

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Application ID: 59812122018144133
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2019
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/SCS Broadband VATI Application
Project Contact Name: Jeremy Bryant
Project Contact Phone: (434) 946-9418
Project Contact Email: jsbryant@countyofamherst.com
Project Location: 153 Washington Street
Amherst, VA 24574-0390
Project Service Area: Amherst County

Total Requested Amount: \$267,760.00
Required Annual Audit Status: Accepted

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$267,760.00	\$131,250.00	\$399,010.00
Construction	\$190,997.00	\$0.00	\$190,997.00
Construction Related Soft Costs	\$76,763.00	\$131,250.00	\$208,013.00
Total:	\$267,760.00	\$131,250.00	\$399,010.00

Budget Narrative:

SCS Broadband will cover 3% of matching funds for this project. SCS Broadband will invest \$11,400 in cash contributions of the total project cost of \$399,010. The County of Amherst will provide 31% of in-kind funding (no cash from Amherst County - only in-kind funding), or \$123,000 of the total project cost. The 66% left over is the remainder of the funding requested by this grant proposal, or \$267,760.

Questions and Responses:

1. Project Area

Provide a map and description of the proposed geographic area including specific boundaries of the project area e.g.; street names, local and regional boundaries, etc. Explain why and how the project area(s) was selected. Attach a copy of your map(s).

Answer:

Amherst County and its private partner SCS Broadband have developed a plan to expand broadband service significantly in the county. SCS Broadband has signed a countywide lease for five county own towers. One is surrounded by CAFII funding and is not included in this project. The remaining four county towers, plus two other non-county owned towers are part of this project. These six towers are located on high foothills and mountain tops providing unique access to wide areas of unserved regions in the county.

SCS Broadband has been delivering broadband services as a Wireless Internet Service Provider since 2007 in Amherst County. The areas serviced are limited to seven private sites using WIFI technology. None of the sites are cell towers, but structure mounts and small pole towers on mountain sides. This VATI funding request proposes to expand SCS Broadband's coverage area in Amherst County by an estimated 450% using technology with speeds up to 50Mbps. SCS Broadband will also be able to add their VOIP phone product to the new network extensions as a result of this funding. This requested VATI funding would also help shorten the current project by an estimated year. Amherst County is requesting VATI funding to cover the labor and materials cost of mounting telecom broadcasting equipment to the towers the county owns, which are managed by Region 2000. SCS Broadband's Lease Agreement with the County includes a working agreement with Region 2000. Through Region 2000 management, all aspects of SCS Broadband frequency usage and engineering will be managed. Harris Corporation has been subcontracted to perform a complete frequency analysis as required by Region 2000. Comsearch will be contracted to perform all required FCC engineering and licensing processes for all licensed backhaul 1Gbps 11Ghz radios. SCS Broadband has already funded and gained approval for all the 3.65Ghz LTE systems through

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Comsearch contract for all Grandfathered Earth Stations. SCS Broadband has also already gained the required approvals from The National Quiet Zone located in Greenbank, West Virginia. Final FCC submissions will go out in December, well before project start, making sure all equipment licensing is ready when the granted project begins. The service area will include the following areas:

- Lowesville
- Clifford
- Pleasant View
- Campbells Mill Road
- Winton Country Club
- Cherry Hill Road
- Turkey Mountain Road
- Lowesville Road
- Huff Creek Trail
- Kenmore Road
- Industrial Park Drive
- Union Hill Community
- Early Farm Road
- Ebenezer Road
- Boxwood Farm Road
- Shadow Ridge Golf Course
- Poplar Grove Golf Club Community
- Round Mountain Community
- Riverville
- Father Judge Road
- High Peak Road
- Monroe
- Winesap Road
- Elon Road
- Cedar Gate
- Puppy Creek Road
- Buffalo Springs Turnpike
- Pera Road

This project area was also selected based on the census blocks and groups that were not awarded CAFII funding, whereas some of the county was awarded a CAFII through Central Virginia Electric Cooperative (CVEC). CVEC's map of CAF II-funded power service lines was used to ensure SCS Broadband's funding request would not overlap more than 10 percent as required by DHCD rules. There are six towers in the plan. Four of the towers are existing county towers SCS Broadband has leased. (A fifth county tower is surrounded by CAFII awards so is not in this project.) One other tower selected for this VATI project is owned by American Tower

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Corporation which SCS Broadband will lease. This tower will provide service to a populated area which does not have CAFII funding. A sixth tower is a small tower located on a mountain side with service for the Lowesville area, a tower owned by SCS Broadband.

On towers which may have a sector or sectors servicing CAFII areas, those sectors are not included in this request, but are paid for by SCS Broadband. The tower loading cost for the sector or sectors which do service non-CAFII areas is reduced to the percentage of the total cost of the tower. So, if a tower has four sectors of LTE and WIFI, and only one qualifies for funding, serving a non-CAFII area, then loading costs will be 25% of the total cost for the tower. This method maintains our request for funding within the rules for DHCD grant, while enhancing the shortfall of the CAFII provider, reaching areas where their power lines do not serve.

Please see the file named “Figure 1.1 - Maps of Project Area” for the location of these towers. The maps show the complete coverage area that would receive broadband wireless services. One map shows the location of the towers in relation to CVEC power lines. Another map shows the broadband service propagation map. The statistics of population, homes, businesses and square miles are presented as they were used in the decision to select this area for this grant request proposal.

2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a map and list of all existing providers (fixed and wireless), and speeds offered within the project area. Provide a detailed explanation of how this information was compiled and the source(s).

Answer:

The project area chosen for this VATI grant submission currently does not have any provider that offers high-speed service as set out by DHCD at <10 Mbps/1Mbps. Although some DSL providers advertise speeds greater than 10Mbps, like in the town of Amherst, BroadbandNow.com runs a continuous service which captures the actual statistics supplied by speed tests by citizens.

There are no other ISPs in the project area that meet the speed requirements of 10Mbps or greater in advertised speeds. The attachment, “Figure 2.1 - Existing ISP and Unserved Funding Map,” depicts the areas for funding, as well as the existing unqualified ISP and CAFII funding areas.

3. Project Need/Description

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 10 Mbps/1 Mbps or less, and with less than 10% service overlap within the project area. Describe the anticipated service overlap with current providers within the project area.

Answer:

There are no Wireless ISPs with 10Mbps or greater other than SCS Broadband in other areas of the county. The Town of Amherst and an area known as Elon have DSL coverage, although according to BroadbandNow.com’s citizen speed checking program, only provides speeds less than 10Mbps. These areas are also less than 10% of any

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

tower coverage presented. This was confirmed as of 12/12/2018 and the results are included in this application.

Sources used to determine what Internet Service Providers used were:

1. Amherst County Administration
2. Public Surveys
3. Web searches
 - a. Broadbandnow.com
 - b. Broadbandsearch.net
4. FCC ISP Registration Database for Form 477

None of these sources listed a wireline or wireless ISP with 10Mbps or more speed.

4. Describe population both in terms of absolute numbers within the project area and the eligible users that will be served by the proposed project. Describe the basis for these projections.

Answer:

The proposed project area is made up of rural homes and communities. If the VATI grant is obtained, the number of citizens that can be served is 5,750. This number was determined using the U.S. Postal mailing routes which fell into the project area. See attachment “Figure 4.1 – U.S. Postal Routes Statistics of Area to be Served”. This a snapshot of the online tool provided by the EDDM service of the U. S. Postal Service. This tool lists a total of 6,375 addresses, 4,750 of which are out of the service range of the tower or is in CAFII area. This leaves a total estimate of 2,300 addresses, 54 of which are businesses and 2,246 of which are homes. The breakdown of the U. S. Postal Service mapping was accomplished using the SCS Propagation Mapping tool which shows the number of people served in the proposed service area.

In summary, 2,246 homes and 54 businesses can be served in the area to be funded. This equates to a population estimate of 5,750 citizens.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area.

Answer:

As indicated in the previous section, there are 2,206 households and 54 businesses that can be served in the project area. In addition to these 54 businesses, there are non-profits and government institutions which also can be serviced by this funding. These include the various government departments and agencies of the Town of Amherst, Old Dominion Training Center, Post Offices, Volunteer Fire Departments, among others.

Although not all-inclusive, these are other same businesses and non-profits which have been analyzed to be in the service area of this tower:

1. Lazy Days Winery
2. Rebec Vineyards
3. Shadow Ridge Gold Course
4. Sardis Gas Station
5. Boxley Materials Company
6. Pathway Recovery Lodge
7. Harris and Co Realtors
8. Apollo Energy Components
9. Parr’s Heating and Air

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

10. Actual Surveyors
11. Shady Mountain Pet Retreat
12. LR Bryant Construction
13. Kenneth L. Mays and Sons
14. W.H. Lynne Engineering
15. Home Business Resources

In addition, the following non-profits would be eligible for SCS Broadband's Non-Profit Program, services from \$17.50 per month:

1. 34 Churches
2. Clifford Rotary Club
3. Virginia Blue Ridge Railway
4. Clifford Sorgum Festival
5. Graces Kids
6. Citizens for Adult Literacy
7. Sports Out Reach Institute

6. Provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also provide all actions to be implemented to reach the identified potential customers within the project area.

Answer:

There is a possibility of 2300 installations based on the previous analysis if SCS achieved a 100% take rate. From SCS's experience, the estimated take rate is a maximum of 1,380 installations or 60% of those who can receive the service signal. The difference is due to several factors:

1. Elderly people who do not use the Internet
2. Extreme low-income people who cannot afford the Internet
3. Abandoned houses and business locations
4. People on long-term contracts with other providers such as satellite
5. People satisfied with less than 10Mbps service due to low Internet demands

Using 1,380 as an estimated number for take rate, and the time frame of one year, all 1,380 would be able to be installed within one year. This is based on the installations to be handled by the SCS Broadband Central Virginia Regional installation team over the course of 2019. These teams will average four installs a day. There are 260 weekdays in a year which we subtract out these numbers:

1. Holidays
2. Sick Leave
3. Vacation Leave

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

4. Poor Weather

SCS Broadband estimates 160 installation days a year, plus 48 Saturdays, as the Central Office has a six day a week installation schedule, giving us 208 installation days a year. This would leave a total of up to 832 installations a year for the installation teams, or approximately 1.5 years to reach the installation of all 1,380 estimated take rate. This may be shortened with additional personnel once the number of installs reaches a certain percentage creating the cash flow for an additional team.

The process to obtain this take rate will be through SCS Broadband established marketing procedures and policies. Marketing is accomplished by these means:

1. Paid Social Media Advertising (Facebook & Instagram)
2. Paid Search Engine Google
3. Google AdWords
4. Yard Signs
5. Local Online News Media
6. Local Printed News Media
7. Customer Recommendation Programs
8. Phone Calling
9. SCS Broadband Website Promoting

Attachment "Figure 6.1 – “Sample Marketing Results”, depicts actual results of a counties’ continual marketing results. All service requests are automatically placed onto a map, and all service signal statistics and installation information are sent to SCS Broadband’s Service and Installation management.

7. A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” portion of the broadband infrastructure.

Answer:

VATI funding for this project would provide an important addition to the enhancement of the existing partnership between SCS Broadband and Amherst County. This project is a last-mile only project using LTE wireless technology at broadband speeds up to 50Mbps. Included are several licensed 1Gbps wireless backhaul links.

8. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Will the wireless co-applicant own or lease the radio mast, tower, or other raised structure onto which the wireless infrastructure will be installed?

Answer:

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Four of Amherst County towers for this grant request are owned by Amherst County, one is owned by American Tower Corporation, and a sixth tower is owned by SCS Broadband. These will be in addition to seven existing sites owned by SCS Broadband within Amherst County. SCS Broadband will own and maintain all the equipment to be loaded onto the project area towers. The company has three certified tower crews, and also contracts out tower climbing subcontracts when required to meet project deadlines. The project area towers are part of a complete county-wide wireless network being extended in 2019-2020. Attachment, "Figure 8.1 - Amherst County Wireless Network Plan", depicts the entire network's goal.

SCS Broadband has or will lease the five towers it does not own. A lease has been signed for the four county towers.

