PROJECT NARRATIVE

BACKGROUND

HPAZNET LLC (hereafter referred to as HPAZ) is requesting a grant of [redacted] for its Hereford & Palominas Broadband Improvement Project to improve and expand its infrastructure in Cochise County. HPAZ will cash match the grant with [redacted]. HPAZ is aware of the challenges residential and commercial clients face in obtaining fast, reliable internet speeds.

THE NATURE OF THE IMPROVEMENTS

HPAZ is committed to solving this issue by providing fixed wireless internet services and installing and connecting more middle-mile components with redundant diverse paths to better serve last-mile connections.

Clients, who are located up to 15 kilometers from the site (without any major obstructions) can have a subscriber radio installed at their property/location to provide them with high-speed internet service. HPAZ services home, business, and enterprise customers. HPAZ uses both licensed and licensed exempt radiofrequency.

HPAZNET rents space on a tower or rooftop and installs radios that broadcast a signal which is directly connected to a fiber optical network or dedicated microwave radio backhaul.

The communications equipment that will be deployed is mostly Ubiquiti and Mimosa radios, which are typically used by wireless internet service providers because it being cost-effective and enable faster and more reliable speeds.

HOW THE PROPOSED PROJECT ADDRESSES THE BROADBAND NEEDS OF THE AREA(S) THAT IT SERVES

HPAZ plans to offer more affordable internet options and proposes to expand its ProNetwork Plan coverage by offering a minimum of 100 Mbps download and 25 Mbps upload speeds in Hereford and Palominas. The project ultimately aims to bridge gaps in internet coverage in the 85615 and 85650 zip code areas by the end of the 2-year deadline.

NUMBER OF COMMUNITY ANCHOR INSTITUTIONS SERVED

HPAZ's current infrastructure has 18 sites residing on rooftops and towers which covers over 110 square kilometers and currently serves 1 community anchor institution

NUMBER OF HOUSEHOLDS SERVED

HPAZ currently serves 630 households out of the total community.

NUMBER OF BUSINESSES SERVED

HPAZ currently serves 10 businesses

TOTAL POPULATION SERVED

With a total population size of 9,569 people, HPAZ's rural wireless internet is typically used by customers located outside of the servicing cable and fiber footprints. HPAZ also now offers a substantially faster ProNetwork offering a minimum of 100 Mbps download and 25 Mbps upload speeds

THE ANTICIPATED ECONOMIC DEVELOPMENT BENEFIT ACHIEVED BY THE CONSTRUCTION OF SUCH IMPROVEMENTS

With the emergence of COVID-19, HPAZ recognizes the importance of reliable, high-speed internet connectivity throughout its rural community. Now more than ever, businesses, residents, and visitors are relying on internet connectivity to work, learn, connect, and entertain from mobile devices, home offices, and other online avenues.

The Hereford & Palominas Broadband Improvement Project will drastically improve the quality of life for residents and businesses by fulfilling gaps in internet coverage as well as increasing bandwidth and overall speed.

Due to the COVID-19 pandemic, many residents have had to quarantine, work from home, provide and/or receive educational services for their children at home, receive telehealth appointments, make Voice-over-Internet Protocol calls (VoIP calls), and stream online movies/tv-shows for entertainment from the comfort of their own homes. This project will also promote safety in the area as many residents in rural areas do not have access to landline services for 911 emergency communications.

This increasing and heavy data usage strongly impact local internet providers, who have to keep up with the higher demand in internet usage and provide the increasing amount of bandwidth needed to support the vital needs of our community. HPAZ anticipates that these major improvements in both internet speed and coverage area will attract more residents to want to live in these communities as well as attract new businesses to expand into the area.

TOTAL MILES OF FIBER TO BE INSTALLED (IF APPLICABLE)
NA

LOCATION OF NEW FIBER (AERIAL, UNDERGROUND, OR BOTH?)
NA

STATED COMMITMENT TO OPERATE AND MAINTAIN THE NETWORK FOR A MINIMUM OF FIVE (5) YEARS UPON COMPLETION OF THE IMPROVEMENTS

HPAZ proposes to upgrade all infrastructure as well as commit to continue to operate and maintain the network for a minimum of five years upon completion of the project.

