

Application to DHCD Submitted through CAMS

County of Buckingham

Buckingham County - Kinex Telecom Fiber Project 2021

Application ID: 75708082020154713
Application Status: Pending
Program Name: Virginia Telecommunications Initiative 2021
Organization Name: County of Buckingham
Organization Address:
Profile Manager Name: Jamie Shumaker
Profile Manager Phone: (434) 969-4242
Profile Manager Email: jshumaker@BuckinghamCounty.Virginia.gov

Project Name: Buckingham County - Kinex Telecom Fiber Project 2021
Project Contact Name: Rebecca Carter
Project Contact Phone: (434) 969-4242
Project Contact Email: BCarter@BuckinghamCounty.Virginia.gov
Project Location: 13380 West James Anderson Highway
Buckingham, VA 23921-3135
Project Service Area: Buckingham County

Total Requested Amount: \$426,074.47
Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$426,074.47	\$106,518.62	\$532,593.09
Construction	\$426,074.47	\$106,518.62	\$532,593.09
Total:	\$426,074.47	\$106,518.62	\$532,593.09

Budget Narrative:

The total project cost is \$532,593. Kinex Telecom is contributing 20%, or \$106,519. The remaining 80% or \$427,074 is being requested from DHCD. Buckingham County will be invoiced by Kinex Telecom on the prescribed basis four invoices submitted at the mid-point of Phase I, the end of Phase I, the mid-point of Phase II, and the completion of Phase II. The Buckingham Board of Supervisors lists the expansion of Broadband to the rural areas as one of its Strategic Priorities and has raised that priority since the inception of Covid-19. Kinex Telecom Costs for the project is \$353,171, which includes, all labor for planning, engineering, mapping, drawings and permitting the project, project management, inventory management, labor documentation and financial documentation and submission. Kinex will also provide all labor for the underground work, the aerial fiber placement, all last miles installs to include inside equipment configuration and placement. Enabling Internet speeds of 1Gbps up and 1Gbps down for two sections of unserved areas of the County.

Questions and Responses:

1. Project Description and Need

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

Answer:

The area was selected in part by the county, but also in part because Kinex built fiber to the schools in the county, to their industrial park, the library, the courthouse, county admin building and are thus being familiar with the county and we know the needs. Because of the lack of population density, there are very few other areas that have the cost-benefit that this area has. During the recent build(s) we marketed the fiber to businesses and residence along the route and we have connected most that are not in contract with Centurylink and cannot sign just yet, but we expect they will. Residences, just beyond our fiber on Rt 60 and our fiber on Rt 20 have expressed interest in us expanding our fiber, but financially, Kinex is unable to make that area a priority just yet, because of the lower population density and cost per passing. With Covid-19, and the amount of school aged children in the area, the county school board and county board interest has heightened and they have all asked for our support. In late July and early August, when the county agreed to submit for the grant, we rushed to complete engineering and attempted to conduct a valid survey of the homes in the area. Time was limited, but we drove and walked the area

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for several days, counting and engineering poles, and spoke to everyone we could catch outdoors (I am reluctant to knock on doors during Covid) and after speaking with 10 people, I could only find one person that had over 10Mbps and that person had 15Mbps, after seeing online at the Centurylink website that he could get 40Mbps. In all, I talked to people at nine residents and one business. Several residents and one business had contact CL attempting to get upgrades from their 10Mbps X 1Mbps DSL, but they were told it is not available in the area.

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

Answer:

The only option for broadband in the area is Centurylink. Through my walks and talks with people in the area, and complaints from the clients we have picked up from our fiber in that area, we can only verify first generation DSL with speeds of 10Mb and one with 15Mbps. We were a Centurylink DSL reseller for some years, but finally dropped the service because we had no control over the quality, but had to support it and answer the complaint calls, which didn't reflect well on our company, so we dropped that service and are no longer a reseller. The Church of Nazarene Camp (in this area) recently asked Centurylink if they had an upgrade for their 10X1Mb DSL and the salesperson confirmed that they could not pull any higher speeds from the DSLAMs in that area, but they could provide a Synchronous DIA circuit for \$550 a month, which was not an attractive financial option, so they called us. We spoke with the camp and they agreed to sign a contract for a 100Mbps X 20Mbps fiber circuit with us as one of our first customers on this build. A gentleman a little further down on that build, on Troublesome Creek Road, has a son starting at Longwood University virtually in the next 10 days, called Centurylink for an upgrade and they managed to clean all of the splices in his area and got him 15X1Mb, but the Centurylink website lists his address as capable of 40Mbps, which is obviously based upon manufacturer specs and not physical capabilities. The father is very concerned that his son's education is going to be negatively impacted, as well as his other two kids at home that are going to be participating in remote learning. As a previous Centurylink reseller, we know that during peak times that 10Mb DSL can slow to a crawl or almost stop and people consistently tell us that. I met with a business in Dillwyn yesterday, that is almost a mile closer to the Central Office and has their DSL has been so problematic lately that I expect they will sign a contract for fiber as soon as they verify a couple of our references. If time would have allowed, we would have used the county database to mail surveys and I voiced that to Dr. Holmes and she told me to do the best we can with the limited time.

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

Answer:

There is no opportunity for federal funding because almost any area that Centurylink has DSL, they report on their FCC Form 477s that they have DSL in the census blocks. The week before submitting this I spoke with nine residences and one business and all but one had 10X1 DSL with CL. That one had fussed and fussed and CL

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managed to get them up to 15X1 and raised their price. The Church of Nazarene Camp called has a 10X1 DSL circuit and they called for an upgrade and the CL salesperson told them the only upgrade they could get was a commercial grade DIA circuit for \$550 a month, so they called us and signed up as the first client on this build.

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

Answer:

We have built fiber to over a dozen clients in the area leading up to this build because they contacted us for higher speeds than the 10Mbps they were getting on their DSL, which they claimed slowed to a crawl at night. Time was limited for us to do much in the way of surveys, but we did what we could and were not able to verify any speeds higher than 15Mbps X 1Mbps in the area. We did try to order DSL for one the person that has 15Mbps and the website noted 40Mbps was available there. We know that is not the case because the father in that home personally told me that since Covid he had tried to get an upgrade and the fastest speed he could get was 15Mbps and he upgraded to it.

5. **Total Passings:** Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form

a. Of the total number of passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area. Describe the methodology used for these projections.

b. Provide the number of serviceable units in the project area that have 10/1 mbps or less. Describe the methodology used for these projections.

Answer:

a. We drove and walked every foot of the build and because this area finishes a loop between two of our current fiber end points, we are very familiar with it.

Residence: 251

Businesses: 9

b. Because of COVID-19 and the short time frame of the county contacting us to apply for the grant, we didn't have the time to speak to a large amount of residents and focused most of our time on engineering. We did however, speak with nine residents and one business in a line of about fifty locations and nine had 10X1Mb and

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one had 15X1Mb DSL that they all noted slows in the evenings. That equates to 20%, but given what I know in the area I think the percentage through the entire area is closer to 60% or more.

6. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the wireless infrastructure will be installed.

Answer:

This project does not contain any wireless components.

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

Answer:

Kinex will provide last mile services utilizing GPON and XGS-PON technologies deployed using a 1x32 distributed split architecture. Optical Light Terminals (OLTS) are currently centralized in the local MBC MSAP with battery backup and generator, with long-haul fiber back to our core router. We will add OLTS in order to add this fiber build and additional clients. The technology will utilize optical splitters in remote clusters to be served. GPON is defined by ITU-T standard G.984 and XGS-PON is defined in ITU-T Recommendations G.9807.1. Each client will be served by 1Gb service that will be throttled back to the speed that contract for. Our slowest speed is 50Mb and up to 1Gbps in every build and deployment with expansion capability to 10Gb with electronics upgrade to XGS-PON. Kinex's fiber network is well managed and has never throttled bandwidth to users, never sold bandwidth that it cannot provide and guarantee, and never lost a fiber Internet client because of not providing the speeds contracted. Kinex's backhaul network peaks at 40% capacity, even schools in and all 11 county and private schools systems working, we peak at less than 50% on all of our middle mile deployments and upgrade as need to keep use below 70%, and we manage our GPON to meet all contracted speeds. All major accounts are monitored by our NOC for speeds and uptime.

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

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Although Kinex has some wireless and DSL in other areas, the Buckingham portion of our network is entirely fiber-based consisting of transport, distribution, and last mile elements. The transport elements include multiple, protected 400 Gbps rings implemented using Ethernet ring protection switching across the MBC network. The long-haul network is served by Level 3 and MBC to multiple East Coast data centers. The middle mile architecture utilizes high-capacity 1Gbps and 10Gbps electronics between MBC shelters and Kinex data shelters with battery backup and generator power. The distribution network is composed of Passive Optical Network (PON) elements delivered over a Fiber to the Premise (FTTP) distribution plant. These distribution elements include Gigabit Passive Optical Networking and 10 Gigabit XGS-PON technologies. Last Mile for these subscribers will be served via PON nodes scaled as appropriate to meet subscriber bandwidth demands. Where GPON provides subscriber speeds of up to a gigabit symmetrically, XGS-PON allows for up to 10Gbps symmetrical speeds. The slowest speed we offer is 50X10Mb, which we guarantee to every client. We guarantee our speeds to every client 24X7, with no throttling, no data caps, and always have.

9. Project Readiness

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

Answer:

Kinex has already built almost 7 miles of fiber in the area and the two start points of this project are the two end points of the recently completed project extension that Kinex completed earlier this year. That means that there is dark fiber at each end of the project awaiting to be lit and extended as start points for these two phases. The MOU has been drafted and signed. A MOA will be signed if the project is awarded. The project will start within 60 days of the award date and will be completed in 4 phases, with each phase lasting about 19 weeks so as to finish prior to the 18 month time frame. The map done for this application will be used as part of the Dominion Energy and VDOT permits. We don't expect any delays with permitting and turn around time for materials is days, not weeks.

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

Answer:

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Kinex began as dialup ISP, then moved to fixed wireless then DSL, and then hired a contractor in 2008 to build a few fiber segments. In 2011, Kinex began very meagerly building its own fiber with employees that spent much of their time on other duties, allowing us to learn and build a few miles per year. Now Kinex has an 8 man fiber crew that focuses their efforts full time building fiber. Kinex now owns, two boring machines, two bucket trucks, a splicing van, excavator and dump trailer, 1 large tracked fiber plow, 1 medium sized fiber plow and 2 yard rated fiber plows. We have a fleet of 8 trucks and service vans, and Optical Time Domain reflectometer, 3 fusion fiber splicers, 3 reel trailers, 5 hauling trailers, and various other tools and machines for fiber deployment and repair. About ten years ago and worked diligently to purchase equipment and train workers. Last year Kinex built 22 miles of fiber and we expect to surpass that if you include all of the last mile fiber installs we will complete this year. We have been committed to building fiber in the rural area and although we started slow because of the costs of equipment, we now build about 25 or so miles a year just off of cash flow. From the very beginning, we attended fiber training and learned how to draw, permit, engineer, deploy and maintain our own networks. We are a proud group that builds great networks, provides jobs, and provides great service to our clients. We have a full time fiber crew and continue to grow that crew as a fixed cost to our company. We prefer not to use contractors. In this project we will provide all of the construction, engineering, and administrative costs as a provider/partner and construction crew. Our current calculations, estimate these costs to \$353,171 or 66% of the cost of the grant. Kinex is willing to contribute \$106,519 as in kind, or 20% of the overall cost of the grant.

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

Answer:

Kinex has been in the area as an early dial up provider beginning in 1997, and via fiber has been providing Internet to the schools and library for about 15 years, to the County Admin office for 10 years or so, to the courts for 4 or 5 years, and to many other businesses as well. I was a resident of Buckingham County for almost 15 years and my son now lives in that house. Kinex is a member of the local Chamber and we have many friends in the area. This build is local to us and we have the beauty of having established relationships with all of the players. Kinex has worked with the county's IT Director for over a decade and we believe that we can operate this project as a smoothly operating team. Kinex has high expectations for the success of this project.