9. Provide a description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate.

Answer:

The system will be a last mile deployment to homes and businesses, using LTE and WIFI technology with a speed range between 10Mbps and 50Mbps with pricing starting at \$35/month. The system uses a proprietary shared polling software system, which keeps an effective service level while preventing overloading on the base stations. Each LTE base station can handle up to 96 last mile sessions, and the new WIFI base stations can handle 60 last mile sessions each. There are four base stations per tower for LTE and four WIFI base stations allowing for a total of 624 sessions, or connections to homes for the tower. This is twice the number expected, reducing the load by 50% of the maximum stated by the manufacturers. All plans are set to burst up to 10% higher than plan speed, used when the system detects the availability of backhaul bandwidth. Dedicated services will be offered in the business plan product line up to 500Mbps. Upload speeds will be open to availability by location, with a minimum of 8Mbps. All plans have uncapped, unlimited data. This is possible due to the bandwidth of the wireless and fiber backhauls.

VOIP phone service will be available for an additional \$15 a month for unlimited U.S. calling. The phone service can be used at home through any type of phone, landline or cellular, and can be used away from home with smartphones connected to WIFI anywhere in the continental United States.

10. 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. Also describe specific advantages of using this technology. Provide a detailed explanation on how this information was compiled and source(s). For wireless projects, provide a propagation map including the proposed project.

Answer:

The funds from this grant will be used to add on to an existing SCS Broadband/Amherst County network. The current network has been built on WIFI over a course of 12 years using small towers and structures on hills and mountains. The current network consists of a fiber backhaul to the SCS Broadband Richmond Exchange and to Ashburn, Virginia for final Internet connection. There are seven existing sites in operation. This current funding request to DHCD/VATI is for loading five new towers for the network and upgrading an older SCS Broadband tower with LTE. This is a critical network build-out due to the population and businesses affected who do not have speeds above 10Mbps. Below is a detailed description of the existing network and what the funding would be used for in adding to this existing network.

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

This project is for tower equipment and labor to be loaded onto six existing towers, as well as six new 1Gpbs 11Ghz licensed backhauls. Presented earlier in Project Description, is a map, “Figure 1.1 - Maps of Project Area”, which includes the propagation of service signal (presented in green) which the new towers will cover. This propagation comes from an automated propagation tool which SCS Broadband uses for determining a tower’s service area. The tool is directly connected to marketing through the company’s website and allows every submission for service from citizens to be automatically mapped and sent to main office staff for processing.

SCS has a fiber backhaul located at one existing tower which will be upgraded for the new bandwidth requirements for this new expansion. This backhaul is leased by SCS Broadband in a five-year contract; it routes through other SCS Broadband fiber leases to our Richmond Exchange equipment. If the content is not available at the Richmond Exchange, SCS Broadband’s leased dedicated fiber to Ashburn, VA directs the user’s request to the Internet. This routing is in place for many counties in Virginia by SCS Broadband which leads to the best performance for high bandwidth usage applications. Some of these applications on the SCS Broadband network as examples are Netflix, Apple TV, DropBox, and Facebook, among the 40+ applications.

11. Project Readiness

What is the current state of project development (i.e. planning, preliminary engineering, final design, etc.)? Prepare a detailed project timeline or construction schedule, which identifies specific tasks, staff, contractor responsible(s), collection of data, etc., and estimated start and completion dates. The timeline should include all activities being completed within 12 months of contract execution with DHCD.

Answer:

Amherst County and SCS Broadband have already cooperated to provision five towers in the county with broadband Internet equipment. This current VATI request for four of these towers, along with an American Tower Corporation (ATC) tower and an SCS Broadband Tower, will be an extension into new territory or territory <10Mbps. The tower owned by American Tower Corporation has already been confirmed to be available, and an engineering review was completed by ATC for wind load to confirm availability. The next step is to submit a lease request and pay for engineering analysis to add the SCS Broadband equipment on the tower. Once the lease is completed, SCS Broadband will be able to immediately load all required equipment onto the tower and turn on service to the communities previously listed. All county towers will also have wind load engineering as well as frequency analysis done by third party contractors. Although VATI allows for a year to complete a funded project, this project is scheduled to be completed within one year of start date. This is shown in “Project Management Plan”.

12. Matching funds: Provide a description of the matching funds the applicant and co-applicant will invest in the proposed project, (VATI funding cannot exceed 80% of total project cost). The Funding Sources Table should be completed.

i. For each element of matching funds in the description, indicate the type of match (cash, salary expense, or in-kind contribution).

ii. Identify whether the applicant or co-applicant is responsible for providing each element of the proposed matching funds.

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

iii. Include copies of vendor quotes or documented cost estimates supporting the proposed budget.

Answer:

SCS Broadband and the County of Amherst will cover 34% of the project between matching and In-Kind contributions. SCS Broadband will invest \$11,400 in matching funds to the project’s total cost of \$399,010 and Amherst County will add in \$123,000 of In-Kind funding (no-cash).

The attachment “Figure 12.3 - VATI Funding Sources,” shows the breakdown of these funds and the details of the budget with documentation per line item.

13. Identify key individuals, including name and title, who will be responsible for the management of the project. Describe their role and responsibilities for the project. Present this information in table format.

Answer:

The Amherst County and SCS Broadband key personnel for this project will be the following:

AMHERST COUNTY STAFF		
Name	Title	Grant Role
Jeremy Bryant	Director, Ed.D, CZA Amherst County Community Development	Will act as grant coordinator for Amherst County
SCS BROADBAND STAFF (internet provider)		
Lon Whelchel	CEO, SCS Broadband	Overseeing entire SCS Broadband side of the project
Clay Stewart	COO, SCS Broadband	Will work with the Amherst grant coordinator to implement broadband services in the Amherst project area
Gerri Stewart, CPA	CFO, SCS Broadband	Will provide oversight of the financial aspect of the project on SCS Broadband’s side
Dean Sigman	Central Operations Manager, SCS Broadband	Day-to-day management of project construction

14. Applicant and Co-Applicant: A description of the public-private partnership involved in the project. Detail the

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

local government assistance: Local government co-applicants should demonstrate assistance to project that will lower overall cost and further assist in the timely completion of construction, including assistance with permits, rights of way, easement and other issues that may hinder or delay timely construction and increase cost.

- i. If the partnership is formalized in a written agreement provide a copy of that agreement.
- ii. If the partnership has not been formalized, provide a short description of the project management role, financial commitment, or other contribution to the project for the applicant and co-applicant and any additional partners.

Answer:

The SCS Broadband/County of Amherst broadband project was launched in December 2018 with a partnership where five county towers were made available for expansion on the existing SCS Broadband network in the county. The county is providing all their towers at a nominal monthly fee for five years as In-Kind funding to help the project be successful. This partnership is documented in a Lease Agreement attachment, "AcelaNetAmherstAgreement".

SCS Broadband has leased a 120' tower near the border in Nelson County which will feed the new network via licensed backhaul. SCS Broadband will also lease a tower from American Tower Corporation which will help fill in service to a large community in need of service, the Clifford area on Rt 151 all the way to Scott Mountain. The 12 years of servicing portions of Amherst County, along with new long-term leases for these new towers and fiber backhauls, show proof of SCS Broadband's commitment to Amherst County.

The Amherst County Administration supports this grant request partnership and posted the proper public notice. SCS Broadband will be responsible for at least 20% of the required matching funds including leasing required fiber and the sixth tower from American Tower Corporation. The County will be responsible for monitoring of the project to completion. Completion will be the day all the towers have started provisioning broadband, after equipment installation is completed.

15. Project Budget and Cost Appropriateness

Applicants shall provide a detailed budget as to how the grant funds will be utilized, including an itemization of equipment and construction costs and a justification of proposed expenses. Expenses should be substantiated by clear cost estimates.

Answer:

This project's itemization of equipment and construction costs is presented in the attachment, "Figure 12.1 Derivative of Costs", which contains web links to pricing for all material, and a list of all construction costs such as labor and leasing fees.

16. 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. Finally, the three component scores are averaged together and converted to a 30 point scale to form a composite score.

Answer:

The DHCD share for the cost of this project will be 67% of the total project cost of \$399,010 or \$267,760. The estimated take rate is 1,380 homes including 54 businesses. Dividing this into the total cost of the project gives the figure of \$289 as the "cost per unit passed". That includes both SCS Broadband's contribution and the funding

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

from DHCD.

Citizens and businesses will be able to choose one of 5 plans, switching for free at the 1st of any month, up or down. The speeds of each tier are 10Mbps, 20Mbps, 30Mbps, 40Mbps, and 50Mbps down. The upload speed for each plan will be 8Mbps or greater.

17. A description of applicant and co-applicant's history or experience with managing grants and constructing broadband communications facilities in the Commonwealth of Virginia and elsewhere.

Answer:

SCS Broadband is a premier Internet Service Provider (ISP), specializing in offering service in rural communities for over 13 years. In 2005, SCS Broadband began building a wireless network using both commercial towers and private structures, water towers and light poles throughout Nelson, Amherst and Buckingham counties of Virginia. In 2016, SCS Broadband created a five-year plan to deploy throughout Central Virginia in rural counties. SCS Broadband has expanded to these counties, many in partnerships of PPEA and other agreements:

- Nelson
- Amherst
- Bedford
- Pittsylvania
- Halifax
- Buckingham
- Albemarle
- Louisa
- Charles City
- Surry

In addition, SCS broadband has worked with New Kent, Hanover and Goochland counties for future deployments. In March 2018, SCS Broadband won two Tobacco Region Revitalization Commission (TRRC) grants in partnerships with Halifax and Pittsylvania Counties.

In addition, SCS Broadband has applied for DHCD/VATI grants for three years in a row in partnership with several counties. As a result of the efforts of writing grants, and in performing grant projects, SCS Broadband has become very experienced in working with grantors such as DHCD.

Amherst County, Virginia is the Applicant for this grant application submittal which includes SCS Broadband, Inc., as the Co-Applicant.

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.

SCS Broadband's CEO Mr. Lon Welchel has more than twenty years of experience in the areas of technology and leading professional service organizations.

Clay Stewart is the COO for SCS Broadband, and he brings more than 40 years of IT experience. He has served as a system support analyst and designer for corporations such as AT&T, MCI, WorldCom, UUNET, The Harris Corporation, and Tyco Electronic communication companies.

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

Gerri Stewart is the CFO for SCS Broadband and brings more than 18 years as a Virginia Certified Public Accountant having served for the County of Henrico and as CFO for private schools, including the Miller School of Albemarle. Gerri and her staff provide for the effective and efficient financial processing for SCS Broadband.

18. Service

Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

Answer:

The SCS Broadband network will be built with security, redundancy and future bandwidth requirements as priority network functions. Internet service plans will be part of the open market architecture. A simple set of pricing plans will allow anyone, home or business, to choose an uncapped, unlimited, cost-effective plan. Homes and businesses will have the advantage of having many plans to choose from, not being locked into a plan that does not meet future needs. Any subscriber may change plans at any time, effective on the 1st of any month, without charge or penalty. Onsite call maintenance for any equipment is done free of charge as stated on the Terms of Service Contract. Two types of Terms of Service Contracts will be offered. Every subscriber will have the choice of a Month-to-Month Service Contract or a Two-Year Service Contract. Two-year contracts will have additional discounting to the subscriber, and any subscriber can switch to a Two-Year Contract at any time.

Payment for services is to be set up to make it as easy as possible, but to meet the different needs of subscribers. They are to be allowed to prepay in advance for a year and receive an additional discount. Payment can be done by mail, phone or website; or any subscriber can easily set up a secured, automatic ACH account to a credit card or bank account.

SCS Broadband will offer 5 tiers of service for residential customers in the project area:

- 10 Mbps for \$34.95/month
- 20 Mbps for \$54.95/month
- 30 Mbps for \$74.95/month
- 40 Mbps for \$94.95/month
- 50 Mbps for \$114.95/month

These prices will be for a 2-Year contract. SCS will also offer a month-to-month contract option which adds an additional \$5/month onto these listed prices.

SCS Broadband will offer 3 tiers of service for businesses, with a required 2-Year Contract for all business plans (Businesses are defined as businesses working from a county zone defined for a business entity, home businesses are exempt):

- 10-15 Mbps for \$150/month
- 15-20 Mbps for \$200/month
- 20-25 Mbps for \$300/month

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

VOIP phone service will be offered at \$15 for unlimited continental United States calling. The phone system can be used at home with any type of phone, including landline or smartphone. It can be used away from home with a smartphone attached to WIFI Internet.

