project.

**Answer:**

The Firefly Fiber Broadband network is a 100% fiber optic connected network. It is a looped system with immediate failover capability to assure full data flow continues through any backbone loop equipment failure or fiber break. The network is based on rings within rings that provide additional local redundancy. Communications huts serve as hubs on the network, with fiber optic lateral lines extending out from the huts to the end users.

Firefly has committed to always keeping its backbone bandwidth adequate to assure the network never suffers from peak use congestion. This year the company began to transition to a full 100 gbps network ring capacity, with the plan to complete the full backbone ring next year to the next capacity that is a tenfold increase over the original 10 gbps capacity.

The proposed VATI project will extend fiber connectivity from the existing network Firefly operates into the new project area. The only new equipment necessary in the existing network is a small set of additional fibers and

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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some new laser cards in the Colleen substation communications hut. The hut is connected to the 100 gbps backbone ring that provides world class speed and reliability.

The network has a present peak usage of 12 gbps with rapid growth plans that will increase the number of services connected and bandwidth used by 500% over the next three years. Firefly is prepared for this level of growth and more should opportunities arise.

## 9. Project Readiness

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 6 – Timeline/Project Management Plan; Attachment 7 – MOU/MOA between Applicant/Co-Applicant.

### Answer:

The Firefly network is in a rapid growth state. In 2020, the network will be built out in the Colleen substation area, which is the take-off point for the VATI grant project area for the New Glasgow – Clifford project. The project team is in place, including design, project management, permitting, materials and inventory management, fiber construction and consumer premise installation. Presently CVEC and Firefly are constructing at a rate of 20 miles of fiber per week and connecting more than 100 weekly while ramping up to 150 and with planning in place to reach 200 new connections per week by 2022. The team is capable and has capacity to include this project within their other work without slowing the CVEC fiber build given the expected calendar.

Our approach will be to deploy a field data gathering team, then perform an autodesign process followed by field confirmation of the design outcome. At that point we will be ready to create construction documents and deploy contractors to begin construction. We already have relationships with the design and construction teams and have contracts in place. We also are maintaining a large inventory of fiber and ancillary materials due to the size and scope of our major fiber project; we will be able to access this inventory as necessary for the project buildout which will not be slowed by long lead times for material or equipment purchases.

The Timeline/Project management Plan and Draft Agreement between CVSI and the County are included in Attachment 6 and Attachment 7.

10. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note the a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant's cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. Label Attachments: Attachment 8 - Funding Sources Table; Attachment 9 – Documentation of Match Funding.

### Answer:

The county will offer non-cash support through assistance with grant management and administration, facilitation

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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of the necessary permitting and county approvals for the construction process, support at community meetings to publicize the project, consideration of taking service at county facilities, and providing access to any county easements. The county is excited about the project and plans to be a partner, helping to assure its success for the citizens of Amherst.

Firefly will provide a \$168,100 cash match for the construction of the project, making up 20.3% of the project cost. In addition, Firefly will provide \$88,500 in additional contributions through labor and equipment for home installs, marketing and promotion efforts, and project management and oversight labor. The marketing and promotion is particularly critical to achieving the desired take rates when a new service is offered to an area that has never had a true broadband option before. Firefly will also provide the expanded backhaul capacity to carry the additional traffic and address all other network impacts with internal investment, adding tens of thousands of dollars in electronics and other hardware.

11. Leverage: Describe any leverage being provided by the applicant, co-applicant, and partner(s) in support of the proposed project.

**Answer:**

The project is a perfect example of a public private partnership with both the county and private partner bringing additional benefits that provide leverage to make the project successful and to let the reach of this project go well beyond the borders of the project area.

The county will offer non-cash support through assistance with grant management and administration, facilitation of the necessary permitting and county approvals for the construction process, support at community meetings to publicize the project, consideration of taking service at county facilities, and providing access to any county easements. The county is excited about the project and plans to be a partner, helping to assure its success for the citizens of Amherst.

Firefly is excited about the project and the opportunity to serve New Glasgow and Clifford. Firefly also brings the benefit of having its fiber network just adjacent to the project area on the southern border. With additional RDOF funding available in the surrounding areas on all four sides of the project area. The availability of fiber connectivity will allow for a launch into many other rural areas of Amherst from this project territory by Firefly or any other ISP.

