Administrative Offices
P.O. Box 276
100 E. 4th Street
York, NE 68467

REQUEST FOR PROPOSALS: Fire Station Communications System

SUBMITTAL DUE DATE: September 23, 2025 by 2:00 PM

PROPOSALS MUST BE MAILED OR DELIVERED TO:
City of York, Attn: City Clerk
100 East 4th St., York NE 68476
(Electronic submissions are not permitted)

Please mark your envelope: "Fire Station Communications System RFP"

EIN/SSN (Required)_____
Federal I.D. Number

COMPANY NAME_____

ADDRESS:_____

CITY/STATE/ZIP_____

PHONE_____

PRINTED NAME_____

AUTHORIZED SIGNATURE_____

TITLE_____ EMAIL_____

Signature acknowledges that Proposer has read the bid documents thoroughly before submitting a proposal, will fulfill the obligations in accordance to the scope of work, terms and conditions and is submitting without collusion with any other individual firm. You must submit this page with an authorized signature.

ALL QUESTIONS MUST BE SUMMITTED BY EMAIL TO THE FOLLOWING PERSON:

Chief Tony Bestwick, tbestwick@cityofyork.ne.gov

Questions must be submitted no later than September 17, 2025. Questions submitted after that date will not be considered.

Non-mandatory Pre-Bid meeting: August 28 at 10:00 AM at 1714 N. Lincoln Ave, York, NE.

BIDDERS MUST SUBMIT THIS PAGE WITH ANY PROPOSAL

Request for Proposal

Project Name: Fire Station Communications System for York Fire Station

Project Location: 1714 N. Lincoln Ave, York, NE 68467. Ground elevation of 1650' above mean sea level, latitude 40-52-38 North & longitude 97-35-31 West.

Scope of Work:

Furnish and install a land mobile communications system to support emergency communications for the fire department and the city of York, Nebraska. The successful bidder shall be responsible for providing all labor, material and hardware along with transporting/delivery to the site, for a complete and fully functional land mobile communications system. The successful bidder shall supply a turnkey communications system to support emergency communications at the new Fire Station at 1714 N. Lincoln Ave., York NE.

The successful bidder shall furnish three copies of the final installation drawings to the York Fire Department.

FCC License:

Modifying the existing FCC Licenses for the new site shall be the responsibility of the City of York.

Radio Equipment:

The existing radio equipment will be transferred to the new station as part of this project. This transfer is described in the "Land Mobile Radio Equipment" section of this RFP.

Tower Details:

The City of York is installing a new 80-foot steel lattice tower on site with completion scheduled no later than October 1, 2025. The new tower will have antenna mounts to support all the detailed antennas in this proposal. The successful bidder shall supply all antennas feed lines and associated materials specified, all installation of the materials and complete turn-up of the communications system and testing.

The following antennas, feedline shall be furnished and installed as follows:

- 80-Foot Level, 1 Comscope DB420-B antenna. This antenna will be mounted at the top of the tower and fed with 7/8" Comscope LDF5-50A or equal 50 Ohm feed line. The feed line shall be grounded at the top of the tower as well as the grounding plate at the base of the tower. The feed line shall be terminated with "N" style connectors with a Polyphaser N-Male to N-Female lightning surge protector device grounded to the grounding plate inside the communication cabinet. The bidder shall also supply the jumper required from the Polyphaser to the duplexer of the main repeater. The

tower is equipped with a coax support ladder with 3/8" holes. The feedline shall be attached to the tower using Andrew stainless steel butterfly clips. No tie-wire shall be permitted for feedline attachment. This antenna will be attached to the York Fire Department main repeater

- 70-Foot level, 1 Comscope DB404-B antenna. This antenna will be fed with ½" Comscope LDF4-50A ½" hardline or equal. The feed line shall be grounded at the top of the tower as well as the grounding plate at the base of the tower. The feed line will be terminated with "N" style connectors with a Polyphaser N-Male to N-Female lightning surge protector grounded device to the grounding plate inside the cabinet. The bidder shall also supply the jumpers required from the Polyphaser to the PL259 female connector on the Kenwood base station. The tower is equipped with a coax support ladder with 3/8" holes. The feedline shall be attached to the tower using Andrew stainless steel butterfly clips. No tie-wire will be permitted for feedline attachment. This antenna will support the Tactical #1 base station.