19. Additional Information

Any other equitable factor that the applicant desires to include.

Answer:

Obtaining VATI funds for this project would greatly expedite the expansion project which Amherst County and SCS Broadband have partnered on December 2018. Well over 5,750 citizens can be affected and have the choice to subscribe to broadband speeds from 10Mbps to 50Mbps, citizens who currently have less than 10Mbps service or none at all. Along with the 54 estimated businesses and non-profits, this set of rural communities and townships will be able to perform any needed function on the Internet. From streaming, telecommuting, education, and health access to home business startups, all known types of Internet usage can be accomplished on this network.

The optional low-cost VOIP phone service is also a major financial help to these citizens. The economic impact for the region will be great based on home value increases and growth in jobs at businesses which rely on Internet communications and access. The logistics of these towers, on the highest mountain ranges in the region, along with our existing network of seven other sites already deployed in nearby areas, is adding Amherst County to the Commonwealth of Virginia's list of rural areas served with broadband Internet.

Attachments:

Documentation of source of match funding

SourceofMatchingFunds1213201814529.pdf

Documentation that proposed project area is unserved based on VATI criteria

Figure21ExistingISPandUnservedFundingMap1213201820500.pdf

Documentation that proposed project area is not designated for Connect America Funding (CAF)

Figure11MapsofProjectArea1213201820752.pdf

Funding Sources Table

Figure123VATIFundingSources1213201814906.pdf

(Optional) || Figure 4.1 US Postal Routes Statistics of Area to be Served

Figure41USPostalRoutesStatisticsofAreatobeServed1213201815533.pdf

Application to DHCD Submitted through CAMS

Amherst County

Amherst County/SCS Broadband VATI Application

(Optional) || Figure 6.1 Sample Marketing Results

Figure61SampleMarketingResults1213201815112.pdf

(Optional) || Figure 8.1 County Wireless Network Plan Map

Figure81CountyWirelessNetworkPlanMap1213201815045.pdf

Derivation of Cost (Project Budget)

Figure121DerivativeofCosts12132018114958.pdf

Project Management Plan

ProjectManagementPlan12132018115547.xlsx

Supporting documentation for costs estimates

Figure122SupportingCostDocumentation12132018115756.pdf

Map(s) of project area, including proposed infrastructure

Figure11MapsofProjectArea1213201891610.pdf

Map(s) or schematic of existing broadband providers (inventory of existing assets)

Figure21ExistingISPandUnservedFundingMap1213201834700.pdf

Documentation of relationship between applicant and co-applicant (formal or informal)

AcelaNetAmherstAgreement12132018120108.pdf

Two most recent Form 477 submitted to FCC

Form477s1213201895909.pdf

Documentation for in-kind contributions, including value(s)

SourceofInKindFunds1213201813703.pdf

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

Figure122SupportingCostDocumentation1213201814159.pdf



Derivative of Costs

12/14/2018

Amherst County

GRAND Summary for Project, rolled up from six individual towers detailed below:

			Project Total	\$399,010
			Match and In-Kind	\$134,400
SCS Broadband - Match	\$11,400	3%	VATI	\$267,760
County of Amherst - In-Kind	\$123,000	31%	VATI Percentage	67%
			Match Percentage	34%
* Fiber and Tower Lease, and Tower Design				

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

High Peak Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>

Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				<u>\$19,170</u>	<u>\$17,670</u>	<u>\$1,500</u>		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>		
Total Estimate Tower				\$85,112	\$59,612	\$25,500		\$85,112

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Amherst	\$24,000	28%

Project Total	\$85,112
Match and In-Kind	\$25,500
VATI	\$59,612
VATI Percentage	70%
Match Percentage	30%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website



Derivative of Costs

12/14/2018

Buffalo Hill Tower

* County Tower New to LTE Project

Product		Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
Equipment	Description							
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>

Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$47,542	\$47,542	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				\$19,170	\$17,670	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$90,712	\$65,212	\$25,500		\$90,712

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Amherst	\$24,000	26%

Project Total	\$90,712
Match and In-Kind	\$25,500
VATI	\$65,212
VATI Percentage	72%
Match Percentage	28%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website



Derivative of Costs

12/14/2018

Lowesville Tower

* Tower Upgrade to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	2	1,000	1,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	2	7,600	7,600	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	2	600	600	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	2	160	160	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All item	600	1	600	600	0	Estimated all parts	12/10/2018
	Total Part Estimate			\$19,065	\$19,065	\$0		
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$3,000	\$0	\$3,000	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			

	Total Labor Estimate	<u>\$6,335</u>	<u>\$1,835</u>	<u>\$4,500</u>		
Leases	Tower Lease 1 Year (3 yr Contract)	\$0	\$0	\$2,400	Private Owner	<u>10/1/2018</u>
	Total Leases	<u>\$0</u>	<u>\$0</u>	<u>\$2,400</u>		
	Total Estimate Tower	\$25,400	\$20,900	\$6,900		\$27,800

High Peak Tower Summary

SCS Broadband	\$3,900	15%
County of Amherst	\$3,000	12%

Project Total	\$25,400
Match and In-Kind	\$6,900
VATI	\$20,900
VATI Percentage	82%
Match Percentage	27%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Panther Mountain Tower

* County Tower New to LTE Project

Partially funded tower ¹

Product	Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
	KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
	NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
	PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
	PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
	AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	<u>12/10/2018</u>
	POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
	Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
	CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>

P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
	Total Part Estimate			\$39,142	\$39,142	\$0		
	Less 75% of Project			\$9,786	\$9,786	\$0	75% Not part of Project - CAFII	
	Total Less 75% CAFII Coverage			\$29,357	\$29,357	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
	Total Labor Estimate			\$17,335	\$15,835	\$1,500		

Less 75% of Project	<u>\$4,334</u>	<u>\$3,959</u>	<u>\$0</u>	75% Not part of Project - CAFII
Total Less 75% CAFII Coverage	<u>\$13,001</u>	<u>\$11,876</u>	<u>\$1,500</u>	
Tower Lease (County Tower)	\$24,000	\$0	\$24,000	Amherst County <u>12/12/2018</u>
Total Leases	<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>	
Total Estimate Tower	\$66,358	\$41,233	\$25,500	\$66,733

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Amherst	\$24,000	36%

Project Total	\$66,358
Match and In-Kind	\$25,500
VATI	\$41,233
VATI Percentage	62%
Match Percentage	38%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP ** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Amherst Control Tower

* County Tower New to LTE Project

Product		Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
Equipment	Description							
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	1	500	500	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	1	3,800	3,800	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	1	456	456	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	1	61	61	0	SitePro1	<u>12/10/2018</u>

Fiber/Power Cable	Fiber/Power/Conduit Package *	2,800	1	2,800	2,800	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	2	240	240	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$23,735	\$23,735	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				\$17,335	\$15,835	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$65,070	\$39,570	\$25,500		\$65,070

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Amherst	\$24,000	37%

Project Total	\$65,070
Match and In-Kind	\$25,500
VATI	\$39,570
VATI Percentage	61%
Match Percentage	39%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Turkey Mountain Tower

* Commercial Tower New to LTE Project

Partially funded tower¹

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>

Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	<u>198</u>	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	<u>308</u>	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>
Surge Protector	AC Surge Protection	<u>170</u>	1	170	170	0	Google Express	<u>12/10/2018</u>
444APC-HV	APC Modular CAT5 Surges	<u>17</u>	12	204	204	0	Amazon.com	<u>12/10/2018</u>
APC Surge	APC Surge Chassis for 444APC-HV	<u>24</u>	1	24	24	0	Amazon.com	<u>12/10/2018</u>
Surge Case	Equipment Outdoor NEMA Box	<u>439</u>	1	439	439	0	Amazon.com	<u>12/10/2018</u>
MER8-P SitePro1	H-Frame Rack Mount Hardware	<u>565</u>	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	<u>399</u>	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
	Total Part Estimate			<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
	Less 75% of Project			<u>\$9,786</u>	<u>\$9,786</u>	<u>\$0</u>	75% Not part of Project - CAFII	
	Total Less 75% CAFII Coverage			<u>\$29,357</u>	<u>\$29,357</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
	Total Labor Estimate			<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
	Less 75% of Project			<u>\$4,334</u>	<u>\$3,959</u>	<u>\$0</u>	75% Not part of Project - CAFII	
	Total Less 75% CAFII Coverage			<u>\$13,001</u>	<u>\$11,876</u>	<u>\$1,500</u>		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	<u>12/12/2018</u>
	Total Leases			<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>		
	Total Estimate Tower			\$66,358	\$41,233	\$25,500		\$66,733

High Peak Tower Summary

SCS Broadband \$1,500 2%
County of Amherst \$24,000 36%

Project Total	\$66,358
Match and In-Kind	\$25,500
VATI	\$41,233
VATI Percentage	62%
Match Percentage	38%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Quote

Page: 1



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: 0121708
 Order Date: 12/01/2018
 Expiration Date: 1/01/2019
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To:	Ship To:
SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922	SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922
Confirm To:	Contact:

Customer P.O.	Ship VIA	Freight Terms	Payment Terms
Quote	BEST WAY	PREPAY AND ADD	Credit Card

Line	Item Code	Unit	Ordered	Price	Amount
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50
5	HG-78 Hoisting Grip, Lase-up, 7/8"	EA	1	15.75	15.75
6	SH-S78 Snap Hanger, Stackable, for 7/8" corrugated coax	K010	7	13.89	97.23
7	GK-C78T Ground Kit, Clip on, Tinned, for 7/8" corrugated coax	EA	3	11.20	33.60
8	VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00

Lead Time: 3 Weeks to Ship

Net Order:	3,511.37
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	3,511.37

Supporting Documentation of Costs

High Peak Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018

444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$41,942	\$41,942	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				\$19,170	\$17,670	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$85,112	\$59,612	\$25,500		\$85,112

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Buffalo Hill Tower

* County Tower New to LTE Project

Product	Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
	KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
	NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
	PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018

PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
	Total Part Estimate			\$47,542	\$47,542	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	

Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0 Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670		
Total Labor Estimate				\$19,170	\$17,670	\$1,500	
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000 Amherst County	<u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000	
Total Estimate Tower				\$90,712	\$65,212	\$25,500	\$90,712

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Lowesville Tower

* Tower Upgrade to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	2	1,000	1,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	2	7,600	7,600	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	2	600	600	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	2	160	160	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	600	1	600	600	0	Estimated all parts	<u>12/10/2018</u>

	Total Part Estimate				\$19,065	\$19,065	\$0	
Tower Design	Frequency Application, Analysis and Tower Design				\$1,500	\$0	\$1,500	Experience
Installers	Tower Equipment Installers				\$3,000	\$0	\$3,000	Experience
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1		\$1,835	\$1,835		
	Total Labor Estimate				\$6,335	\$1,835	\$4,500	
Leases	Tower Lease 1 Year (3 yr Contract)				\$0	\$0	\$2,400	Private Owner <u>10/1/2018</u>
	Total Leases				\$0	\$0	\$2,400	
	Total Estimate Tower				\$25,400	\$20,900	\$6,900	\$27,800

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Panther Mountain Tower

* County Tower New to LTE Project

Partially funded tower¹

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>

Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
	Total Part Estimate			<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
	Less 75% of Project			<u>\$9,786</u>	<u>\$9,786</u>	<u>\$0</u>	75% Not part of Project - CAFII	
	Total Less 75% CAFII Coverage			<u>\$29,357</u>	<u>\$29,357</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
	Total Labor Estimate			<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
	Less 75% of Project			<u>\$4,334</u>	<u>\$3,959</u>	<u>\$0</u>	75% Not part of Project - CAFII	
	Total Less 75% CAFII Coverage			<u>\$13,001</u>	<u>\$11,876</u>	<u>\$1,500</u>		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018

Total Leases	<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>	
Total Estimate Tower	\$66,358	\$41,233	\$25,500	\$66,733

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Amherst Control Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	1	500	500	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	1	3,800	3,800	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	1	456	456	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	1	61	61	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	2,800	1	2,800	2,800	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	2	240	240	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018

APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$23,735	\$23,735	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				\$17,335	\$15,835	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$65,070	\$39,570	\$25,500		\$65,070