12. Marketing: Describe the broadband adoption plan.

a. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate.

b. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

Answer:

a. We have been building fiber in the rural areas for about 10 years now. We have marketing materials that we mail and will do mail merges every several weeks using the county's mailing list. We will also knock on every door that we pass as we are doing now in Lunenburg County. However, what we have discovered over the years that if we

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place yard signs as we pass with our plows, boring machines, and bucket trucks, people tend to feel more comfortable stopping and asking you about the fiber. These conversations usually lead us to tell them about one of our happy customers that is in their vicinity, which leads to another install.

b. This area in Buckingham is very much like the project we are working on in Lunenburg County. In March of this year, when we finished 8 miles of middle-mile fiber, after mailing out brochures, we started knocking on doors (just as Covid-19 hit) and signups were slow. Now that we have been working on last mile installs, we have a 2 mile lateral off of the middle mile and from neighbor talking to neighbor, we have about 80% signed up or installed. Another shorter lateral with 11 houses has 10 signed up or installed. Before Covid-19 we were seeing 40 to 50%, but now it is easily surpassing 65% and I expect Buckingham to be the same way. I would attribute some of this to Covid-19, but some is certainly because word of mouth has spread as to the quality of service and the fair price. We have been providing Internet service to the local library and the county school system for close to 15 years. We plan to utilize those relationships to leave palm cards, display advertising posters, and organize presentations. The owner of Kinex owns a printing company in Farmville, so advertising and marketing materials are one of our strengths.

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

Answer:

Name | Title | Role

Rebecca Carter | County Administrator | Grant Administrator Grant Overseer and liason to VHDA

Jamie Shumaker | IT Director, County Grant Liason | Responsible for collection and forwarding of all financial documents, primary person to be briefed by Kinex on a weekly basis

Jim Garrett President/Owner Kinex Telecom | Will oversee project, coordinate all tasks and communicate with the county, present reports as needed

Scott Chidester | Chief Engineer | Responsible for network planning and testing

Joey Garcia | OSP Construction Manager | Responsible for permitting, logistics and day to day construction

Clayton Sutherland | OSP Construction Supervisor | Responsible for permitting, logistics and day to day crew supervision

Heather Grant | Finance Clerk | Responsible for weekly reports of time, resources and materials and the collection of receipts and invoices

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14. Project Budget and Cost Appropriateness

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

Answer:

The Derivation of costs is clearly laid out in the attachments as required. Labor pricing is standard industry pricing and the material costs are based upon a quote from Comstar, our preferred source for our fiber build materials and the equipment costs are justified on the most recent receipt from Zhone/Dasan, the provider of our GPON equipment.

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

Answer:

- Total VATI funding request: 426,074.47
- Number of serviceable units: 260
- Highest residential speed available in proposed project area: 1Gbps

My calculations include last mile installs and the equipment and labor for the installs was based on a 50% take rate of 130 clients. We suspect it will be higher, but those takes may be outside of the 18 month window.

16. Commonwealth Priorities

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

- How the proposed project fits into a larger plan to achieve universal broadband coverage for the locality. Explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage.
- Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.
- Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and

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federal/state agencies.

d. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 25/3 mbps.

Answer:

a. We have been building fiber in the rural areas for almost 10 years and will continue to do so.

We have been out here in the trenches for quite some time and will continue to do our best to continue to build in the rural areas.

b. How the proposed project fits into a larger plan to achieve universal broadband coverage for the locality. Explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage.

We already ran fiber to the schools, the library, to the county administration building, to the industrial park, to the courthouse, sheriffs office and the courts and to many businesses in the area. I think we should get some points for being in the rural area and as a small company doing all of this with cash flow and not borrowing or getting grants to do so.

c. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.

We plan to approach Dominion for price breaks on their poles, but we are mainly partnering with the county. We have contracts with the State Supreme Court for the county courts and they were most appreciative when we built to the courts with no install fee.

d. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 25/3 mbps.

Probably 96% on this area is low to moderate income and will be a huge help to households with children, especially during Covid.

17. Additional Information

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

Label Additional Attachments as:

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

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Answer:

N/A

Attachments:

Map(s) of project area, including proposed infrastructure

VATISectionMapsbyMilestone816202073739.pdf

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

ATTACHMENT2DocumentationofFederallyFundedArea8172020111557.docx

Documentation that proposed project area is unserved based on VATI criteria

ATTACHMENT3DocumentationofUnservedArea8172020102342.docx

Passings Form (Please use template provided)

PassingsForm6112020211321816202073818.docx

Timeline/Project Management Plan

GrantTimeline816202073951.pdf

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

DRAFTMEMORANDUMOFUNDERSTANDINGINFORMATIONSSUPPORTOFKINEXTELECOM816202074431.docx

Funding Sources Table

VATIFundingSourcesTable8162020100944.docx

Documentation for match funding

Attachment9MatchingFunds817202030000.pdf

Letters of Support

LettersofSupportandBoardResolution817202090754.pdf

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Derivation of Cost (Project Budget)

BuckinghamGrantCalculations816202074850.pdf

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

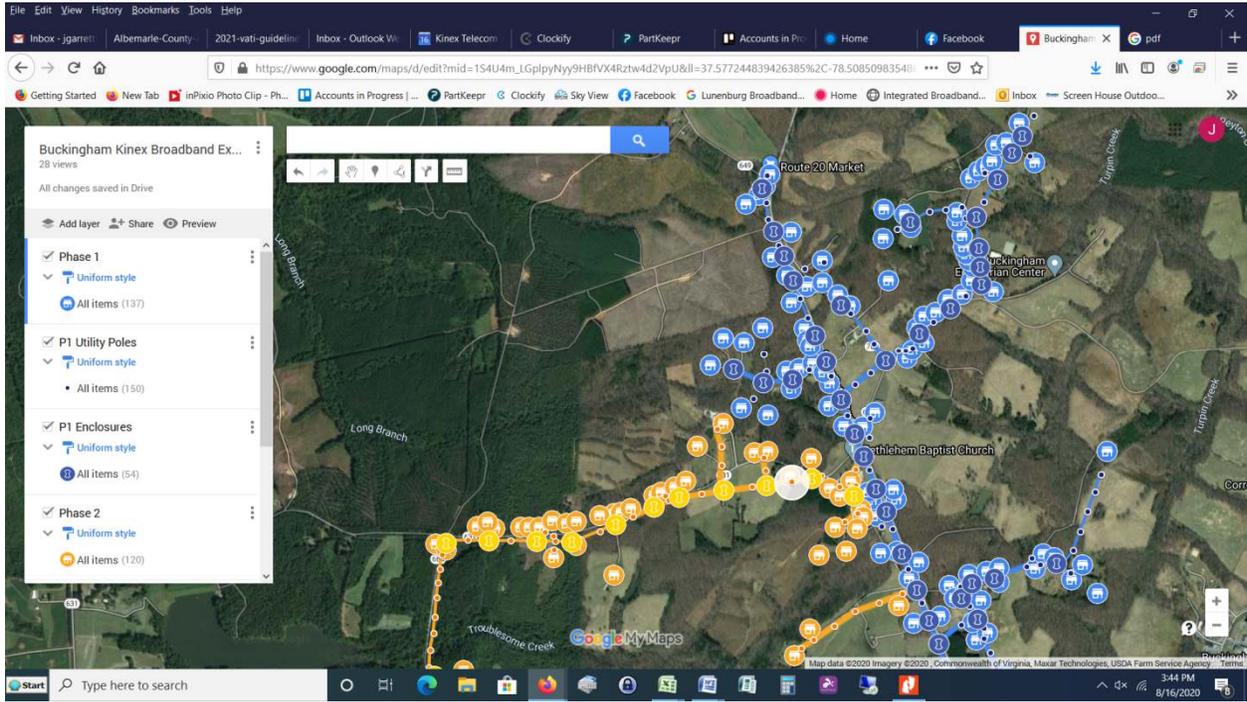
VendorQuotes817202020427.pdf

Two most recent Form 477 submitted to FCC

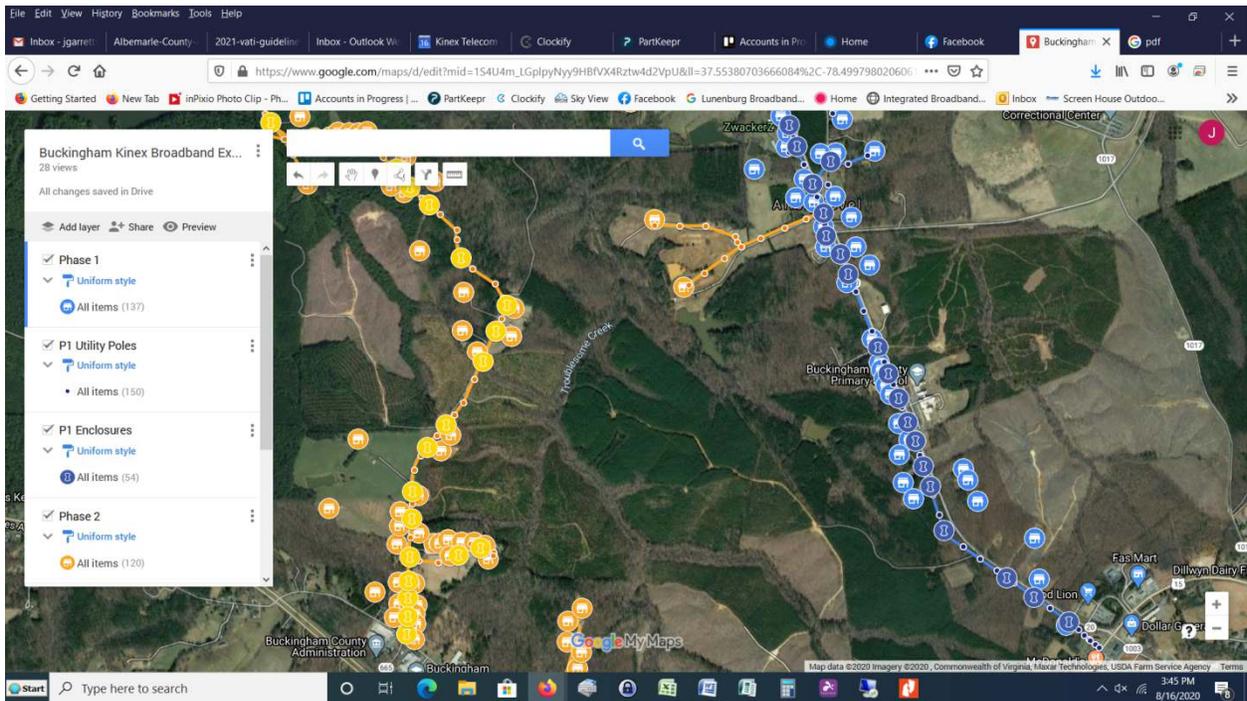
JuneDecember2019FCCForm477816202075511.pdf

