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## Executive Project Summary

Sharon Telephone Company (STC) is developing a project to provide highspeed broadband service to rural areas in Iowa. The area to be served is located in south Johnson county and northeastern Washington count. The area extends south of Hills, IA to 240<sup>th</sup> St. an is bound on the west by highway 218 and on the east by the Iowa river. This area contains approximately 400 households, 61 businesses and two schools.

If the grant is award to STC, work on the project would begin in early December 2019 to review the project and schedule the area to be staked. Construction would begin in early spring 2020 and would be completed the end of 2021 or early 2022.

The major part to this area has been identified at Targeted-Service-Areas which do not meet the requirements for broadband service. The primary deployment model will be a Gigabit Passive Optical Network (GPON). This will entail the installation of a cabinet containing a GPON switch and distribution panel. Passive 1x32 splitters will be located in strategic location in the area to provide access to the subscribers. The use of GPON will reduce the total fiber count needed to service the areas while providing the minimum speed of 25 Mbps down and 3 Mbps up. At a maximum load on the network the speeds of 76.5 Mbps down and 38.8 Mbps up can still be available at the subscriber's location. This technology will allow for the delivery of voice, data and video services to all subscribes. The fiber optic cable will be either plowed in or use directional boring to go under roads, streams, converts and other areas where plowing is not possible.

In reference to Iowa Code section 8B.11, STC will make service available to all homes, farms, schools and businesses in the area describe above.

STC will also meet all requirements set forth in Iowa Administrative Code rule 129-22 as it pertains to mapping, reimbursement record keeping, network performance and field testing.

The grant funding would allow this project to begin late 2019 early 2020. Without the funding the project would be delayed until 2022 or later. The grant funding would allow STC to tie this effort into work that is currently in progress. By contracting larger area, it would help in obtaining a lower price for construction and materials.

This project is currently in the early planning stage. Initial maps have been drawn in-order to obtain material lists, and distances to develop the initial cost estimate. This work will be used as the starting point for the development of the finial design and development of schedules and project tasks.