

Alabama Broadband Accessibility Fund
2020 Round One Grant Application for



SHERLING LAKE COMMUNITY BROADBAND PROJECT

Hayneville Fiber Transport D/B/A
Camellia Communications
P.O. Box 129
180 Greenville Bypass
Greenville, AL 36037

(334) 371-3000

2020 Round One Grant Application

Applicant Information

Project Name: Sherling Lake Community Broadband Project

Legal Name of Entity: Hayneville Fiber Transport, Inc. d/b/a Camellia Communications

Mailing Address: P O Box 129, Greenville, AL 36037

Name and Title of CEO: Evelyn P. Causey, President

Name and Title of Contact: Evelyn P. Causey, President

Phone Number and Email of Contact: (334) 371-3008 ecausey@htcnet.net

Autonomous System Number (ASN): 33623

List Internet Exchange Membership (if any) MGMix Montgomery

PeeringDB entries (www.peeringdb.com)

Hayneville Fiber Transport - History & Project Introduction

Hayneville Fiber Transport (HFT) is applying for a Broadband Accessibility Grant under the 2020 Alabama Broadband Accessibility Fund to provide Broadband internet access to underserved areas in and around Butler County, Alabama.

HFT is an Equal Opportunity Employer with headquarters located at 180 Greenville Bypass in Butler County, Alabama. Please see included state and area maps for location information. HFT operates as a competitive local exchange carrier (CLEC) and holds statewide CLEC authority for the state of Alabama. HFT has been a family owned and operated telephone company since 2003 and is a wholly owned subsidiary of Hayneville Holding Company, Inc. which was founded in 1946.

In 2003 Hayneville Holding Company recognized a need to provide voice and data services in neighboring Butler, and Lowndes Counties where it began to construct a copper and fiber-based infrastructure to provide both data and voice services. It serves multiple communities such as Ft Deposit, Greenville, McKenzie, Georgiana and surrounding rural areas of Butler County. HFT was able to serve the residents of Butler and Lowndes County with quality services and was among the first Telcos to offer custom calling features and ADSL internet service in the 1990s, as well as IPTV services in 2007.

Butler County is home to a population of 20,100 people with approximately 7,000 households. The estimated median household income is \$36,326. The poverty rate stands at 24.4 %. Butler county employs 7,730 people. The population consists of 52.2% White and 44.7% Black or African Americans and the remaining being Asian, and Hispanic. (source: datausa.io/profile/geo/Butler-county-al/#about)

Interstate 65 is Butler County's major transportation route, running north-south through the center of the county. U.S. 31 and State Route 10 are the county's other major transportation arteries.

Greenville, the county seat, is known as the Camellia City for its beautiful flowers and contains numerous historic structures. The Commerce Street Residential Historic District as well as many other homes and commercial buildings are on the National Register of Historic Places. The Greenville Railroad Depot preserves the rail and economic history of the town. It also hosts exhibits and works from local artists. The Ridge, a historic plantation community, was constructed by wealthy residents to escape the diseases of the lowland areas. In addition to its historic homes, The Ridge is today home to a premier golf course, Cambrian Ridge, which is on the famed Robert Trent Jones Golf Trail. Greenville and Georgiana were once home to legendary country singer Hank Williams Sr. His boyhood home in Georgiana is operated as a museum, and the city hosts its annual Hank Williams Festival each June. The historic Ritz Theater, a former movie palace, now serves as Greenville's performing arts center.

Conecuh National Forest lies largely within Butler County on its southern border and offers fishing, hiking, and other outdoor recreational opportunities. Butler County State Wildlife Management Area, northwest of Georgiana, offers fishing and hunting, and fishing activities are available at Sherling Lake in Greenville.

On the retail, and enterprise side of the business, HFT serves a large portion of the county with bundled services including unlimited local, long distance and features plus high-speed internet (from 6 Mbps to 1 Gbps) and IPTV video services.

On the wholesale side of the business, HFT currently offers transport, and wholesale services over a high-capacity all fiber network which includes over 500 miles along the I-65 corridor from Montgomery to Mobile, AL. We also provide services east as far as Tallahassee.

HFT transports bandwidth through an industry-leading packet optical network with 4 terabyte capability. HFT currently transmits anywhere from 1 Gbps to multiple 100 Gbps of data on our network for small to nationwide corporations. Their offerings include: Carrier ethernet, Dedicated Internet, wavelength services, wireless backhaul, etc.

**Alabama Broadband Accessibility Fund
2020 Round One Grant Application for**



SHERLING LAKE SERVICE AREA BROADBAND PROJECT

SECTION A - PROJECT DESCRIPTION

Section A.1 Project Service Area

HFT proposes under ADECA Broadband Accessibility Fund 2020 Grant Application to serve the Sherling Lake Community in rural Butler County which will bring speeds up to 1 Gig to one of the most rural parts of Alabama. The infrastructure improvements included in the Sherling Lake Community Broadband Project Application will significantly improve the internet speeds and quality of video services currently available to these rural residents and businesses. The Sherling Lake Community Broadband Project will construct 7.3 total route miles of fiber optic infrastructure to deliver these services to 52 eligible locations within the proposed service area. Currently the maximum wireline service available broadband speed is between 6 and 10 Meg using bonded pair copper delivery in some locations. This antiquated delivery method is not capable of providing higher speed internet services to the Sherling Lake residents. With the completion of the Sherling Lake project, businesses and residences will be offered symmetrical internet services to support upload speeds up to 500 Meg. Additional upload speeds will be available with the addition of equipment. This is especially valuable for small businesses using cloud services and uploading large files. With technologically advanced facilities, HFT's local presence and the ability to offer multiple advanced services on one monthly invoice, HFT will be able to meet the needs of these rural customers. A breakdown of customers located in the PFSA follows:

Number of Households to be Served	48
Number of Businesses / Industries to be served	0
Number of Community Anchors to be served	4

The project area is rural in nature and not included in any incorporated area / municipality. According to the Alabama Broadband Accessibility Act definition of rural, the Sherling Lake Community meets the requirements of rural classification. The 2017 Census data reported Butler County had a population of 20,100 with recent estimates on July 1, 2018 of 19,680, of which the Sherling Lake Community project area represents only a small percentage of that population; thereby making the entire county and the Sherling Lake Community qualify as rural, being less than the 25,000 population maximum.

Section A.2 Technology Discussion

This project will use Adtran network equipment to deploy Gigabit Passive Optical Network (GPON) technology to underserved areas. GPON was designed as a “future-proof” solution to support advances of end user technology without the need to upgrade the entire network infrastructure. GPON technology reliably delivers triple play services (Internet, voice and TV) from a single mode fiber strand to multiple subscribers. GPON consist of OLT (Optical Line Terminals), optical splitters, and ONT (Optical Line Terminals). Adtran Total Access 5000 (TA 5000) serve as HFT’s OLTs and support a 10 GB fiber distribution ring. Fiber cables (12 to 144 strand fiber cable depending on passing quantity) from TA 5000s run to a 1:32 optical splitter and terminate into Adtran TA-352 or TA-400 series ONTs at the customer premise. GPON minimizes latency by not requiring intermediary powered switches, bridges, or optical splitters between OLTs and ONTs. GPON capacity easily scales to provide Gigabit service for subscribers. However, if more bandwidth were to be required, NG-PON2 or XGS-PON at 10Gbps or Point to Point 10Gb/s connections or higher could be deployed on an as-needed basis over the proposed Fiber optic cable.