Attachment 1 - Project Area Maps

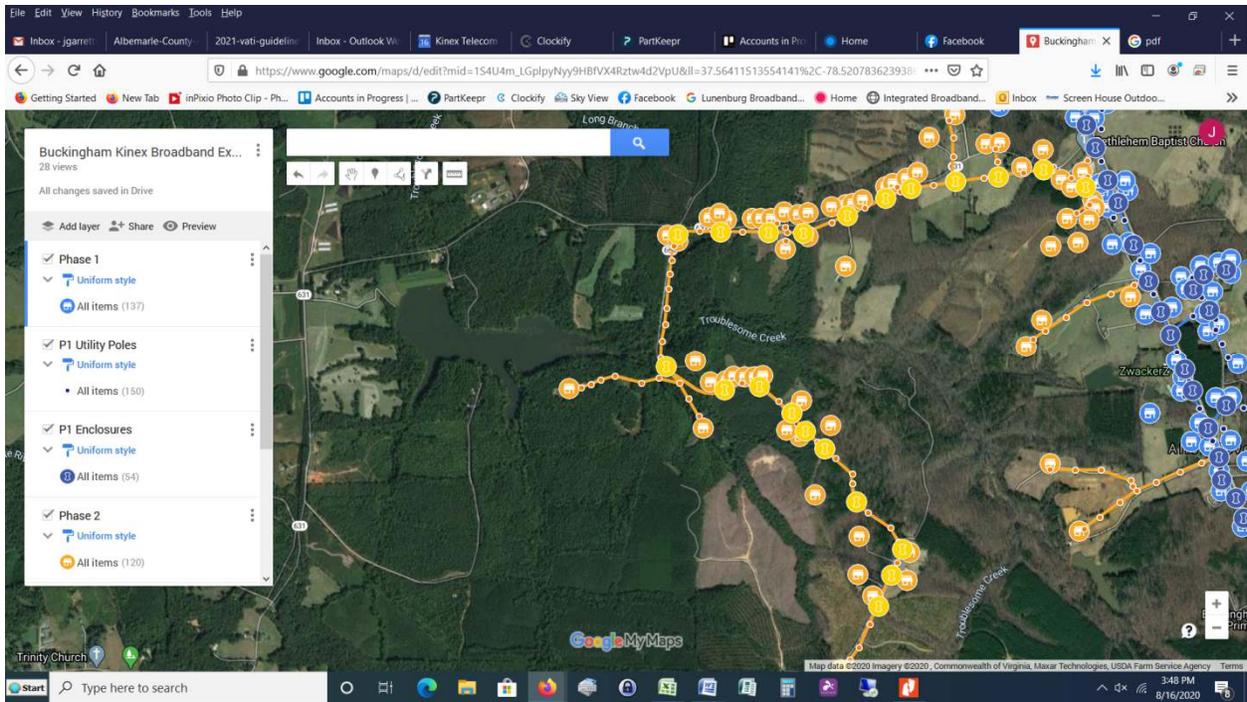
Northern portion of Phase I (2nd Milestone)



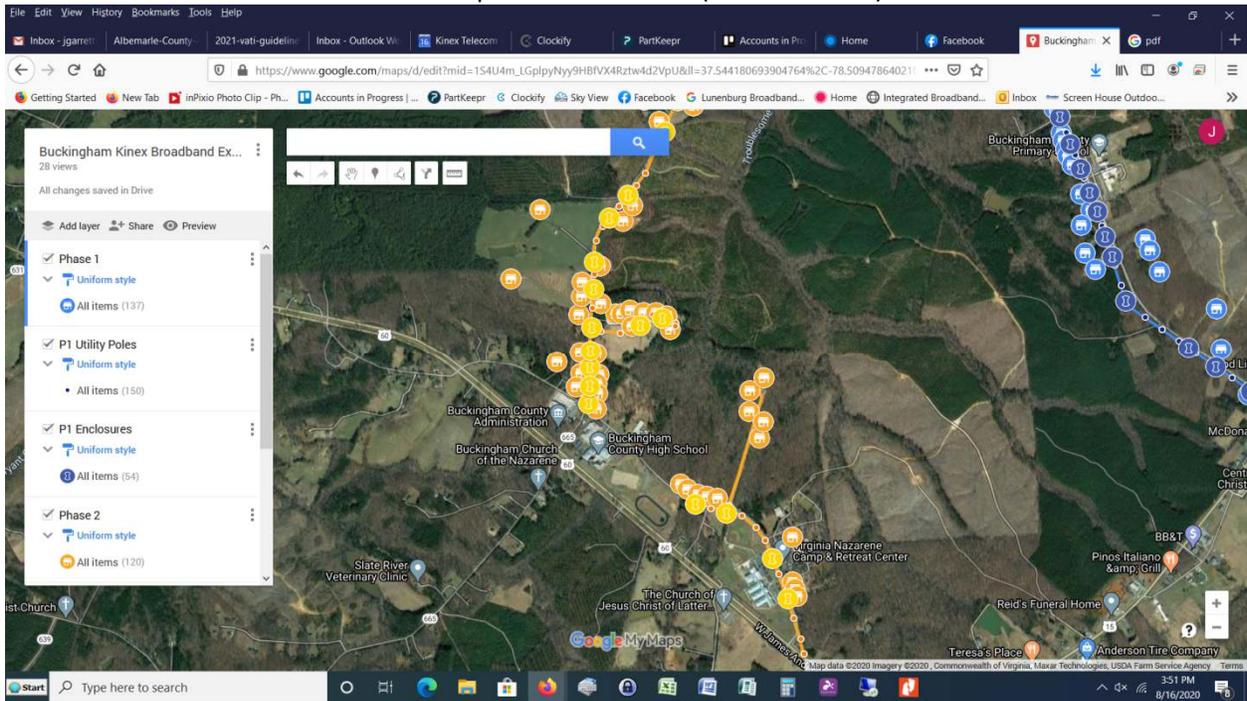
Southern portion of Phase I (1st Milestone)



Northeastern portion of Phase II (4th Milestone)

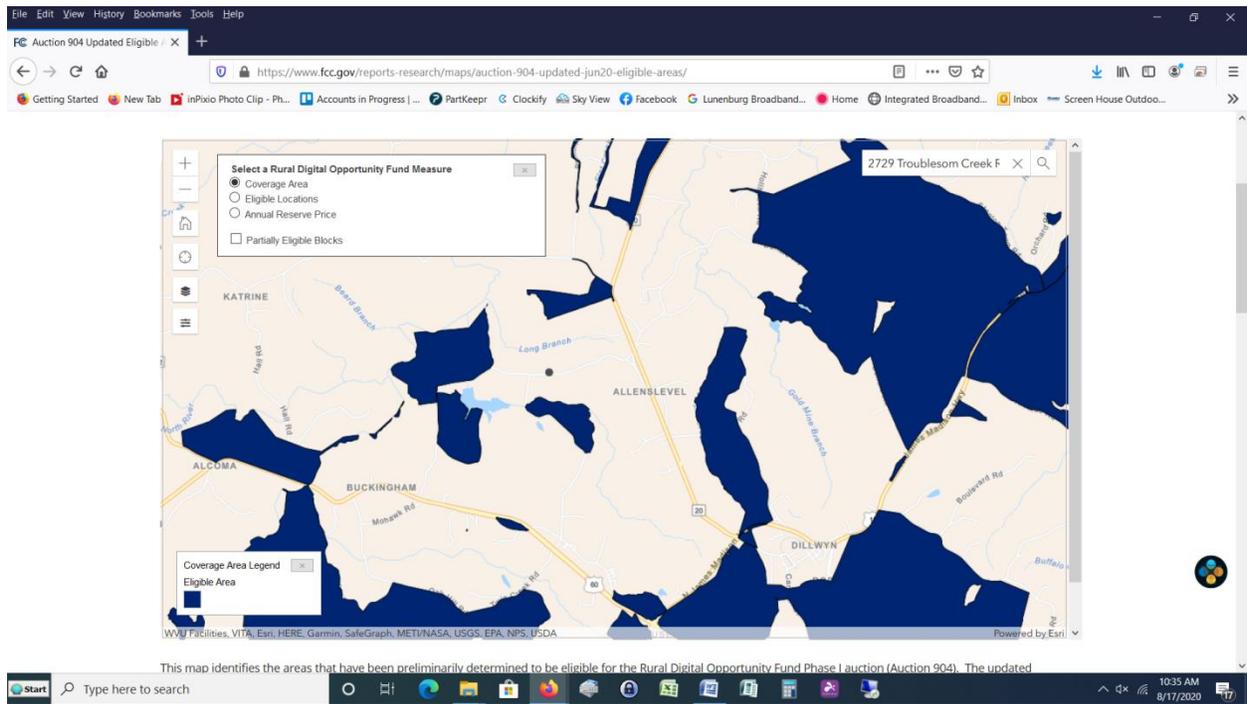


Southern portion of Phase II (3rd Milestone)

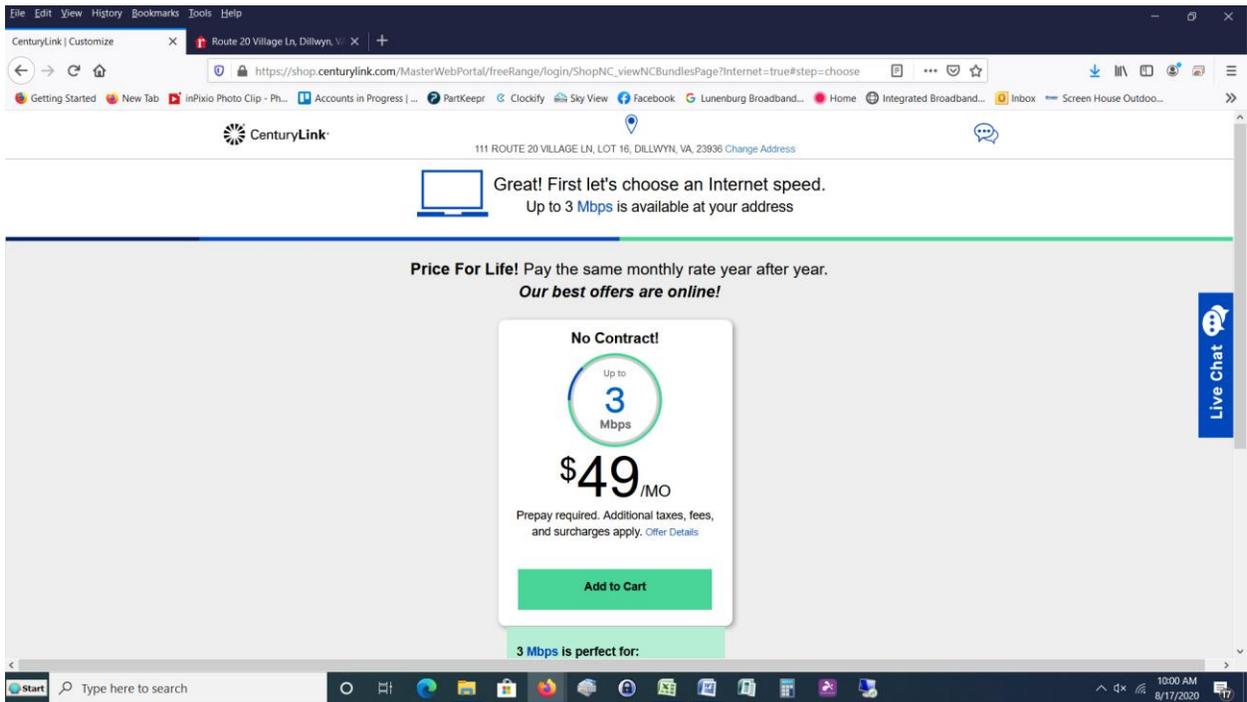
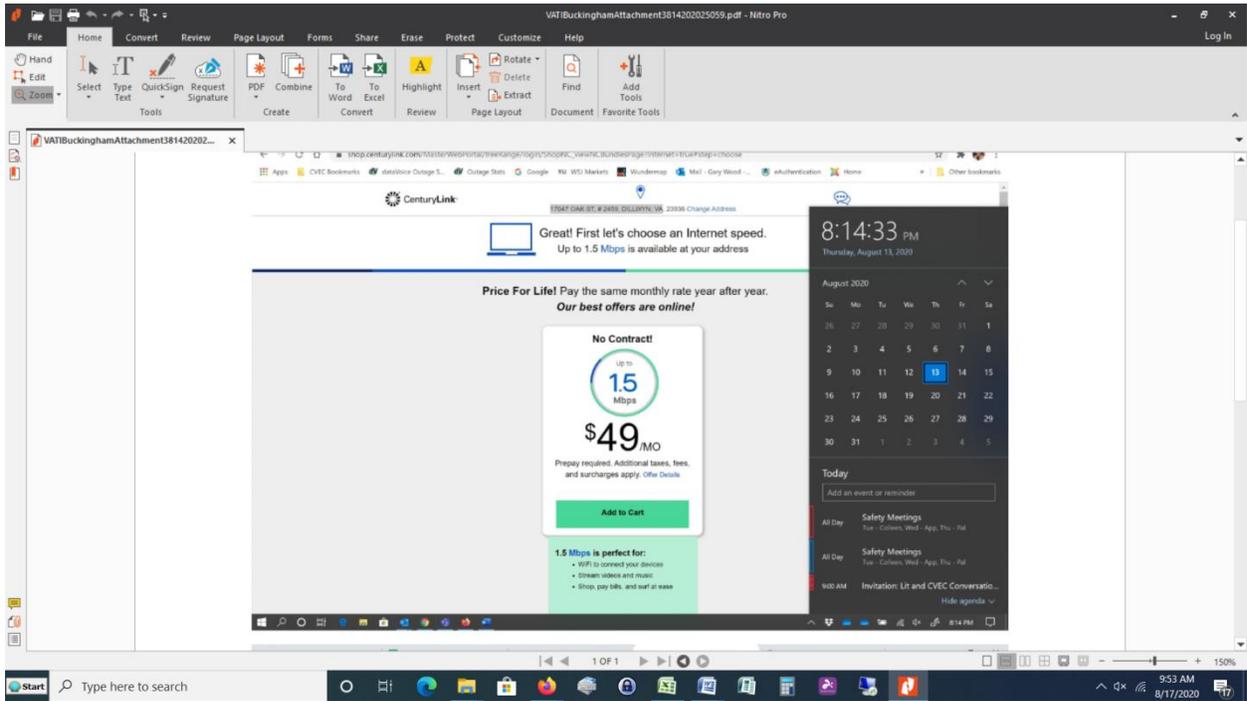


