**Executive Summary of Project for BIP and BTOP:**

**8. Infrastructure Projects Executive Summary**

The primary problems the proposed project seeks to address are: 1) increase the availability of broadband to 57 households, 14 businesses and 1 anchor institution in an underserved area; and 2) make broadband available to 64 households, 10 businesses and 3 anchor institutions in an unserved area.

The proposed services are high speed internet access for all types of customers along with an Ethernet Private Line Wide Area Network. Business and residential customers, as well as institutions will be offered broadband speeds that will begin at up to 10 Mbps downstream and 5 Mbps upstream. Customers can purchase bandwidth up to twice that speed for less than $70 per month. Customers needing higher speeds or symmetric service will be able to purchase Ethernet access at varying speeds up to 100 Mbps both up and down at prices ranging from $300 to $795 per month.

Applicant will approach the non-discrimination and interconnection obligations as they do today. Both as a rural local exchange carrier and an internet service provider rooted in the local community, Applicant currently offers access to its network under tariffed rates and is subject to interconnection obligations. Current policies and practices are in place around network management, service provisioning and illegal content.

The type of system that will be deployed is a fiber-to-the-home passive gigabit optical network design (GPON). The total estimated cost of the project is $628,860. The costs are much lower than would otherwise be necessary since the system will leverage the existing FiberDrive chassis housing Optical Line Terminations in the central office and optical network termination element at the subscriber premises. The platform supports traditional voice service, high speed data and other IP applications. It supports various ways to transport IP and Ethernet traffic and is compliant with all major telecommunications standards. The existing central office infrastructure has sufficient capacity to support 100% of the households, businesses and institutions purchasing service in the funded service areas. This project extends Applicant’s GPON existing network by building out from the nearest fiber splice point through the funded service area to a centrally located PON cabinet containing 1x32 passive optical splitters that require no power.

As finances have permitted, Applicant has invested in extending its GPON network and replacing its legacy copper infrastructure. The placement of the ONTs and provisioning of voice, Internet and Ethernet services is the Applicant’s core business. Applicant currently uses this system to provide voice and Internet to approximately 300 residential and business subscribers and Ethernet WAN service to 15 business and institution customers. The FTTH GPON system is in wide use, and all of Applicant’s technicians are trained and experienced in its installation and maintenance. The extension of the system to the new service areas will be straightforward and of identical design.

The forecasted residential take rate is conservatively estimated to be 40% at the end of five years with a somewhat larger number of businesses projected to take service. These figures are low compared to national studies (e.g., PEW Institute) for communities with our
demographics.

Applicant has successfully managed through the downturn in the economy but the competitive environment is difficult. Funding of this proposal would ensure that Applicant would have the growth opportunities to remain a strong, viable entity and not succumb to the consolidation and related job losses in the telecommunications industry.