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Turkey Mountain Tower

* Commercial Tower New to LTE Project

Partially funded tower¹

Product	Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
	KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
	NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
	PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
	PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
	AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018

POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
Less 75% of Project				<u>\$9,786</u>	<u>\$9,786</u>	<u>\$0</u>	75% Not part of Project - CAFII	
Total Less 75% CAFII Coverage				<u>\$29,357</u>	<u>\$29,357</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	

Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0 Experience
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835	
Total Labor Estimate				\$17,335	\$15,835	\$1,500
Less 75% of Project				\$4,334	\$3,959	\$0 75% Not part of Project - CAFII
Total Less 75% CAFII Coverage				\$13,001	\$11,876	\$1,500
Tower Lease (County Tower)				\$24,000	\$0	\$24,000 Amherst County <u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000
Total Estimate Tower				\$66,358	\$41,233	\$25,500 \$66,733


* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Quote

Page: 1



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: **0121708**
 Order Date: **12/01/2018**
 Expiration Date: **1/01/2019**
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To:		Ship To:		
SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922	SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922			
Customer P.O.		Ship VIA	Freight Terms	Payment Terms
Quote		BEST WAY	PREPAY AND ADD	Credit Card

Line	Item Code	Unit	Ordered	Price	Amount
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50
5	HG-78 Hoisting Grip, Looe-up, 7/8"	EA	1	15.75	15.75
6	SH-S78 Snap Hanger, Stackable, for 7/8" corrugated coax	K010	7	13.89	97.23
7	GK-C78T	EA	3	11.20	33.60

8	Ground Kit, Clip on, Tinned, for 7/8" corrugated coax VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00
Lead Time: 3 Weeks to Ship					

Net Order:	3,511.37
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	3,511.37

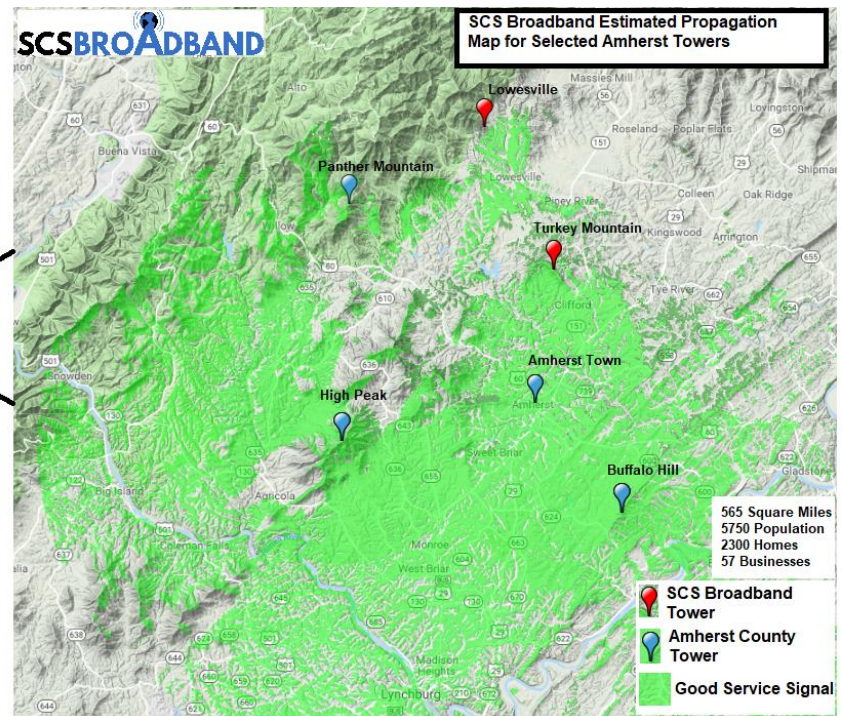
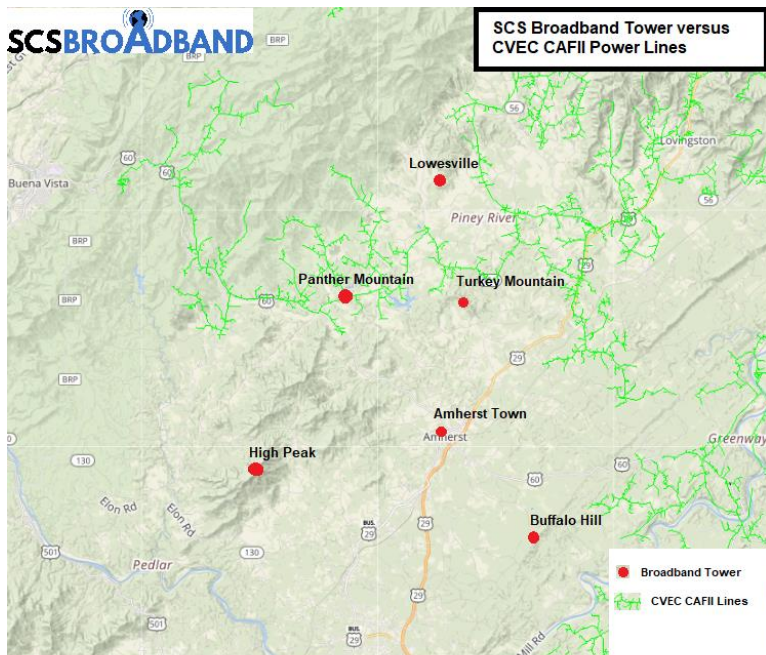


Figure 1.1 - Maps of Project Area

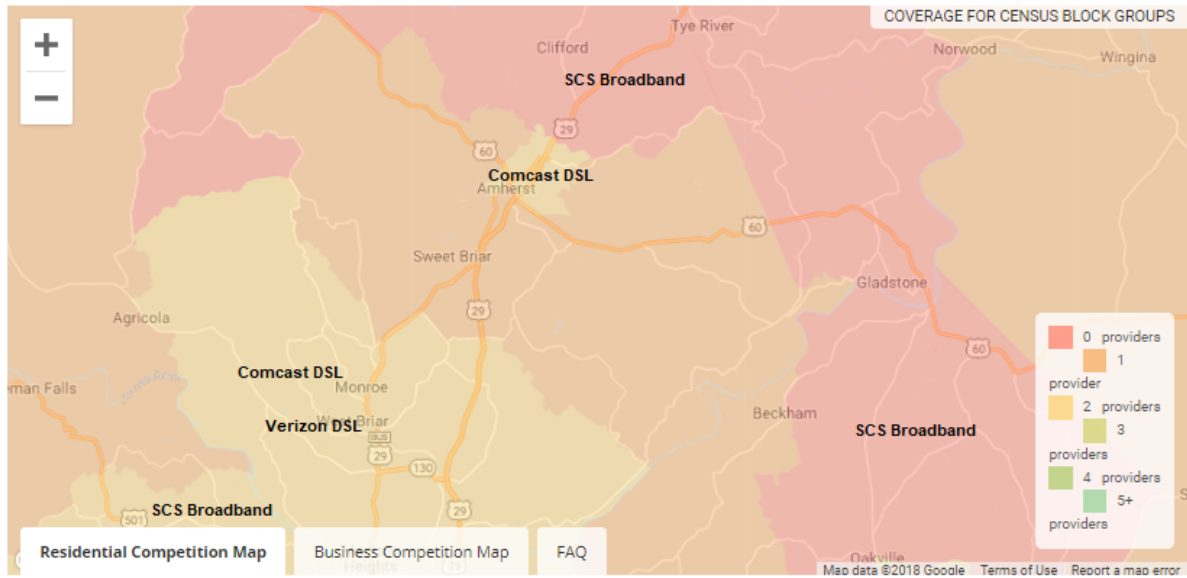
Last Updated on 12/11/2018.

Competition Map

© 2014 – 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

INTERNET PROVIDER COMPETITION MAP FOR AMHERST



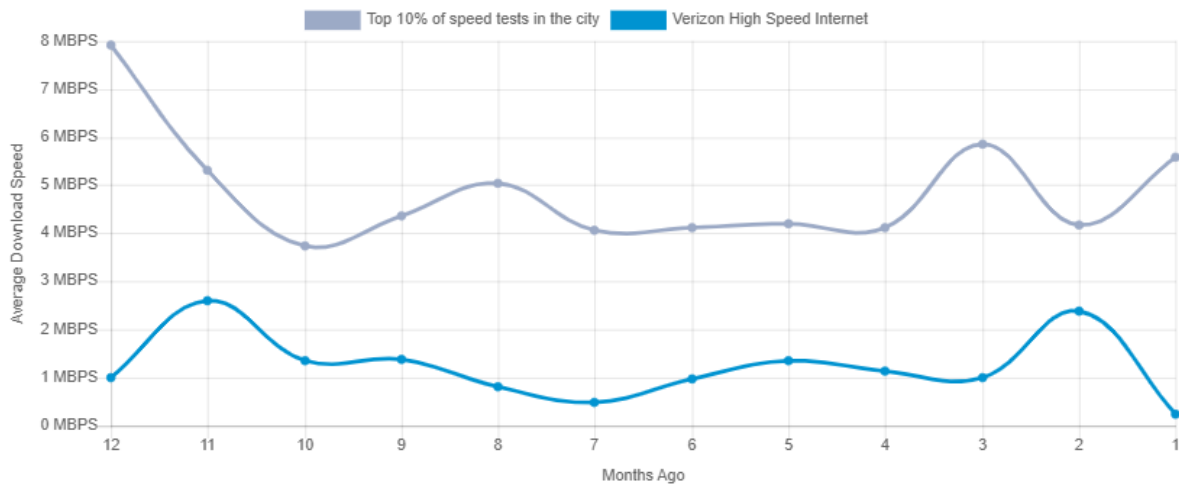
Last Updated on 12/11/2018.

Download Speeds

© 2014 – 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

DOWNLOAD SPEEDS IN AMHERST



This analysis is based on 8,508 speed tests from IP verified users who took speed tests from an IP address in Amherst between December 2017 and November 2018. National statistics are calculated across 314,082,195 over the same time range.

COMPREHENSIVE AGREEMENT

This Comprehensive Agreement ("Comprehensive Agreement") is formed between the Amherst County Broadband Authority, a political subdivision of the Commonwealth of Virginia (the "Authority" or "Owner"), and AcelaNet, LLC, doing business as SCS Broadband, a Virginia limited liability company ("SCS" or the "Contractor"; collectively, the "Parties").

RECITALS

WHEREAS, the Authority is a political subdivision of the Commonwealth of Virginia under the Virginia Wireless Service Authorities Act, Chapter 43.1 of Title 15.2 of the Code of Virginia, 1950, as amended, with the authority to participate in the provision of qualifying communications services, defined as high-speed data service and Internet access service, of general application, but excluding any cable television or other multi-channel video programming services; and

WHEREAS, on 9/5/17, the Authority lawfully adopted Guidelines under the Public-Private Education Facilities & Infrastructure Act of 2002 (the "Act"), Chapter 22.1 of Title 56 of the Code of Virginia, 1950, as amended, and is a "responsible public entity" as defined in the Act; and

WHEREAS, on 10/17/17, SCS submitted an unsolicited proposal under the Act (the "Conceptual Proposal"), which the Authority duly advertised and sought competing proposals for, which is incorporated herein by reference as **Exhibit A**; and

WHEREAS, the Authority received no competing proposals, and elected to continue to the detail phase of consideration with SCS, and to begin negotiating a Comprehensive Agreement for a Qualifying Project designed to provide technology, equipment, and infrastructure designed to deploy wireless broadband internet services to schools, businesses, and residential areas; and

WHEREAS, on 7/17/18, the Authority held a public hearing on whether to enter a Comprehensive Agreement, as provided by the Guidelines and the Act, and advertised this Agreement for 30 days for comments; and

WHEREAS, SCS is a wireless internet service provider (WISP) with years of experience providing the infrastructure, goods, and services set forth in this Agreement, and is a "private entity" under the Act, and is capable of providing the services contemplated herein.