At the same time as this project is constructed, Firefly plans to extend its fiber network to an area east of New Glasgow Road making fiber internet available to 70 mobile homes. This area is not included in the project area and will be funded by Firefly. The mobile home area is eligible for RDOF, including it would put the project at risk should the RDOF funding for the area be awarded. The needs for this community are too great to wait for the RDOF buildout, and Firefly has decided to include the build within the same time frame while contractors would be in the area building the VATI grant project. This fiber extension will assure that this low and moderate income community get broadband access within the same timeframe as the VATI project is built.

This New Glasgow-Clifford project is a gateway project that sets the stage for additional further expansion that will move the county toward the goal of having every building in the county have the option of gigabit speed internet access.

12. Marketing: Describe the broadband adoption plan.

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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- a. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate.
- b. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

**Answer:**

a. Firefly has been offering internet to rural, underserved communities for 18 months and has achieved take rates in those areas ranging from 50-70%. The largest emphasis of the marketing plan for this project will revolve around direct mail to the residents who live in these areas. The County can provide mailing addresses for each residence in the project area and Firefly will craft a mailing specific to this area. We know that rural America still checks their mailboxes and direct mail is a proven way to communicate with our audience. We can also rely on word of mouth and our vibrant Firefly installation trucks, a.k.a. rolling billboards, to reach residents who may have tossed our mailing aside or missed the messaging. In addition, Firefly will be listed as an internet provider on any County provider listing for that area.

If the grant is awarded, Firefly will issue a press release to the local media to highlight the areas of the build to keep residents informed of the award and the progress. Press releases are posted on the Firefly website and maps of the build can be posted on the website as well. Additionally, press releases are posted on social media. Firefly has found an active audience on social media and updates its followers there often on new announcements.

b. Firefly hosts Town Hall meetings for each community when a build is launched in order to answer questions about their services and about the internet in general. As space and connectivity have allowed, Firefly employees took a television and showed guests how to stream programs using the internet instead of subscribing to cable. Firefly has hosted the Town Hall events at local churches and community centers to attract guests.

13. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co-applicant's history and experience with managing grants and constructing broadband communication facilities. Please attach any letters of support from stakeholders. If applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality. Attachment 10 – Letters of Support.

**Answer:**

Firefly Fiber Broadband is led by a team with Gary Wood, Bruce Maurhoff and Tina Mallia. This same team is responsible for the pursuit, award and administration of two grants from the Virginia Tobacco Region Revitalization Commission, two Virginia Telecommunications Initiative Grants, several county level grants, a \$28.6 million FCC Connect America Fund II auction award and a \$28 million USDA ReConnect program grant/loan award within the past two years. The Firefly team this year added Dennis Reece as its General

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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Manager, bringing in additional experience with successful grant management from his career at Citizens Telephone Cooperative in Floyd, VA. Dennis has experience with grants from the federal, state and local levels.

The Firefly team has built approximately 1200 miles of fiber within the past two years. Starting 2019 with 6 subscribers, it will have 7000 at the end of 2020. The team includes the design and project management from Conexon which is working with multiple electric cooperatives across many states in similar buildout efforts. The fiber contractor is S&N Communications, a Virginia company headquartered in Louisa, Va which has a long and successful record of working on large projects with Google, Verizon, Comcast and other major communications companies. Internally, Dennis Reece leads the effort for Firefly with his 23 years of experience in the construction and operation of internet communication facilities.

The county staff has pursued, been awarded and successfully administered numerous grants at the federal and state level. They are familiar with the requirements of the VATI program and stand ready to oversee an award for this project. Jeremy Bryant, Director of Amherst County Community Development Office, has served as the department director since 2006. He supervises all activities related to short- and long-range planning, serves as the Zoning Administrator, and is the secretary for the Amherst County Planning Commission and the Board of Zoning Appeals. He has managed several committees including the Business Taskforce as well as the Madison Heights Redevelopment District committee, a key initiative that served to lay the foundation for the OTMH project and village zoning designation. Bryant has directly overseen numerous Amherst County state and federally funded projects where he was directly responsible for all elements of project phasing, document and funding submittals. He has extensive knowledge of state and federally funded project and has served in the management role of three successfully executed CDBG non-entitlement projects.

Name	Title	Project Duties
Dean Rodgers	County Administrator	Grant and program oversight
Jeremy Bryant	Community Development Manager	Point of Contact Administration of grant Reporting

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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Gary Wood	President and CEO	Oversight of project
Bruce Maurhoff	Sr. VP & COO	Oversight of construction activities
Tina Mallia	VP & CFO	Oversight of finances, accounting and grant fund compliance
Dennis Reece	General Manager	Project Manager

## 14. Project Budget and Cost Appropriateness

**Budget:** Applicants must provide a detailed budget that outlines how the grant funds will be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. If designating more than one service area in a single application, each service area must have delineated budget information. For wireless projects, please include delineated budget information by each tower. Expenses should be substantiated by clear cost estimates. Include copies of vendor quotes or documented cost estimates supporting the proposed budget. **Label Attachments:** Attachment 11 – Derivation of Costs; Attachment 12 - Documentation of Supporting Cost Estimates.

