

SUBJECT: Award of Bid No. 21-073B, Design Build Big Lake Station 8-2 Telecommunication Tower to New Horizons Telecom, Inc., for the contract amount of \$199,891.00.

AGENDA OF: November 17, 2020

ASSEMBLY ACTION:

*Adopted without objection
11-17-20 BSM*

MANAGER RECOMMENDATION: Present to the Assembly for consideration.

APPROVED BY GEORGE HAYS, ACTING BOROUGH MANAGER:

George Hays

Route To:	Department/Individual	Initials	Remarks
	Purchasing Officer	<i>JB</i>	10/13/2020
	Capital Projects Director	<i>Brad Swartz for JB</i>	10/14/2020
	Finance Director	<i>CX</i>	
	Borough Attorney	<i>NS</i>	
	Borough Clerk	<i>BSM for JKM</i>	11-9-20

ATTACHMENT (S) : Fiscal Note: Yes ☒ No ☐
 Analysis Sheet (1p)
 Scope of Work (3p)

SUMMARY STATEMENT: On September 1, 2020, the Matanuska-Susitna Borough Purchasing Division issued a solicitation requesting bids from qualified contractors to design and build a self-supporting communication tower at Station 8-2. This tower will increase and enhance Emergency Communications for the Western portion of the Matanuska-Susitna Borough. The tower will provide a stable foundation and a more suitable location that improves the coverage area. This tower will also provide the means to add additional antennas for digital paging, emergency microwave network and an enhanced radio system. This site will be an integral portion of the digital backbone and telecommunication systems that will

extend communications to the Western and Northern Borough; vital to the future of the Department of Emergency Services emergency communications.

Construction Services purchased will support the Emergency Services Department in assembly district #5.

In response to the advertisement, three bids were received. Award recommendation is being made to New Horizons Telecom, Inc. as the lowest responsive and responsible bidder based on Total Bid Amount.

The substantial completion date for this project is July 30, 2021 with the final completion of August 31, 2021.

In accordance with MSB 3.08.170(B), Administration requests authority to modify the resulting contract completion date by 30 days for unforeseen circumstances.

The Capital Projects Department, Project Management Division will be administering the contract.

RECOMMENDATION OF ADMINISTRATION: Award of **BID NO. 21-073B, DESIGN BUILD BIG LAKE STATION 8-2 TELECOMMUNICATION TOWER** to **NEW HORIZONS TELECOM, INC.** for the contract amount of **ONE HUNDRED NINETY NINE THOUSAND EIGHT HUNDRED NINETY ONE DOLLARS AND 00/100 CENTS (\$199,891.00)**.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: November 17, 2020

SUBJECT: Award of Bid No. 21-073B, Design Build Big Lake Station 8-2 Telecommunication Tower to New Horizons Telecom, Inc., for the contract amount of \$199,891.00.

ORIGINATOR: Purchasing

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <u>YES</u> NO
AMOUNT REQUESTED <u>199,891</u>	FUNDING SOURCE <u>Arcticwide</u>
FROM ACCOUNT # <u>480,000.000 4XX.XXX</u>	PROJECT # <u>47525-1800-1809</u>
TO ACCOUNT :	PROJECT #
VERIFIED BY: <u>[Signature]</u>	CERTIFIED BY:
DATE: <u>10-16-2020</u>	DATE:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						

CAPITAL	<u>199.9</u>					
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REVENUE						
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FUNDING: (Thousands of Dollars)

General Fund						
State/Federal Funds						
Other	<u>199.9</u>					
TOTAL	<u>199.9</u>					

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____
 DEPARTMENT: _____ DATE: _____
 APPROVED BY: Chugenne Skumell DATE: 10/16/2020

~PRELIMINARY RESULTS~

MATANUSKA-SUSITNA BOROUGH: PURCHASING
BID OPENING ANALYSIS SHEET
21-073B Design Build Big Lake Station 8-2 Telecommunication Tower