WITNESSETH

NOW THEREFORE, in consideration of the premises hereof and the mutual promises set forth herein, together with other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Purpose.** The purpose of this Agreement is to provide ubiquitous high-speed internet to the unserved and underserved public in Amherst County at fair, reasonable, and uniform prices.
2. **Term.** Five-year initial term, with three renewals of five years each, contingent on continued achievement of deployment, customer satisfaction, and service targets.
3. **Payments.** SCS will charge fair, reasonable, and uniform rates to the public for its services. It will provide two main services as the Authority's partner: (1) Installation, maintenance, upkeep, and timely replacement and updating of its equipment; and (2) being an ISP to the public. SCS will receive its payments through customer subscriptions. The Authority will make lease payments to the Region 2000 Radio Board for towers it owns, if required, as a "pass-through" and consult with SCS on the negotiation and payments due under the leases. The Parties understand that the Region 2000 Radio Board supports low-cost use of its towers for the purposes of this Agreement. SCS will

be expected to meet reasonable reinvestment levels for replacement and updated equipment on a regular basis.

4. Phase I—Tower Deployment.

4.1. General. The Parties anticipate that the services contemplated by this Agreement will occur over several phases. Phase I is composed of testing and deployment on five radio towers.

4.2. Phase I Towers. The following towers (each a "Tower") will be part of Phase I rollout, with deployment dates as set forth below:

Name	Lat/Long	Deployment Date
High Peak	37° 33' 47.33"/79° 11' 37.06"	2/4/18
Buffalo Ridge	37° 31' 15.37"/78° 59' 9.08"	4/4/19
Panther Mountain	37° 42' 10.0"/79° 11' 20.70"	6/4/19
Amherst Control	37° 35' 7.60"/79° 3' 0.20"	8/4/19
Rocky Mountain	37° 47' 43.9"/79° 10' 48.17"	10/4/19

On or before the "deployment date," the Equipment on each Tower shall be fully installed, fully permitted, and in actual use providing wireless internet service to customers. In the event that the Notice to Proceed is issued later than January 1, 2019, the Deployment Dates shall be extended in the same number of days as the Notice to Proceed is delayed.

4.3. Propagation Testing & Engineering. It is SCS's responsibility to select and license spectrum and to choose appropriate and effective equipment to achieve the goals of this Agreement in a timely manner and as otherwise agreed. In furtherance of these goals, SCS shall:

4.3.1. Prior Approval of Equipment. All construction, installations, and alterations, including maintenance, repair, removal or relocation, except routine and/or emergency repairs and maintenance of any of the Company's Improvements on the Leased Premises shall require submission of plans with detail required by the Authority and the prior written approval of the Authority and shall be in compliance with any Authority and Radio Board specifications and with the plans approved by the Authority. In the event emergency repairs or routine maintenance is needed, plans shall be submitted as soon as practical following the end of the emergency or maintenance; provided that any such repairs or maintenance which is consistent with the Construction Drawings shall not require any submittals. The Authority reserves the right, consistent with good engineering practices, to reasonably and within a reasonable time period approve or disapprove the plans and the actual changes or Improvements. In the event the changes or Improvements are not in accordance with the approved plans or do not meet the requirements of this Agreement, the Authority shall provide written notice to Company of such non-compliance. In the event Company has not corrected such non-compliance within thirty (30) days following written notice, the Authority may remove the Improvements or otherwise take the necessary action to restore the Leased Premises at the expense of the Company.

4.3.2. As-builts. Within thirty (30) days after substantial completion of construction, installation, or alteration of any of the Improvements, the Company shall provide the County with "as-built" plans for the Improvements.

4.3.3. Utility Service & Redundancy. All ground equipment used by SCS will be located inside the leased or owned compound. Ground equipment will be located outside of any buildings and mounted to the exterior of existing poles or buildings with the prior approval of the County. SCS will install a battery backup system that will provide redundancy to their equipment at each tower location. SCS will add a circuit breaker to the breaker box for the existing tower power which also has emergency backup.

4.4. Structural Testing. Before SCS's Equipment may be placed in operation: (i) SCS shall carry out strength and wind loading tests and other necessary engineering to ensure that the Tower structure is capable of handling the Equipment chosen, and shall provide the Authority with structural data and certification of wind loads by a licensed professional engineer; (ii) the Authority or its designee must approve in writing SCS's installation and Structural Test and verify that the Tower structure is sufficient for the Equipment selected. If SCS receives written notification stating that the Authority or its designee has disapproved the Structural Test, then SCS shall have the right to make any necessary adjustments to its Equipment, and may, upon agreement with the Authority and the owner of the Tower, strengthen the Tower to achieve the desired structural integrity.

The Broadband Authority may remove towers from the Phase 1 list found in Section 4.2 of this Agreement that do not meet structural testing requirements necessary to hold broadband equipment as provided by SCS. If SCS believes that a tower is not sufficient they shall provide a report to the Authority explaining the reasons why a tower does not meet the structural testing requirements and a cost estimate to upgrade the tower to hold the broadband equipment. The Authority, at its discretion, may remove a tower from the Phase 1 list once it is satisfied of the justification to do so, or may provide for structural improvements necessary to hold the broadband equipment. The completion date for the deployment on that tower shall be tolled until the completion of the strengthening work.

4.5. Interference Testing. SCS recognizes that the Authority will primarily be leasing it space that is also used by the Region 2000 Radio Board ("Radio Board") for public safety radio. It further recognizes that the Radio Board reserves the right to reject uses and Equipment that interferes with the primary purpose of the Towers as public safety facilities. Before SCS's Equipment may be placed in operation, (i) SCS shall test (the "Interference Test") the Equipment to ensure that the actual operation will not cause Interference as defined in this Agreement and shall provide the Authority with an intermodulation study and certification of lack of Interference by an independent third-party consultant ("Certification of Non-Interference") and (ii) the Authority or its designee must approve in writing SCS's installation and Interference Test of its Equipment and verify that there is no Interference from the Equipment. If SCS receives written notification stating that the Authority or its designee has disapproved the Interference Test, then SCS shall have the right to make any necessary adjustments to its Equipment and to resend the Certification of Non-Interference to the Authority. The Authority shall have 20 days after SCS's submission of the Certification of Non-Interference to notify SCS in writing whether the Interference Test and any subsequent test, if necessary, is approved or disapproved. If the Authority or its designee should determine that there is Interference that cannot be resolved within a reasonable period of time, this Agreement shall be terminated as to that Tower and neither party shall have any liability to the other.

5. Phase II—Operations.

5.1. *Customer Service.* The goal of the Parties is to provide service to all persons desiring it at fair, reasonable, and uniform pricing.

5.1.1. *Non-Discrimination.* SCS shall provide service on a non-discriminatory to any business or resident in the County that requests it without regard to race, sex, religion, alienage, disability status, age, or other reason prohibited by law. Service shall only be denied for a valid capacity-related reason. If a request for service is made by a residence or business and service is not available, SCS shall notify the Authority, indicate what would be needed to provide service to the customer, and work with the Authority to find a solution to expand coverage to the requested area.

5.1.2. *Quarterly Reports.* SCS shall provide the Authority a quarterly report describing the customer base in Amherst and demonstrating that broadband availability is being expanded into the Authority. Coverage areas, available services, new buildout activity, and customer success stories demonstrating the impact of the project are strongly encouraged. A list of customer complaints and their resolution status should be provided. Customer lists, however, should not be provided; aggregated data is sufficient.

5.1.3. *Complaints.* Customer service complaints should be resolved as soon as practicable, but in no event later than seven calendar days from a customer reporting them without reasonable cause. Excessive legitimate complaints from customers regarding SCS's service sent to the Authority will be considered a failure to meet performance criteria. The Authority shall take the following steps to work with SCS and resolve complaints before determining that complaints are excessive. After the Authority works with SCS by following the steps below, the Authority shall have sole discretion in deciding whether issues have been resolved to the satisfaction of the Authority:

- a) The Authority will forward all complaints it receives to SCS, and provide SCS's customer service contact information to any person from whom it receives a complaint.
- b) If the Authority determines that complaints are becoming excessive, in the sole determination of the Authority, both parties shall meet at the County Offices or another mutually agreed upon location.
- c) At the meeting SCS shall report on the root cause of the complaints and present a plan to resolve the issues responsible for the complaints.
- d) The Company shall then have 30 days to resolve the issues and report to the Authority on the resolution.

5.2. *Maintenance.* Maintenance of Towers is the responsibility of the Authority; maintenance of Equipment, including wiring and base stations, is the responsibility of SCS.

5.3. *SCS's Right of Access.* Subject to such reasonable security-related rules and regulations as the Authority shall from time-to-time promulgate notifying SCS in writing thirty (30) days in advance of the effective date, SCS and SCS's employees, representatives, contractors and subcontractors shall have the right of 24-hour, 7-day-a-week access to the premises for the purposes of installing, inspecting, maintaining, operating, repairing, or removing equipment and facilities used by SCS in connection with its operations. SCS shall give reasonable advance notice to the Authority when SCS needs access to a site, if practicable, and SCS shall provide a timeframe for access, as soon as practical and in the interest of security, but

within 24 hours of the request, except in case of emergency. In the event of an emergency SCS shall give prior notice to the Authority if possible, or within a reasonable time thereafter. Only those employees, representatives, contractors, and subcontractors of SCS of which the Authority has been informed in writing will be allowed access to the sites. The Authority has the option of assigning a representative to be present at all times when SCS is present at a site. The Authority may establish additional or more or less stringent access requirements by written notification to SCS. However, in no event shall SCS be unreasonably denied access to the Site.

5.4. *Duty to Replace Equipment in the Event of Damage or Destruction.* In the event of the damage or destruction of any piece of Equipment, SCS shall repair or replace such equipment within seven days following such damage or destruction. In the event such damage or destruction results in a claim on insurance made under Section 8.2.2.d of this Agreement, SCS shall use all funds recovered on such claim for the purpose of replacement or improvement of such equipment.

5.5. *Replacement.* Choice of wireless communications equipment and its replacement schedule is the responsibility of SCS. SCS has the responsibility, consistent with the other obligations of this Agreement, to replace equipment that is superannuated, technologically obsolescent, or has become unreliable due to passage of time or wear and tear. However, SCS shall replace each piece of equipment or infrastructure to ensure that it is providing up-to-date wireless communication assets that is consistent with current market demands.

6. Phase III—Future Considerations.

6.1. *Other Vertical Assets.* The Authority or affiliated entities have access to other vertical assets, such as water towers, public safety towers, and other tall structures. Within two years following execution of this Agreement, the Parties shall develop a plan to begin Phase III rollout of facilities on such assets.

6.2. *Economic Development Partnerships.* Within one year after the final deployment date, SCS should develop a price schedule for private homeowners, apartment owners, businesses, and property owner associations to have equipment placed on their property. Some people, including potentially the Economic Development Authority of Amherst County, Virginia (EDA), are not content to wait for service, and may be willing to make contributions to assist in accelerating deployment of services. A schedule of values for such services and extensions would assist the Authority in working with private persons and economic development prospects on accelerated deployment.

6.3. *Small Cells & 5G Wireless.* Small cell and 5G wireless technologies may be appropriate in some areas of Amherst County, where there is sufficient density to make such technology economical. The Authority is a Wireless Service Authority under Virginia law, and has access to public rights of way. On the same schedule as study of other vertical assets under Section 7.1, the Authority shall study possibilities of deployment of small cell technology in Madison Heights, the Town of Amherst, and other areas of subdivisions, either itself, in partnership with SCS, or in partnership with the Town. In the event such technology is advisable, in the Authority's discretion, the Parties may add such deployment to this Agreement by amendment hereto, and such amendment and extension of this Agreement is expressly contemplated.

7. Public Procurement Act. SCS agrees to comply with the following mandatory Public Procurement Act provisions:

7.1. *Required Terms & Conditions.* The provisions of this section apply at any site where performance of work in connection with this specific Agreement is done.

7.1.1. *Non-Discrimination.* SCS agrees that it will (Va. Code § 2.2-4311):

- a) Not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by local, state, or federal law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of SCS's business;
- b) Post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause;
- c) State that it is an equal opportunity employer in all solicitations or advertisements for employees placed by or on behalf of SCS to perform services under this Agreement. All notices, advertisements, and solicitation placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section; and
- d) Will include the provisions of the foregoing subparagraphs in every subcontract or purchase order exceeding \$10,000 issued by SCS in order to fulfill its obligations under this Agreement, so that the provisions will be binding on each subcontractor or subvendor.