### **Answer:**

The budget was developed using actual pricing from the ongoing 4000+ mile buildout across the CVEC footprint.

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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The estimates were developed using market prices established in competitively bid labor and materials contracts. Consumer premise equipment and communications hut electronics are based on contract pricing with our equipment partners for the large buildout.

15. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
- Total VATI funding request
  - Number of serviceable units
  - Highest residential speed available in proposed project area

**Answer:**

- Total VATI funding request is \$570,000.
- 174 serviceable units are within the project area.
- The highest residential speed will be 1 gigabit per second.

16. Commonwealth Priorities

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

- How the proposed project fits into a larger plan to achieve universal broadband coverage for the locality. Explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage.
- Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.
- Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.
- Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 25/3 mbps.

**Answer:**

- Amherst County is working toward a plan for county-wide connectivity with a stated goal of having each home have the option of being connected to a network capable of providing gigabit speed service. This project fulfills a small but strategically critical step in filling one doughnut hole rural area in which there are no other options for grants or outside support. There are not options for broadband internet for the citizens in this area today.

As Amherst County works toward universal coverage, Firefly is working to be a valued partner by completing its originally announced build and then extending into other areas with the support of CAF funds as well as pursuing all other potential sources of support to help make fiber to the home a reality for all areas in the southern, eastern

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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and northern rural areas of the county.

b. The project will make fiber optic connected, reliable, affordable, high speed broadband service available to 30 businesses, including small retail operations and service businesses. There is a community center and a number of churches. Most importantly, the project allows for the expansion of these businesses and the creation of home businesses. It also allows remote work for the area residents, distance learning for the community students and provides the opportunity for telemedicine for those who need healthcare but prefer not to travel.

c. This project is a partnership of the local government with Firefly Fiber Broadband, a local community based internet service provider owned by the not for profit electric cooperative, Central Virginia Electric Cooperative. Firefly offers world class speed internet with superior local customer service at rates that are usually only found in the highest density most competitive markets. The profits from the project will stay local, with a portion reinvested in further expansion of rural broadband access in Amherst County and central Virginia.

d. The proposed project provides a basic service of 100 mbps at \$49.99 per month. Firefly offers service through the Lifeline program of the FCC with a discount of \$10.00 per month for any account which qualifies for that program. In addition, the basic service provides broadband of speed and reliability to allow television channels to be received using online services such as Hulu, Sling, DirecTVNow, YoutubeTV and others. These online providers have much lower rates than satellite or cable packages, allowing families who presently have other television viewing packages to choose basic internet service plus an online television provider for less than family is presently spending for television alone.

One new Firefly subscriber calculated a \$2400 annual savings for his household when using the Firefly internet and voice over IP services with an online video service to replace their present internet, satellite television and landline phone services.

## 17. Additional Information

17. Provide any other information that the applicant desires to include. Applicants are limited to four additional attachments.

Label Additional Attachments as:

- a. Attachment 13 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 14 – XXXXXXXX
- c. Attachment 15 – XXXXXXXX
- d. Attachment 16 – XXXXXXXX
- e. Attachment 17 – XXXXXXXX

**Answer:**

N/A

**Attachments:**

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Pages: 12 of 14

# Application to DHCD Submitted through CAMS

Amherst County

Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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Map(s) of project area, including proposed infrastructure

1NewGlasgowCliffordVATI814202074306.jpg

Documentation of Federal Funding (CAF/ACAM/USDA, etc...) in and/or near proposed project area.

2NewGlasgowCliffordVATIRDOF814202074313.jpg

Documentation that proposed project area is unserved based on VATI criteria

3AmherstVATIDocumentationofUnservedNewGlasgowClifford8172020110048.pdf

Passings Form (Please use template provided)

4PassingsFormAmherstNewGlasgow8172020110057.pdf

Timeline/Project Management Plan

6VATIProjectScheduleAmherstCountyCounty814202074334.xlsx

MOU/MOA between applicant/co-applicant (can be in draft form)

7AmherstCVECDraftAgreementVATI2021814202074409.pdf

Funding Sources Table

8VATIFundingSourcesTableAmherstNewGlasgow814202074458.pdf

Documentation for match funding

9VATIAmherstCVSIBoardResolution814202074508.pdf

Letters of Support

10AmherstCountyLetterofSupport814202074536.pdf

Derivation of Cost (Project Budget)

