# ADDENDUM TWO QUESTIONS and ANSWERS

Date: July 2, 2024

To: All Bidders

- From: Dianna Gilliland, Procurement Contract Officer AS Materiel State Purchasing Bureau (SPB)
- RE: Addendum for Request for Proposal Number 6905 Z1 to be opened July 15, 2024 July 11, 2024 at 2:00 P.M. Central Time

## **Questions and Answers**

Following are the questions submitted and answers provided for the above-mentioned Request for Proposal. The questions and answers are to be considered as part of the Request for Proposal. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

Question Number	RFP Section Reference	RFP Page Number	Question	State Response
1.	Section V	Page 27	Are there photos and a written report to reference to? If so, will a copy be provided?	Exhibit A – Inspection Report is posted separately on the RFP website and also attached below.
2.	Section V	Page 27	Are you requesting contractor to re-coat the guy wires?	Re-coating the guy wires are required. RFP Section V.D., third paragraph is hereby modified to include the following: While on site for diagonal replacements, begin treatment of 16 wires on workface, complete treatment of remaining 8 wires on back leg. Bidder is to supply a grease coating for the guy wires. The type of grease selected must be of a type designed for this application.
3.	Section V	Page 27	Project Description And Scope Of Work Item A, last line references to See Section F. Deliverables below for detailed information. Is this a typo and was meant to be letter "D", I can not locate a section "F".	Section V.A. Project Overview: last sentence is hereby deleted and replaced with the following: See Section D. Deliverables below for detailed information.

4.	Is there a line item scope available that details what work is expected to be performed?	Section V.C. Scope of Work hereby modified to include the following third sentence in the section: Location of work is the KUON- TV tower site, 851 County Road G, Ithaca, NE 68033. Winning bidder must contact Robert Vos, Transmissions Operations Manager at 308- 991-7443 or rvos@nebraskapublicmedia.org to coordinate scheduling tower work. Bidder must follow all standard safety procedures when rigging and derigging tower. NETC asks that bidder performs site cleanup at the conclusion of the project after tower is derigged. Refer to Attachment B – Line Items which list out the work expected to be completed. Attachment B is below.
5.	Is a Bid Bond required for this project?	No, a Bid Bond is not required.

This addendum will become part of the Request for Proposal and should be acknowledged with the Request for Proposal response.



KUON Ithaca, NE 2023

# INSPECTION REPORT

918.789.8084 pci@pcitower.com

#### **Summary**

DATE: 11/11/2023 LOCATION: Ithaca, NE Type: Guyed Height: 770' INSPECTOR: Ken Rickhoff FCC: 1029935

Ken Rickhoff of Precision Communications, LLC. completed a physical inspection of the KUON broadcast tower. Conditions then existing on the tower were noted and photographed. This report describes those conditions, includes reference photographs, and recommendations for any needed corrective action.

The contents of this report, including the recommendations, are based on a visual condition assessment per the TIA 222 Structural Standard for Antenna Supporting Structures and Antennas, Annex J. No type of structural analysis or testing of individual components is included or implied. The tower owner is responsible for maintaining the tower and its components and fulfilling any requirements of the FCC, FAA or any other governing body under which the tower or any of its components are subject.

Precision Communications, LLC 506 Industrial Road Grove, OK 74344 Phone: 918-786-8084 Fax: 918-786-8827 Email: pci@pcitower.com

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### Recommendations

There are areas of surface rust on the ladder where the galvanizing appears to be worn off. We recommend that the rusting areas be treated. **Ref: Photos 4, 5, & 7** 

The banding that secures diagonal members at their intersections is loose or missing in multiple sections throughout the tower. The banding is stretching over time. These conditions can cause wear and loss of steel where the diagonal members rub and hit each other at the intersections. We recommend that the banding be removed from all diagonals throughout the tower and replaced with U-bolts and backing plates.

Ref: Photos 16, 17, 18 – 22, & 26

There is surface rust at the intersection of some diagonal members that have loose or missing banding. We recommend that all rusting areas be treated and coated with a high zinc content primer when the bandings are replaced with U-bolts and backing plates. **Ref: Photos 20, 22, & 28** 

One diagonal member in Section #10, Bay #2, on Face B is bent. We recommend that this member be replaced. **\*\*Priority Ref: Photo 22** 

One diagonal member in Section #15, Bay #1, on Face C is bent at the upper and lower ends of the member. We recommend that this member be replaced. **\*\*Priority Ref: Photos 23 & 24** 

One diagonal member in Section #17, Bay #3, on Face A is bent. We recommend that this member be replaced. **\*\*Priority Ref: Photo 25** 

One diagonal member in Section #30, Bay #3, on Face B is bent. We recommend that this member be replaced. **\*\*Priority Ref: Photo 26** 

Note: All of the diagonals are mounted to the outside of the gusset plates, and this is causing them to bow at their intersections. Some look worse than others for this reason. Upon replacement of the damaged diagonal members, installing the new rods at the inside of the gusset plates would help reduce the bowing around each other.