7.1.2. *Drug-Free Workplace.* SCS agrees that it will (Va. Code § 2.2-4312):

- a) Provide a drug-free workplace for its employees;
- b) Post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in its workplace and specify the actions which will be taken against any employee for a violation;
- c) State in all of its solicitations or advertisements for employees to perform services under this Agreement that SCS maintains a drug-free workplace;
- d) Include the provisions of this sub-paragraph in every subcontract or purchase order of over \$10,000, so that said provisions shall be binding upon each subcontractor or subvendor.

7.1.3. *Illegal Alien Workers.* SCS agrees not to employ illegal alien workers or otherwise violate the provisions of the Immigration Reform and Control Act of 1986.

7.2. *Insurance Requirements.*

7.2.1. *Liability Coverage.* SCS must take out and maintain during the term of this Agreement such bodily injury, personal liability, and property damage liability insurance necessary protect it and the Authority from claims for damages arising from personal injury, including death, as well as from claims for property damage,

which might arise from SCS's performance of its obligations under this Agreement. Such insurance must be issued by a company admitted to do business in the Commonwealth of Virginia and with at least an AM Best rating of A-. Within 10 days after execution of this Agreement, and in no event later than the first day on which SCS begins its performance, SCS must provide the Authority with a certificate of insurance showing such insurance to be in force and providing that the insurer must give the Authority at least 30 days' notice prior to cancellation or other termination of or reduction in such insurance.

7.2.2. *Insurance.* SCS shall maintain the following insurance to protect it from claims that could arise from performance of this Agreement, including claims (i) under the Workers' Compensation Act; (ii) for personal injury, including death; and (iii) for damage to property, regardless of whether such claims arise out of SCS's actions or inactions, or those of SCS's subcontractor or other persons directly or indirectly employed by either of them:

a) Worker's Compensation:

Coverage A: Statutory

Coverage B: \$100,000

b) General Liability:

Per Occurrence: \$1,000,000

Personal/Advertising Injury: \$1,000,000

General Aggregate: \$2,000,000

Products/Completed Operations \$2,000,000 Aggregate

Fire Damage Legal Liability \$ 100,000

c) Automobile Liability:

Combined Single Limit: \$1,000,000

d) Professional Liability:

Per Occurrence: \$1,000,000

General Aggregate: \$1,000,000

e) Insurance on Equipment. SCS shall maintain insurance on its Equipment in an amount at least equal to its present depreciated value, which amount, however, shall not be less than 100% of the replacement cost of the Equipment.

7.3. **Registration to Transact Business** (Va. Code § 2.2-4311.2). SCS warrants and certifies that it is authorized to transact business in the Commonwealth of Virginia as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, 1950, as amended, or as otherwise required by law. SCS will not allow its corporate existence to lapse or its certificate of authority or registration to do business in the Commonwealth to be revoked or cancelled at any time during the

term of this Agreement. The Authority may void this Agreement if SCS fails to remain in compliance with the provisions of this section.

7.4. Non-Collusion.

7.4.1. Governmental Frauds Act. Neither SCS's proposal nor this agreement is the result of, or affected by, any unlawful act of collusion with another person or company engaged same line of business or commerce, or any act of fraud punishable under the Virginia Governmental Frauds Act, §§ 18.2-498.1 *et seq.* of the Code of Virginia, 1950, as amended. Furthermore, SCS understands that fraud and unlawful collusion are crimes and can result in fines, prison sentences, and civil damage awards.

7.4.2. COIA. All aspects of SCS's proposal and agreement are in compliance with the applicable provisions of the State and Local Government Conflict of Interests Act, §§ 2.2-3100 *et seq.* of the Code of Virginia, 1950, as amended. Specifically, without limitation, no employee of the Authority or member of employee's immediate family shall have any proscribed personal interest in this Agreement.

7.4.3. Ethics in Contracting. SCS's proposal and this Agreement are in accordance with the applicable provisions of the Virginia Public Procurement Act, Art. 6, Ethics in Public Contracting, §§ 2.2-4367 *et seq.* of the Code of Virginia, 1950, as amended, and any other applicable law set forth therein.

8. Remedies.

8.1. Liquidated Damages for Delay. Execution of this Agreement shall constitute Notice to Proceed on Phase I. The Parties agree that if the Equipment on each Tower is not fully installed as of the deployment date, following the Authority's giving 14 days' demand for performance, the Authority's damages shall be deemed liquidated in the amount of \$200 per day. The Parties agree that the damages are not susceptible of definite measure, and that this is a good faith pre-estimate of probable damages and not a penalty. This sum shall be due and payable and shall extend until SCS either cures the default or the Authority declares SCS in breach and terminates this Agreement.

8.1.1. Excusable Delay. If and to the extent SCS is delayed at any time in the progress of the project by strikes, fires, unusual delays in transportation or unavoidable casualties, delays in governmental approvals, third party supporting infrastructure or other causes outside the control of SCS, then SCS shall give the Authority written notice within 14 days after the inception of the delay. SCS shall also give the Authority written notice of the termination of the delay within 14 days after such termination. For delays by the Authority the Authority shall extend the delivery date for the length of time that the delivery date was actually delayed thereby, and the SCS shall not be charged with liquidated damages for delay during the period of such extension.

8.2. Right of Authority to Terminate Agreement upon Bankruptcy or Insolvency of SCS. In the event SCS becomes bankrupt, either voluntarily or involuntarily, or if a receiver is appointed for it, or if it executes any bill of sale, deed of trust, or general assignment for the benefit of creditors in lieu of foreclosure, or become critically insolvent, in the sole judgment of the Authority, the Authority may terminate this Agreement, giving SCS reasonable time to remove its Equipment from the Towers.

8.3. *Right of Authority to Make Payments.* In the event SCS intends to default on any payment to any creditor who has or may have a lien on the Equipment, it shall give notice to the Authority at the same time as it gives notice to the creditor. The Authority has the right to advance such sums as may be necessary to make payments on behalf of SCS under any lien, credit, subordination, or other agreement relating to the Equipment, including any taxes, insurance proceeds, replacements, or repairs to the Equipment, or to ensure the performance of any of the covenants included in such credit agreement or lien, which sums shall become a lien on the Equipment in favor of the Authority. All such advances may be evidenced by the Authority by a memorandum of lien, and shall bear interest from the date of payment thereof at the lawful judgment interest rate in the Commonwealth of Virginia.

8.4. *Termination for Cause.*

8.4.1. If SCS should refuse or should repeatedly fail, except in cases for which the Authority is notified and gives permission, to supply enough properly skilled workmen or proper materials and equipment to perform its obligations under this Agreement, or if he should fail to perform its obligations in a diligent, efficient, workmanlike, skillful, and careful manner, or if it should fail or refuse to perform its obligations, or if he should fail to make prompt payment to creditor or lienor, or if he should disregard laws or ordinances, or otherwise be in substantial violation of any provision of this Agreement, then SCS shall be in default of the Agreement.

8.4.2. The Authority will give SCS prompt written notice of any default and allow 10 days during which SCS may rectify the basis for the notice of default. If the default is rectified to the reasonable satisfaction of the Authority within said ten (10) days, the Authority shall rescind its notice of default. If not, the Authority may terminate this Agreement for cause by providing written notice of termination to SCS. In the alternative, the Authority may, in writing, postpone the effective date of the termination for cause, at its sole discretion, if it should receive reassurances from SCS that the default will be remedied in a time and manner which the Authority finds acceptable. If at any time after such postponement, the Authority determines that SCS has not or is not likely to rectify the default in an acceptable manner within the time allowed, then the Authority may immediately terminate this Agreement for cause, without the necessity of providing a further notice of default, by notifying SCS in writing of the termination. If the Authority postpones the effective date of the termination, and SCS subsequently rectifies the default to the reasonable satisfaction of the Authority, the Authority shall rescind its notice of default.

8.4.3. Termination of this Agreement under this Section is in addition to and without prejudice to any other right or remedy of the Authority. Any actions by the Authority permitted herein shall not be deemed a waiver of any other right or remedy of the Authority under this Agreement or under the law. The provisions of this Section shall survive termination of this Agreement.

8.5. *"Cooling Off" Period.* In no event shall either Party file suit against the other without first giving notice of all grievances, and waiting 90 days prior to filing. In the event such waiting period would cause the aggrieved Party to miss a statute of limitations or other time bar, it shall be ineffective; nor shall this section be construed to be a pledge not to plead the statute of limitations.

9. Miscellaneous.

9.1. Integration. This Agreement, including the exhibits hereto, constitutes the full and complete agreement of the Parties respecting its subject matter, and any prior or contemporaneous agreements or understandings, written or oral, are hereby merged into and superseded by the provisions of this Agreement. This Agreement may only be amended or supplemented by a subsequent writing of equal dignity except where expressly set forth herein. This Agreement may not be assigned by a Party without the prior written consent of the other Party.

9.2. Notices. Notices may be given to:

If to Authority:

Amherst County Broadband Authority
Attn: Purchasing Office
153 Washington Street
P.O. Box 390
Amherst, Virginia 24521
drproffitt@countyofamherst.com

If to SCS:

SCS Broadband
Attn: Clay Stewart
604 Thomas Nelson Highway
Arrington, Virginia 22922
cstewart@stewartcomputerservices.com

Either Party may amend addresses it has set forth in this paragraph by sending notice to the other Party as set forth in this paragraph, notwithstanding the provisions of section 10.1.

9.3. No Covenants of Officials. No covenant, agreement or obligation contained in this Agreement shall be deemed to be a covenant, agreement or obligation of any present or future director, officer, employee, council member, supervisor or agent of the Authority in his or her individual capacity, and neither Authority officials nor any officer, employee, council member, supervisor or agent thereof executing this Agreement or any related instrument shall be liable personally on this Agreement or such instrument or be subject to any personal liability or accountability by reason of the execution and delivery thereof. No director, officer, employee, council member, supervisor or agent of the Authority shall incur any personal liability with respect to any other action taken by him or her pursuant to this Agreement or any of the transactions contemplated hereby, provided he or she acts in good faith.

9.4. Intellectual Property. All intellectual property created in the performance of the Obligations is the property of the Authority. Any reports, studies, photographs, negatives, or other documents prepared by Company in the performance of its Obligations shall be remitted to the Authority by the Company, without demand therefor, upon the earliest of (i) completion of its Obligations; (ii) completion of the Contract Period; or (iii) termination, cancellation or expiration of the Contract Documents. The Company shall not use, willingly allow, or cause to have such materials used for any purpose other than performance of the Obligations without the prior written consent of the Authority.

9.5. Rule of construction as to dates. If any action is required to be performed, or if any notice, consent or other communication is given, on a day that is a Saturday or Sunday or a

legal holiday in the Commonwealth of Virginia, such performance shall be deemed to be required, and such notice, consent or other communication shall be deemed to be given, on the first business day following such Saturday, Sunday or legal holiday. Unless otherwise specified herein, all references in this Agreement to a "day" or "days" shall refer to calendar days and not business days.

9.6. *Choice of law.* This Agreement shall be construed according to the laws of the Commonwealth of Virginia without regard to its principles of conflicts of laws. The Parties consent to exclusive venue and jurisdiction in the Circuit Court for Amherst County, Virginia, and shall not file any suit in any other court.

9.7. *Drafter & Severability.* This Agreement has been jointly drafted by the Parties, and is to be construed as jointly drafted and not be construed against either of the Parties as the drafter. This Agreement is severable, and if any provision is found to be invalid by any court of competent jurisdiction, the remainder shall survive. The section and paragraph headings in this Agreement are for convenience of reference only and do not modify or restrict any provisions hereof and shall not be used to construe any provisions of this Agreement.

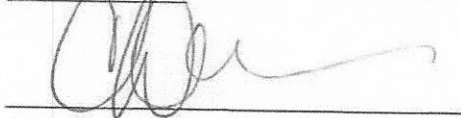
9.8. *Covenant of authority.* All Parties warrant that the signatories below have full authority, and have undertaken such legal actions as may be necessary to ensure such authority, to bind the entities of which they are representatives to the full extent permitted by law. This Agreement may be executed by facsimile, electronic or original signature of the Parties and in counterparts which, assuming no modification or alteration, shall constitute an original and when taken together, shall constitute one and the same instrument.

9.9. *Time of the essence.* Time is of the essence of all obligations set forth herein for which a time is stated.

9.10. *Waiver.* The failure of either Party to this Agreement to insist upon strict compliance with any term herein shall not be construed to be a waiver of that requirement.

