REQUEST FOR PROPOSALS
Infrastructure Division
Reconnect Round 4 Engineering

Introduction
Tanana Chiefs Conference Infrastructure Division invites a qualified and experienced OSP engineer to design and engineer the installation of fiber optic networks in multiple communities.

Overview
Tanana Chiefs Conference has received a USDA ReConnect Round 4 award to deploy high-speed broadband connectivity to the communities of Venetie, Chalkyitsik and Circle, referred to hereafter as the Yukon Flats Fiber Project. The Yukon Flats Fiber Project will consist of two main components: the FTTH (fiber to the home) distribution system, and the fiber backhaul connection. The system is designed to be capable of providing 100/100 upload/download speeds at the same time to all subscribers, with a total household count of 189.

The project will originate with an interconnection to Alaska Communications fiber in Fort Yukon. This fiber is being constructed under an NTIA Tribal Broadband Connectivity Program grant and is a partnership between Doyon, Limited, the for-profit ANC in the TCC region, and Alaska Communications. From Fort Yukon, terrestrial fiber will be installed to Chalkyitsik, and underwater fiber will be laid in the river to Circle. The line to Venetie will not go to Ft Yukon it will go to Venetie Landing which is below the porcupine river on the Yukon and the Doyon fiber project will include a submarine landing directionally drilled from the cable to the river bank.

The terrestrial routes for Venetie Landing and Chalkyitsik would be a shallow direct-bury cable plowed into the soil at approximately 12 to 16 inches deep. River crossing(s) will be installed by directional drilling, or by submerging a submarine type cable in the river, possibly with added pipe protection. The route from Fort Yukon to Circle will originate at a previously installed shoreline splice case on the eastern side of Fort Yukon and will enter the Yukon River and route to the east for 77 miles, daylighting in Circle at a beach manhole (BMH). Due to water depth and river branching, the proposed river network would be plowed into the riverbed for the entire 77-mile route. The fiber network is not anticipated to require electric power.

At each of the villages, an equipment hut will house the electronics for the fiber system, including GPON equipment rack(s) for the FTTH distribution. From this hut, a fiber optic cable system will be installed to provide availability of broadband to every home, business, and anchor institution in the community if they choose to subscribe. This installation will be either aerial or buried based on the availability and distribution of existing pole systems.

The awarded consultant will design and engineer the installation of fiber optic networks in these three communities, as well as middle-mile backhaul from existing point(s) of interconnection. Phase I will support the environmental review process, Phase II will generate middle and last mile

network designs for review by TCC and the operating telco, and Phase III will result in a construction bid package(s).

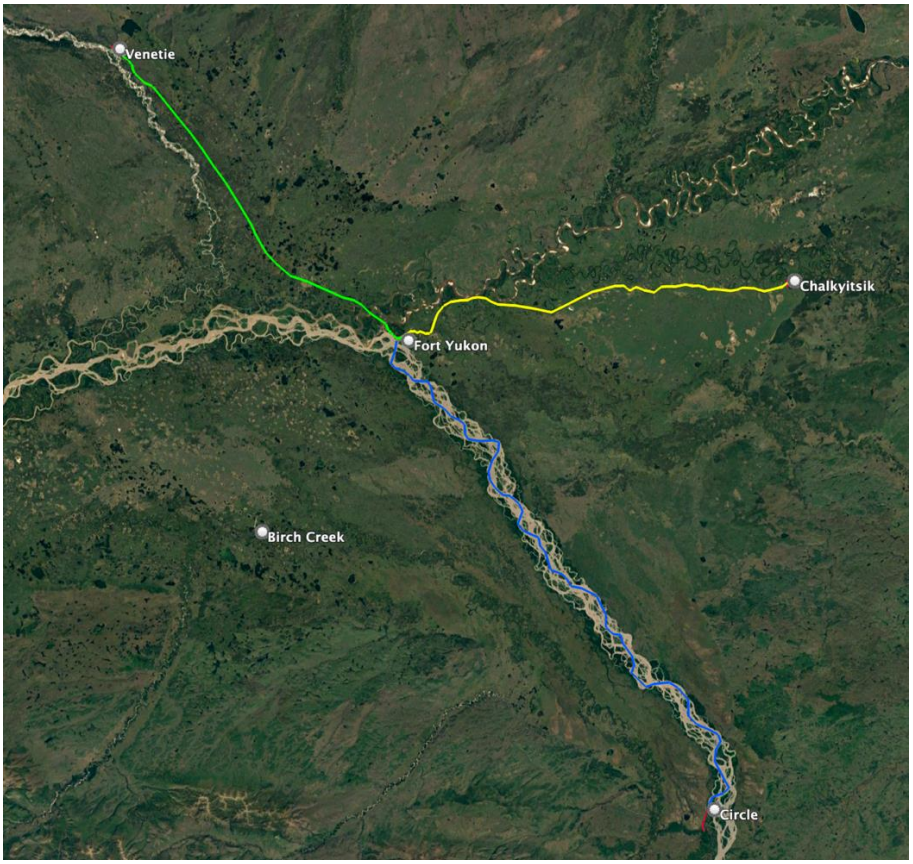
The selected contractor will be expected to work with Deployecom and Alaska Communication Systems, respectively the construction contractor and operator for the Phase 1 portion of the Yukon River. Phase 1 is currently being constructed by ACS and Doyon bringing fiber from the Yukon River Bridge to Fort Yukon. The in-river portion of this project is expected to be a continuation of the line from the Yukon River Bridge to Fort Yukon

During Phase I, the engineering contractor shall provide fiber network routing, ancillary infrastructure specifications and locations, disturbance quantities, and construction method information to support the NEPA document and permitting process, resulting in a 35% design. Multiple alternatives (microwave, terrestrial fiber, etc.) will be analyzed during the NEPA process to ensure the best solution is chosen for construction and the engineer should be prepared to support the alternatives analysis from a technical standpoint.

During Phase II, the engineer shall develop a 65% design based on the results of the NEPA process and agency coordination and provide to TCC and the operating telco for review and comment.

During Phase III, the engineer shall develop a construction bid package and assist TCC with construction RFP development and contract negotiations with construction entities.

Proposed Routing for Analysis



Term
Any contract awarded will be for the duration of the current fiscal year, ending on September 30, 2024. Contractor will be required to keep a detailed record of hours spent on specific tasks and submit the record with each invoice.

Budget
All design work paid for by TCC will be owned by TCC with all rights to use design information as needed. Please provide budgetary cost estimates and applicable rates in the table in Appendix A.

Selection Process
An individual or firm may be selected based on the highest scoring proposal submitted, based on the following criteria: experience, team qualifications, resources, availability, and methodology. Final selection is anticipated by November 17, 2023. The selected consultant must be able to provide both an active business license and proof of insurance.

Proposal Submission
Proposals may be submitted by e-mail to cortnie.doan@tananachiefs.org. Proposals must be received no later than November 15, 2023 by 5:00 PM.

Tanana Chiefs Conference reserves the right to reject any or all submittals, to waive informalities or technicalities, and to negotiate with any responder to this RFP it deems best qualified.

Questions
Cortnie Doan
Infrastructure Division &
Office Manager
907-452-8251 ext. 3040 or
cortnie.doan@tananachiefs.org

Appendix A – Budgetary Cost Estimates

Task	Budgetary Estimate	Unit Measure	Comments
Phase I – 35% design and support of NEPA review	$		
Phase II – 65% design	$		
Phase III – Construction Bid Package	$		
Total	**$**		

Applicable Hourly Rates	
Rate	**Role**
$	
$	
$	
$	
$	
$	