The TA 5000 is an environmentally hardened modular platform that can be deployed in a central office or at a remote location. Its modular architecture is scalable and protects carrier investments by preventing equipment obsolescence. Migrating to next-generation access interfaces, protocols, and services is accomplished by simply replacing a module in the TA 5000. This platform supports flexible traffic management; Ethernet flow mapping, prioritization, tagging; and versatile management options which are required to respond to the demand for premium services. The TA 5000 product line is widely deployed and meets all of the core standards required to provide telecom and datacom services.

This network is easily upgradeable and well maintained consistent with HFT existing network. Equipment and software upgrades for new features and patches can easily be deployed during our maintenance window (12am – 6am) to minimize the impact to HFT broadband customers.

Section A.3 Service Offerings Information

CenturyLink and Troy Cable each provide 10 GB uplinks that serve as HFT’s backbone connection to the Internet network. Bandwidth accessibility per home is up to 1 Gbps. Any businesses and CAI’s that locate to the area will have the accessibility to speeds up to 10 Gbps with upgrade or installation of additional equipment. New equipment at each site has allowed for future-proof scalability of up to 4,000 Gbps by adding electronics (40 channels at 100 Gbps per channel).

Hayneville Fiber Transport provides a variety of service plans to its customers and does not enforce data caps. The two tables below list residential fiber bandwidth and pricing tiers for Internet, phone & Internet, and triple-play services.

Bandwidth	Internet	Phone & Internet	TV & Internet		
			Basic	Standard	Expanded & HD
Up to 50mb	\$50.95	\$90.95	\$89.95	\$162.95	\$170.95
Up to 100mb	\$79.95	\$119.95	\$123.95	\$191.95	\$199.95
Up to 300mb	\$99.95	\$139.00	\$143.95	\$211.95	\$219.95
Up to 500mb	\$124.95	\$164.95	\$168.95	\$236.95	\$244.95

This table contains triple-play services – phone, TV, and Internet.

Bandwidth	Basic	Standard	Expanded or HD
Up to 50mb	\$149.95	\$182.95	\$190.95
Up to 100mb	\$143.95	\$211.95	\$219.95
Up to 300mb	\$163.95	\$231.95	\$239.95
Up to 500mb	\$188.95	\$256.95	\$264.95

Section A.4 Technical Evaluation

Preliminary Technical Evaluation – Sherling Lake Community Service Area

Hayneville Fiber Transport project has the following technical capabilities and metrics:

Proposed System Type:	Fiber to the Home (FTTH)
Proposed System Topology:	Active Ethernet
Proposed Network Equipment:	Adtran with TA-352 or TA-400 series ONT
Proposed Broadband Service Speeds:	Up to 1Gb/s and beyond (future)
Proposed Miles of Fiber:	7.3
Proposed Customers Passed:	Homes 48, 4 Anchors, Total 52
Project Cost Estimate:	\$367,990.00
Project Schedule Start:	April 13, 2020
Project Schedule End:	April 13, 2022

Hayneville Fiber Transport (HFT) will utilize an Active Ethernet (Active E) Fiber to the Home (FTTH) network architecture to provide 25 Mbps downstream & 3 Mbps upstream broadband to the Sherling Lake service area. The proposed FTTH network design in this service area calls for a total of 4.3 miles of fiber.

The equipment strategy for the HFT Sherling Lake Service Area FTTH project is to leverage existing fiber to deploy an Active E FTTH solution using the Adtran Total Access 5000 platform. The Adtran platform can deliver video, data and voice over the Active E platform from a designated fiber to multiple subscribers. Latency within the proposed Adtran FTTH equipment ranges from microseconds to around 3-5ms, depending on location, providing the lowest practical latency for a residential user. Facilities supporting fiber infrastructure exist and none will be constructed or leased. HFT will add 48 households, and 4 community anchors to the Sherling Lake Service Area.

HFT's Internet peering connections and routers are monitored by a NOC and upstream providers, CenturyLink and Troy Cable, to ensure that adequate bandwidth and IP addresses are available to our broadband customers. Currently, two routers connect to Internet backbones. The routers are co-located in Atlanta, GA and Dallas, TX. Two optical waves are leased to

connect the routers to our network in Dothan and Montgomery, AL. Troy Cable offers broadband, transport, redundancy, diverse routing, and business continuity for strategic community operations and wholesale services. HFT has 10 Gbps of existing peering bandwidth, with the ability to scale it higher as bandwidth usage grows. This network facilitates excellent response times across the network with minimal latency. Latency from HFT's network's edge to our Internet peering locations is typically well below 20 ms. HFT will provide an overall service level across the entire network that is equivalent to Internet users in Urban and Suburban areas to its existing subscribers and to all customers in the proposed service area. Each location supporting core and FTTH equipment will be constructed with carrier grade DC power plant and batteries with at least 8 hours of backup in the event of a long-term power outage. If the commercial power were to be affected for an even longer period, HFT can provide longer-term temporary power via fixed or portable generators as necessary.

Project Budget

Following is the project budget from Schedule B-1

Budget Item	Total Cost	Grant	Match
Engineering/Design	\$47,450.00	\$16,607.50	\$30,842.50
Materials	\$25,206.00	\$8,822.10	\$16,383.90
Labor	\$1,250.00	\$437.50	\$812.50
Construction/Installation	\$294,084.00	\$102,929.40	\$191,154.00
Other (please specify)			
Total	\$367,990.00	\$128,796.50	\$239,193.50

Project Schedule & Timeline

The project schedule is planned to be completed well within the 2-year timeframe. The engineering has been completed for the project and it has been bid out to qualified contractors. The winning contractor will order materials along with HFT. Construction will commence on the mainline followed by customer drops. After marketing and scheduling of customer turn-ups, customers will be cutover to the new FTTH network and higher-speed broadband services.

PLEASE SEE ATTACHMENT A4 FOR COMPLETE ENGINEERING TIMELINE, PROJECT BUDGET DATA, ADECA BROADBAND MAP, AND PROFESSIONAL ENGINEER CERTIFICATIONS. KMZ FORMATS ARE ELECTRONICALLY SUBMITTED WITH THIS APPLICATION.

Section A.5 Technical and Managerial Capabilities

Hayneville Fiber Transport History and Legacy

Hayneville Fiber Transport has an interesting and long history of serving rural Alabama with communication services. In 1946 the home of Howard and Jessie Powell burned to the ground. The real estate in Hayneville, Alabama was limited and the only house for sale was the one with the local telephone company in the living room. Howard ran a successful Sinclair Gas Franchise and wasn't really interested in the telephone business, but his young wife loved the house, so as any good southern wife would do, she purchased the home without her husband's permission or approval. So, in the blink of an eye Howard Powell owned a telephone company with 60 subscribers. He and his young wife moved in and raised their three children as well as their new business, all under the same roof. Jessie served as the operator and Howard managed the outside plant facilities. The temptation to listen in most often got the best of "Miss Jess", so to deter her Howard borrowed funds from USDA's Rural Electrification Administration, now known as Rural Utilities Services, to purchase their first automated switch. Although "Miss Jess" was no longer in the "know", their services continued to improve and expand through hard work and advancing technology. The company began to flourish. Their children also invested their lives into the company, all three serving in various leadership positions over the years. Currently the third and fourth generations are involved in the company and continue the legacy of service started over 73 years ago. Over the years the company proved to be one of the most forward thinking telcos in Alabama. Being one of the first to offer high speed internet and IPTV (internet protocol cable services) in rural Lowndes County speaks to their innovation and dedication to the industry. In 2003 the owners saw a need in neighboring Butler County and built a new copper and fiber based network to provide modern services to southern Lowndes County and all of Butler County. Currently, Hayneville Fiber Transport is led by both Powell legacies and industry professionals taking it into the 21st century.