BIDDER		Gunnerson Consulting	Arcticom	New Horizons Telecom
Signed Bid Form		✓	✓	✓
Receipt of Addendum (1,2)		✓	✓	✓
Bid Guarantee		✓		✓
Demonstrated Experience Qualifications Statement		✓	✓	✓
Descriptive Literature (I.A., Alternate Tower Bid)		NA	NA	NA
BID ITEM	DESCRIPTION	BID PRICE	BID PRICE	BID PRICE
Base Bid 1.	Design & Build a self-supporting communication tower at Station 8-2 in accordance with 21-073B solicitation documents.	\$ 445,000	\$ 209,660.37	\$ 199,891.00

RECOMMENDATION: ALL BIDS ARE TAKEN UNDER ADVISEMENT

Dustin Silva

PURCHASING OFFICER

10/05/2020

DATE

PURCHASING REPRESENTATIVE

WITNESS

[Signature]

PURCHASING REPRESENTATIVE

WITNESS

[Signature]

PROJECT MANAGER

WITNESS

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BID #21-073B

DESIGN BUILD BIG LAKE STATION 8-2 TELECOMMUNICATION TOWER

SCOPE OF WORK

OVERVIEW

The Matanuska-Susitna Borough (MSB) is requesting bids from qualified contractors to design and build a self-supporting communication tower at Station 8-2. The Contractor will provide a manufactures designed Communication Towers, design and constructed a slab foundation that is appropriate for soil conditions, seismic requirements and wind loads to support a tower that will be fully equipped in the future. Installation of communication equipment on the tower is not requested.

Qualified proposers must demonstrate experience in Self-supporting Communication Towers, foundation design, and tower construction that is equal to or greater than the scope of work for this project. **Bidder must provide with their bid** 3 completed projects with 3 references for each project.

Work includes, but is not limited to tower procurement, shipping, foundation design, tower construction, civil, structural, electrical, code compliance, and permitting.

Tower and foundation design for 120' PiRod U series self-supporting Communication Tower with listed communication equipment. The Bidder shall include all costs for tower procurement and professional stamps, by appropriate Alaska licensed Architectural / Engineering disciplines, cost of all regulatory agency required reviews or permits, including, but not limited to FAA, FCC, State of Alaska, MSB Code Compliance, etc. and all authorities having jurisdiction. It is the responsibility of the successful Bidder to ascertain all requirements, pay any review costs, testing costs and obtain all permits/registrations necessary to complete the proposed project. Permits and Stamped drawings for each discipline provided to the MSB Project Manager prior to construction and stamped record as-built drawings will be provided upon completion.

PERIOD OF PERFORMANCE

The project shall be complete no later than nine months from notice to proceed or August 30, 2021, whichever is sooner.

REQUIREMENTS

- The contractor will provide a 120' PiRod U Series self-support tower that conforms to ANSI/TIA-222-G and ASTM standards for wind loading, equipment loads, and construction.
- The tower will have an 8 port wave guide snap-in ladder attached from the ice bridge to tower top.
- The tower will be connected to a MSB owned communications shelter with an ice bridge and 8 port wave guide attachment.
- The tower will be grounded, bonded and incorporated into the MSB communications shelter, and surrounding fencing.
- Climbing pegs with safety climb located on tower leg
- The contractor will be responsible for acquiring engineered foundation design.
- The contractor will stake proposed tower location and determine ground elevations at proposed tower location required to complete FAA 7460.
- The contractor will be responsible for tower permitting (MBSC 17.67), site permitting and ensuring the tower is constructed within required setbacks at each site.
- Submittals required for review:
 - Documents showing design of tower foundation calculations and tower information from manufacturer.
 - Engineered foundation design.
 - Detailed Tower construction schedule.
- The contractor will attach and wire OB lights if required.

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- The towers will incorporate design criteria to insure sufficient strength and stability to resist the effects of seismic ground motions for self-supporting tower.
- Wind speed and ice loading considerations are specific and calculations will include all equipment listed that will be installed at a later date.
- Tower top lighting rod
- Risk Category IV
- Provide required signage.