ATTACHMENT 2 – Documentation of Federal Funding Area

Much of this area is depicted as covered by Centurylink with at least 25/3, but the residents we spoke with tell me otherwise.



ATTACHMENT 3 – Documentation of Unservd Area



File Edit View History Bookmarks Tools Help

CenturyLink | Customize

church of nazarene camp - Go: X

https://shop.centurylink.com/MasterWebPortal/freeRange/login/ShopNC_viewNCBundlesPage?Internet=true#step=choose

Getting Started New Tab inPixio Photo Clip - Ph... Accounts in Progress ... PartKeeper Clockify Sky View Facebook Lunenburg Broadband... Home Integrated Broadband... Inbox Screen House Outdoo...

CenturyLink

1151 HIGH SCHOOL RD, UNIT 07, BUCKINGHAM, VA, 23921 [Change Address](#)

 Great! First let's choose an Internet speed.
Up to 10 Mbps is available at your address

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

No Contract!

Up to
10
Mbps

\$49/MO

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

Add to Cart

10 Mbps is perfect for:

Live Chat

Start Type here to search

10:21 AM 8/17/2020

2021 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number in Project Area	Number with Speeds at 10/1 or below in Project Area
Residential	251	151
Businesses (non-home based)		
Businesses (home-based)		
Community Anchors	Kinex already built fiber to all community anchors	Due to time constraints data for residential DSL was derived from a sampling that computed to 60% and applied to the total
Non-residential	9	
Total Number of Passings	160	151

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

Definitions

Passing – any structure that can receive service.

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

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

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

MEMORANDUM OF UNDERSTANDING INFORMATION SUPPORT OF KINEX
TELECOM, INC. RESPONSE TO VATI 2021

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

1. The parties to this Memorandum of Understanding (MOU) are Buckingham County and Kinex Telecom.
2. The purpose of the MOU is to establish a commitment by the parties to participate in the development of a grant proposal in 2021 for the Virginia Telecommunications Initiative (VATI) program established by the Virginia Department of Housing and Community Development (DHCD). Although a formal partnership between Buckingham County and Kinex Telecom has not yet been formalized for this project, both parties are collaborating on an agreement to be executed if DHCD awards them a VATI grant. An agreement would cover the following areas.
 - a. Kinex Telecom would commit to implement the Project Management Plan within the designated period, to provide updates to Buckingham County and County staff on the status of the project, notify Buckingham County staff if it's assistance is needed, to submit requests for payment as work was completed, to complete all work within the required timeframe, to provide Buckingham County with information of the locations where broadband has been enabled, and to propose any required nondisclosure agreements if Kinex Telecom were requested to share confidential information.
 - b. Buckingham County would commit to processing requests for payment in a timely manner, to review information provided by Kinex Telecom and submit requests for additional information in a timely manner, to complete and necessary non-disclosed agreements, to assist Kinex telecom in obtaining necessary right of ways within the scope of Buckingham County's authority, and assist in contacting residents and others as appropriate to foster completion of the project within the required timeframe.
 - c. The parties agree in advance the Kinex Telecom will be permitted to consolidate bills on at least a monthly basis and submit one single invoice for processing. The preferred method of billing is at every 25% milestone of completion of work; thereby providing 4 sets of remittance processing.
 - d. Because of the short timeframe, resident address information was not requested, but moving forward both parties agree to work together so as to

provide Kinex Telecom with residential information within the boundaries of this grant so mail marketing can begin immediately if grant is awarded.

- e. On August 13, 2020, this MOU is being signed as the basis of a future agreement if the VATI grant is awarded.

BY:

James R. Garrett
President
Kinex Telecom, Inc.

BY:

ATTACHMENT 8 – VATI SOURCES FUNDING TABLE

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	\$ 426,074.47	80%	Pending
KINEX TELECOM	\$106,518.62	20%	Pending
	\$		
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 532,593.09	100 %	

Attachment 9 - Matching Funds		GRANT TOTALS							
	MATERIAL	COST (\$) PER UNIT	GRANT MATERIAL UNITS	GRANT COST SUB-TOTAL	NON-GRANT MATERIAL UNITS	NON-GRANT COST SUB-TOTAL	COST TOTAL	MATERIALS TOTAL	KINEX LABOR TOTALS
MIDDLE MILE	FIBER (ft)								
	576ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	288ct	\$2.00	0	\$0.00	0	\$0.00	\$0.00		
	144ct	\$0.90	18,025	\$16,222.50	0	\$0.00	\$16,222.50	\$16,222.50	
	96ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	72ct	\$0.56	30,502	\$17,081.12	0	\$0.00	\$17,081.12	\$17,081.12	
	48ct	\$0.37	2570	\$950.90	0	\$0.00	\$950.90		
	24ct	\$0.29	7820	\$2,267.80	0	\$0.00	\$2,267.80	\$2,267.80	
	1.5" HDPE CONDUIT (ft)	\$0.69	0	\$0.00	0	\$0.00	\$0.00		
	24"x36"x24" HANDHOLE	\$325.00	10	\$3,250.00	0	\$0.00	\$3,250.00		
	36"x60"x36" HANDHOLE	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	FIBER ENSLOSURE(S)								
	FOSC B	\$184.00	90	\$16,560.00	0	\$0.00	\$16,560.00	\$16,560.00	
	FOSC D	\$348.67	0	\$0.00	0	\$0.00	\$0.00		
	B Tall Basket	\$37.55	90	\$3,379.50	0	\$0.00	\$3,379.50	\$3,379.50	
	D Basket	\$25.87	0	\$0.00	0	\$0.00	\$0.00		
	A/B Ribbon Tray	\$26.79	0	\$0.00	0	\$0.00	\$0.00		
	B Tray	\$16.76	90	\$1,508.40	0	\$0.00	\$1,508.40	\$1,508.40	
	D Tray	\$29.93	0	\$0.00	0	\$0.00	\$0.00		
	1x32 Splitter Tray	\$120.00	10	\$1,200.00	0	\$0.00	\$1,200.00	\$1,200.00	
	AERIAL								
	Number of poles used	244							
	1/4" Strand (ft)	\$0.17	58,893	\$9,717.35	0	\$0.00	\$9,717.35	\$9,717.35	
	Bolt	\$1.69	244	\$412.36	0	\$0.00	\$412.36	\$412.36	
	Washer	\$0.25	488	\$122.00	0	\$0.00	\$122.00	\$122.00	
	Nut	\$0.24	488	\$117.12	0	\$0.00	\$117.12	\$117.12	
	3-Hole Clamp	\$3.75	203	\$761.25	0	\$0.00	\$761.25	\$761.25	
	Lashing wire (coil)	\$24.00	99	\$2,376.00	0	\$0.00	\$2,376.00	\$2,376.00	
Lashing Clamp	\$0.36	488	\$175.68	0	\$0.00	\$175.68	\$175.68		
Snow Shoe	\$22.75	70	\$1,592.50	0	\$0.00	\$1,592.50	\$1,592.50		
Strand Vise	\$8.75	54	\$472.50	0	\$0.00	\$472.50	\$472.50		
Thimble Nut/Washer	\$2.95	54	\$159.30	0	\$0.00	\$159.30	\$159.30		
Pole Make Ready	\$230.00	36.6	\$8,418.00	0	\$0.00	\$8,418.00	\$8,418.00		
FIBER (ft)				(FTTx numbers based est. take rate of 50%)					
2ct Flat Drop	\$0.18	65000	\$11,700.00	0	\$0.00	\$11,700.00	\$11,700.00		
12ct Flat Drop	\$0.23	3445	\$792.35	0	\$0.00	\$792.35	\$792.35		
1ct Indoor Bend Insensitive	\$0.18	13000	\$2,340.00	0	\$0.00	\$2,340.00	\$2,340.00		
Flat Drop Wedge Clamp	\$0.98	0	\$0.00	0	\$0.00	\$0.00	\$0.00		
Outdoor Demarc	\$21.54	130	\$2,800.20	0	\$0.00	\$2,800.20	\$2,800.20		
Indoor Termination Box	\$13.25	130	\$1,722.50	0	\$0.00	\$1,722.50	\$1,722.50		
Jumper	\$2.50	130	\$325.00	0	\$0.00	\$325.00	\$325.00		
Lynx Splice-on Connector	\$10.48	390	\$4,087.20	0	\$0.00	\$4,087.20	\$4,087.20		
Optical Network Terminal (ONT)	\$138.00	130	\$17,940.00	0	\$0.00	\$17,940.00	\$17,940.00		
Gel Drop Seal Block	\$35.00	86	\$3,010.00	0	\$0.00	\$3,010.00	\$3,010.00		
Aerial Drop Labor (/foot) *500ft avg.	\$1.15	65000	\$74,750.00	0	\$0.00	\$74,750.00		\$74,750.00	
Underground Drop Labor (/foot) *500ft avg.	\$2.30	65000	\$149,500.00	0	\$0.00	\$149,500.00		\$149,500.00	
Network Node Materials									
Wireworks Patch Panel	\$1,929.44	0	\$0.00	0	\$0.00	\$0.00	\$0.00		
Mikrotik w/ DC Modules	\$3,014.23	0	\$0.00	0	\$0.00	\$0.00	\$0.00		