Personnel

Evelyn Causey currently serves as President / COO of Hayneville Fiber Transport. Evelyn has 25 years experience in the telecom industry. She officially joined HFT during the onset of the internet service offering, but as the grandchild of Howard and Jessie she has been part of the business all of her life. Evelyn is very active in the industry and serves as Vice President of the Telecommunications Association of the Southeast. She is currently the Chair of the Alabama 911 Board (Governor appointed) and serves on the Butler County Commission on Economic Development (Vice Chair) as well as the Lowndes County Economic Development Commission. Evelyn was most recently asked to serve on the Lurleen B. Wallace Foundation Board which she has proudly served for the past year. With a proven track record of telecom leadership, Evelyn has led the efforts to keep Hayneville Fiber Transport innovative and competitive in an ever changing industry.

Mason Halacker, General Manager and Director of Business Development for HFT has over 30 years' experience in Management with small business and Fortune 500 companies. He worked for 15 years in the Utilities Industry with 10 years specifically in Telecommunications. His expertise includes Human Resources ranging from a local plant level to the Corporate level. He also leads the company's business development efforts where he garnered 100% of the Hyundai Auto Manufacturing Tier 2 and 3 support businesses in our footprint. Under his leadership, we currently serve approximately 75 % of all industry, government, medical, and educational institution's communications needs.

Howard Powell, IV, Chief Technology Officer, has over 24 years' experience in Network Engineering and Management. He has led the company in the development of our Sonnet platform and then its evolution to Ethernet. Today he helped develop the company's Fiber based DWDM (Dense Wavelength Division Multiplexing) backbone. He designed our network's redundancy and diversity to help us maintain very high Industry service levels. Recently Howard helped the company with its expansion into the Montgomery, Mobile, Selma and

Atlanta markets where we co-lo with National and International Carriers. He led the RFP process of a new DWDM platform with 4 Terabyte capability which now serves its first ever 100 G solution to a national corporation customer. He continues his grandparents' legacy of service.

Cory Causey is currently the Comptroller for Hayneville Fiber Transport since June of 2013. His finance degree has served him well managing the day to day financial operations including accounts payables, inventory, investments and asset management. Cory's expertise in organizational development and restructuring has helped the company maintain its' competitiveness in a changing and highly competitive market. Cory currently serves as a board member for Greenville Rotary Club, President of the Butler County Auburn Club and a board member of Butler County Children's Advocacy Center (Safe Harbor).

Keith Bowen, Network Administrator, brings over 15 years' experience in Network Administration. He is responsible for the programing, configuration, maintenance and overall performance of our modern Meta Switch for Voice Services, Adtran, Calix and other data equipment as well as our IPTV equipment four our TV Head End. He maintains system software including upgrades, and actively monitors the network performance. He also troubleshoots more complex issues and deploys solution accordingly. He provides input in the evaluation of new applications and equipment.

With a cumulative 86 years experience and 73 years corporate business experience serving Lowndes County, Hayneville Fiber Transport has been a stable and reliable service provider for the state's most rural markets. With a proven track record of reliability and advanced technology deployment HFT continues the legacy of service and commitment to community into the 21st century. They have the skills and resources necessary to complete this project within the two year grant deadline.

Section A.6 Pole Attachment Discussion

Hayneville Fiber Transport does not currently have any entities to whom we are charging for pole attachment fees nor do we anticipate having any during the construction of this project.

Section A.7 Vendor and Subcontractor Discussion

Hayneville Fiber Transport plans to utilize internal human resources and material resources as much as feasibly possible. Should we need the assistance of outside contractors to complete certain aspects of the project construction, we will use standard RFP processes giving small, minority owned and women owned businesses capable of providing needed goods or services due and appropriate consideration.

Section A.8 Middle Mile Projections if Applicable

There will be no Middle Mile construction in this project. The broadband FTTH infrastructure will only service underserved subscribers.

Section A.9 Community Support Location Discussion

The entire Sherling Lake community qualifies as rural under the ADECA definitions. Furthermore, there are no wireless or fixed wireless solutions in the proposed service area that provide 25 Mbps download / 3 Mbps upload speeds. The citizens of this rural area are in great need of higher speed internet. The lack of high speed internet has made citizens unable to work from home due to low bandwidths. From an educational standpoint, students need access to higher speeds to do online assignments and research. The internet has immense potential to improve the quality of education, which is one of the pillars of sustainable development. Access to the internet is fundamental to achieving this vision for the future, opening doorways to a wealth of information, knowledge and education resources. We sent out surveys to the potential fiber customers have we received excited feedback of customers wanting to upgrade internet speeds. Respondents noted that they are interested in speeds from 50 Meg to 1 Gig as soon as access to the network becomes available. Surveys are available upon request.

Community support letters from the following have been included for your review and consideration:

- U. S. Representative Second District - Congresswoman Martha Roby
- Alabama House of Representatives, District 90 – Representative Chris Sells
- Butler County Commission for Economic Development – Josh Pierce, Chairman
- City of Greenville – Dexter McLendon, Mayor
- Butler County Commission – Joey Peavy, Chairman
- Butler County School System – Dr. John D. Strycker, Superintendent
- Butler County School System – Matthew Shell, Technology Director
- Butler County School System – Lisa Adair, Federal Programs Director
- Butler County School System – Joe Eiland, Assistant Superintended

**Alabama Broadband Accessibility Fund
2020 Round One Grant Application for**



**SHERLING LAKE COMMUNITY SERVICE AREA
BROADBAND PROJECT
SECTION B – APPLICATION BUDGET**

Section B – Application Budget

Total Project Cost	\$367,990.00
65% of Total Project Cost (minimum match)	\$239,193.50
35% of Total Project Cost (grant maximum)	\$128,796.50
Total Grant Amount Requested (not to exceed \$1.5 million)	\$128,796.50

Section B.1 - Itemized eligible project expenses.

Budget Item	Total Cost	Grant	Match
Engineering/Design	\$47,450.00	\$16,607.50	\$30,842.50
Materials	\$25,206.00	\$8,822.10	\$16,711.50
Labor	\$1,250.00	\$437.50	\$812.50
Construction/Installation	\$294,084.00	\$102,929.40	\$191,154.60
Other (please specify)			
Total	\$367,990.00	\$128,796.50	\$239,193.50

Section B.2 – Financial Discussion

Hayneville Fiber Transport has reviewed its business model for the Sherling Lake Community Broadband project and believes it to be financially sustainable. HFT is already receiving revenues from existing subscribers in the project area and after the fiber to the home technology is placed into service, HFT expects to increase its average revenue per user (ARPU) by offering higher broadband speeds to its existing customer base and to reach additional new customers with its superior network. In addition, while the project is under construction, HFT will supplement the grant funding with its own cash from existing operations. In addition, should it be necessary, HFT can also draw on its existing line of credit. HFT plans to execute on most of the project deliverables by using its own staff and where needed, HFT will seek to receive responses from subcontractors on an RFP for additional services in order to ensure the project is completed on target and as outlined in the grant application. Hayneville Fiber Transport is externally audited annually. HFT is happy to provide copies of financial reports as needed for additional support upon request.