11DerivationofCostsAmherstNewGlasgow814202074546.xlsx

Documentation supporting project costs (e.g. vendor quotes)

12ProjectCostjustification8172020110107.pdf

# Application to DHCD Submitted through CAMS

Amherst County

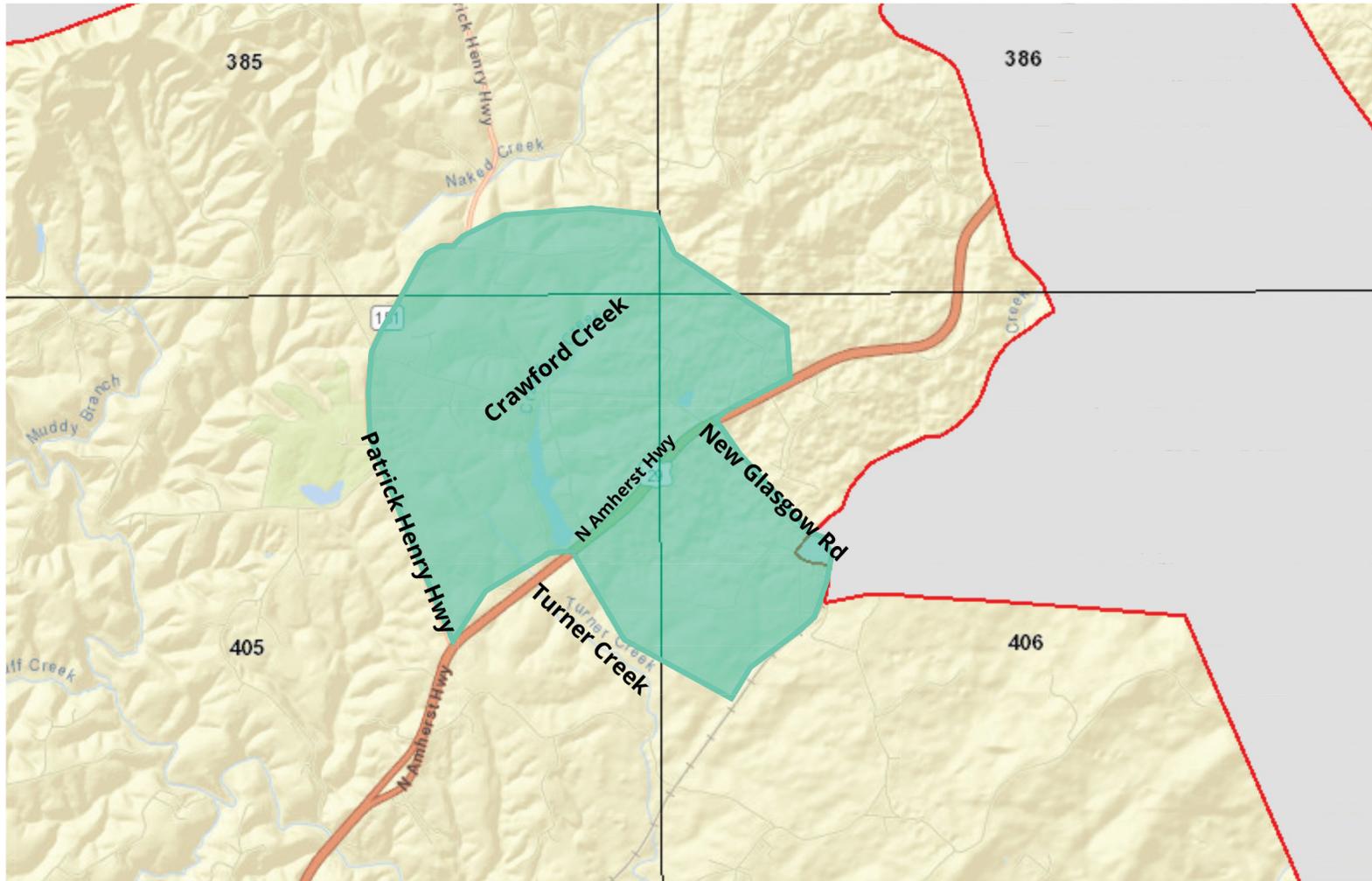
Amherst County-New Glasgow/Clifford-Firefly Fiber Broadband 2021

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Two most recent Form 477 submitted to FCC