IN WITNESS WHEREOF, the Parties affix their signatures below:

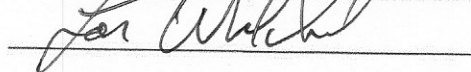
AMHERST COUNTY BROADBAND
AUTHORITY



By: Claudia D. Tucker

Its: Chair

ACELANET, LLC, d/b/a SCS BROADBAND



By: Lon Whelchel

Its: ~~Manager~~ CEO



(RETAIN FOR YOUR RECORDS)Form 477 Filing Summary

FRN:

0016948093

Data as of:

Jun 30, 2018

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

Sep 4, 2018 23:27:00

Filer Identification

Section	Question	Response
Filer Information	Provider Name	Acelanet LLC
	Holding Company Name	Acelanet LLC
	SAC ID	

Section	Question	Response
	499 ID	
Data Contact Information	Data Contact Name	Clay Stewart
	Data Contact Phone Number	(434) 942-6510
	Data Contact E-mail	cstewart@scsbroadband.com
Emergency Operations Contact Information	Emergency Operations Name	Clay Stewart
	Emergency Operations Phone Number	(434) 942-6510
	Emergency Operations E-mail	cstewart@scsbroadband.com
Certifying Official Contact Information	Certifying Official Name	Clay Stewart
	Certifying Official Phone Number	(434) 942-6510
	Certifying Official E-mail	cstewart@scsbroadband.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	AllCensusBlocksCSV.csv	Sep 4, 2018 23:24:57	5283
Fixed Broadband Subscription	Interactive data entry		106

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	SCS Broadband	Terrestrial Fixed Wireless	5283
Total			5283

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	6	225	21	246
	Terrestrial Fixed Wireless	100	1297	16	1313
Total		106	1522	37	1559



(RETAIN FOR YOUR RECORDS) Form 477 Filing Summary

FRN:

0016948093

Data as of:

Dec 31, 2017

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

Mar 1, 2018 22:51:17

Filer Identification

Section	Question	Response
Filer Information	Provider Name	Acelanet LLC
	Holding Company Name	Acelanet LLC
	SAC ID	
	499 ID	

Section	Question	Response
Data Contact Information	Data Contact Name	Clay Stewart
	Data Contact Phone Number	(434) 942-6510
	Data Contact E-mail	cstewart@scsbroadband.com
Emergency Operations Contact Information	Emergency Operations Name	Clay Stewart
	Emergency Operations Phone Number	(434) 942-6510
	Emergency Operations E-mail	cstewart@scsbroadband.com
Certifying Official Contact Information	Certifying Official Name	Clay Stewart
	Certifying Official Phone Number	(434) 942-6510
	Certifying Official E-mail	cstewart@scsbroadband.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	NelsonCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:44	4013
	CharlesCityCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:43	635
	LouisaCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:43	635
Fixed Broadband Subscription	Interactive data entry		95

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	SCS Broadband	Terrestrial Fixed Wireless	5283
Total			5283

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	5	73	3	76
	Terrestrial Fixed Wireless	90	1351	20	1371
Total		95	1424	23	1447

The In-Kind funds are:

1. \$123,000 from Amherst County for reducing lease obligations for five years on four towers designated for this grant is considered In-Kind as discussed with the DHCD. This is calculated from 60 months at \$400 a month for 4 towers.

This amount is the In-Kind reduction to the project by Amherst County.

Supporting Documentation of Costs

High Peak Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018

444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$41,942	\$41,942	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				\$19,170	\$17,670	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$85,112	\$59,612	\$25,500		\$85,112

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Buffalo Hill Tower

* County Tower New to LTE Project

Product	Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
	KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
	NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
	PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018

PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
	Total Part Estimate			\$47,542	\$47,542	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	

Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0 Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670		
Total Labor Estimate				\$19,170	\$17,670	\$1,500	
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000 Amherst County	<u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000	
Total Estimate Tower				\$90,712	\$65,212	\$25,500	\$90,712

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Lowesville Tower

* Tower Upgrade to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	2	1,000	1,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	2	7,600	7,600	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	2	600	600	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	2	160	160	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	600	1	600	600	0	Estimated all parts	<u>12/10/2018</u>

	Total Part Estimate				\$19,065	\$19,065	\$0	
Tower Design	Frequency Application, Analysis and Tower Design				\$1,500	\$0	\$1,500	Experience
Installers	Tower Equipment Installers				\$3,000	\$0	\$3,000	Experience
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1		\$1,835	\$1,835		
	Total Labor Estimate				\$6,335	\$1,835	\$4,500	
Leases	Tower Lease 1 Year (3 yr Contract)				\$0	\$0	\$2,400	Private Owner 10/1/2018
	Total Leases				\$0	\$0	\$2,400	
	Total Estimate Tower				\$25,400	\$20,900	\$6,900	\$27,800

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Panther Mountain Tower

* County Tower New to LTE Project

Partially funded tower¹

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018

Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
Less 75% of Project				<u>\$9,786</u>	<u>\$9,786</u>	<u>\$0</u>	75% Not part of Project - CAFII	
Total Less 75% CAFII Coverage				<u>\$29,357</u>	<u>\$29,357</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
Less 75% of Project				<u>\$4,334</u>	<u>\$3,959</u>	<u>\$0</u>	75% Not part of Project - CAFII	
Total Less 75% CAFII Coverage				<u>\$13,001</u>	<u>\$11,876</u>	<u>\$1,500</u>		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018

Total Leases	<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>	
Total Estimate Tower	\$66,358	\$41,233	\$25,500	\$66,733

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Amherst Control Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	1	500	500	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	1	3,800	3,800	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	1	456	456	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	1	61	61	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	2,800	1	2,800	2,800	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	2	240	240	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018

APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$23,735	\$23,735	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				\$17,335	\$15,835	\$1,500		
	Tower Lease (County Tower)			\$24,000	\$0	\$24,000	Amherst County	12/12/2018
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$65,070	\$39,570	\$25,500		\$65,070

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Turkey Mountain Tower

* Commercial Tower New to LTE Project

Partially funded tower¹

Product	Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
	KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
	NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
	PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
	PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
	AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018

POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard I	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
Less 75% of Project				<u>\$9,786</u>	<u>\$9,786</u>	<u>\$0</u>	75% Not part of Project - CAFII	
Total Less 75% CAFII Coverage				<u>\$29,357</u>	<u>\$29,357</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	

Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0 Experience
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835	
Total Labor Estimate				\$17,335	\$15,835	\$1,500
Less 75% of Project				\$4,334	\$3,959	\$0 75% Not part of Project - CAFII
Total Less 75% CAFII Coverage				\$13,001	\$11,876	\$1,500
Tower Lease (County Tower)				\$24,000	\$0	\$24,000 Amherst County <u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000
Total Estimate Tower				\$66,358	\$41,233	\$25,500 \$66,733


* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

¹ This tower will have only 1/4 funded by grant as the direction of the other radios feed into CAFII Funded areas, only Non-CAFII direction requested

Quote

Page: 1



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: **0121708**
 Order Date: **12/01/2018**
 Expiration Date: **1/01/2019**
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To:		Ship To:			
SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922	SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922				
Customer P.O.		Payment Terms			
Quote	BEST WAY	PREPAY AND ADD	Credit Card		
Line	Item Code	Unit	Ordered	Price	Amount
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50
5	HG-78 Hoisting Grip, Looe-up, 7/8"	EA	1	15.75	15.75
6	SH-S78 Snap Hanger, Stackable, for 7/8" corrugated coax	K010	7	13.89	97.23
7	GK-C78T	EA	3	11.20	33.60

8	Ground Kit, Clip on, Tinned, for 7/8" corrugated coax VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00
Lead Time: 3 Weeks to Ship					

Net Order:	3,511.37
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	3,511.37

The matching funds are:

1. \$1,500 from SCS Broadband for Tower Analysis, Load Design, Frequency Analysis which is calculate as 20 hours for a Sr. Tower Engineer at \$65 per hour.
2. \$9,000 from SCS Broadband for one year of a three-year lease for tower from American Tower Lease which is calculated from estimated lease of \$750 * 12 Months.
3. \$6,000 from SCS Broadband for one year of three-year lease for fiber backhauls based on the estimate increase of \$500 for 12 months.

These amounts are to be paid by SCS broadband as considered as matching funds.

Leases from Mid-Atlantic Broadband and American Tower Corporation are covered under an Non-Disclosure Agreement with both companies as their pricing is based on leasing agreements tailored for each of their clients.

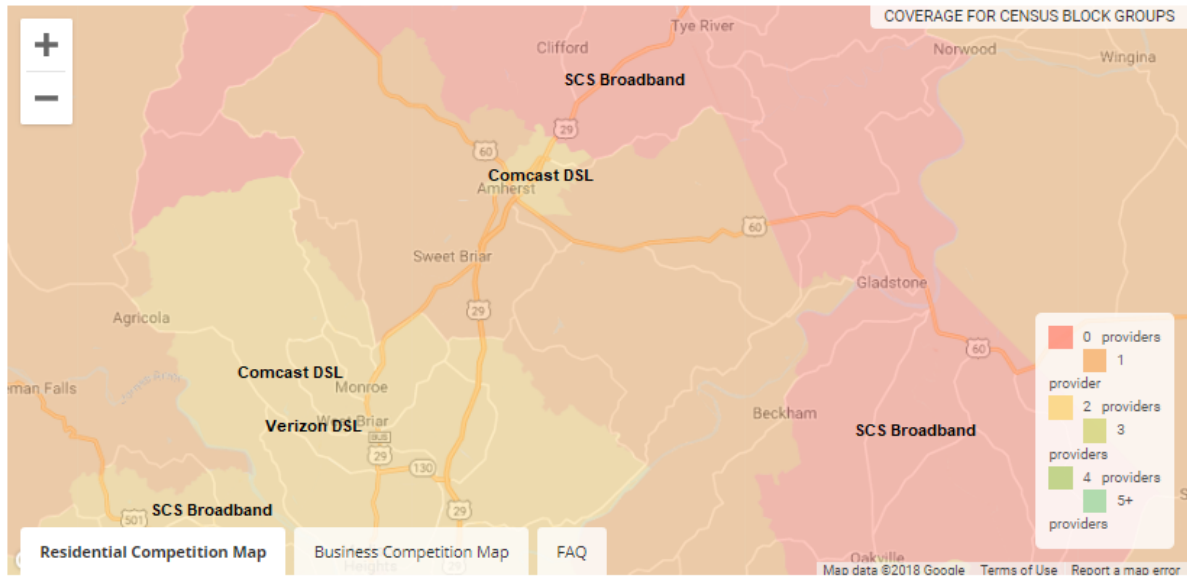
Last Updated on 12/11/2018.

Competition Map

© 2014 – 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

INTERNET PROVIDER COMPETITION MAP FOR AMHERST



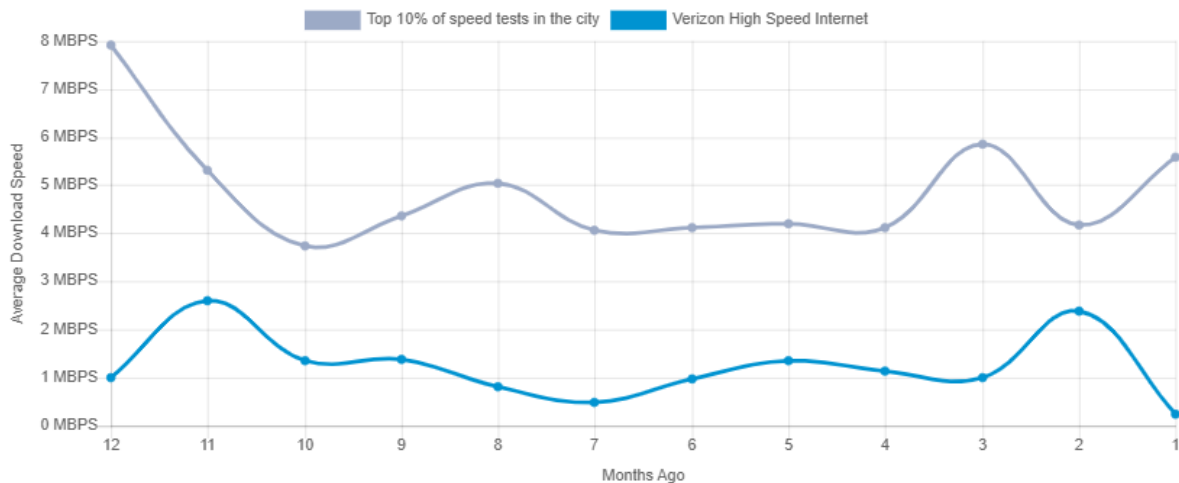
Last Updated on 12/11/2018.