As a competitive local exchange carrier, Hayneville Fiber Transport (HFT) has been serving Butler County since 2003. HFT, being a CLEC, does not receive in federal. HFT operates under a successful business model where the operations are supported by retail and wholesale revenues.

C. Other Program Priorities

Please see Attachment C for further responses.

Does this project seek to leverage grant funds through private investment?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Will this project be an extension of existing infrastructure?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Does this project serve locations with demonstrated community support?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Will this project serve the highest number of unserved homes, businesses, and community anchor points for the least cost?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Does this project emphasize the highest broadband speeds?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Will this project provide material broadband enhancements to hospitals located in rural areas?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Will this project support local libraries in this state for the purpose of assisting the libraries in offering digital literacy training pursuant to state library and archive guidelines?

YES



NO



If yes, include an explanation and documentation in a file titled Attachment C

Is the applicant a certified Minority Business Enterprise under the Alabama Minority Business Enterprise Program? Or is it certified under another Disadvantaged Business Enterprise Program?

YES




NO



If yes, include an explanation and documentation in a file titled Attachment C

D. Certifications

1. The applicant certifies that it is a non-governmental entity.
2. The applicant certifies all new customers served as a result of this project will have access to an internet connection that provides a capacity for transmission at an average speed per customer of at least 25 Mbps download and at least 3 Mbps upload.
3. The applicant certifies that all new customers served as a result of this project are not located within the boundaries of any incorporated city or town having a population in excess of 25,000 inhabitants, according to the last federal census.
4. The applicant certifies that it has the technical and managerial capabilities to complete the project within two years of the effective date of the grant agreement.
5. The applicant certifies that the area to be served does not have at least one provider of terrestrial broadband service that is either: (1) offering a connection to the Internet meeting the minimum service threshold; or (2) is required, under the terms of the Federal Universal Service Fund or other federal or state grant, to provide a connection to the Internet at speeds meeting the minimum service threshold by March 28, 2023.

Certification	
I the undersigned am authorized to obligate my entity and enter into agreements for my organization. I understand that the above certifications do not guarantee funding and a grant agreement will be executed prior to project funds being expended. I further understand that if the above statements cannot be verified, no grant funds will be awarded under this program. Finally, to the best of my knowledge the above certifications are true and correct.	
Signature of Applicant: 	Date: 12/30/2019
Title of Applicant: President / COO	

For more information regarding the Alabama Broadband Accessibility Fund, please send questions to Maureen Neighbors at broadband.fund@adeca.alabama.gov, or call (334) 242-5292 between the hours of 8:00 a.m. to 4:00 p.m., Monday through Friday.

**Alabama Broadband Accessibility Fund
2020 Round One Grant Application for**



SHERLING LAKE COMMUNITY BROADBAND PROJECT

ATTACHMENT C

Section C – Other Program Priorities Responses

Question 1 Yes Response - Grant Funds Leveraged Through Private Investment

HFT will seek to leverage ADECA grant funding in the amount of \$90,072.50, 35% of the project total of \$257,350. The matching grant funding of \$167,277.50 will be invested by Hayneville Fiber Transport through cash on hand and an operating line of credit. HFT has the ability to service the debt through existing operations not including any growth that would be generated from the grant funded facilities. The Sherling Lake community has been in the HFT service area since their initial construction in 2003. This project will improve the services and create new opportunities for HFT to grow their customers base. This will only improve the financial model to continue service this area into the future.

Question 2 Yes Response - Extension of Existing Infrastructure

Currently HFT serves the majority of Butler County including the rural cities, towns and communities of Greenville, Georgiana, McKenzie, and Fort Deposit (in Lowndes County) with 400 route miles of existing infrastructure. Leveraging the existing fiber to the remote network, this project will improve the services available to the Sherling Lake community by providing fiber to the home services. The extension of the fiber network will add 4.3 miles of fiber optic cable to the HFT network allowing them to reach more rural residences, businesses and anchor institutes.

Question 3 Yes Response - Community Support

The community has more than embraced the need for this fiber infrastructure evidenced by the letters of support included in this application. Although rural in nature, the level of interest has been overwhelming. Please see the letters of support for more information. The entire Sherling Lake community qualifies as rural under the ADECA definitions. Furthermore, there are no wireless or fixed wireless solutions in the proposed service area that provide 25 Mgbps download / 3 Mgbps upload speeds. The citizens of this rural area are in great need of higher speed internet. The lack of high speed internet has made citizens unable to work from home due to low bandwidths. From an educational standpoint, students need access to higher speeds to do online assignments and research. The internet has immense potential to improve the quality of education, which is one of the pillars of sustainable development. Access to the internet is fundamental to achieving this vision for the future, opening doorways to a wealth of information, knowledge and education resources. According to Sherling Lake area surveys, telecommuting was the largest need. Respondents noted that they are interested in speeds from 50 Meg to 1 Gig as soon as access to the network becomes available. Copies of these surveys are available upon request.

Question 4 Yes Response - Highest number of Unserved for the Lease Cost

Using existing middle mile fiber infrastructure, HFT can capitalize on the last mile investment at the least cost. The Sherling Lake project was engineered to take full advantage of existing infrastructure and be cost effective in providing the highest bandwidth available. The Sherling Lake project builds fiber facilities from the node to each service location. All 52 locations will be served with fiber to the home facilities constructed in the most cost-effective method possible. This solution will also future proof the needs of the community for years to come providing infinite bandwidth capabilities with the addition of more equipment. Being a small company, HFT understands the importance of using resources wisely and will make sure to provide an excellent value for each dollar spent.

Question 5 Yes Response - Emphasize the Highest Broadband Speeds

Using FTTH technology the HFT fiber network will provide future proof technology to enable speeds of infinite bandwidth with the additional of electronic equipment. All CAls within the proposed service area will have access up to 1 Gig bandwidth with infinite bandwidth available with the additional equipment.

Question 8 No Response - Certified Minority Business Enterprise

Hayneville Fiber Transport is majority woman owned and operated. They are in the process of being certified by the Alabama Minority Business Enterprise Program. In light of this, the NO box is indicated, but HFT is poised to change that to a YES for future opportunities.

Preliminary Technical Evaluation – Hayneville Sherling Lake Service Area

Hayneville Fiber Transport project has the following technical capabilities and metrics:

Proposed System Type:	Fiber to the Home (FTTH)
Proposed System Topology:	Gigabit Passive Optical Network (GPON)
Proposed Network Equipment:	Adtran with TA-352 or TA-400 series ONT
Proposed Broadband Service Speeds:	Up to 1Gb/s and beyond (future)
Proposed Miles of Fiber:	7.3
Proposed Customers Passed:	Homes 48, Anchor 4, Total 52
Project Cost Estimate:	\$367,990.00
Project Schedule Start:	April 13, 2020
Project Schedule End:	April 13, 2022

Hayneville Fiber Transport (HFT) will utilize a Gigabit Passive Optical Network (GPON) Fiber to the Home (FTTH) network architecture to provide 25 Mbps downstream & 3 Mbps upstream broadband to the Hayneville-Sherling Lake service area. The proposed FTTH network design in this service area calls for a total of 7.3 miles of fiber.