13LastTwoFCCForm477FilingsCombined8172020110124.pdf

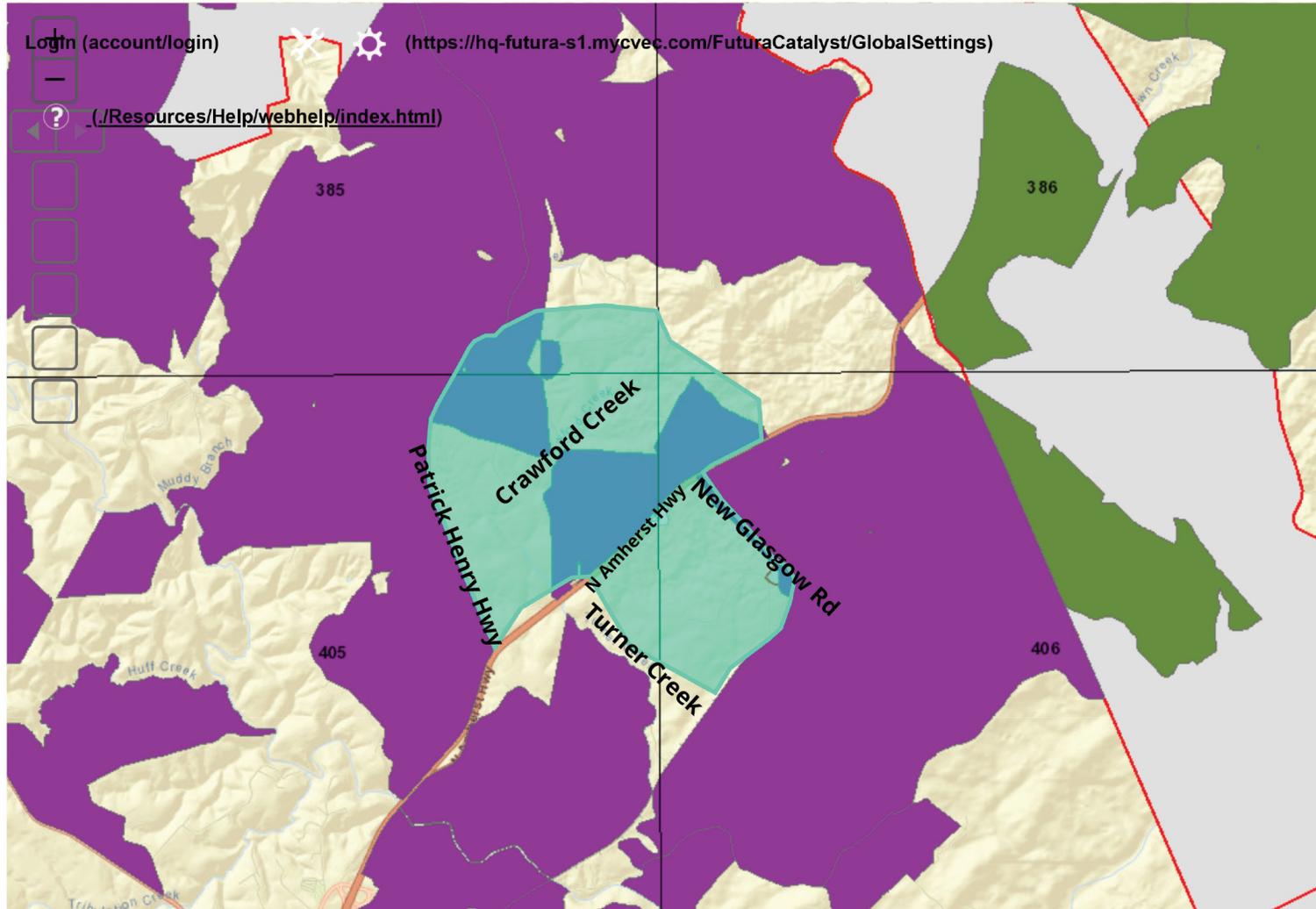
## New Glasgow/Clifford VATI Area



 CVEC Territory

 VATI

# New Glasgow/Clifford VATI & RDOF Area



 CVEC Territory

 VATI

 RDOF

CenturyLink

17047 OAK ST, # 2459, DILLWYN, VA, 23936 Change Address

Great! First let's choose an Internet speed.  
Up to 1.5 Mbps is available at your address

Price For Life! Pay the same monthly rate year after year.  
*Our best offers are online!*

**No Contract!**

Up to  
**1.5**  
Mbps

**\$49**/MO

Prepay required. Additional taxes, fees, and surcharges apply. [Offer Details](#)