OTHER	OLT	\$4,389.20	2	\$8,778.40	0	\$0.00	\$8,778.40	\$8,778.40	
	GPON SFPs	\$266.00	10	\$2,660.00	0	\$0.00	\$2,660.00	\$2,660.00	
	DAC 10G Module	\$18.94	0	\$0.00	0	\$0.00	\$0.00	\$0.00	
	10G-Cat6 Module	\$52.65	0	\$0.00	0	\$0.00	\$0.00	\$0.00	
	Aerial Labor (/foot)	\$1.30	55,968	\$72,758.40	0	\$0.00	\$72,758.40		\$72,758.40
	Plow Labor (/foot)	\$1.66	4,556	\$7,562.96	0	\$0.00	\$7,562.96		\$7,562.96
	Bore Labor (/foot)	\$8.40	1500	\$12,600.00	0	\$0.00	\$12,600.00		\$12,600.00
	Seed & Straw (avg cost/foot)	\$0.06	51,306	\$2,821.83	0	\$0.00	\$2,821.83	\$2,821.83	
	Fuel (\$/gallon) (Diesel/Gasoline)	\$2.25	16000	\$36,000.00	0	\$0.00	\$36,000.00	\$36,000.00	
	Project Management/Admin costs	\$42.00	802	\$33,684.00	0	\$0.00	\$33,684.00	\$33,684.00	\$33,684.00
TOTAL				\$532,593.09		\$0.00	\$532,593.09	\$211,204.86	\$350,855.36
Total Residences Passed	251		Invoices Processed	When			VATI Portion	Kinex Portion	
Total Businesses Passed	9								
Total Passed	260		Financial Draw #1	1/4 completed			\$106,518.62	\$26,629.65	
			Financial Draw #2	1/2 completed			\$106,518.62	\$26,629.65	
* Installation calculations are based on a 50% take rate			Financial Draw #3	3/4 completed			\$106,518.62	\$26,629.65	
			Financial Draw #4	completed			\$106,518.62	\$26,629.65	
Cost per Residence at 50% take rate	\$4,096.87								
						Totals	\$426,074.47	\$106,518.62	
VATI contribution @ 80%	\$426,074.47								
Kinex contribution @ 20%	\$106,518.62								
Cost per residence passed for VATI @ 50% take rate:	\$3,277.50								
Cost per residence passed for KINEX @ 50% take rate:	\$819.37								

PHASE I

	MATERIAL	COST (\$) PER UNIT	IN GRANT MATERIAL UNITS DEPLOYED	IN GRANT COST SUB-TOTAL	NON-GRANT MATERIAL UNITS DEPLOYED	NON-GRANT COST SUB-TOTAL	COST TOTAL	MATERIALS	LABOR
MIDDLE MILE	FIBER (ft)								
	576ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	288ct	\$2.00	0	\$0.00	0	\$0.00	\$0.00		
	144ct	\$0.90	18,025	\$16,222.50	0	\$0.00	\$16,222.50	\$16,222.50	
	96ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	72ct	\$0.56	5270	\$2,951.20	0	\$0.00	\$2,951.20	\$2,951.20	
	48ct	\$0.37	0	\$0.00	0	\$0.00	\$0.00		
	24ct	\$0.29	5270	\$1,528.30	0	\$0.00	\$1,528.30	\$1,528.30	
	1.5" HDPE CONDUIT (ft)	\$0.69	0	\$0.00	0	\$0.00	\$0.00		
	24"x36"x24" HANDHOLE	\$325.00	0	\$0.00	0	\$0.00	\$0.00		
	36"x60"x36" HANDHOLE	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	FIBER ENSLOSURE(S)								
	FOSC B	\$184.00	54	\$9,936.00	0	\$0.00	\$9,936.00	\$9,936.00	
	FOSC D	\$348.67	0	\$0.00	0	\$0.00	\$0.00		
	B Tall Basket	\$37.55	54	\$2,027.70	0	\$0.00	\$2,027.70	\$2,027.70	
	D Basket	\$25.87	0	\$0.00	0	\$0.00	\$0.00		
	A/B Ribbon Tray	\$26.79	0	\$0.00	0	\$0.00	\$0.00		
	B Tray	\$16.76	54	\$905.04	0	\$0.00	\$905.04	\$905.04	
	D Tray	\$29.93	0	\$0.00	0	\$0.00	\$0.00		
	1x32 Splitter Tray	\$120.00	6	\$720.00	0	\$0.00	\$720.00	\$720.00	
	AERIAL								
	Number of poles used	148							
	1/4" Strand (ft)	\$0.17	33,792	\$5,575.68	0	\$0.00	\$5,575.68	\$5,575.68	
	Bolt	\$1.69	148	\$250.12	0	\$0.00	\$250.12	\$250.12	
	Washer	\$0.25	296	\$74.00	0	\$0.00	\$74.00	\$74.00	
	Nut	\$0.24	296	\$71.04	0	\$0.00	\$71.04	\$71.04	
	3-Hole Clamp	\$3.75	120	\$450.00	0	\$0.00	\$450.00	\$450.00	
Lashing wire (ft)	\$0.02	67,584	\$1,351.68	0	\$0.00	\$1,351.68	\$1,351.68		
Lashing Clamp	\$0.36	296	\$106.56	0	\$0.00	\$106.56	\$106.56		
Snow Shoe	\$22.75	40.5	\$921.38	0	\$0.00	\$921.38	\$921.38		
Strand Vise	\$8.75	28	\$245.00	0	\$0.00	\$245.00	\$245.00		
Thimble Nut/Washer	\$2.95	28	\$82.60	0	\$0.00	\$82.60	\$82.60		
Pole Make Ready	\$230.00	22.2	\$5,106.00	0	\$0.00	\$5,106.00	\$5,106.00		
FIBER (ft)			(FTTx numbers based est. take rate of 50%)						
2ct Flat Drop	\$0.18	35000	\$6,300.00	0	\$0.00	\$6,300.00	\$6,300.00		
12ct Flat Drop	\$0.23	3445	\$792.35	0	\$0.00	\$792.35	\$792.35		
1ct Indoor Bend Insensitive (/ft) *100ft avg	\$0.18	7000	\$1,260.00	0	\$0.00	\$1,260.00	\$1,260.00		
Flat Drop Wedge Clamp	\$0.98	0	\$0.00	0	\$0.00	\$0.00	\$0.00		
Outdoor Demarc	\$21.54	70	\$1,507.80	0	\$0.00	\$1,507.80	\$1,507.80		
Indoor Termination Box	\$13.25	70	\$927.50	0	\$0.00	\$927.50	\$927.50		
Jumper	\$2.50	70	\$175.00	0	\$0.00	\$175.00	\$175.00		
Lynx Splice-on Connector	\$10.48	210	\$2,200.80	0	\$0.00	\$2,200.80	\$2,200.80		
Optical Network Terminal (ONT)	\$138.00	70	\$9,660.00	0	\$0.00	\$9,660.00	\$9,660.00		
Gel Drop Seal Block	\$35.00	54	\$1,890.00	0	\$0.00	\$1,890.00	\$1,890.00		

LAST MILE (FTTx)

PHASE II

	MATERIAL	COST (\$) PER UNIT	IN GRANT MATERIAL UNITS DEPLOYED	IN GRANT COST SUB-TOTAL	NON-GRANT MATERIAL UNITS DEPLOYED	NON-GRANT COST SUB-TOTAL	COST TOTAL	MATERIALS	LABOR
MIDDLE MILE	FIBER (ft)								
	576ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	288ct	\$2.00	0	\$0.00	0	\$0.00	\$0.00		
	144ct	\$0.90	0	\$0.00	0	\$0.00	\$0.00	\$0.00	
	96ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	72ct	\$0.60	25,232	\$15,139.20	0	\$0.00	\$15,139.20	\$15,139.20	
	48ct	\$0.37	2570	\$950.90	0	\$0.00	\$950.90		
	24ct	\$0.29	2550	\$739.50	0	\$0.00	\$739.50	\$739.50	
	1.5" HDPE CONDUIT (ft)	\$0.69	0	\$0.00	0	\$0.00	\$0.00		
	24"x36"x24" HANDHOLE	\$325.00	10	\$3,250.00	0	\$0.00	\$3,250.00		
	36"x60"x36" HANDHOLE	\$0.00	0	\$0.00	0	\$0.00	\$0.00		
	FIBER ENSLOSURE(S)								
	FOSC B	\$184.00	36	\$6,624.00	0	\$0.00	\$6,624.00	\$6,624.00	
	FOSC D	\$348.67	0	\$0.00	0	\$0.00	\$0.00		
	B Tall Basket	\$37.55	36	\$1,351.80	0	\$0.00	\$1,351.80	\$1,351.80	
	D Basket	\$25.87	0	\$0.00	0	\$0.00	\$0.00		
	A/B Ribbon Tray	\$26.79	0	\$0.00	0	\$0.00	\$0.00		
	B Tray	\$16.76	36	\$603.36	0	\$0.00	\$603.36	\$603.36	
	D Tray	\$29.93	0	\$0.00	0	\$0.00	\$0.00		
	1x32 Splitter Tray	\$120.00	4	\$480.00	0	\$0.00	\$480.00	\$480.00	
	AERIAL								
	Number of poles used		96						
	1/4" Strand (ft)	\$0.17	25,101	\$4,141.67	0	\$0.00	\$4,141.67	\$4,141.67	
	Bolt	\$1.69	109	\$184.21	0	\$0.00	\$184.21	\$184.21	
	Washer	\$0.25	192	\$48.00	0	\$0.00	\$48.00	\$48.00	
Nut	\$0.24	192	\$46.08	0	\$0.00	\$46.08	\$46.08		
3-Hole Clamp	\$3.75	83	\$311.25	0	\$0.00	\$311.25	\$311.25		
Lashing wire (ft)	\$0.02	50,202	\$1,004.04	0	\$0.00	\$1,004.04	\$1,004.04		
Lashing Clamp	\$0.36	192	\$69.12	0	\$0.00	\$69.12	\$69.12		
Snow Shoe	\$22.75	27	\$614.25	0	\$0.00	\$614.25	\$614.25		
Strand Vise	\$8.75	26	\$227.50	0	\$0.00	\$227.50	\$227.50		
Thimble Nut/Washer	\$2.95	26	\$76.70	0	\$0.00	\$76.70	\$76.70		
Pole Make Ready	\$230.00	14.4	\$3,312.00	0	\$0.00	\$3,312.00	\$3,312.00		
FIBER (ft)			(FTTx numbers based est. take rate of 50%)						
2ct Flat Drop	\$0.18	30000	\$5,400.00	0	\$0.00	\$5,400.00	\$5,400.00		
12ct Flat Drop	\$0.23	0	\$0.00	0	\$0.00	\$0.00	\$0.00		
1ct Indoor Bend Insensitive	\$0.18	6000	\$1,080.00	0	\$0.00	\$1,080.00	\$1,080.00		
Flat Drop Wedge Clamp	\$0.98	0	\$0.00	0	\$0.00	\$0.00	\$0.00		
Outdoor Demarc	\$21.54	60	\$1,292.40	0	\$0.00	\$1,292.40	\$1,292.40		
Indoor Termination Box	\$13.25	60	\$795.00	0	\$0.00	\$795.00	\$795.00		
Jumper	\$2.50	60	\$150.00	0	\$0.00	\$150.00	\$150.00		
Lynx Splice-on Connector	\$10.48	180	\$1,886.40	0	\$0.00	\$1,886.40	\$1,886.40		
Optical Network Terminal (ONT)	\$138.00	60	\$8,280.00	0	\$0.00	\$8,280.00	\$8,280.00		
Gel Drop Seal Block	\$35.00	32	\$1,120.00	0	\$0.00	\$1,120.00	\$1,120.00		
Aerial Drop Labor (/foot) *500ft avg.	\$1.15	30000	\$34,500.00	0	\$0.00	\$34,500.00		\$34,500.00	
Underground Drop Labor (/foot) *500ft avg.	\$2.30	30000	\$69,000.00	0	\$0.00	\$69,000.00		\$69,000.00	



Buckingham County Public Schools

15595 West James Anderson Highway

Buckingham, VA 23921

Telephone 434/969-6100

Fax 434/969-1176

Dr. Daisy M. Hicks
Division Superintendent

Wendy L. Oliver
Clerk

Theresa D. Bryant
Chairman

Thomas W. Hutcherson, Jr.
Vice-Chairman

Pamela D. Morris

Sherry S. Ragland

Jacqueline J. Newton

Joi W. Goodman

Rachel M. Castello-Dunn

To: Whom It May Concern

From: Joan Shumaker
Coordinator of Buckingham County Public Schools

A handwritten signature in blue ink that reads "Joan Shumaker".

