

**Technical capability statement-**

- Discuss experience providing broadband

Three River Communications (TRC) is a subsidiary of Three River Telco (“TRT”). TRT and its predecessor have been operating in the area for 60 years. Our employees have outstanding experience in all aspects of running a telecommunication company. TRT has extensive experience in building and maintaining a state-of-the-art fiber network. In 2009 TRT started building a fiber to the home (FTTH) network in the ILEC areas of Verdel, Monowi, Lynch, Naper, Springview & Johnstown. It was engineered by RVW out of Columbus, NE. The construction work was done by Bauer Underground out of Norfolk, NE. In 2016, TRC started a fiber build in O’Neill to business customers being able to offer them 1Gb symmetrical service. TRT has built and successfully operated the physical network. Over the years, we have built relationships with residents and businesses alike and established our self as an integral pillar in the communities that we serve. Our employees live in the communities we serve and we use local support services therefore creating and keeping jobs in the community that we serve. This is the case with the currently planned fiber to the home project in Ainsworth as well. Upon completion of the project, we are committed to offering the best broadband experience to our customers by offering state-of the art Fiber Internet service with unlimited data plans (we do not meter the usage) and the download/upload speeds will be symmetrical.

The company has been operating in Ainsworth since 2002 when TRT membership voted to approve a CLEC (Competitive Local Exchange Carrier) in Ainsworth. In 2020, TRC applied and received a Nebraska Broadband Grant from the Nebraska Department of Economic Development to build Fiber-to-the-Home within the town of Ainsworth. This project was recently completed. The Ainsworth Rural Fiber Project will extend Fiber-to-the-Home technology to homes and businesses in rural Ainsworth that are currently served with DSL technology.

- Does provider currently provide broadband at a minimum of 100/100?

TRC currently provides broadband at a minimum of 100/100 Mbps as indicated in Attachment Letter C-2 and Attachment Letter C\_3.

- How will the project be resilient and sustainable in the long-term?

The fiber optic cable for the TRC Ainsworth Rural Fiber Upgrade project will all be buried and be more resilient and less susceptible to damage from the weather like wind and ice and snow storms. The Project will be more sustainable than other technologies, because fiber has a longer useful life span, is less maintenance intensive, and is more scalable. TRC is currently using both GPON and XGS-10G PON technology over their fiber plant today. TRC is currently using Adtran’s XGS-10G PON OLT in the town of Ainsworth. TRC plans to use the current Adtran OLT for the Ainsworth Rural Fiber Upgrade project.

Discuss the number of technical staff that will be dedicated to serving the project area once the project is complete and provide a description of how the service area will be maintained throughout the useful life of the facilities.

Three River currently has 18 employees. seven employees are central office equipment (COE) and outside plant (OSP) qualified. Three River has three customer support representatives to handle customer accounts. Three River currently uses their own staff to operate and maintain their current FTTH system and will use their staff to operate, sustain, and maintain the FTTH facilities deployed as part of the Ainsworth Rural Fiber Upgrade Project.

Three River uses our current staff to maintain network infrastructure using common industry practices for each of the services provided. The network and services will be monitored and supported 24x7x365 by the Three River's current support staff. The applicant will leverage existing staff and processes to operate the proposed network deployment. Troubleshooting and service provisioning will be handled by applicant office staff using a combination of existing automated systems. Orders for services will be taken by our customer service representatives. Equipment will be provisioned by our office technicians and professional installation will be completed by our outside plant technicians

- Identify the expected useful life of the facilities proposed to be built with the NBBP funding. The description should include a statement as to the technological components used and if applicable, which components may require more frequent repair or replacement.

FTTH network will be deployed with XGS-10G PON optical technology supporting up to 10 Gbps symmetrical bandwidth with each subscriber having full access to the entire network bandwidth. The subscriber terminals will support up to 1-Gig symmetric service and be uplinked via a 10-Gig local ring to TRT's regional 20-Gig transport ring to TRC's geographically diverse and redundant network core data centers located in Ainsworth and Lynch, Nebraska which provide dedicated internet access connections to diverse ISPs providing fully protected and redundant internet access.

As a way to demonstrate the expected useful life of the facilities, we have attached the depreciation rates that RUS applies to facilities as part of it ReConnect grant program. (See Attachment Letter G\_2). Our engineering professional believes the useful life of fiber facilities to be much longer than the depreciable life provided by RUS. The major components of the network and the depreciable and useful life of each component are as follows:

	<u>RUS</u>	<u>Engineer</u>
Buried fiber	20 years	25-50 years
Electronics equipment	10.67 years	10-15 years
ONTS	5-10 years	7-10 years

Components which may require more frequent repair:

The most frequently repaired/replaced items in a FTTH network will be at the customer premise. These items include power supply/battery backup, ONT and premise wiring.