**Add to Cart**

**1.5 Mbps is perfect for:**

- WiFi to connect your devices
- Stream videos and music
- Shop, pay bills, and surf at ease

8:14:33 PM  
Thursday, August 13, 2020

August 2020

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Today

Add an event or reminder

All Day Safety Meetings  
Tue - Colleen, Wed - App, Thu - Pal

All Day Safety Meetings  
Tue - Colleen, Wed - App, Thu - Pal

9:00 AM Invitation: Lit and CVEC Conversatio...  
[Hide agenda](#)

Federal Communications Commission

Fixed Broadband Deployment

Home Location Summary Area Summary Area Comparison Provider Detail Data Download About

Address 17047 Oak Street, D

**All Providers Reporting Service**

Census block ID: 510299302011072

**Number of Fixed Residential Broadband Providers**

0 1 2 3 4 6 12 or more

**Broadband**

Technology ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other  
Speed ≥ 25/3 Mbps  
Date June 2019 (latest public release)

Provider	Tech	Down (Mbps)	Up (Mbps)
ViaSat, Inc.	Satellite	35	3
Hughes Network Systems, LLC	Satellite	25	3
CenturyLink, Inc.	ADSL	20	1.5
VSAT Systems, LLC	Satellite	2	1.3

## 2021 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
<b>Residential</b>	138	125
<b>Businesses (non-home based)</b>	30	27
<b>Businesses (home-based)</b>	1	1
<b>Community Anchors</b>	1	1
<b>Non-residential</b>	4	4
<b>Total Number of Passings</b>	174	154

**Note:** The Total Number of Passings **MUST** be equal to the Residential, Business (non-home based), Non-residential and Community Anchors sum.

### Definitions

**Passing** – any structure that can receive service.

**Business** – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

**Community Anchor** - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, unemployed, and the aged.

**Non-Residential Passing** – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.











**Agreement between Central Virginia Services Inc (CVSI) and Amherst County Regarding VATI Funding**

An Agreement dated \_\_\_\_\_, between DHCD and Amherst County (the "DHCD Agreement") imposes certain responsibilities on the "Grantee" in accepting the VATI grant. As anticipated in the joint application for funding submitted by Amherst County and CVSI, the parties wish to outline the roles of each party now that the grant has been awarded. Accordingly, the parties now hereby agree as follows:

CVSI shall perform all work described in the DHCD Agreement (which is attached hereto and incorporated herein by reference), the submitted application, project management schedule, and budget. Specifically, CVSI shall complete all Grant Activities described in the DHCD Contract Documents (including but not limited to installing \_\_\_\_ miles of fiber, building out the network to make fiber to the home broadband service available to all service units in the grant area including to those who choose to take service, and supplying and installing all related equipment) on or before 31 December 2022. CVSI shall indemnify, defend, and hold Amherst County harmless for any failure(s) (a) to complete any Grant Activities described in the DHCD Contract Documents on or before 31 December 2020. Upon completion of the project, CVSI will provide Amherst County speed validation data to ensure that the project Outcomes have been met and plant constructed is capable of providing broadband speeds that meet VATI criteria. CVSI may choose to submit either monthly invoices or a single invoice for payment upon completion of the work. No VATI funds shall be distributed unless and until (a) CVSI has submitted all requested documents applicable to the construction project and (b) Amherst County has verified that pre-construction and/or construction work has been completed or equipment has been ordered and received. Upon any change to availability of funding, Amherst County must notify CVSI immediately. At its sole discretion, CVSI may amend or terminate the project. Amherst County will use best efforts to request the full amount of grant funds prior to 31 December 2022.

CVSI and Amherst County will exercise due diligence and best efforts on community outreach and marketing the availability of service, which is the intent of the program. The parties understand, however, that the actual number of customers who choose to subscribe is beyond the parties' control. The parties also understand that the intent of DHCD is that the parties exercise due diligence and best efforts and that no funds will be returned to the Commonwealth nor retained by Amherst County so long as the parties exercise due diligence and best efforts to reach the program goals.

Amherst County requires a progress update from CVSI every 30 days until project completion. CVSI agrees to assume responsibility for keeping Amherst County updated per the project timeline included in the grant. Project timeline of the grant states all activities to be completed by 18 months from contract date of Amherst County and DHCD. CVSI agrees to provide Amherst County post-closeout subscriber reports as of 1 April 2023, so that Amherst County can report to DHCD in accordance with its agreement with the DHCD Agreement.