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## **Recommendations continued**

The ladder does not have a safety climb cable system. We recommend that one be installed to comply with the ANSI TIA 222-G 12.3 code. **\*\*Priority** Ref: Photo 14

There are multiple brackets secured to the back side of the ladder at several elevations throughout the tower. The brackets are impeding the climbing area and some look to be preventing the climber from putting his foot directly on the ladder rung, and more on the Cchannel that is bolted to it. This represents a potential climbing hazard and is a safety concern. We recommend that two runs of rigid conduit be installed to support the coax lines, and the brackets be removed from the ladder. **\*\*Priority** 

Ref: Photos 13, 14, 28, & 29

The ladder is significantly bowed at two locations just below the second guy level. This represents a possible climbing hazard and is a safety concern. We recommend that the bowed ladder sections be replaced, and that all U-bolts securing the ladder be checked and tightened throughout the tower, as needed. **\*\*Priority** Ref: Photo 28

Guy wire levels #5 and #6 are not within the current TIA tower specifications for guy tensions. We recommend adjusting the tensions at these levels. The rest of the tensions and vertical alignment are within specifications. **\*\*Priority Ref: Page 22** 

There are areas of surface rust on the guy wires, mostly at the upper elevations of each wire. We recommend treating the guy wires with an anodic self-priming paint or paraffin wax to prevent the progression of the rusting.

**Ref: Photos 39 - 43** 

There are broken chunks of concrete at the outer anchor A foundation, and slight cracks in the concrete at the inner anchor B and outer anchor C foundations. We recommend that the outer anchor A foundation be repaired, and the cracks in the concrete at the inner anchor B and outer anchor C foundations be patched and sealed. **Ref: Photos 32 - 34** 

Several cables and flexible lines to ancillary antennas were found to be unsecured at several locations. The lines were temporarily secured with electrical tape and nylon zip ties during the inspection. We recommend that the lines be secured with proper stainless steel hardware, and that the broken hangers that have slid down the line in section #15 be removed. Ref: Photos 50, 51, 54,

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# **Recommendations continued**

The hoisting grip for the flexible line feeding the dipole antenna in section #20 is secured with a butterfly clamp. We recommend that the grip be supported with stronger hardware. **Ref: Photo 53** 

There is light to moderate surface rust on the mount for the dipole antenna in section #20. We recommend that the rusting areas be treated and coated with a high zinc content primer. **Ref: Photo 52** 

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Broadcast Photographs 1 - 10 Main Antenna: Andrew ATW16V5-HTO -12 Center of Radiation: 820' Transmission Line: RCA 6-1/8" rigid coax with Marmon flanges



Profile view of main antenna. Photo also shows faded and missing paint.



Antenna base mount.



Transmission line input and top fixed hanger.



Transmission line elbow complex below the antenna input. Photo also shows some surface rust on the ladder.



Fixed hangers below the top elbow complex. Photo also shows some surface rust on the ladder.



Transmission line location in the tower.



Typical spring hanger. Photo also shows surface rust on the ladder.



Transmission line elbow complex at the tower base.



Transmission line in the bridge.



Transmission line entering the building.

Structure Photographs 11 - 29 Manufacturer: Stainless G-7 Type: Guyed Height: 770'

The sections of tower appeared in satisfactory condition. The paint coverage has faded and worn off at some elevations. The climbing ladder does not have a safety climb cable system installed. The lightning rod assembly above the top mounted antenna appeared in satisfactory condition.



Profile view of tower.



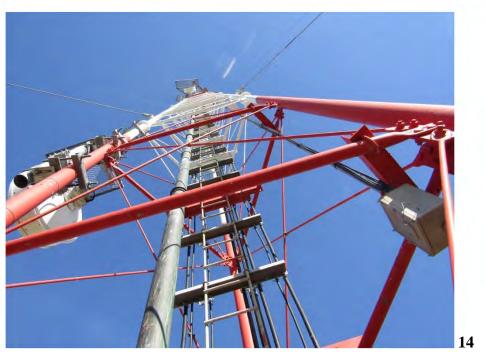
Typical leg splice and gusset plate connections.



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Typical bracing configuration. Photo also shows C-channel brackets secured to the back side of the ladder.

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The climbing ladder without a safety climb cable system. Photo also shows C-channel brackets secured to the back side of the ladder.



Grounding at the tower base.

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Typical missing banding at the intersection of diagonals.



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Typical missing banding at the intersection of diagonals.

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Typical loose banding at the intersection of diagonals.



Typical loose banding at the intersection of diagonals.



Typical loose banding at the intersection of diagonals. Photo also shows rust at the intersection of the diagonal members.



Typical loose banding at the intersection of diagonals.