The equipment strategy for the HFT Sherling Lake Service Area FTTH project is to leverage existing fiber to deploy a Gigabit Passive Optical Network (GPON) Fiber to the Home (FTTH) solution using the Adtran Total Access 5000 platform. The Adtran platform can deliver video, data and voice over Gigabit Passive Optical Networks (GPON) from a single fiber to multiple subscribers. Customers served by a GPON connection will have a 25mbps/3Mbps GPON connection from the Optical Network Terminal (ONT) at their home through a 1:32 optical splitter that runs over fiber cable (12 to 144 strand fiber cable depending on passing quantity) to the serving remote Optical Line Terminal (OLT). Latency within the proposed Adtran FTTH equipment ranges from microseconds to around 3-5ms, depending on location, providing the lowest practical latency for a residential user. Facilities supporting fiber infrastructure exist and none will be constructed or leased. HFT will add 48 households and 4 Community Anchors to the Hayneville Sherling Lake Service Area.

HFT's Internet peering connections and routers are monitored by a NOC and upstream providers, CenturyLink and Troy Cable, to ensure that adequate bandwidth and IP addresses are available to our broadband customers. Currently, two routers connect to Internet backbones. The routers are co-located in Atlanta, GA and Dallas, TX. Two optical waves are leased to connect the routers to our network in Dothan and Montgomery, AL. Troy Cable offers broadband, transport, redundancy, diverse routing, and business continuity for strategic community operations and wholesale services. HFT has 10 Gbps of existing peering bandwidth, with the ability to scale it higher as bandwidth usage grows. This network facilitates excellent response times across the network with minimal latency. Latency from HFT's network's edge to

our Internet peering locations is typically well below 20ms. HFT is able to provide an overall service level across the entire network that is equivalent to Internet users in Urban and Suburban areas to its existing subscribers and to all customers in the proposed service area.

Each FTTH OLT will be constructed with carrier grade DC power plants and batteries with at ISherling Lake 8 hours of backup in the event of a long-term power outage. If the commercial power were to be affected for an even longer period, HFT can provide longer-term temporary power via fixed or portable generators as necessary.

Project Budget

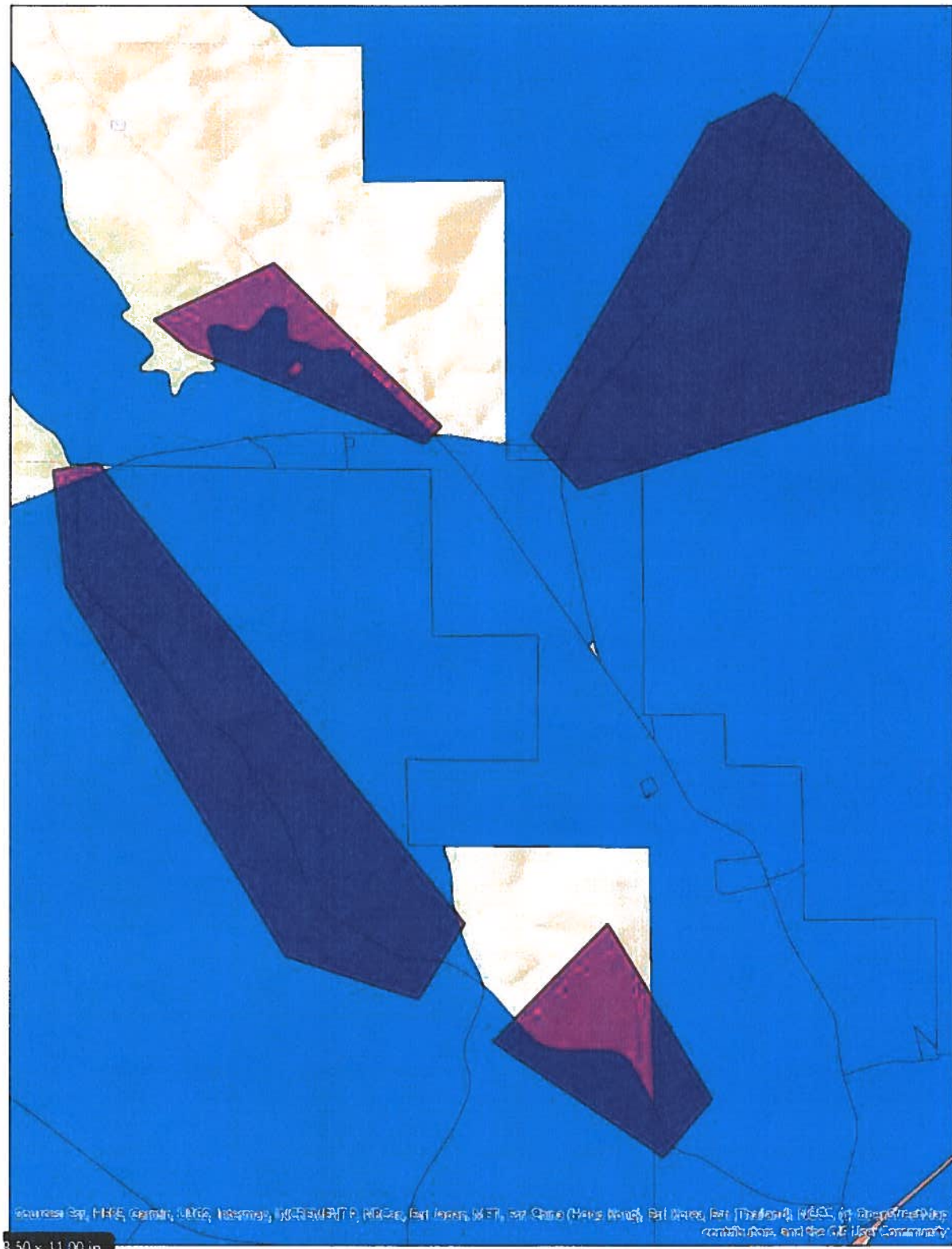
Following is the project budget from Schedule B-1:

Budget Item	Total Cost	Grant	Match
Engineering/Design	\$47,450.00	\$16,607.50	\$30,842.50
Materials	\$25,206.00	\$8,822.10	\$16,383.90
Labor	\$1,250.00	\$437.50	\$812.50
Construction/Installation	\$294,084.00	\$102,929.40	\$191,154.60
Other (please specify)			
Total	\$367,990.00	\$128,796.50	\$239,193.50

Project Schedule & Timeline

The project schedule is planned to be completed well within the 2-year timeframe. The engineering has been completed for the project and it has been bid out to qualified contractors. The winning contractor will order materials along with HFT Construction will commence on the mainline followed by customer drops. After marketing and scheduling of customer turn-ups, customers will be cutover to the new FTTH network and higher-speed broadband services. The attached timeline and project schedule shows the order of activities for the project:

ADECA Broadband Map – Hayneville Sherling Lake



Professional Engineer Certification

I the undersigned, certify that the proposed FTTH project will work as described in the application and can deliver 25 Mbps downstream 3 Mbps upstream, at the service levels outlined, to all premises for which coverage is proposed. Moreover, the system, as designed, can meet the proposed build-out timeline, milestones, and construction schedule within the cost specified in the application and can be completed within two years.