Download Speeds

© 2014 – 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

DOWNLOAD SPEEDS IN AMHERST



This analysis is based on 8,508 speed tests from IP verified users who took speed tests from an IP address in Amherst between December 2017 and November 2018. National statistics are calculated across 314,082,195 over the same time range.

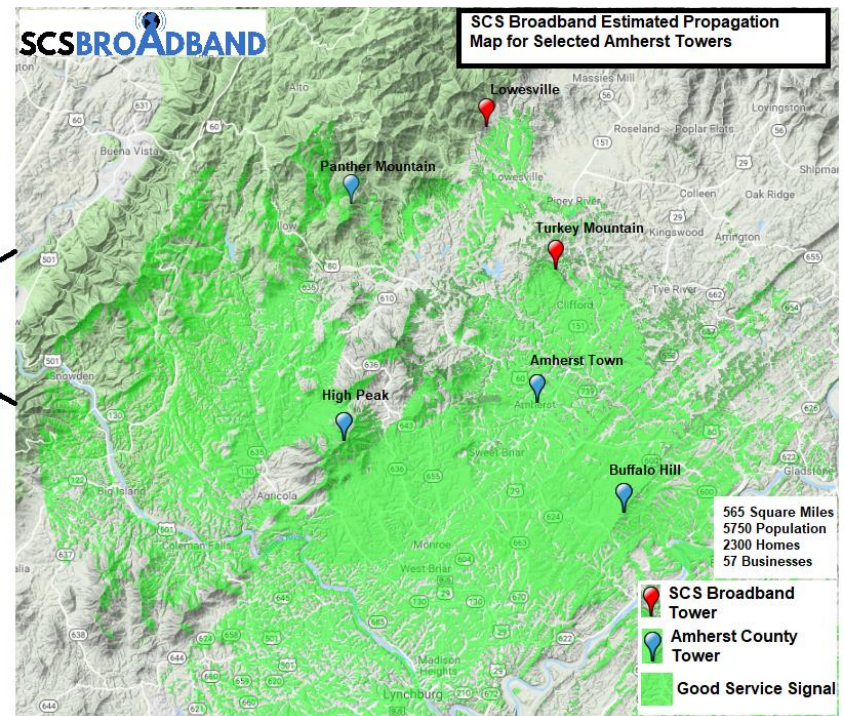
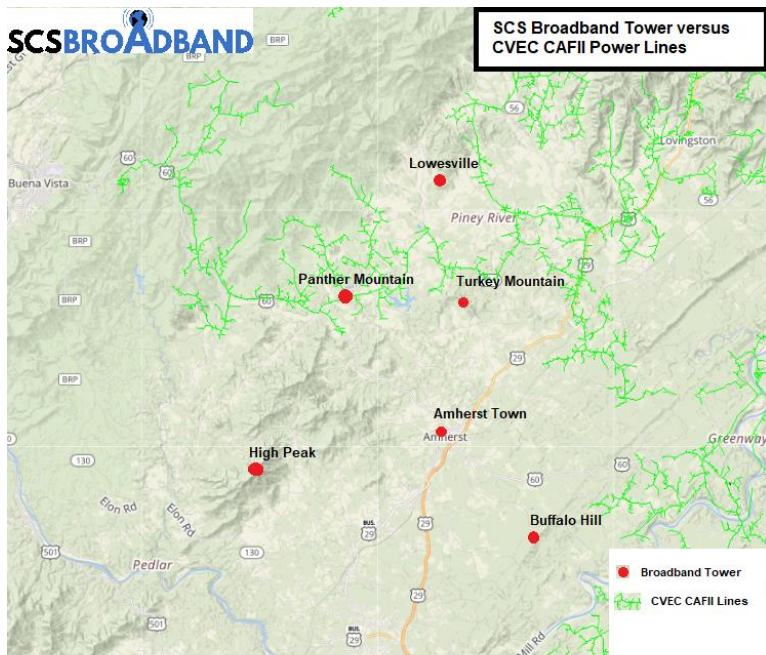
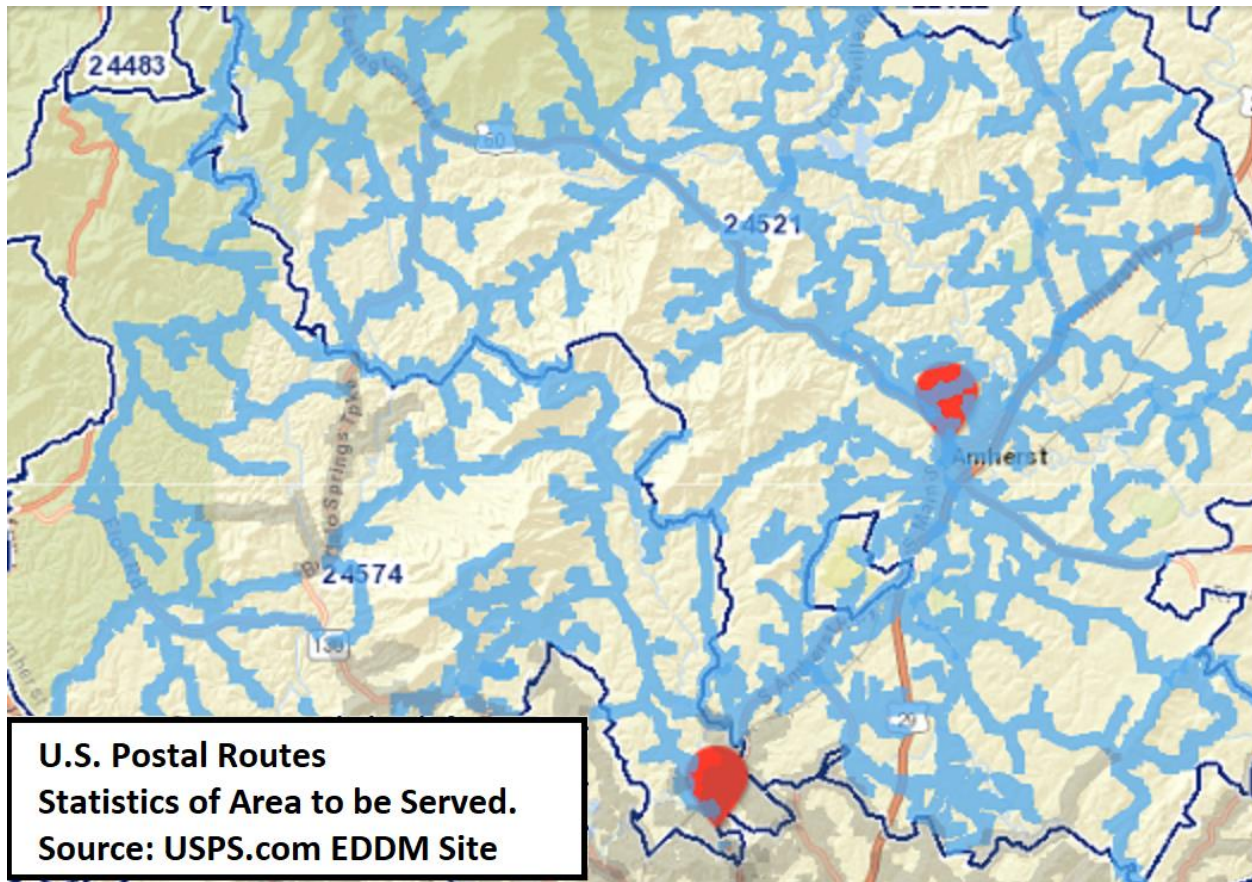


Figure 1.1 - Maps of Project Area

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	\$ 267,760	67	Pending
AMHERST COUNTY	\$123,000	31	Pending
SCS BROADBAND	\$ 11,400	3	Pending
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 399,010	100 %	



Total Delivery Addresses
6375



-  **Postal Delivery Route Selected**
-  **Postal Delivery Route NOT Selected**

Figure 4.1 – U.S. Postal Routes Statistics of Area to be Served

SCSBROADBAND

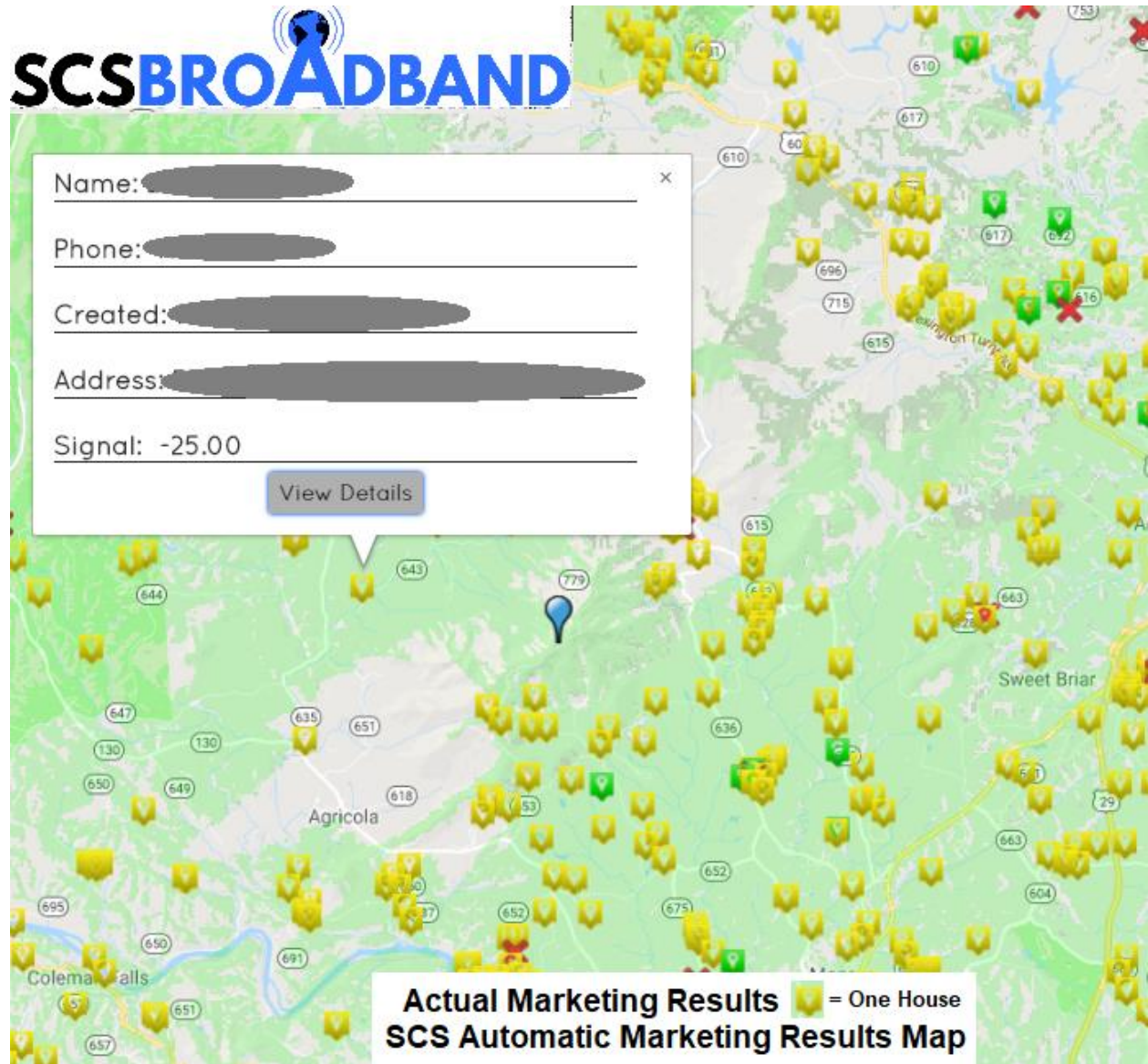


Figure 1- Actual Amherst Service Requests High Peak Area

Figure 8.1 – Amherst County Wireless Network Plan Map