- 55-foot level two (2) Laird Y-4505 Yagi antennas antenna 1 with an azimuth of 185 degrees. The second antenna at the 55-foot level will have an azimuth of 25 degrees. Both antennas will be fed with Comscope LDF4-50A ½" hardline or equal. The feed line shall be grounded at the top of the tower as well as the grounding plate at the base of the tower. The feed line will be terminated with "N" style connectors with a Polyphaser N-Male to N-Female lightning surge protector device grounded to the grounding plate inside the cabinet. The bidder shall also supply the jumper required from the Polyphaser to the base station PL259 of the base station. The antenna with an azimuth of 185 will support control of the McCool repeater, the antenna with an azimuth of 25 degrees will support control of the Thayer Repeater. The tower is equipped with a coax support ladder with 3/8" holes. The feedline shall be attached to the tower using Andrew stainless steel butterfly clips. No tie-wire will be permitted for feedline attachment.

- 50-foot level two (2) Laird Y-4505 Yagi antennas antenna 1 with an azimuth of 185 degrees. The second antenna at the 50-foot level will have an azimuth of 25 degrees. Both antennas will be fed with Comscope LDF4-50A ½" hardline or equal. The feed line shall be grounded at the top of the tower as well as the grounding plate at the base of the tower. The feed line shall be terminated with "N" style connectors with a Polyphaser N-Male to N-Female lightning surge protector device grounded to the grounding plate inside the cabinet. The antenna with an azimuth of 185 will support control of the McCool Operations repeater, the antenna with an azimuth of 25 degrees will support control of the Thayer Operations Repeater. The bidder shall also supply the jumper from N-Female to PL-259 female of the base station. The tower is equipped with a coax support ladder with 3/8" holes. The feedline shall be attached to the tower using Andrew stainless steel butterfly clips. No tie-wire will be permitted for feedline attachment.

Climate Controlled Modular Cabinet:
The successful bidder shall purchase the following for installation of land mobile radio equipment at the base of the communications tower.

- Purchase and install a Charles Industries Climate controlled cabinet Part #MC-32E6E6K1.
- Purchase and install a Charles Industries Cable Entry Port 97-EZENTRYKTHC4 for installation of cables into the Charles cabinet.
- The successful bidder shall supply the Charles Industries CPAD-M2BUNI7836 mounting pad. The successful bidder shall also supply the CPAD-SCRWANCRKT pad anchor screws.
- There are two 3" conduits to the base of the tower that will be installed prior to this project by the electrical contractor for the new fire station building. One conduit will provide AC power for the cabinet. The second will be used to support a 50/125um multimode fiber optic cable routed to the communications/data room in the new fire station to support communications to the Ethernet supported console.
- The successful bidder shall work with the general contractor and personnel from the York Fire Department to determine final location of the climate-controlled cabinet.
- The quoted climate-controlled cabinet has two bays. (see attached PDFs of the cabinet) The cabinets have a 2 row, 8 position ground bar at the bottom of each bay. These grounding bars shall attach to the tower ring ground system.
- The specified cabinet is also equipped with vertical and horizontal double stud ground both sides and rear of the cabinet.
- The quoted part number cabinet has a Square D Q0116L125GRB 125 A 16 position AC load center with main breaker, (1) 30A 2P breaker for AC surge arrestor, (1) 15A 1 breaker for GFCI, and Eaton ZD16731LN 100kA AC Surge Arrestor and GFCI service outlet in each bay bar. The AC power to this service panel will be furnished and installed by the contracted electrical contractor for the new building. Additional breakers and AC power distribution panels for the19" equipment racks shall be the responsibility of the successful bidder for the transfer of the radio equipment.

Communications/Data Room:
The successful bidder shall also supply and install a CPI-Chatsworth products wall mount 19" equipment Part #11790-118 rack to support the fiber optic patch panel and the media converter in the communications/data room on the second level of the fire station. The fiber optic patch panel and all devices/equipment are the responsibility of the successful bidder.

Fiber Optic Communications System:
The fire department currently uses a Telex ADHB-4 Console that will be removed from its current location (see "Land Mobile Radio Equipment" section for location) and installed in the watch/control room of the new station. This console is Ethernet based. The Ethernet is fed from an existing Linksys LGS124 switch that will be installed in the climate-controlled communications cabinet at the base of the tower. The successful bidder shall supply the

following to support the Ethernet connection from the outdoor communications cabinet to the communications/data room located on the second level of the fire station. Ethernet copper cabling from the communications/data room in the Fire Station shall be the responsibility of the data/phone supplier and not part of this bid.