12/20/19

(Date)



(Certifying Engineer's Signature)

Howard John Gorter

Name (Printed)

VP – Engineering & CTO

Title

Palmetto Engineering & Consulting

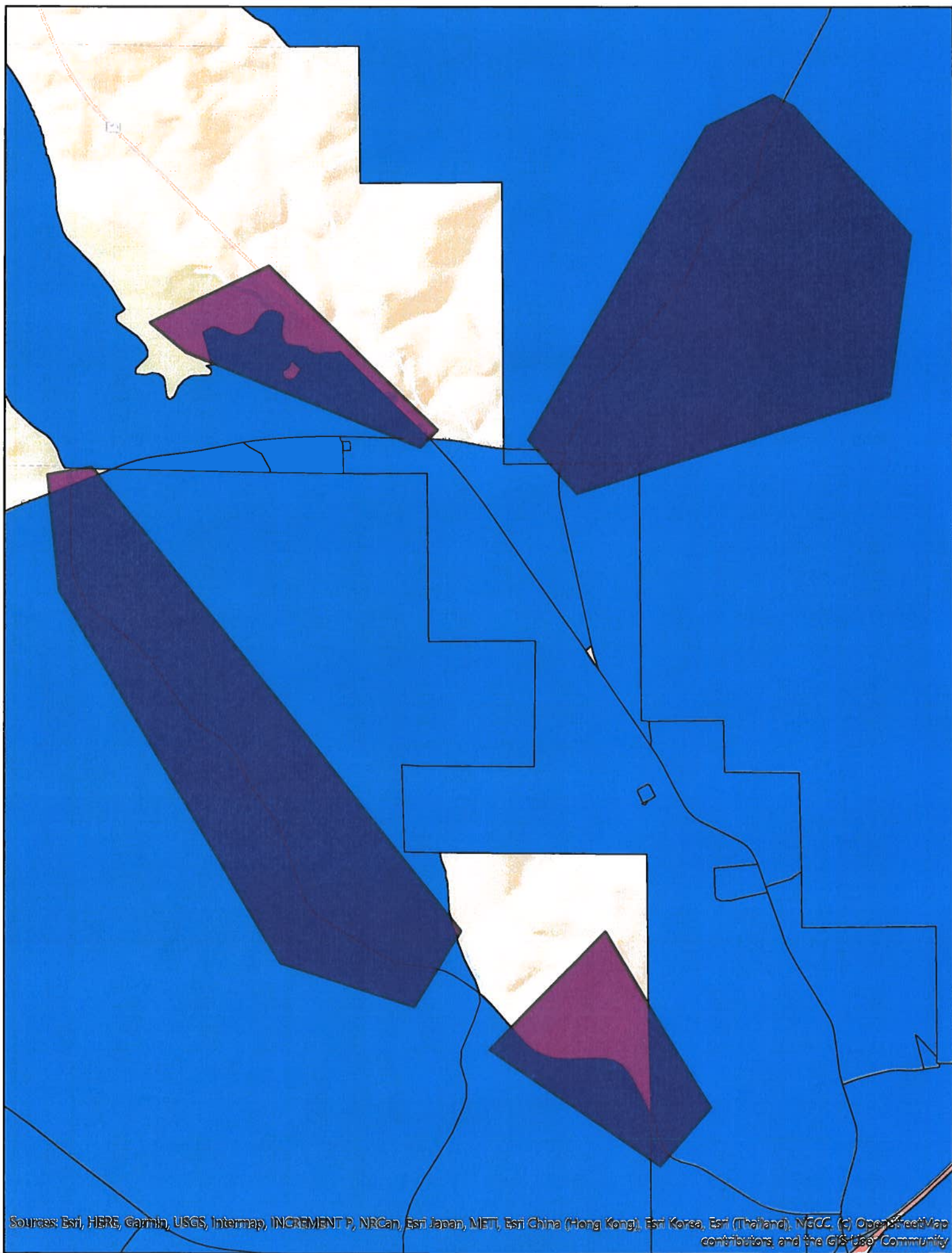
Company

Registration Number: 37916-E

State of Registration: AL

Expiration Date: 12/31/2021





Hayneville Fiber Transport Company 2020-2022 Timeline

2019 - 2020 Grant Application:

- Application submitted December 30, 2019 12pm.
- Objection period December 31 to February 11 (30 business days).
- Review Period (60 calendar days) Saturday April 11.
- Project start Monday, April 13 2020 - Wednesday, April 13 2022

2020-2021 Buildout Timeline:

Complete 100% of OSP Construction and Electronic Equipment installation for Blackbelt service area, approximately 7.3 route miles and 52 drops. Add new subscribers and upgrade existing subscribers.

Reasonableness / Data Points:

Complete Engineering and Design upon positive award of ADECA Grant for Sherling Lake service area. Start permitting in preparation to begin OSP cable construction. Prepare Plans & Specifications to Bid OSP Construction and Electronic Equipment contracts to assure competitive pricing. Award contracts and begin installation/construction. Finalize and closeout OSP Construction and Electronic Equipment contracts.

Hayneville Fiber Transport, Inc. d/b/a Camellia Communications

Sherling Lake Community Broadband Grant - Attachment A.9

Community Support Letters to Follow

MARTHA ROBY
2ND DISTRICT, ALABAMA

CANNON HOUSE OFFICE BUILDING
ROOM 442
WASHINGTON, DC
PHONE: (202) 225-2901

COMMITTEE:
APPROPRIATIONS

Congress of the United States
House of Representatives

Washington, DC 20515-0102

December 9, 2019

Mr. Kenneth W. Boswell
Director, Alabama Department of Economic and Community Affairs
401 Adams Avenue
Montgomery, AL 36104

**RE: Hayneville Telephone & Hayneville Fiber Transport, Inc. d/b/a Camellia Communications
Alabama Broadband Accessibility Fund 2020 Grant Project**

Dear Mr. Boswell:

I have been contacted by representatives of Hayneville Telephone and Hayneville Fiber Transport, Inc. d/b/a Camellia Communications in Butler County, Alabama, located within my congressional district, in reference to the applications they are submitting to your agency for the Alabama Broadband Accessibility Fund 2020 Grant Program.

It is my understanding that the program would assist in funding last mile fiber infrastructure deployment offered connectivity to the following rural, currently unserved, project locations within Butler and Lowndes counties: Blackbelt, Ebenezer Road, Hayneville-East, Hayneville-West, Poor House Road and Sherling Lake. In total, the proposed fiber infrastructure will serve approximately 810 households, and small businesses; as well as an economic development center, community library and a campground in these service areas. Likewise, the proposed projects, totaling \$2,150,850.00, will provide broadband services up to 1 Gig speeds meeting the demands of rural Butler and Lowndes counties for any application needed such as telecommuting, distant learning, email, retail commerce, typical banking and financial needs, over the top video, gaming and social media.