CENTRAL VIRGINIA SERVICES, INC

AMHERST COUNTY

By:

By:

\_\_\_\_\_ [SEAL]

\_\_\_\_\_ [SEAL]

Gary Wood, President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 570,000	69.0%	Pending
FIREFLY CASH	\$ 168,100	20.3%	APPROVED
FIREFLY IN KIND	\$ 88,500	10.7%	APPROVED
	\$		
	\$		
	\$		
	\$		
<b>TOTAL</b>	<b>\$826,600</b>	<b>100 %</b>	

**EXCERPT FROM THE MINUTES OF THE CVSI BOARD OF  
DIRECTORS MEETING HELD AUGUST 10, 2020, AT WHICH  
MEETING A QUORUM WAS PRESENT**

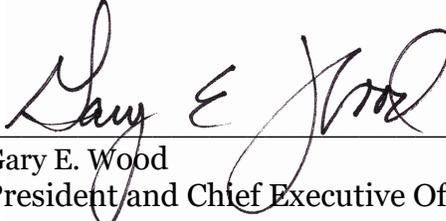
**VATI Grant Applications Approval**

**RESOLVED:** That the Board of Directors of Central Virginia Services, Inc. Approves the submission of VATI grant applications for the counties of Amherst, Buckingham, and Goochland. The two applications for Amherst County are for the areas of Sweet Briar and New Glasgow Road. The Goochland application is back-up for ReConnect funding.

**CERTIFICATION**

I, GARY E. WOOD, PRESIDENT AND CHIEF EXECUTIVE OFFICER OF CENTRAL VIRGINIA SERVICES, INC., DO HEREBY CERTIFY THAT THE ABOVE ARE TRUE AND CORRECT EXCERPTS FROM THE MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF CENTRAL VIRGINIA SERVICES, INC., HELD ON THE 10<sup>th</sup> DAY OF AUGUST, 2020, AT WHICH MEETING A QUORUM WAS PRESENT.

August 10, 2020

  
\_\_\_\_\_  
Gary E. Wood  
President and Chief Executive Officer



## COUNTY OF AMHERST



### OFFICE OF THE COUNTY ADMINISTRATOR

TELEPHONE (434) 946-9400

FAX (434) 946-9370

AMHERST COUNTY ADMINISTRATION BUILDING  
153 WASHINGTON STREET  
P. O. Box 390  
AMHERST, VIRGINIA 24521

August 12, 2020

Mr. Gary Wood, President & CEO  
Central Virginia Services, Inc.  
PO Box 359  
Lovingsston, VA 22949

**RE: VATI Grant Application for CVSI**

Dear Mr. Wood:

I am writing on behalf of Amherst County in support of the grant application of Central Virginia Services, Inc. (CVSI) for the VATI Grant. We understand this grant application will be in support of CVSI's efforts to bring high speed internet to rural Virginia, including some of the most remote parts of Amherst County which includes; Amherst, New Glasgow, Clifford, and Gladstone to Sweet Hills Project Area.

Amherst County is extremely grateful to CVSI for recognizing the most fundamental and urgent need for broadband in our rural localities and for its commitment to address this need. Broadband is critical for the success of our school children seeking to stay technology-adept, for our elderly citizens in need of health care and other basic needs, and for our working adults in need of internet access for their jobs. It has become apparent that smaller, more civic-minded companies like CVSI are among the few who are actually willing to answer this urgent call, and for that commitment to our communities, we applaud CVSI and fully support their VATI Grant application.

Sincerely,

Dean Rodgers  
County Administrator

Enclosure

## Derivation of Costs

Product	Total	VATI	Non-VATI	Source of Estimate	Date
<b>UG Construction</b>					
Labor (10 miles at 52,200)	\$ 522,000	\$ 417,600	\$ 104,400	Present cost in fiber project	8/14/2020
Conduit and fiber (10@5600)	\$ 56,000	\$ 44,800	\$ 11,200	Present cost in fiber project	8/14/2020
Pedestals/Vaults (10*2925)	\$ 29,300	\$ 23,400	\$ 5,900	Present cost in fiber project	8/14/2020
Splicing	\$ 10,500	\$ 8,000	\$ 2,500	Present cost in fiber project	8/14/2020
Design and Mgmt (Contract)	\$ 51,000	\$ 21,000	\$ 30,000	Present cost in fiber project	8/14/2020
<b>Service Installations</b>					
Service Drops (105@\$600 ea)	\$ 69,300	\$ 55,200	\$ 14,100	Present cost in fiber project	8/14/2020
<b>Construction Totals</b>					
	\$ 738,100	\$ 570,000	\$ 168,100		
<b>Additional Project Costs</b>					
Firefly install & equip (105@\$400 ea)	\$ 42,000	\$ -	\$ 42,000	In kind labor & equip contribution	8/14/2020
Marketing and Promotion	\$ 6,500		\$ 6,500	In kind labor & cost contribution	8/14/2020
In House Project Mgmt and Oversight	\$ 40,000		\$ 40,000	In kind labor contribution	
<b>In Kind Contribution Totals</b>					
	\$ 88,500	\$ -	\$ 88,500		
<b>PROJECT TOTALS</b>					
	\$ 826,600	\$ 570,000	\$ 256,600		