Bent diagonal member in Section #10 with 1" deflection. Photo also shows rust at the intersection of the diagonal members.



Bend at the lower end of diagonal member in Section #15.

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Bend at the upper end of diagonal member in Section #15.



Bent diagonal member in Section #17.

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Bent diagonal member in Section #30. Photo also shows loose banding and surface rust at the intersection of the diagonal members.



Surface rust on the ladder.

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C-channel mounting brackets secured to the ladder below guy level #2. Photo also shows two significant bows in the ladder.



C-channel mounting brackets secured to the ladder below guy level #4.

Guy Wires Photographs: 30 - 43 Guy Levels: 6

# **Vertical Alignment**

The vertical alignment of the tower was measured with a transit set up in two locations  $90^{\circ}$  apart from each other. Facings were verified using a lens tic compass.

-	Tempera	ature: 55 deg	grees	Wind: 5 mph		
Guy	Trai	nsit A Facing	Leg A 0	Transit B Facing Leg A 90		
Level	Left	Ø	Right	Left	Ø	Right
1		Ø			Ø	
2		Ø			Ø	
3		Ø			Ø	
4		Ø			Ø	1
5		Ø	1	· · · · · · · · · · · · · · · · · · ·	Ø	
6		Ø		1	Ø	

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## **Guy Wire Tensions**

The tensions of the guy wires were measured from the A anchor with an intercept scope. The recommended tension intercept readings are at 55 degrees off the provided temperature chart.

The acceptable tolerance for tensions on the guy wires is plus or minus 5%, according to . documents provided by SpectraSite.

Temperature: 55 degrees Wind: 5 mph				
Guy Level	Measured Intercept / Sag (Feet)	Recommended Intercept / Sag (Feet)	Percentage	
1	10'	10.5'	+ 0.4 %	
2 R	15'	14.6'	02 %	
2L	14.8'	14.6'	0 %	
3	24'	25.3'	+0.5 %	
4 R	88'	92'	+4 %	
<b>4</b> L	87'	92'	+4 %	
5	92.4'	81.3'	-11 %	
6	96'	83.6'	-12 %	

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Inner anchor A with brush growing on the guy wires.



Inner anchor A after removal of brush by the inspection crew.



Broken concrete at the outer anchor A.



Small cracks in the concrete at the inner anchor B.



Small cracks in the concrete at the outer anchor C.



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Typical fencing at the anchors, and dampers on the guy wires.



Typical grounding cable connections on guy wires.



Typical tower connection for guy wires at levels #1, #3, #5, & #6.



Typical tower connection for guy wires at double guyed levels #2 & #4.



Typical areas of surface rust on at the upper end of a level #3 guy wire.



Typical areas of surface rust on a level #3 guy wire.



Typical areas of surface rust on a level #4 guy wire.



Typical areas of surface rust on a level #5 guy wire.



Typical areas of surface rust on a level #6 guy wire.

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Lighting Photographs: 44 - 49 Lighting type: Dialight LED Dual Mode System Levels: 4



Typical flash head and ice shield.

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Typical controller box.



Location of rigid conduit in the tower.

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Light fixture level #2.



Junction box at light level #2.

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Ancillary Photographs 49 - 54



Flexible lines to ancillary systems

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Flexible line to the dipole antenna in section #20 was unsecured. The line was temporarily secured with electrical tape during the inspection.



Broken hangers that slid down a flexible line in section #15. The crew temporarily secured the line with zip ties.



Surface rust on the mount for the dipole antenna in section #20.



Hoisting grip for the flexible line feeding the dipole antenna in section #20 secured with a butterfly clamp.



Unsecured flexible line noted in photo #50, before being temporarily secured by the inspection crew.

#### 6905 Z1 Attachment B - Line Items

- 1. Install new customer supplied safety cable on main ladder in tower shaft and at top transition ladder.
- 2. Replace 4 customer supplied diagonal members and hardware, 1 in S.10 B.2, S.15 B.1, S.17 B.3 and one in S.30 B.3.
- 3. Replace 2 customer supplied ladder sections and hardware below guy level 2.
- 4. Punch new holes for conduit U bolts on back side of ladder as needed.
- 5. Install 2 runs of customer supplied 1" conduit and hardware on back side of ladder. (qty 155 pieces of 1"x10' long rigid conduit.)
- 6. Move coax from brackets u-bolted to ladder to the new conduit with existing butterflies and hardware or up to 100 new ones (customer supplied) then remove brackets from ladder.
- 7. Rust treat spots in tower.
- 8. Remove wrap lock at all diagonal intersections and install customer provided U bolt assembly with backing plate and hardware. U-bolts and backing plates are customer supplied approx. qty 400.
- 9. Patch and seal concrete anchors with grout as needed.
- 10. Complete Plumb and Tension on tower.
- 11. Relocate and properly secure hoisting grip in Sec. 20 on the 1/2" coax to strut location.