Bristol Fire Department

Inter Office Memorandum

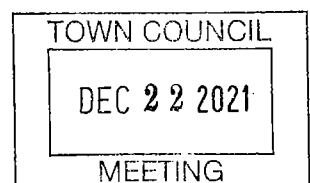|	
To:	Honorable Town Council
From:	Michael DeMello, Fire Chief
cc:	File
Date:	December 16, 2021
Re:	Fiber Project Continuance, December 22 Council Meeting

The proposed ARP Broadband fiber project requires additional information and details that are currently still being gathered and analyzed.

It is for this reason I respectfully request a continuance in this matter to a future date to be determined once all pertinent information has been gathered and can be presented in its entirety for council consideration.

Thank you in advance for your continued support and consideration.

I3. Fire Chief DeMello re ARP Broadband Fiber Project
(continued from October 20, 2021)

> Sweeney/Teixeira- Voted
> unanimously to continue
> this matter to the
> December 22, 2021 for
> further consideration.

Bristol Fire Department

Inter Office Memorandum

To: Steven Contente, Town Administrator

From: Michael DeMello, Fire Chief

cc:

Date: October 6, 2021

Re: ARP Broadband Fiber Project Recommendation

The following information describes Bristol's Broadband Fiber Project and its compliance with American Rescue Plan (ARP). Additionally, this memorandum provides guidance and recommendations to bring broadband to the community to assist businesses, allow access to underserved populations, and create a communication medium that can disseminate information during emergencies.

Current Environment

Current town operations rely on each separate public facility to install and pay for internet access. Most internet subscriptions are based on download and upload speeds, with higher-speed access plans costing more than low-speed plans. The town has multiple vendors that provide broadband or other access measures such as phone lines. This service structure is not cost-effective and, in some cases, does not meet the needs of today's technology requirements. The town does not currently own or have any fiber optic cables installed on its behalf. Current speeds for internet are 50/25 at best.

Future Environment

This fiber project has been designed to meet the current and future needs of the community. This project will connect the locations identified below and create improved operations through a mesh Wi-Fi network. This internet access will be available for residents, businesses, and visitors to utilize. In addition, the community's continuity of operations will be improved as the Town will have the ability to disseminate emergency information to network users. The network is fully adaptable, meaning that future additions can be implemented without difficulty.

The following locations have been identified to incorporate fiber optic or wi-fi equipment to support this initiative.

Town Hall (10 Court Street)	Maritime Center
Police Department	Reynolds School
Fire Department - All Stations	Quinta-Gamelin Community Center
Department of Public Works	Wastewater Treatment
Independence Park (Public Wi-Fi Dish Only)	Vet's Park (Public Wi-Fi Dish Only)
Franklin Court (Public Wi-Fi Dish Only)	500 Wood St. (Public Wi-Fi Dish Only)
Town Common (Public Wi-Fi Dish Only)	Rogers Free Library (Public Wi-Fi Dish Only)
Benjamin Church Manor (Public Wi-Fi Only)	Town Beach

Cyber Security

Installation of this fiber network will provide enhanced cyber security. The fiber will allow components of town operations to be separated, reducing the ability for exploitation of the entire network should a breach in security occur. First and foremost, the equipment deployed with this network is monitored 24/7 and up-to-date technology reduces the risk of network infiltration. The fiber itself allows for the ability to separate networks, creating distinct modes of operation that will not conflict with each other. For example, an intranet within the town can be created that allows all town departments to share information or access programs without utilizing the internet. The improved speed and technology are important to public safety, enhancing Criminal Justice Information Systems (CJIS) and emergency medical healthcare information compliance. The architecture of the network provides failover and redundancy capability improving resiliency and continuity of critical services

Project Funding Requirements & Long-term Funding Outlook

Initial One-Time

This project requires components to be installed initially and account for one-time charges. Since the community does not have any existing fiber, the majority of initial costs are for the installation of new fiber lines to each location. The vendor will be responsible to install fiber and all required network equipment, including connections to existing network equipment in accordance with specifications set forth by the town's technology service provider. The vendor will also be responsible for the installation of all Wi-Fi equipment associated with the town's public internet access initiative. The vendor is also responsible for all associated testing and verification of performance once fiber and equipment have been installed. Cost for one-time installation is approximately $450,000.

Monthly Services

The town currently pays for monthly services for internet and other technology services. A monthly cost will continue once the fiber and network are installed that will provide either slight savings in cost or remain just about the same at face value. However, the monthly service costs for the fiber network will include a single aggregate cost for internet access (Eliminates having a service at every location), managed network services, 100MB speed to all locations, a portal for detailed reporting, dedicated solutions engineer, public Wi-Fi management, and 24/7/365 monitoring of the entire system. The monthly cost is approximately $4,500.

Long-Term Funding/Potential Cost Reductions

The vendor maintains an upgraded system of technology and at this time there is no forecasted significant long-term funding or capital outlay required. However, the field of technology changes rapidly and it is recommended that funding for future network additions be included in the town's capital plan for technology. As an example, if a new town building were erected, there would be a cost to run and connect fiber optic cable and equipment to the existing network.

It is likely that additional savings will be realized once the network is installed and operating. Opportunities exist to integrate other systems, such as phone systems, building security monitoring, & radio communications. The ability to utilize fiber for the aforementioned operations will reduce the need for monthly monitoring fees, expensive monthly landline fees for radio transmissions, and will likely provide additional cost savings of several thousand dollars annually.

Recommendation and Request for Authorization to Proceed

Though many vendor options exist, it was important to select a vendor consistent with American Rescue Plan (ARP) guidance, and a vendor that would be responsive to the needs of the community. Over the past several months Oshean Inc. is a non-profit member directed organization invested in the success of its members.

It is recommended that Oshean Inc. be allowed to proceed with the construction and installation of the town fiber network as proposed and as stipulated under the RI Master Price Agreement.