14 August 2020

## ***Documentation of Budget Costs***

Central Virginia Services, Inc, d/b/a Firefly Fiber Broadband, is a wholly owned subsidiary of Central Virginia Electric Cooperative (CVEC). Since August 2018, CVEC has been building a system wide fiber network across its system. Each of the past two years have seen capital investments in the project of more than \$30 million. These active, ongoing projects have provided real time pricing that is the basis for our estimates.

The prices come from proprietary contracts with our design firm, fiber contractor, and our inventory & materials management contractor. They are customized by location, soil conditions, and unique aspects of construction in each area. There are multiple professional engineers on staff who oversee the project, value engineer it and assure there is efficient construction. We stand behind the project budgets. If there are any cost overruns, Firefly will be responsible for the additional funding to complete the project.

(RETAIN FOR YOUR RECORDS)  
Form 477 Filing Summary

FRN: 0027729573 | Data as of: Dec 31, 2019 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Feb 26, 2020 22:03:52

**Filer Identification**

Section	Question	Response
<b>Filer Information</b>	Company Name	Central Virginia Services, Inc.
	Holding Company Name	Central Virginia Electric Cooperative
	SAC ID	199021
	499 ID	832816
<b>Data Contact Information</b>	Data Contact Name	Cheryl Sandas
	Data Contact Phone Number	(434) 263-8336 ext: 1502
	Data Contact E-mail	csandas@mycvec.com
<b>Emergency Operations Contact Information</b>	Emergency Operations Name	Ryan Coffey
	Emergency Operations Phone Number	(434) 282-7682
	Emergency Operations E-mail	rcoffey@fireflyva.com
<b>Certifying Official Contact Information</b>	Certifying Official Name	Gary Wood
	Certifying Official Phone Number	(434) 263-8336 ext: 1100
	Certifying Official E-mail	gwood@mycvec.com

**Data Submitted**

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Dec_2019_fbd_rev.csv	Feb 26, 2020 21:59:21	611
Fixed Broadband Subscription	Dec_2019_fbs_rev1.csv	Feb 26, 2020 21:29:25	17
Fixed Voice Subscription	Dec_2019_fvs_rev1.csv	Feb 26, 2020 21:23:14	7

**Fixed Broadband Deployment**

**Census Block Counts by State, DBA Name and Technology**

State	DBA Name	Technology	Blocks
Virginia	Firefly Fiber Broadband	Optical Carrier/Fiber to the End User	611
<b>Total</b>			<b>611</b>

**Fixed Broadband Subscriptions by State, Technology and End-user Type**

State	Technology	End-user Type	Subscriptions
-------	------------	---------------	---------------

## Fixed Broadband Subscription

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	17	1583	25	1608
<b>Total</b>		<b>17</b>	<b>1583</b>	<b>25</b>	<b>1608</b>

### Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
3.000	1.000	1	0	1
100.000	100.000	1163	21	1184
250.000	250.000	0	2	2
1000.000	1000.000	419	2	421
<b>Total</b>		<b>1583</b>	<b>25</b>	<b>1608</b>

### Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Optical Carrier/Fiber to the End User	3.000	1.000	1	0	1
	100.000	100.000	1163	21	1184
	250.000	250.000	0	2	2
	1000.000	1000.000	419	2	421
<b>Total</b>			<b>1583</b>	<b>25</b>	<b>1608</b>

## Fixed Voice Subscription

### VGE Lines and VoIP Subscriptions by State and End-user Type

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	0	0	337	324
<b>Total</b>	<b>0</b>	<b>0</b>	<b>337</b>	<b>324</b>

## Fixed Voice Subscription (iVoIP)

### Over-the-top VoIP Subscriptions by State and End-user Type

State	Total	Consumer	Business / Govt
Virginia	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

### All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Virginia	337	324	13	336	1	337	0	0	0
<b>Total</b>	<b>337</b>	<b>324</b>	<b>13</b>	<b>336</b>	<b>1</b>	<b>337</b>	<b>0</b>	<b>0</b>	<b>0</b>