The successful bidder shall furnish, install and terminate the following equipment:

- As required a 12 strand 50/125um multimode fiber optic cable. The cable will be installed from the climate-controlled cabinet to the communications room via an already installed 3" underground conduit. This cable shall be all dielectric with no metal or shield. This cable shall be Corning Freedom One Tight-Buffered cable Part Number 012T8F-31180-29, or equal.
- This cable will be terminated on 1 RU fiber optic patch panels in the outdoor cabinet and in the communications/data room at the fire station. The successful bidder shall supply the patch panels and modules to be inserted into the patch panels to allow the cable to be terminated with ST multimode connectors. Patch panels shall be Corning-C CCH-01U 1 Rack Unit panel equipped with two (2) Corning-C CCH-CP06-H3 6-pak adapters for ST connectors.
- The successful bidder shall terminate the installed cable at both ends for insertion into the ST 6-Pac adapters using ST 50um fiber optic connectors.
- The successful bidder shall supply two fiber optic media converters Lantronix E-100BTX-FX-05(HT) that will provide fiber to copper Ethernet transport from the outdoor cabinet to the communications/data room of the fire station. The successful bidder shall also supply Lantronix SPS-2460-SA standalone power supplies for each media converter. The media converters will be housed in a Lantronix RMS19-SA4-02 4-slot 1 rack unit media converter shelf at the climate-controlled cabinet and the wall mount rack installed in the Fire Station communications room.
- The successful bidder shall also supply two duplex ST 50um multi-mode fiber optic jumpers to connect from the installed fiber optic patch panel to the media converters.
- The successful bidder shall perform end-to-end testing of the fiber optic cable and provide the final test results to the City of York for review and acceptance.

Land Mobile Radio Equipment:

A coordinated agreement between the City of York and the successful bidder shall be required to transfer the existing radio equipment to the new fire station. The existing land mobile radio equipment, console and Ethernet switch is located at 125 East 8th Street, York, Nebraska. The successful bidder shall remove the Telex ADHB-4 console, the four (4) Telex IP-224 Ethernet to radio interfaces and the Lynksys LGS124 switch and associated shelves. The successful bidder shall then install the Telex ADHB-4 console in the watch/control room and complete Ethernet connection to the communications/data equipment room media converter via existing Ethernet data cabling installed by others to the

communications/data room. The successful bidder then shall install the mounting shelves from the old fire station in the equipment rack of the outdoor cabinet and mount the Telex IP-224 interfaces. The successful vendor will then install the Lynksys LGS124 Ethernet switch in the outdoor cabinet.

The successful vendor will then establish and test the Ethernet connection via the fiber optic cable and media converters from the climate-controlled cabinet to the console.

Please note: the console is already programmed for the radios that are to be installed. No programing should be required to make the system operational. The successful contractor shall ensure wiring associated with each radio matches the equipment removed and connections from the CPI TTP1N-C tone control modules, Telex IP-224 interfaces and the Linksys switch.

- First Radio moved shall be the Kenwood 450Mhz repeater, power supply, amplifier & duplexer. This equipment shall be installed in the outdoor cabinet and a successful bidder supplied jumper from the duplexer to the Polyphaser. All cabling and interfacing shall be completed and tested to confirm operation of the York Fire Department repeater.

- The second Radio moved will be the Thayer Repeater Control Kenwood base station with the CPI tone interface control module (TTP1N-C). This base station will attach to the Laird Y-4505 Yagi that is located at the 55-foot level pointed to an azimuth of 25 degrees. The successful bidder will once again furnish the jumper from the Polyphaser to the base station radio. The CPI interface module shall then connect to the correct Telex-IP224 module. All cabling and interfacing shall be completed and tested to confirm operation of the Thayer Repeater.

- The third Radio moved will be the McCool Repeater Control Kenwood base station with the CPI tone interface control module. This base station will attach to the Laird Y-4505 Yagi that is located at the 55-foot level pointed to an azimuth of 185 degrees. The successful bidder will once again furnish the jumper from the Polyphaser to the base station radio. All cabling and interfacing shall be completed and tested to confirm operation of the McCool Repeater.