Date: 8/13/2020

Subject: New fiber Project

I am honored to write a letter to support Kinex for the project to build up fiber around our schools.

We are a rural area and our students do not have access to reliable internet in our area. All students in our community deserve the same quality of education and without internet, they begin the school year at a disadvantage.

This fiber run is imperative for the education of all our students. Our school division has been using Kinex for over 9 years with 99.9 percent up time.



Buckingham County Public Schools

15595 West James Anderson Highway

Buckingham, VA 23921

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Vice Chairman

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Jacqueline J. Newton

Joni W. Goodman

Rachel M. Castello-Dunn

Dr. Daisy M. Hicks
Division Superintendent

Wendy L. Oliver
Clerk

August 13, 2020

To whom it may concern:

As Superintendent for Buckingham County Public Schools, I am pleased to submit this letter of support for the Kinex project of fiber build up along High School, Fanny White, Troublesome Creek, and all of the roads that laterally run across or from Rt 20 Market between Rt 20 and RT 15. With our school year starting off virtually, I know that this project will greatly help our community with the need for more internet access. This will also be of great help to all people of the community who have not been able to get WiFi or internet access.

Sincerely,

A handwritten signature in cursive script, appearing to read "Daisy Hicks".

Dr. Daisy Hicks
Superintendent
Buckingham County Public Schools

RESOLUTION

SUBMISSION OF A GRANT APPLICATION WITH THE VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (DHCD) 2021 VIRGINIA TELECOMMUNICATIONS INITIATIVE (VATI), AND ACCEPTANCE AND SUPPLEMENTAL APPROPRIATION OF THE GRANT FUNDS

WHEREAS, on June 10, 2020, Kinex Telecom, Inc. (“Kinex”) approached Buckingham County with a project description for an unserved area for Broadband and requested assistance to obtain a Virginia Telecommunications Initiative (VATI) grant. The 2021 VATI grant guidelines were reviewed by Kinex and Buckingham County and a deadline for applications was set for August 17, 2020; and

WHEREAS, Kinex committed matching funds for the 2021 VATI program to address an unserved area in Buckingham County: Fanny White Road on to Troublesome Creek Road, then across Rt. 20 on Troublesome Creek Road, on Rt. 20 North to Rt. 20 Market and South on Rt. 20 connecting all residences on all side roads and residences along both sides of Rt. 20 back to Rt. 15, at a total projected cost of \$532,593.09 to complete the project.

WHEREAS, Kinex committed 20% in matching funds totaling \$106,518.62 to the project, and is requesting 80% in matching funds totaling \$426,074.47 from VATI; and

WHEREAS, no matching funds from the Board of Supervisors is requested, nor required; and

WHEREAS, Kinex has completed the due diligence to provide all studies and documentation needed for the VATI grant; and

WHEREAS, the DHCD VATI program guidelines for grant applications require a government entity as the applicant with a qualified and experienced private sector broadband provider as the co-applicant.

NOW, THEREFORE, BE IT RESOLVED, that the Buckingham County Board of Supervisors does hereby approve the submission and acceptance of a grant application to Virginia Telecommunications Initiative to assist in building out broadband telecommunications infrastructure in this unserved area of the County and authorized county staff to submit this grant application to the DHCD with the co-applicant, Kinex Telecom, Inc. (“Kinex”)

BE IT FURTHER RESOLVED that the Board does hereby authorize the supplemental appropriation of the grant funds when the funds becomes available.

ATTEST:



Rebecca S. Carter
County Administrator

ATTACHMENT 11 - Derivation of Costs

GRANT TOTALS							
	MATERIAL	COST (\$) PER UNIT	GRANT MATERIAL UNITS	GRANT COST SUB- TOTAL	NON-GRANT MATERIAL UNITS	NON-GRANT COST SUB- TOTAL	COST TOTAL
MIDDLE MILE	FIBER (ft)						
	576ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	288ct	\$2.00	0	\$0.00	0	\$0.00	\$0.00
	144ct	\$0.90	18,025	\$16,222.50	0	\$0.00	\$16,222.50
	96ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	72ct	\$0.56	30,502	\$17,081.12	0	\$0.00	\$17,081.12
	48ct	\$0.37	2570	\$950.90	0	\$0.00	\$950.90
	24ct	\$0.29	7820	\$2,267.80	0	\$0.00	\$2,267.80
	1.5" HDPE CONDUIT (ft)	\$0.69	0	\$0.00	0	\$0.00	\$0.00
	24"x36"x24" HANDHOLE	\$325.00	10	\$3,250.00	0	\$0.00	\$3,250.00
	36"x60"x36" HANDHOLE	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	FIBER ENSLOSURE(S)						
	FOSC B	\$184.00	90	\$16,560.00	0	\$0.00	\$16,560.00
	FOSC D	\$348.67	0	\$0.00	0	\$0.00	\$0.00
	B Tall Basket	\$37.55	90	\$3,379.50	0	\$0.00	\$3,379.50
	D Basket	\$25.87	0	\$0.00	0	\$0.00	\$0.00
	A/B Ribbon Tray	\$26.79	0	\$0.00	0	\$0.00	\$0.00
	B Tray	\$16.76	90	\$1,508.40	0	\$0.00	\$1,508.40
	D Tray	\$29.93	0	\$0.00	0	\$0.00	\$0.00
	1x32 Splitter Tray	\$120.00	10	\$1,200.00	0	\$0.00	\$1,200.00
	AERIAL						
	Number of poles used		244				
	1/4" Strand (ft)	\$0.17	58,893	\$9,717.35	0	\$0.00	\$9,717.35
	Bolt	\$1.69	244	\$412.36	0	\$0.00	\$412.36
Washer	\$0.25	488	\$122.00	0	\$0.00	\$122.00	
Nut	\$0.24	488	\$117.12	0	\$0.00	\$117.12	
3-Hole Clamp	\$3.75	203	\$761.25	0	\$0.00	\$761.25	
Lashing wire (coil)	\$24.00	99	\$2,376.00	0	\$0.00	\$2,376.00	
Lashing Clamp	\$0.36	488	\$175.68	0	\$0.00	\$175.68	
Snow Shoe	\$22.75	70	\$1,592.50	0	\$0.00	\$1,592.50	
Strand Vise	\$8.75	54	\$472.50	0	\$0.00	\$472.50	
Thimble Nut/Washer	\$2.95	54	\$159.30	0	\$0.00	\$159.30	
Pole Make Ready	\$230.00	36.6	\$8,418.00	0	\$0.00	\$8,418.00	
FIBER (ft)				(FTTx numbers based est. take rate of 50%)			
2ct Flat Drop	\$0.18	65000	\$11,700.00	0	\$0.00	\$11,700.00	
12ct Flat Drop	\$0.23	3445	\$792.35	0	\$0.00	\$792.35	
1ct Indoor Bend Insensitive	\$0.18	13000	\$2,340.00	0	\$0.00	\$2,340.00	
Flat Drop Wedge Clamp	\$0.98	0	\$0.00	0	\$0.00	\$0.00	
Outdoor Demarc	\$21.54	130	\$2,800.20	0	\$0.00	\$2,800.20	
Indoor Termination Box	\$13.25	130	\$1,722.50	0	\$0.00	\$1,722.50	
Jumper	\$2.50	130	\$325.00	0	\$0.00	\$325.00	
Lynx Splice-on Connector	\$10.48	390	\$4,087.20	0	\$0.00	\$4,087.20	
Optical Network Terminal (ONT)	\$138.00	130	\$17,940.00	0	\$0.00	\$17,940.00	
Gel Drop Seal Block	\$35.00	86	\$3,010.00	0	\$0.00	\$3,010.00	
Aerial Drop Labor (/foot) *500ft avg.	\$1.15	65000	\$74,750.00	0	\$0.00	\$74,750.00	
Underground Drop Labor (/foot) *500ft avg.	\$2.30	65000	\$149,500.00	0	\$0.00	\$149,500.00	
Network Node Materials							
Wireworks Patch Panel	\$1,929.44	0	\$0.00	0	\$0.00	\$0.00	
Mikrotik w/ DC Modules	\$3,014.23	0	\$0.00	0	\$0.00	\$0.00	
OLT	\$4,389.20	2	\$8,778.40	0	\$0.00	\$8,778.40	
GPON SFPs	\$266.00	10	\$2,660.00	0	\$0.00	\$2,660.00	
DAC 10G Module	\$18.94	0	\$0.00	0	\$0.00	\$0.00	
10G-Cat6 Module	\$52.65	0	\$0.00	0	\$0.00	\$0.00	
Aerial Labor (/foot)	\$1.30	55,968	\$72,758.40	0	\$0.00	\$72,758.40	
Plow Labor (/foot)	\$1.66	4,556	\$7,562.96	0	\$0.00	\$7,562.96	
Bore Labor (/foot)	\$8.40	1500	\$12,600.00	0	\$0.00	\$12,600.00	
Seed & Straw (avg cost/foot)	\$0.06	51,306	\$2,821.83	0	\$0.00	\$2,821.83	
Fuel (\$/gallon) (Diesel/Gasoline)	\$2.25	16000	\$36,000.00	0	\$0.00	\$36,000.00	
Project Management/Admin costs	\$42.00	802	\$33,684.00	0	\$0.00	\$33,684.00	
TOTAL			\$532,593.09		\$0.00	\$532,593.09	
Total Residences Passed	251		\$131,743.19				
Total Businesses Passed	9		\$128,921.36		\$224,250.00		
Total Passed	260						
* Installation calculations are based on a 50% take rate			0.242063526		\$353,171.36		
Cost per Residence at 50% take rate	\$4,096.87						
VATI contribution @ 80%	\$426,074.47				0.663116683		
Kinex contribution @ 20%	\$106,518.62						
Cost per residence passed for VATI @ 50% take rate:	\$3,277.50						
Cost per residence passed for KINEX @ 50% take rate:	\$819.37						