Please know that I am glad to support the referenced application. Please note my interest and grant all due and appropriate consideration. You may reply to my district office in Montgomery at the following address or fax number.

Congressman Martha Roby
401 Adams Avenue, Ste. 160
Montgomery, AL 36104
(334) 262-8758 Fax

If you need to reach a member of my staff, please contact Casey Rogers at (334) 262-7718 or via e-mail at casey.rogers@mail.house.gov. Thank you for your attention to this matter.

Sincerely,



Martha Roby
Member of Congress

MDR/cr



ALABAMA HOUSE OF REPRESENTATIVES

11 S. UNION STREET, MONTGOMERY ALABAMA 36130

REP. CHRIS SELLS
DISTRICT 90
POST OFFICE BOX 26
GREENVILLE, ALABAMA 36037

STATE HOUSE: 334-242-7768
DISTRICT: 334-371-9304
EMAIL: chris.sells@alhouse.gov

November 20, 2019

Kenneth Boswell, Director
Alabama Department of Economic and Community Affairs
401 Adams Avenue, Suite 560
Montgomery, Alabama 36104-4325

Dear Mr. Boswell:

Hayneville Fiber Transport, d/b/a Camellia Communications is applying for the 2020 Alabama Broadband Accessibility Fund Grant to extend their fiber optic network into rural areas of Butler County. They hope to provide more underserved areas in our district with high speed internet. As we all know, broadband is a building block for advancement in commerce, education and ultimately the economic success of our state. I share their values of Innovation, Economic growth and Commitment to the Community.

As a fiber-based internet provider, Camellia Communications has committed to providing an advanced high-capacity fiber network solution to our community in an ever-increasing bandwidth intensive world. Having been in business as a Telecommunications Carrier for over 65 years, Camellia has a proven track record of providing reliable broadband services to not only residential, but to area governmental, commercial, industrial, medical and educational entities.

Mr. Boswell, I offer my full support to Camellia Communications and their endeavor to secure this much needed funding. I respectfully request that you give them due and appropriate consideration. If you have any questions or if I may be of assistance, please do not hesitate to call me at 334-371-9304.

Sincerely,

A handwritten signature in black ink that reads "Chris Sells". The signature is written in a cursive, flowing style.

Chris Sells
Senator, District 90

BUTLER COUNTY COMMISSION FOR ECONOMIC DEVELOPMENT



December 9, 2019

Mr. Kenneth Boswell
Director, ADECA
401 Adams Avenue, Ste. 580
Montgomery, Alabama 36104

Re: Alabama Broadband Accessibility Application – Butler County and Lowndes County

Dear Mr. Boswell,

The Butler County Commission for Economic Development (BCCED) fully supports the broadband application submitted by Camellia Communications and the Hayneville Telephone Company. The broadband project will enhance our economic development efforts and provide fiber infrastructure to rural residents that are currently unserved. Camellia Communications and the Hayneville Telephone Company are active participants and supporters of economic development activities in both Butler and Lowndes County.

It is estimated that this service would provide up-to-date internet speed to almost 1200 homes, small businesses, farms, economic development and community centers and libraries in rural southcentral Alabama. This will increase our ability in both counties to assist existing industries continue to expand and provide a business-friendly environment for industry and small businesses considering new business development opportunities.

Thank you for your time and consideration.

Josh Pierce, Chairman
Butler County Commission for Economic Development



Dexter McLendon
Mayor

City of Greenville

Post Office Box 158 • Greenville, Alabama 36037

Telephone 334-382-2647 • Fax 334-382--7031
www.greenville-alabama.com

COUNCIL MEMBERS

Bryan Reynolds - Dist. 1
Ed Sims - Dist. 2
Tommy Ryan - Dist. 3
Jimmy Lawson - Dist. 4
Boris Thigpen - Dist. 5



Dee H. Blackmon
City Clerk - Treasurer

December 23, 2019

Mr. Kenneth Boswell, Director
Alabama Department of Economic and Community Affairs
401 Adams Avenue, Suite 560
Montgomery, AL 36104-4325

Dear Mr. Boswell:

Camellia Communications is applying for the 2020 Alabama Broadband Accessibility Grant to extend their fiber optic network into rural areas in Butler County. The City of Greenville works closely with Camellia Communications as a customer and partner in the economic development of our town. We share their values of innovation and commitment to our community.

As a fiber-based internet provider, Camellia Communications has committed to providing an advanced high-capacity fiber network solution to our community in an ever-increasing bandwidth intensive world. Having been in business as a Telecommunications Carrier for over 70 years, Camellia has a proven track of providing reliable broadband services not only to residential, but to area governmental, commercial, industrial, medical and educational entities.

We offer our full support to Camellia Communications and their endeavor to secure this much needed funding to bring high speed internet to all citizens of Butler County. I respectfully request that you give them due and appropriate consideration. If you have any questions or if I may be of assistance, please do not hesitate to call me at 334-382-7111.

Sincerely,

Dexter McLendon
Mayor

JOEY PEAVY
CHAIRMAN

DIANE KILPATRICK
COUNTY ADMINISTRATOR

DENNIS MCCALL
COUNTY ENGINEER



COMMISSIONERS:

JOEY PEAVY, DISTRICT 1

JESSE F. MCWILLIAMS, III, DISTRICT 2

FRANK A. HICKMAN, DISTRICT 3

ALLIN WHITTLE, DISTRICT 4

DARRELL SANDERS, DISTRICT 5

BUTLER COUNTY COMMISSION

202 PATSALIGA ST
P.O. BOX 756
GREENVILLE, ALABAMA 36037
(334) 382-3612 Phone (334) 382-3506 Fax
e-mail butlercc@butlercoal.us
www.butlercountyal.com

November 22, 2019

Kenneth Boswell, Director
Alabama Department of Economic and Community Affairs
401 Adams Avenue, Suite 560
Montgomery, Alabama 36104-4325

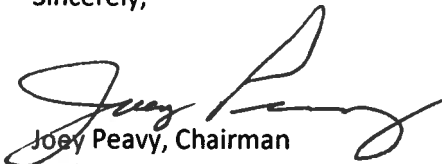
Dear Mr. Boswell:

Camellia Communications is applying for the 2020 Alabama Broadband Accessibility Grant to extend their fiber optic network into rural areas in Butler County. The Butler County Commission works closely with Camellia Communications as a customer and partner in economic development in Butler County. We share their values of Innovation and Commitment to the Community.

As a fiber-based internet provider, Camellia Communications has committed to providing an advanced high-capacity fiber network solution to our community in an ever-increasing bandwidth intensive world. Having been in business as a Telecommunications Carrier for over 65 years Camellia has a proven track of providing reliable broadband services to not only residential, but to area governmental, commercial, industrial, medical and educational entities.

We offer our full support to Camellia Communications and their endeavor to secure this much needed funding. I respectfully request that you give them due and appropriate consideration. If you have any questions or if I may be of assistance, please do not hesitate to call me at 334-382-3612.