- The fourth Radio moved will be the Thayer Repeater Control Operations Channel Kenwood base station with the CPI tone interface control module. This base station will attach to the Laird Y-4505 Yagi that is located at the 50-foot level pointed to an azimuth of 25 degrees. The successful bidder will once again furnish the jumper from the Polyphaser to the base station radio. All cabling and interfacing shall be completed and tested to confirm operation of the Thayer Repeater Control Operations.

- The fifth Radio moved will be the McCool Repeater Control Operations Kenwood base station with the CPI tone interface control module. This base station will attach to the Laird Y-4505 Yagi that is located at the 50-foot level pointed to an azimuth of 185 degrees. The successful bidder will once again furnish the jumper from the Polyphaser to the base station radio. All cabling and interfacing shall be completed and tested to confirm operation of the McCool Repeater Control Operations.

- The sixth Radio move will be the York Fire TAC #1 Channel Kenwood base station with the CPI tone interface control module. This base station will attach to the Comscope DB404-B antenna that is located at the 70-foot level. The successful bidder will once again furnish the jumper from the Polyphaser to the base station radio. All cabling and interfacing shall be completed and tested to confirm operation of the York Fire TAC #1.

Additional Requirements:

- All work must be completed by contractors who are registered with the City of York.
- All work must have approved city permits prior to the work beginning.
- All bidders and contractors on site must furnish proof of insurance.
- All contractors on site must follow all safety requirements of Scheele-Kayton Construction, the Fire Station construction contractor and participate in a safety orientation by Scheele-Kayton prior to commencing any work on the site.
- All bidders must provide contract information for at least two references from similar past work for a municipality or fire district.
- All bids must designate a time frame for completion of the project from notice to proceed.

BID RESPONSE:

All submittals shall become the property of the City. Proposals shall be submitted by September 23, 2025 at 2:00 PM to:

Amanda Ring, City Clerk
City of York
Ref: Fire Station Communications System RFP
100 East 4th Street
York, NE 68467

Proposals must be submitted in a sealed envelope and clearly marked on the outside, "Fire Station Communications System RFP." No email or fax submissions will be considered.

Required Contents for Bid Responses

- A completed City of York Bid Cover Page
- A proposal for completing all work outlined in this Request for Proposals that includes:
    - Qualifications of the personnel and contractors who will be involved
    - Description of the approach that will be used to complete the work
    - A time frame for completion on the work from Notice to Proceed (Expected Notice to Proceed is Oct. 3).
    - Cost and Payment Schedule for work completed, including at least a 10% contingency paid after all final testing and approval of the project by the City of York.
    - Description of similar projects completed for a municipality or fire district in the last four years, including a timeline and budget for those projects.
    - Contact information for references for at least two of these similar projects.

Selection Criteria

- Qualifications of firm project personnel and subcontractors.
- Project approach to ensure our project goals are met within time and cost constraints.
- Time frame for completion from Notice to Proceed.
- Cost to fully complete scope of work
- Past record of performance on relevant projects based on information from the proposal, references, and interview (if completed). Past performance considerations include: quality of communication with Fire Staff and other contractors, quality of work, cost control, and ability to meet schedules.

Submittals will be opened on September 23, 2025. The complete proposals will be distributed to members of the City of York staff for review and ranked based on the evaluation criteria. The City of York reserves the right to conduct interviews to better inform the judgment of the city concerning the most qualified contractor/supplier. The City of York reserves the right to select the most qualified firms/supplier/installer based on their assessment of these criteria.

This request for proposals does not commit the City of York to award a contract, to pay any costs incurred in the preparation of a proposal for this request, or to procure or contract for services. The City of York reserves the right to accept or reject any or all proposals received as a result of this request, to negotiate with any qualified firm or to modify or cancel in part or in its entirety the Request for Proposals, if it is in the best interest of the City of York to do so.

Proposed Timeline:

a. Proposal Submissions Due: Sept. 23 by 2:00 pm
b. Proposal Review: Sept. 23 – Sept. 30
c. Tower Completion: Oct. 1, 2025
d. Council consideration of Bid: October 2, 2025 at 5:30 PM
e. Notice to proceed for communications project: Oct. 3, 2025

Attachments:

- Schemmer Drawing E501
- Charles Industries LT-EZENTRYKTHC4 Cable Entry Port Kit Details & MC-32E6E6K1 Details
- York Fire Radio System Block Diagram (3-Pages)