	MATERIAL	COST (\$) PER UNIT	IN GRANT MATERIAL UNITS DEPLOYED	IN GRANT COST SUB- TOTAL	NON-GRANT MATERIAL UNITS DEPLOYED	NON-GRANT COST SUB- TOTAL	COST TOTAL
MIDDLE MILE	FIBER (ft)						
	576ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	288ct	\$2.00	0	\$0.00	0	\$0.00	\$0.00
	144ct	\$0.90	0	\$0.00	0	\$0.00	\$0.00
	96ct	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	72ct	\$0.56	0	\$0.00	0	\$0.00	\$0.00
	48ct	\$0.37	0	\$0.00	0	\$0.00	\$0.00
	24ct	\$0.29	0	\$0.00	0	\$0.00	\$0.00
	1.5" HDPE CONDUIT (ft)	\$0.69	0	\$0.00	0	\$0.00	\$0.00
	24"x36"x24" HANDHOLE	\$325.00	0	\$0.00	0	\$0.00	\$0.00
	36"x60"x36" HANDHOLE	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	FIBER ENSLOSURE(S)						
	FOSC B	\$184.00	0	\$0.00	0	\$0.00	\$0.00
	FOSC D	\$348.67	0	\$0.00	0	\$0.00	\$0.00
	B Tall Basket	\$37.55	0	\$0.00	0	\$0.00	\$0.00
	D Basket	\$25.87	0	\$0.00	0	\$0.00	\$0.00
	A/B Ribbon Tray	\$26.79	0	\$0.00	0	\$0.00	\$0.00
	B Tray	\$16.76	0	\$0.00	0	\$0.00	\$0.00
	D Tray	\$29.93	0	\$0.00	0	\$0.00	\$0.00
	1x32 Splitter Tray	\$120.00	0	\$0.00	0	\$0.00	\$0.00
	AERIAL						
	1/4" Strand (ft)	\$0.17	0	\$0.00	0	\$0.00	\$0.00
	Bolt	\$1.69	0	\$0.00	0	\$0.00	\$0.00
	Washer	\$0.25	0	\$0.00	0	\$0.00	\$0.00
	Nut	\$0.24	0	\$0.00	0	\$0.00	\$0.00
3-Hole Clamp	\$3.75	0	\$0.00	0	\$0.00	\$0.00	
Lashing wire (ft)	\$0.02	0	\$0.00	0	\$0.00	\$0.00	
Lashing Clamp	\$0.36	0	\$0.00	0	\$0.00	\$0.00	
Snow Shoe	\$22.75	0	\$0.00	0	\$0.00	\$0.00	
Strand Vise	\$8.75	0	\$0.00	0	\$0.00	\$0.00	
Thimble Nut/Washer	\$2.95	0	\$0.00	0	\$0.00	\$0.00	
LAST MILE (FTTx)	FIBER (ft)						
	2ct Flat Drop	\$0.18	0	\$0.00	0	\$0.00	\$0.00
	12ct Flat Drop	\$0.23	0	\$0.00	0	\$0.00	\$0.00
	1ct Indoor Bend Insensitive	\$0.18	0	\$0.00	0	\$0.00	\$0.00
	Flat Drop Wedge Clamp	\$0.98	0	\$0.00	0	\$0.00	\$0.00
	Outdoor Demarc	\$21.54	0	\$0.00	0	\$0.00	\$0.00
	Indoor Termination Box	\$13.25	0	\$0.00	0	\$0.00	\$0.00
	Jumper	\$2.50	0	\$0.00	0	\$0.00	\$0.00
	Lynx Splice-on Connector	\$10.48	0	\$0.00	0	\$0.00	\$0.00
	Optical Network Terminal (ONT)	\$138.00	0	\$0.00	0	\$0.00	\$0.00
	Gel Drop Seal Block	\$35.00	0	\$0.00	0	\$0.00	\$0.00
	Aerial Drop Labor (/foot) *500ft avg.	\$1.15	0	\$0.00	0	\$0.00	\$0.00
Underground Drop Labor (/foot) *500ft avg.	\$2.30	0	\$0.00	0	\$0.00	\$0.00	
OTHER	Network Node Materials						
	Wireworks Patch Panel	\$1,929.44	0	\$0.00	0	\$0.00	\$0.00
	Mikrotik w/ DC Modules	\$3,014.23	0	\$0.00	0	\$0.00	\$0.00
	OLT	\$4,389.20	0	\$0.00	0	\$0.00	\$0.00
	GPON SFPs	\$266.00	0	\$0.00	0	\$0.00	\$0.00
	DAC 10G Module	\$18.94	0	\$0.00	0	\$0.00	\$0.00
	10G-Cat6 Module	\$52.65	0	\$0.00	0	\$0.00	\$0.00
	Aerial Labor (/foot)	\$1.20	0	\$0.00	0	\$0.00	\$0.00
	Plow Labor (/foot)	\$1.50	0	\$0.00	0	\$0.00	\$0.00
	Bore Labor (/foot)	\$8.40	0	\$0.00	0	\$0.00	\$0.00
	Seed & Straw (avg cost/foot)	\$0.04	0	\$0.00	0	\$0.00	\$0.00
	Fuel (\$/gallon) (Diesel/Gasoline)	\$0.00	0	\$0.00	0	\$0.00	\$0.00
	TOTAL				\$0.00		\$0.00



105 Kestrel Drive
 Collegeville, PA 19426
 www.comstarsupply.com

QUOTE

QUOTE NUMBER: 70003
 QUOTE DATE: Aug 13,2020
 VALID THRU DATE: Sep 14,2020

Voice: 610-831-5020
 Fax: 610-831-5012

TO:
 KINEX TELECOM, INC.
 717 EAST THIRD ST.
 FARMVILLE, VA 23901

Dock?: N Forklift?:
 N Palletjack?: N
 Residential?: Y
 Construction?: N
 Limited Access?: N

SHIP TO:
 KINEX TELECOM
 JOEY GARCIA
 434.392.4804 X 3100
 717 EAST THIRD STREET
 FARMVILLE, VA 23901

Customer Name	Quote Number	Sales Rep Name
KINEX TELECOM, INC.	70003	RICK MILAM
Customer Contact	Shipping Method	Payment Terms
JAMES GARRETT	BEST WAY	NET DUE IN 30 DAYS

Quantity	Item	Description	Unit Price	Amount
20,000	FIB144SMLTARMDRY	144CT SINGLEMODE LOOSE TUBE ARMORED DRY FIBER OPTIC CABLE	0.9000	18,000.00
35,000	FIB72SMLTARMDRY	72CT SINGLEMODE LOOSE TUBE ARMORED DRY FIBER OPTIC CABLE	0.5600	19,600.00
5,000	FIB48SMLTARMDRY	48CT SINGLEMODE LOOSE TUBE ARMORED DRY FIBER OPTIC CABLE	0.3700	1,850.00
10,000	FIB24SMLTARMDRY	24CT SINGLEMODE LOOSE TUBE ARMORED DRY FIBER OPTIC CABLE	0.2900	2,900.00
60,000	BOLTSTRAND1/4	5000FT 1/4 INCH EHS GALVANIZED STRAND CLASS A	0.1850	11,100.00
224	BOLTBMACHINE5/8X20	5/8 INCH X 20 INCH MACHINE BOLT	1.6900	412.36
488	BOLTNUSSQUARE	5/8 INCH SQUARE NUT	0.2400	117.12
99	BOLTLASHWIRE045302	0.045 TYPE 302 LASHING WIRE 1200FT COIL	24.0000	2,376.00
203	BOLTCLAMPSPUSPTR	3 BOLT CABLE SUSPENSION STRAIGHT CLAMP	3.7500	761.25
488	BOLTCLAMPDLASH	D LASHING CLAMP	0.3600	175.68
54	BOLTSTRANDVISE1/4	1/4 INCH STRANDVISE ALL GRADE	8.7500	472.50
488	BOLTWASHERSQ5/8X2	5/8 INCH X 2 INCH FLAT SQUARE WASHER	0.2500	122.00
54	BOLTNUTTHIMEYE	5/8 INCH THIMBLE EYE NUT	2.9500	159.30
60	BOLTEYELETTTHIMBLE5/8	5/8 INCH X 2 INCH STRAIGHT THIMBLE EYELET	4.1000	246.00
70	PLPFIS16M	PAIR OF 16IN PLASTIC SNO SHOE WITH HANGER BRACKETS FOR LASHED CABLE	22.7500	1,592.50
90	TEEK9632-000	FOSC 450B SPLICE CLOSURE FOSC450-B6-4-NT-0-N0V	184.0000	16,560.00
90	TEF53958-000	FOSC 450 B TALL SLACK STORAGE BASKET	37.5500	3,379.50

CUSTOMER NOTES:
 DELIVERED PRICE.

Subtotal	CONTINUED
Sales Tax	0.00
Freight	0.00
TOTAL ORDER AMOUNT	CONTINUED



105 Kestrel Drive
 Collegeville, PA 19426
 www.comstarsupply.com

QUOTE

QUOTE NUMBER: 70003
 QUOTE DATE: Aug 13,2020
 VALID THRU DATE: Sep 14,2020

Voice: 610-831-5020
 Fax: 610-831-5012

TO:
 KINEX TELECOM, INC.
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 FARMVILLE, VA 23901

Dock?: N Forklift?:
 N Palletjack?: N
 Residential?: Y
 Construction?: N
 Limited Access?: N

SHIP TO:
 KINEX TELECOM
 JOEY GARCIA
 434.392.4804 X 3100
 717 EAST THIRD STREET
 FARMVILLE, VA 23901

Customer Name	Quote Number	Sales Rep Name
KINEX TELECOM, INC.	70003	RICK MILAM
Customer Contact	Shipping Method	Payment Terms
JAMES GARRETT	BEST WAY	NET DUE IN 30 DAYS

Quantity	Item	Description	Unit Price	Amount
90	TE863927-000	FOSC 24 COUNT SPLICE TRAY FOR B CASES	16.7600	1,508.40
10	TED87277-000	1X32 A SPLITTER TRAY BLACK BOX PLANAR SYMMETRICAL SPLIT FOSC-OC-6P11W00	120.0000	1,200.00
86	TECZ3388-000	FOSC 450 GEL DROP SEAL BLOCK	36.0000	3,010.00
10	HHFB243624T	FIBERGLASS HANDHOLE WITH 20 K LID (24X36X24) TAPERED SIDE	325.0000	3,250.00
5,000	COM15SDR11ORWT	1.50 INCH SDR 11 ORANGE W/TAPE	0.6300	3,150.00
65,000	FIB2SMDROPTONE	2CT SM TONE FLAT DROP	0.1800	11,700.00
130	FO_CCP3R1SAN	1 PORT SC-APC PATCH ONLY CCP3	13.2500	1,722.50
130	FO_506F-01-01-02-N	506F FIBER INTERFACE 2 PORT SC-APC CLOSURE PATCH ONLY	21.5400	2,800.20
13,000	FIB1SMDROPUNIV	1CT SM UNIVERSAL FLAT DROP DIELECTRIC INTERCONNECT	0.1800	2,340.00
390	LYNX2-SCAPCSM-250900	LYNX SPLICE-ON CONNECTOR SCAPC SMF 250UM & 900UM	10.4800	4,087.20

CUSTOMER NOTES:
 DELIVERED PRICE.

Subtotal	114,592.51
Sales Tax	0.00
Freight	0.00
TOTAL ORDER AMOUNT	114,592.51

Disclaimer: Comstar will not be held responsible for any additional services or special equipment at time of delivery. All requests must be authorized by Comstar prior to tender of delivery; without authorization, the consignee will be responsible for all applicable fees associated with additional services or special equipment at delivery. Due to the volatility of the steel rod and polyethylene market, the prices listed in this document are subject to change at any time without notice. Comstar has a \$100 minimum order amount on every order placed.

National Fiber Connections
5790 Botkins Road
New Knoxville, Ohio 45871
kroakley@gmail.com
844-632-3884



QUOTE

Submitted on 08/17/2020

P.O. #

Invoice for

Kinex
Jim Garrett
Daniel McCabe

Payable to

National Fiber Connections LLC

Quote #

2020-08-17-2

Project

DASAN GPON

Due date

N/A

Description	Qty	Unit price	Total price
DPW-G-M-SFPGPL-24-B+ OLT SFP	8	\$266.00	\$2,128.00
DPW-G-5808 V5808 GPON OLT 8 4XGE ports w/2ea DC Power Supplies	1	\$4,389.20	\$4,389.20
ONT-IN 2425-A1-NA ZNID GPON Indoor 2 Pots , 4GE, RF Video	155	\$138.00	\$21,360.00
	Total		\$27,877.20
			\$27,877.20

Notes:

APPENDIX 13 - Two most recent Form 477s submitted to the FCC



(RETAIN FOR YOUR RECORDS) Form 477 Filing Summary

FRN: 0013866488 | Data as of: Jun 30, 2019 | Operations: Non-ILEC | Submission Status: Revised - Submitted | Last Updated: Feb 10, 2020 18:03:24

Filer Identification

Section	Question	Response
Filer Information	Company Name	KINEX TELECOM, INC.
	Holding Company Name	Kinex Networking Solutions, Inc.
	SAC ID	
	499 ID	827027
Data Contact Information	Data Contact Name	Kelly Shaw
	Data Contact Phone Number	(540) 268-0517
	Data Contact E-mail	kaver68@gmail.com
Emergency Operations Contact Information	Emergency Operations Name	James R. Garrett
	Emergency Operations Phone Number	(434) 392-4804
	Emergency Operations E-mail	jgarrett@kinextel.com
Certifying Official Contact Information	Certifying Official Name	James R. Garrett
	Certifying Official Phone Number	(434) 392-4804
	Certifying Official E-mail	jgarrett@kinextel.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	kinex-september-2019_fbd.csv	Feb 10, 2020 18:01:36	320
Fixed Broadband Subscription	kinex-september-2019_fbs_fixed.csv	Nov 24, 2019 10:17:02	242
Fixed Voice Subscription	kinex-september-2019_fvs.csv	Nov 24, 2019 10:05:15	35