Sincerely,


Joey Peavy, Chairman
Butler County Commission

BUTLER COUNTY SCHOOL SYSTEM

211 School Highlands Road
Greenville, Alabama 36037-1833
Telephone: 334-382-2665 Fax: 334-382-8607

BUTLER COUNTY
BOARD
OF EDUCATION

SUPERINTENDENT
OF EDUCATION
Dr. John Strycker

November 21, 2019

Michael Nimmer
District 1

Camellia Communications
Mason Halacker
180 Greenville Bypass
Greenville, AL 36037

To Whom It May Concern,

Lois Robinson
District 2

I am writing this letter to express the personal and professional support of Camellia Communication's efforts to obtain grant funding from the Alabama Broadband Accessibly Fund 2020 Round One Grant to expand coverage of broadband services to areas within our district that are currently unserved or underserved. Camellia Communications has been an excellent partner to our school system and our community since their founding in 2004. Camellia Communications has shown great commitment to customer service. This is exemplified by the high quality of their products and their quick reaction to customer support inquiries by their local staff. Their efforts to seek financial support to further serve portions of our school district again confirms the commitment of Camellia Communications to advancing economic development and closing the digital divide in our communities.

Brandon Sellers
District 3

Our students today compete with other students for opportunities not only locally, but world-wide. Many of our students live in areas of our district with little to no access to wired broadband services and who, therefore, must rely on wireless data options that are costly and often that do not perform optimally. Some live in areas that are not even served by wireless data providers and thus have no option for any type of Internet connectivity. Many educational pathways and careers now require access to broadband to even be considered for a position. This severely limits the ability of our stakeholders to be competitive as well as eliminating certain opportunities entirely for which they might otherwise be considered highly competitive.

Linda Hamilton
District 4

I enthusiastically authorize Camellia Communications to include my feedback in any applications that they may file with state agencies administering these broadband stimulus programs. I also strongly encourage those reviewing these applications to look favorably on these plans that will have such long-term positive benefits for our students, communities, and school system.

Mickey Jones
District 5

For further questions, I can be reached at 989-233-2490 or john.strycker@butlerco.k12.al.us

Sincerely,



Dr. John Strycker
Secretary and
Chief Executive Officer

Dr. John D. Strycker
Superintendent of Schools

BUTLER COUNTY SCHOOL SYSTEM

211 School Highlands Road
Greenville, Alabama 36037-1833
Telephone: 334-382-2665 Fax: 334-382-8607

BUTLER COUNTY
BOARD
OF EDUCATION

SUPERINTENDENT
OF EDUCATION
Dr. John Strycker

November 21, 2019

Michael Nimmer
District 1

Camellia Communications
Mason Halacker
180 Greenville Bypass
Greenville, AL 36037

To Whom It May Concern,

Lois Robinson
District 2

I am writing this letter to express the personal and professional support of Camellia Communication's efforts to obtain grant funding from the Alabama Broadband Accessibility Fund 2020 Round One Grant to expand coverage of broadband services to areas within our district that are currently unserved or underserved. Camellia Communications has been an excellent partner to our school system and our community since their founding in 2004. Camellia Communications has shown great commitment to customer service. This is exemplified by the high quality of their products and their quick reaction to customer support inquiries by their local staff. Their efforts to seek financial support to further serve portions of our school district again confirms the commitment of Camellia Communications to advancing economic development and closing the digital divide in our communities.

Brandon Sellers
District 3

Our students today compete with other students for opportunities not only locally, but world-wide. Many of our students live in areas of our district with little to no access to wired broadband services and who, therefore, must rely on wireless data options that are costly and often that do not perform optimally. Some live in areas that are not even served by wireless data providers and thus have no option for any type of Internet connectivity. Many educational pathways and careers now require access to broadband to even be considered for a position. This severely limits the ability of our stakeholders to be competitive as well as eliminating certain opportunities entirely for which they might otherwise be considered highly competitive.

Linda Hamilton
District 4

I enthusiastically authorize Camellia Communications to include my feedback in any applications that they may file with state agencies administering these broadband stimulus programs. I also strongly encourage those reviewing these applications to look favorably on these plans that will have such long-term positive benefits for our students, communities, and school system.

Mickey Jones
District 5

For further questions, I can be reached at 334-382-2665 or matthew.shell@butlerco.k12.al.us

Sincerely,



Matthew Shell
Technology Director

Dr. John Strycker
Secretary and
Chief Executive Officer

BUTLER COUNTY SCHOOL SYSTEM

211 School Highlands Road
Greenville, Alabama 36037-1833
Telephone: 334-382-2665 Fax: 334-382-8607

BUTLER COUNTY
BOARD
OF EDUCATION

SUPERINTENDENT
OF EDUCATION
Dr. John Strycker

November 21, 2019

Michael Nimmer
District 1

Camellia Communications
Mason Halacker
180 Greenville Bypass
Greenville, AL 36037

To Whom It May Concern,

Lois Robinson
District 2

I am writing this letter to express the personal and professional support of Camellia Communication's efforts to obtain grant funding from the Alabama Broadband Accessibly Fund 2020 Round One Grant to expand coverage of broadband services to areas within our district that are currently unserved or underserved. Camellia Communications has been an excellent partner to our school system and our community since their founding in 2004. Camellia Communications has shown great commitment to customer service. This is exemplified by the high quality of their products and their quick reaction to customer support inquiries by their local staff. Their efforts to seek financial support to further serve portions of our school district again confirms the commitment of Camellia Communications to advancing economic development and closing the digital divide in our communities.

Brandon Sellers
District 3

Our students today compete with other students for opportunities not only locally, but world-wide. Many of our students live in areas of our district with little to no access to wired broadband services and who, therefore, must rely on wireless data options that are costly and often that do not perform optimally. Some live in areas that are not even served by wireless data providers and thus have no option for any type of Internet connectivity. Many educational pathways and careers now require access to broadband to even be considered for a position. This severely limits the ability of our stakeholders to be competitive as well as eliminating certain opportunities entirely for which they might otherwise be considered highly competitive.

Linda Hamilton
District 4

Mickey Jones
District 5

I enthusiastically authorize Camellia Communications to include my feedback in any applications that they may file with state agencies administering these broadband stimulus programs. I also strongly encourage those reviewing these applications to look favorably on these plans that will have such long-term positive benefits for our students, communities, and school system.

For further questions, I can be reached at 334-382-2665 ext. 1219

Sincerely,



Lisa Adair
Federal Programs Director

Dr. John Strycker
Secretary and
Chief Executive Officer

BUTLER COUNTY SCHOOL SYSTEM

211 School Highlands Road
Greenville, Alabama 36037-1833
Telephone: 334-382-2665 Fax: 334-382-8607

BUTLER COUNTY
BOARD
OF EDUCATION

SUPERINTENDENT
OF EDUCATION
Dr. John Strycker

Michael Nimmer
District 1

November 22, 2019

To Whom This May Concern,

Lois Robinson
District 2

We are truly excited to hear that you are seeking grant assistance to enhance your current communications network by expanding your broadband internet offerings to the residents and businesses in Butler County. Please know that we stand ready to assist you and promote your services. I trust our friends at ADECA will fund your requests and if we may assist in urging them to do so, we will indeed.

Brandon Sellers
District 3

Should you need any assistance from me, please do not hesitate to call or email me. You may reach me on my personal cell phone at 334-313-2593. My email address is joe.eiland@butlerco.k12.al.

Sincerely,


Joe Eiland
Assistant Superintendent/Hearing Officer

Linda Hamilton
District 4

Mickey Jones
District 5

Dr. John Strycker
Secretary and
Chief Executive Officer