OWNER DESIGN STANDARDS

1. The work shall comply with applicable design and fabrication standards:
 - ANSI/ASSE A10.48 Standard
 - ASSP Standards – Major Tower Standards can be accessed through the American Society of Safety Professionals (ASSP)
 - TIA 222 Rev G – This Standard provides the requirements for the structural design and fabrication of new and the modification of existing structural antennas, antenna-supporting structures, mounts, structural components, guy assemblies, insulators and foundations.
 - ANSI/TIA 322 – Loading, Analysis and design criteria.
 - ANSI/ASSE Z359 – ANSI/ASSE Z359 Fall Protection Code Package

SITE LOCATION

Station 8-2 is located at 19151 Four Dog Court, Big Lake, AK 99654

CODE INFORMATION

Contractor is responsible for adhering to and paying for all required Federal, State, and local, permits and/or registrations.

PERMITTING REQUIREMENTS

Contractor is responsible for all required permits not limited to the following:

1. Matanuska-Susitna Borough Code Title 17.67. Contact MSB Permitting office for details concerning tower construction permitting.
2. FCC Federal Permitting to include compliance with FCC rule implementing NEPA tribal notifications and compliance with Section 106.
3. FAA 7460 – Notice of proposed construction.
4. FCC registration of constructed tower.

BUILDING REQUIREMENTS

Pad: The site location for the tower is raw land and a 60' x 60' pad will need to be constructed. On site gravel is available. Over burden, with the exception of trees and stumps, can be disposed of on site in a neat and orderly manner.

Foundation:

The contractor is responsible for Foundation design that meets or exceeds the recommendations from the Geotechnical Report. See the Geotechnical Reports in Appendix B. Note: The Geotechnical report is a reference for bidding purposes. Foundation design is the responsibility of the award-contracted party as specified in the Scope of Work.

Tower Construction:

The Contractor is responsible for the proper Tower selection to insuring that all loads are considered. The Tower construction in accordance with manufactures recommendations and National Communication Tower Construction Standards. Equivalent Alternative tower to PiRod U series will be considered with Submit alternative tower information with bid.

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Fencing:

Approximately 200 feet of 8 foot commercial grade chain link enclosure with security wire with lockable double gate. Fencing will need to be coordinated with Project Manager to facilitate equipment shed placement by others.

BONDING AND GROUNDING

The Towers and site electrical design shall conform to the latest adopted edition of the following building codes and standards as well as any amendments adopted by the State of Alaska:

- National Electrical Code (NEC NFPA 72)
- Life Safety Code (NFPA 101)
- TIA/EIA Telecommunications Tower standards
- ANSI/TIA-607-B, Generic Telecommunications Bonding and Grounding.
- ANSI/NECA/BICSI-607
- A telecom/data grounding system in accordance with EIA/TIA 607 criteria.

DRAWINGS/SPECIFICATION

The following must be submitted to the Borough for approval.

Submit electronic copies of the submittal in PDF format and on a reproducible CD, DVD or flash drive, and three (3) Copies of the updated drawings and specifications. Printed drawing sheets shall be reduced 50% of their original size and printed on 11x17 sheets.

Items for submittal prior to construction:

- Tower selection, documentation of design parameters, latter access, safety climb, and equipment bracketing descriptions and locations.
- Foundation design, calculations, and design parameters
- Purposed site plan with offsets from property lines and purposed fencing.
- New remote Meter base
- Tower Bonding and grounding details
- Electrical disconnects and wiring details.
- Estimated lead time to ship Towers
- Construction schedule.

CONSTRUCTION DOCUMENTS

Based on the MSB's approval of the construction documents, and on the MSB's authorization of any adjustments in the Project requirements, the contractor shall prepare stamped Final Construction Documents for construction of the Work. Four (2) full size hard copies of the stamped drawings and specifications will be provided for the owner's use during construction.

RECORD DRAWINGS

Drawings will be provided in electronic PDF format and in the latest version of AutoCAD on a reproducible CD, DVD or flash drive, and four (2) full size hard copies.

CONSTRUCTION PERMITTING

The contractor is responsible for filing for and obtaining all required plan reviews and permits. The contractor shall include any changes to the work directed by authorities having jurisdiction (AHJ) at no additional cost to the MSB. The contractor shall investigate and determine which permits and plan reviews are required from other authorities having jurisdiction, including but not limited to State of Alaska agencies, Federal Communications Commission, Federal Aviation Administration, and Matanuska-Susitna Borough Permitting.

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