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Kinex Telecom, Inc.	ADSL2	62
		Optical Carrier/Fiber to the End User	176
		Other Copper Wireline	1
		Terrestrial Fixed Wireless	72
		VDSL	9
Total			320

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	20	95	36	131
	Optical Carrier/Fiber to the End User	173	53	322	375
	Other Copper Wireline	2	0	2	2
	Terrestrial Fixed Wireless	47	60	35	95
Total		242	208	395	603

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.512	0.128	5	0	5
0.768	0.384	4	5	9
1.000	1.000	0	2	2
1.500	0.512	22	6	28
3.000	0.512	1	0	1
3.000	0.640	29	4	33
3.000	1.000	4	4	8
5.000	0.768	27	16	43
5.000	1.000	42	47	89
5.000	3.000	0	1	1
5.000	5.000	0	3	3
7.000	0.768	1	0	1
7.000	1.000	2	1	3
8.000	1.000	1	0	1
10.000	1.000	18	18	36
10.000	2.000	0	3	3
10.000	3.000	8	46	54
10.000	5.000	1	11	12
10.000	10.000	0	45	45
15.000	1.000	2	0	2
20.000	1.000	0	3	3
20.000	2.000	0	2	2
20.000	3.000	2	14	16

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
20.000	5.000	1	7	8
20.000	10.000	0	9	9
20.000	20.000	0	11	11
25.000	5.000	0	2	2
25.000	25.000	0	2	2
30.000	5.000	0	2	2
30.000	10.000	0	6	6
30.000	30.000	0	1	1
50.000	5.000	18	26	44
50.000	10.000	14	13	27
50.000	20.000	0	1	1
50.000	25.000	0	3	3
50.000	30.000	0	1	1
50.000	50.000	0	20	20
75.000	5.000	0	1	1
75.000	10.000	3	5	8
75.000	25.000	0	9	9
75.000	75.000	0	1	1
85.000	10.000	0	1	1
100.000	10.000	1	10	11
100.000	25.000	0	1	1
100.000	50.000	0	1	1
100.000	100.000	0	18	18
150.000	10.000	2	0	2
150.000	150.000	0	2	2
200.000	200.000	0	4	4
400.000	400.000	0	1	1
1000.000	1000.000	0	5	5
2000.000	2000.000	0	1	1
Total		208	395	603

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	0.768	0.384	4	0	4

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	1.500	0.512	17	3	20
	3.000	0.512	1	0	1
	3.000	0.640	27	4	31
	5.000	0.768	27	14	41
	5.000	1.000	1	1	2
	7.000	1.000	0	1	1
	8.000	1.000	1	0	1
	10.000	1.000	16	13	29
	15.000	1.000	1	0	1
Optical Carrier/Fiber to the End User	1.000	1.000	0	2	2
	1.500	0.512	0	1	1
	3.000	1.000	0	1	1
	5.000	1.000	9	36	45
	5.000	3.000	0	1	1
	5.000	5.000	0	2	2
	10.000	1.000	0	2	2
	10.000	2.000	0	2	2
	10.000	3.000	5	43	48
	10.000	5.000	0	10	10
	10.000	10.000	0	45	45
	20.000	1.000	0	3	3
	20.000	2.000	0	2	2
	20.000	3.000	0	14	14
	20.000	5.000	1	7	8
	20.000	10.000	0	8	8
	20.000	20.000	0	10	10
	25.000	5.000	0	2	2
	25.000	25.000	0	2	2
	30.000	5.000	0	2	2
	30.000	10.000	0	5	5
	30.000	30.000	0	1	1
	50.000	5.000	18	26	44
	50.000	10.000	14	12	26

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	50.000	20.000	0	1	1
	50.000	25.000	0	3	3
	50.000	30.000	0	1	1
	50.000	50.000	0	20	20
	75.000	5.000	0	1	1
	75.000	10.000	3	5	8
	75.000	25.000	0	9	9
	75.000	75.000	0	1	1
	85.000	10.000	0	1	1
	100.000	10.000	1	10	11
	100.000	25.000	0	1	1
	100.000	50.000	0	1	1
	100.000	100.000	0	17	17
	150.000	10.000	2	0	2
	150.000	150.000	0	2	2
	200.000	200.000	0	4	4
	400.000	400.000	0	1	1
	1000.000	1000.000	0	4	4
	2000.000	2000.000	0	1	1
Other Copper Wireline	100.000	100.000	0	1	1
	1000.000	1000.000	0	1	1
Terrestrial Fixed Wireless	0.512	0.128	5	0	5
	0.768	0.384	0	5	5
	1.500	0.512	5	2	7
	3.000	0.640	2	0	2
	3.000	1.000	4	3	7
	5.000	0.768	0	2	2
	5.000	1.000	32	10	42
	5.000	5.000	0	1	1
	7.000	0.768	1	0	1
	7.000	1.000	2	0	2
	10.000	1.000	2	3	5
	10.000	2.000	0	1	1

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Business /		Total
			Consumer	Govt	
	10.000	3.000	3	3	6
	10.000	5.000	1	1	2
	15.000	1.000	1	0	1
	20.000	3.000	2	0	2
	20.000	10.000	0	1	1
	20.000	20.000	0	1	1
	30.000	10.000	0	1	1
	50.000	10.000	0	1	1
Total			208	395	603

Fixed Voice Subscription

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

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	0	0	669	23
Total	0	0	669	23

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Virginia	0	0	0
Total	0	0	0

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

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Virginia	669	23	646	669	0	614	0	2	53
Total	669	23	646	669	0	614	0	2	53



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0013866488 | Data as of: Dec 31, 2019 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Feb 26, 2020 22:02:49

Filer Identification

Section	Question	Response
Filer Information	Company Name	KINEX TELECOM, INC.
	Holding Company Name	Kinex Networking Solutions, Inc.
	SAC ID	
	499 ID	827027
Data Contact Information	Data Contact Name	James R. Garrett
	Data Contact Phone Number	(434) 392-4804
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	Certifying Official Phone Number	(434) 392-4804
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Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Kinex 477 Deployment March 2020.csv	Feb 26, 2020 21:14:22	319
Fixed Broadband Subscription	Kinex 477 Subscription March 2020 Table.csv	Feb 26, 2020 13:53:54	241
Fixed Voice Subscription	Kinex VoIP Table.csv	Feb 25, 2020 13:25:32	37

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	Kinex Telecom, Inc.	ADSL2	70
		Optical Carrier/Fiber to the End User	178
		Other Copper Wireline	2
		Terrestrial Fixed Wireless	69
Total			319

Fixed Broadband Subscription

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

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Asymmetric xDSL	20	94	34	128
	Optical Carrier/Fiber to the End User	173	75	340	415
	Other Copper Wireline	2	0	2	2
	Terrestrial Fixed Wireless	46	60	30	90
Total		241	229	406	635

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.512	0.128	5	0	5
0.768	0.384	4	4	8
1.000	1.000	0	1	1
1.500	0.500	21	6	27
3.000	0.500	1	0	1
3.000	0.640	29	3	32
3.000	1.000	4	4	8
5.000	0.768	27	14	41
5.000	1.000	40	48	88
5.000	3.000	0	1	1
5.000	5.000	0	3	3
7.000	0.768	1	0	1
7.000	1.000	2	1	3
8.000	1.000	1	0	1
10.000	1.000	17	13	30
10.000	2.000	0	2	2
10.000	3.000	8	42	50
10.000	5.000	1	10	11
10.000	10.000	0	47	47
15.000	1.000	1	0	1
20.000	1.000	0	2	2
20.000	2.000	0	2	2
20.000	3.000	3	14	17
20.000	5.000	1	6	7

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
20.000	10.000	0	8	8
20.000	20.000	0	9	9
25.000	3.000	1	0	1
25.000	5.000	2	3	5
25.000	25.000	0	3	3
30.000	5.000	0	2	2
30.000	10.000	0	5	5
30.000	30.000	0	1	1
50.000	5.000	0	4	4
50.000	10.000	47	46	93
50.000	20.000	0	4	4
50.000	25.000	0	4	4
50.000	50.000	0	24	24
75.000	5.000	0	1	1
75.000	10.000	9	5	14
75.000	25.000	0	8	8
75.000	75.000	0	1	1
85.000	10.000	0	2	2
100.000	10.000	1	11	12
100.000	25.000	0	2	2
100.000	50.000	0	1	1
100.000	100.000	0	23	23
150.000	10.000	3	3	6
150.000	150.000	0	1	1
200.000	200.000	0	4	4
400.000	400.000	0	1	1
1000.000	1000.000	0	6	6
2000.000	2000.000	0	1	1
Total		229	406	635

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

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	0.768	0.384	4	0	4
	1.500	0.500	16	3	19

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	3.000	0.500	1	0	1
	3.000	0.640	27	3	30
	5.000	0.768	27	14	41
	5.000	1.000	1	1	2
	7.000	1.000	0	1	1
	8.000	1.000	1	0	1
	10.000	1.000	16	12	28
	15.000	1.000	1	0	1
Optical Carrier/Fiber to the End User	1.000	1.000	0	1	1
	1.500	0.500	0	1	1
	3.000	1.000	0	1	1
	5.000	1.000	9	36	45
	5.000	3.000	0	1	1
	5.000	5.000	0	2	2
	10.000	2.000	0	1	1
	10.000	3.000	5	39	44
	10.000	5.000	0	9	9
	10.000	10.000	0	47	47
	20.000	1.000	0	2	2
	20.000	2.000	0	2	2
	20.000	3.000	0	14	14
	20.000	5.000	1	6	7
	20.000	10.000	0	8	8
	20.000	20.000	0	8	8
	25.000	5.000	0	3	3
	25.000	25.000	0	3	3
	30.000	5.000	0	2	2
	30.000	10.000	0	4	4
	30.000	30.000	0	1	1
	50.000	5.000	0	4	4
	50.000	10.000	47	45	92
	50.000	20.000	0	4	4
	50.000	25.000	0	4	4

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	50.000	50.000	0	24	24
	75.000	5.000	0	1	1
	75.000	10.000	9	5	14
	75.000	25.000	0	8	8
	75.000	75.000	0	1	1
	85.000	10.000	0	2	2
	100.000	10.000	1	11	12
	100.000	25.000	0	2	2
	100.000	50.000	0	1	1
	100.000	100.000	0	22	22
	150.000	10.000	3	3	6
	150.000	150.000	0	1	1
	200.000	200.000	0	4	4
	400.000	400.000	0	1	1
	1000.000	1000.000	0	5	5
	2000.000	2000.000	0	1	1
Other Copper Wireline	100.000	100.000	0	1	1
	1000.000	1000.000	0	1	1
Terrestrial Fixed Wireless	0.512	0.128	5	0	5
	0.768	0.384	0	4	4
	1.500	0.500	5	2	7
	3.000	0.640	2	0	2
	3.000	1.000	4	3	7
	5.000	1.000	30	11	41
	5.000	5.000	0	1	1
	7.000	0.768	1	0	1
	7.000	1.000	2	0	2
	10.000	1.000	1	1	2
	10.000	2.000	0	1	1
	10.000	3.000	3	3	6
	10.000	5.000	1	1	2
	20.000	3.000	3	0	3
	20.000	20.000	0	1	1

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Business /		Total
			Consumer	Govt	
	25.000	3.000	1	0	1
	25.000	5.000	2	0	2
	30.000	10.000	0	1	1
	50.000	10.000	0	1	1
Total			229	406	635

Fixed Voice Subscription

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

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Virginia	0	0	739	25
Total	0	0	739	25

Fixed Voice Subscription (iVoIP)

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

State	Total	Consumer	Business / Govt
Virginia	0	0	0
Total	0	0	0

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

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Virginia	739	25	714	739	0	683	0	3	53
Total	739	25	714	739	0	683	0	3	53