THE PARTY OR PARTIES THAT WILL PERFORM THE INFRASTRUCTURE CONSTRUCTION (IF KNOWN)

HPAZ

THE INTENDED USES OF THE ABDG RURAL/URBAN FUNDS IN RESPECT TO THE CONSTRUCTION OR PLANNING

HPAZ offers multiple points of redundancy to ensure an exceptional customer experience with minimal downtime. All towers and communication facilities will be constructed above ground. There may be some exceptions to communications equipment or types of infrastructure materials used, dependent on inventory availability through HPAZ's various distribution centers.

HPAZ will use all of the grant funding towards infrastructure expansion and improvements. The majority of the grant funding will be used on equipment and software with the rest of the funding being used for warehousing, facilities, construction, materials, and licensed subcontractors.

HPAZ readily has the cash match available and plans to use all of the cash match funding on more equipment purchases and understands that it may not be reimbursed if HPAZ has to spend more than our [redacted] cash match to finalize the project by the 2-year deadline. HPAZ's ultimate goal is to build a scalable infrastructure for the future needs of clients.

THE SPECIFIC INFORMATION REQUIRED UNDER SECTION 1.4 (TO THE EXTENT RELEVANT)

HPAZ is gradually improving its network infrastructure through upgrading existing technology and adding more coverage in areas to meet the high-speed demands of

each customer in Hereford & Palominas. Through the proposed project, the project lead plans to upgrade thirteen transmitter sites and build two new transmitter sites. He plans to use thirty new licensed and coordinated multigigabit backhaul links in 6 GHz, 11 GHz, and 18 GHz and over 60 new multigigabit broadcast transmitters and antenna arrays in the improvement project.

For extremely remote areas that aren't financially feasible, HPAZ is asking to use some of the funding from the Arizona Broadband Development Grant (ABDG) Program to overcome this digital divide. With the participation of ABDG and ACA, any awarded funds from the grant program would allow connectivity in areas that were previously not feasible and/or service is inadequate.

A TIMELINE FOR COMPLETION OF THE INFRASTRUCTURE IMPROVEMENTS

HPAZNET LLC plans to have all middle mile components completed by the first fifteen months. That leaves the remaining nine months dedicated towards last-mile components. A more detailed timeline is listed on the Gantt Chart Timeline provided at the end of this project narrative.

In the absence of ABDG-Rural funding, the proposed project would not proceed within the same time frame or would not otherwise be as effective in advancing the objectives of the project due to the lack of sufficient funding and the delay in the return of investment within a two-year time constraint. It would take HPAZ a significantly longer time frame to both obtain funding and execute this project, approximately six to ten years from now.

QUALIFICATIONS OF THE VENDORS/CONTRACTORS

Benjamin Tyler

Mr. Tyler has for the past ten years designed, deployed, and managed large-scale wireless networks for educational facilities, healthcare facilities, governmental infrastructure projects in Cochise County as well as designing and operating a medium-size residential wireless internet service provider in Hereford and Palominas Arizona. Mr. Tyler is currently HPAZ's Operations Manager where he sets and executes both strategic technical direction as well as the day to day operations of the infrastructure.

Curtis Vincent

Mr. Vincent was the Executive Director at Morgan Stanley where he founded, defined and built the Cyber Security Division of 400 people and ran it over a 15-year period. He has recently served as Senior Vice President and Chief Operating Officer for the Operations Command Center at Bank of America and as VP of a Dev/Ops team at

Type	Project	Applicant	GEOID
Rural	Hereford & Palominas	HPAZNET	04003001200
Rural	Hereford & Palominas	HPAZNET	04003001900
Rural	Hereford & Palominas	HPAZNET	04003002001
Rural	Hereford & Palominas	HPAZNET	04003002002
Rural	Hereford & Palominas	HPAZNET	04003002100