

Bismarck

Airport

DATE: June 17, 2019

FROM: Greg B. Haug, Airport Director

ITEM: Consider a Sole Source upgrade to the existing terminal telephone/data amplifier system.

REQUEST

Please place this item on the 6/25/2019 City Commission meeting agenda.

BACKGROUND INFORMATION

Shortly after the Bismarck Airport opened the new passenger terminal in May 2005 we found that interior spaces lacked signal coverage for cell phones. Staff worked with Electronic Communications Inc. here in Bismarck and the Board approved installation of an amplifier system with interior antennas and an external antenna on the dome of the building. The existing system uses 2 frequencies, one for AT&T and one for Verizon to provide cell and data service. The system has worked with no problems for over ten years. Over the last few years we have learned that the existing system has inadequate capacity for modern cell phone and data transfer inside the building. The new standard for this type of amplifier has 4 frequencies each for AT&T and Verizon and is able to carry much more data (Long Term Evolution (LTE)) than the old system. An upgrade to the system will increase speed, reliability and provide better service to the passengers and users.

Airport staff has been working with Marshal Pudwill from Electronic Communications Inc. for over 15 months to gain permission from AT&T and Verizon to use their frequencies. The process included submission of diagrams showing building signal coverage and signal strength as well as submission of specific plans for equipment to be used. On December 18, 2018 and April 9, 2019 the Board approved agreements with AT&T and Verizon respectively. In our memo to the Board we said we would later bring to the Board a plan for equipment upgrades to our existing cellular telephone/data amplifier system. We have completed an equipment upgrade plan that is compliant with our agreements with ATT and Verizon. The upgrades will include a roof mounting system and eight directional antennas (four for ATT frequencies, four for Verizon frequencies), connections to upgraded amplifiers (four for ATT, four for Verizon) combiners that communicate to numerous upgraded antennas throughout the terminal interior which interface with customer smart phones and devices. Other associated

equipment and testing is included as a turnkey installation. Electronic Communications proposes a cost of \$46,000.

RECOMMENDED CITY COMMISSION ACTION

Approve the sole source upgrade to the existing terminal telephone/data amplifier system with Electronic Communications Inc., at Enclosure 1.

STAFF CONTACT INFORMATION

Greg Haug | Airport Director, 355-1808 or ghaug@bismarcknd.gov

Enclosure

1. Upgrade proposal

CONTRACT REVIEW FORM

DEPARTMENT

Contract between the City of Bismarck and ELECTRONIC COMMUNICATIONS INC.

Purpose of Contract: UPGRADE EXISTING INDUSTRIAL CELLULAR AMPLIFIER SYSTEM INTERMINAL

Contract Amount: \$46,000.00

Contract Period: COMPLETE SUMMER 2019

Funding Source: AIRPORT SPENDING PLAN

Project Number: (If needed, send copy to Fiscal)

Comments:

After Mayor's Signature, route to: AIRPORT

Date:

Department Head Signature:

Date:

CITY ATTORNEY

Comments:

City Attorney Signature:

Date:

FINANCE

Comments:

Director of Finance Signature:

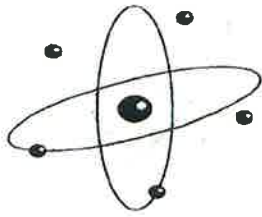
Date:

ADMINISTRATION

City Administrator Signature:

Date:

Please send copy of completed contracts to Administration.



***ELECTRONIC
COMMUNICATIONS
INC***

212 West Main Ave., Bismarck, ND 58501
(701) 258-7698 (800) 932-8911

April 4, 2019

Tim Thorsen, Assistant Airport Director
City of Bismarck (Airport)
2301 University Drive, Building #17
Bismarck, ND 58504

RE: Industrial Cellular BDA located at the Bismarck Airport

Tim,

The following is a final price quote to include all equipment and installation of the Industrial grade Bi-Directional Cellular amplifiers to cover all 4 bands of ATT and Verizon cell bands at the Bismarck Airport.

4 - Amplifiers, Combiners, Coax, internal antennas and external antennas
Jumpers, power dividers, splitters and installation. 46000.00

This proposal upgrades the current Cellular amplifiers that were install approximately 10 years ago.

Retransmission agreements with ATT and Verizon have been completed and signed.

If you have any further questions, please call.

Respectfully,

Marshall Pudwill

Marshall Pudwill

ACCEPTED:

DATE:
