

Missouri Department of Transportation
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**ADDENDUM 001
Flat Radio Tower
Request for Bid 9-150331TV**

Bidders should acknowledge receipt of Addendum 001 (ONE) by **signing** and **including it** with the original bid. The due date for receipt of bids is extended to **April 9, 2015** at 2:00PM Local Time. Accordingly, the following clarifications, questions and answers are believed to be of general interest to all potential Bidders. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Name: Tom Veasman Title: Sr. General Services Specialist
Bidder Signature (Signature of person authorized to sign)	Department of Transportation  (Authorizing Signature)
Date Signed:	Date Signed: March 25, 2015

The opening of the Flat Radio Tower bids will be **extended to April 9, 2015 at 2:00 pm** at the same location given in the original Request for Bid in order to allow vendors time to incorporate the following information into their bid:

Tower Revisions/Clarifications:

- Clarification: Any required AC service surge suppression equipment will be installed and provided by MoDOT.
- Clarification: Any grounding required for repeaters and other radio equipment in the shelter will be provided by MoDOT.
- Clarification: Fence grounding for all fencing and gates including the tower compound and the guy anchor locations shall conform to all R56 requirements.



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- Clarification on removal of old radio tower: The method of tower removal is at the discretion of the contractor. The removal process shall not damage any trees, existing power pole, any part of the adjacent tower or compound facility, and shall not impact State Route M.
- Clarification on concrete anchor demolition: All concrete bases and guy anchors shall be removed at a minimum of 1' below grade. Any concrete anchors that conflict with new anchors shall be completely removed.
- Tower Specification Item 5. b. *remove and replace* with: The existing equipment shelter and associated concrete pad, fencing, fence post bases and any other waste, scrap or debris shall be removed and disposed of by the contractor at an appropriate disposal facility or scrap recycling facility.
- *Remove* Tower Specification Item 5. c.
- Tower Specification Section 11, *add*: All antenna connections shall be made directly from the feed line to the antenna connector or phasing harness unless a direct connection will create a rub point or cannot be otherwise properly dressed. If a jumper is required it shall be made from Times Microwave® LMR400 cable with properly installed connectors and shall include a drip loop. The length of the jumpers will be the shortest possible for the situation. These jumpers shall conform to the loss requirements in Section 10.h.
- Tower Specifications Section 11.h. *remove and replace*: h. **Cable Tray**. A cable tray system shall be installed inside the shelter to support all tower cables from the entry ports. The cable trays shall be ladder style or mesh basket style and shall be constructed of aluminum or zinc coated steel. A minimum 24" wide cable tray shall span the full length of the building (16') from the entry ports to the opposite wall. A minimum 6" wide cable tray shall support the aviation lighting cable. The cable tray system shall be installed and supported according to manufacturer's specifications. All cables shall be fully supported in a cable tray to just over the associated equipment. The 7/8" feed lines inside the shelter shall be continuous to a nominal 1 foot inside the coax entry port (to allow for any future repairs) and as close as possible to the master bus bar inside the shelter.

Vendor Questions:

- **QUESTION:** Exposure category; there are some open fields in the area of interest around the tower (TIA-222-G Addendum 1 Section 2.6.5.1), should the exposure category be changed to "Category C"?
ANSWER: *Following the Addendum 1, the area of interest is a 6000' radius around the tower. About 95% of this area is mature forest. There are some scattered fields in the area of interest, but these fields are relatively small, have tree lines through them and scattered groves of trees within them. We do not believe these fields create an "open terrain" situation.*

- QUESTION: Who will provide the antenna and feed lines for the US Forest Service equipment?
ANSWER: *These will be provided by US Forest Service as specified in section 10.d. of the Tower Specifications.*
- QUESTION: What is required for the transmission line grounding?
ANSWER: *This is detailed in section 11.i. of the Tower Specifications.*
- QUESTION: Would MoDOT allow a used shelter?
ANSWER: *We require a new shelter to assure the maximum shelter life and to assure that the shelter is fabricated to meet our requirements.*
- QUESTION: What are the cable tray requirements?
ANSWER: *These are detailed in section 11.h. of the Tower Specifications.*
- QUESTION: What are the grounding requirements for the ice bridge?
ANSWER: *These are referenced in section 14.g. of the Tower Specifications and detailed in section 4.7.10.2 of R56.*

Building and Site Revisions/Clarifications:

- The US Forest Service will move the metal building that is currently within the fenced area.
- MoDOT will consider a new Pre-Fab Tower Equipment Shelter with a minimum of 9' X 16' inside dimensions as an alternate to our plans for a Tower Equipment Shelter. It should have similar penetrations to our shelter plans for a functional system. A slab will be required with thickened concrete (Shelter Plans Detail A3) extending 1' outside the perimeter of the building on all sides. A concrete passage door stoop will be required as shown on the plans. The pre-fab building must be comparable to the building shown on our plans both structurally and in its heating/ cooling capabilities.
- AC Service Panel/Transfer switch, backup generator and propane tank will be provided and installed by MoDOT. Two (2) working day notice is required for installation of these items.
- Add 2 conduits from building to generator:
 - AC Feed
 - 2" Minimum conduit for monitoring cable
- 2" Minimum conduit from building to propane tank for future monitoring cable.
- Note: All conduits can be the same size.
- Concrete cylinder requirements are covered in the Flat Radio Tower Equipment Shelter Specifications, Section 03300, Part 2 Products.
- Remove Flat Radio Tower Equipment Shelter Specification, Section 02220, 2.2 Weed Killer.

- Flat Radio Tower Equipment Shelter Plans, Sheet 2 of 9 contains a note on the left side of the page requiring the vendor to: "Provide a 4" Sch 40 PVC with Fiber Optic Sweeps up through Floor Slab 12" A. F. F. below transfer switch, extend 5' beyond chain link fence and cap 24" below grade". Replace note with the following:
Provide a 4" Sch 40 PVC with Fiber Optic Sweeps up through Floor Slab 12" A. F. F. below transfer switch, extend to power pole.
- Flat Radio Tower Equipment Shelter Plans, Sheet 4 of 9, Cross Section B4 incorrectly referenced a 26 ga. Prefinished Steel Wall Panel. It should instead reference ½" AC Plywood Painted.
- The Contractor is responsible for the demolition and proper disposal of the block building. Disposal must meet all state and federal regulations. The following landfill contacts may be of service in the disposal of the building:
WCA Waste Corporation of America (Special Waste Division)
Mark Scott, E-mail: mscott@wcamerica.com Phone: 501-350-5359

Prairie Valley Disposal Inc, 3975 Highway 19, Cuba, MO 65453 573-885-7596
For trucking of waste: Ronnie Voight 573-885-6921 rvoight@swingerssanitation.com
- The Contractor may desire to sell the old radio tower as salvage steel. The following local recycling vendors may be of interest:
Didion Orf Recycling West 14090 Dillon Outer Rd, Saint James, MO 65559 (573) 265-1243

Recycling Works 12814 County Road 5030, Rolla, MO 65401 (573) 368-3688

Davis Recycling 16460 County Road 8240, Rolla, MO 65401 (573) 364-2157

Tomco Metals 11310 W Little Oaks Rd, Rolla, MO 65401 (573) 364-1444

Skaggs Recycling 102 S Spilman Ave, Rolla, MO 65401 (573) 341-3936

Ft Wood Recycling Center 16805 Superior Rd, Saint Robert, MO 65584 (573) 336-8886

Scenic Rivers Industries Inc 601 S Walker St, Salem, MO 65560 (573) 729-6264

Hall's 410 Highway 68, Salem, MO 65560 (573) 729-2326

R & R Metals 165 Road Runner Ln, Cuba, MO 65453 (573) 885-7876
- The Contractor will be required to give 10 days notice prior to demolition by filing the Missouri Dept. of Natural Resource's ASBESTOS NESHAP NOTIFICATION OF DEMOLITION AND RENOVATION FORM. Go to the following link for a fill-in version:
<http://dnr.mo.gov/forms/780-1923-f.pdf>
Form and instructions are attached to this addendum.



Asbestos NESHAP Notification of Demolition and Renovation Application Instructions for Form 780-1923

Air Pollution Control Program fact sheet

10/2013

Division Of Environmental Quality Director:- Leanne Tippet Mosby

- I. First time notices = "Original."
Amended projects = "Revision."
Notice of cancellation = "Cancelled."
- II. If no asbestos removal was necessary, indicate "N/A" for asbestos removal contractor.
- III. Indicate the type of project.
- IV. Mark the "YES" box if asbestos is present. In the next box, indicate the types of asbestos materials present. Mark the "NO" box if no asbestos is present.
- V. Failure to complete this section will result in an unapproved project. Include building uses, sizes and age. If you do not know the exact information, give your best estimate.
- VI. All regulated structures must be inspected by a certified asbestos inspector prior to renovation or demolition. Typically "Certified asbestos inspector, with sample analysis by PLM was the method used." If other methods were used, explain.
- VII. All asbestos materials present in the building must be included here. Enter amounts (in ft², linear feet or cubic feet) of material to be removed or left in the building. For example, in the column "Nonfriable asbestos material to be removed," under sub-column "CAT II" (on the "surface area" line) you might enter "5,200" and "transite" under the number.

The inspection report, which must be attached to the notification, should reflect this information.
- VIII. This line must be completed. Never enter a date that is not at least 10 working days beyond your postmark date, unless granted a waiver by the Department. Missouri law requires notification to be submitted at least 10 working days in advance of the project start date.
- IX. Enter the dates on which asbestos removal abatement will occur or has occurred.
- X. Please give a brief description of your demolition/renovation plans including the scope of work to be performed and the methods used to perform the work. Use an additional page if necessary.
- XI. Describe how any asbestos containing materials involved will be removed prior to demolition/renovation. If asbestos containing materials will be left in the building, then indicate precautions used to prevent material from being made friable. If all asbestos has been removed, "N/A."

- XII. Identify Waste Transporter.
- XIII. Identify Waste Disposal Site.
- XIV. Complete this section only for ordered demolitions. Submit the order with the notification. For all others, "N/A."
- XV. Complete this section only for emergency renovation projects. For all other renovations, indicate "N/A."
- XVI. Indicate what will be done in the event friable asbestos or suspect materials are unexpectedly encountered.
- XVII. For regulated asbestos abatement or demolition of an unsafe or damaged structure when a prior inspection has not been conducted, a person trained in the requirements of 40 CFR Part 61, Subpart M must be on-site to supervise the asbestos abatement. In the event no asbestos is present or has already been removed, "N/A".
- XVIII. Always sign and date this line. This form may be signed by the project owner or operator. The project approval letter will be mailed to the person who signs the notification form.

Note: For all regulated demolition and renovation projects, always include a complete copy of your asbestos inspection report with the notification form.

Completed forms should be sent to:

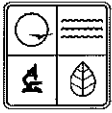
Missouri Department of Natural Resources
Air Pollution Control Program, Asbestos
P.O. Box 176
Jefferson City, MO 65102

Or by priority mail to:

Missouri Department of Natural Resources
Air Pollution Control Program, Asbestos
1659 East Elm St.
Jefferson City, MO 65101

For More Information

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
800-361-4827 or 573-751-4817
www.dnr.mo.gov/env/apcp/index.html



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

ASBESTOS NESHAP NOTIFICATION OF DEMOLITION AND RENOVATION

OPERATOR PROJECT NO.		POSTMARK		DATE RECEIVED		NOTIFICATION NUMBER		
I. TYPE OF NOTIFICATION								
☐ O - ORIGINAL ☐ C - CANCELLED ☐ R - REVISION, WRITE REVISION NUMBER _____								
II. FACILITY INFORMATION (IDENTIFY OWNER, REMOVAL CONTRACTOR, AND OTHER OPERATOR)								
OWNER NAME				ADDRESS				
CITY		COUNTY		STATE		ZIP CODE		
CONTACT				TELEPHONE NUMBER WITH AREA CODE				
ASBESTOS REMOVAL CONTRACTOR				ADDRESS				
CITY				STATE		ZIP CODE		
CONTACT		TELEPHONE NUMBER WITH AREA CODE		TITLE				
DEMOLITION CONTRACTOR				ADDRESS				
CITY				STATE		ZIP CODE		
CONTACT		TELEPHONE NUMBER WITH AREA CODE		TITLE				
III. TYPE OF OPERATION								
☐ D - DEMO ☐ O - ORDERED DEMO ☐ R - RENOVATION ☐ E - EMERGENCY RENOVATION								
IV. IS ASBESTOS PRESENT								
☐ YES ☐ NO		LIST TYPE OF ASBESTOS MATERIAL(S) TO BE REMOVED						
V. FACILITY DESCRIPTION (INCLUDE BUILDING NAME, NUMBER AND FLOOR OR ROOM NUMBER)								
BUILDING NAME								
ADDRESS								
CITY		COUNTY		STATE		ZIP CODE		
SITE LOCATION								
BUILDING SIZE		NUMBER OF FLOORS		AGE IN YEARS				
PRESENT USE				PRIOR USE				
VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL. INCLUDE A COPY OF THE ASBESTOS INSPECTION.								
PROCEDURE USED								
VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. REGULATED ACM (RACM) 2. CATEGORY I ACM 3. CATEGORY II ACM				RACM TO BE REMOVED	NONFRIABLE ASBESTOS MATERIAL TO BE REMOVED		NONFRIABLE ASBESTOS MATERIAL NOT TO BE REMOVED	
					CAT I	CAT II	CAT I	CAT II
PIPES (LINEAR FEET)								
SURFACE AREA (SQUARE FEET)								
VOL. RACM OFF FACILITY COMPONENT (CUBIC FEET)								

VIII. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY)			
START:		COMPLETE:	
IX. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY)			
START:		COMPLETE:	WEEKDAYS WORK HOURS
			WEEKEND WORK HOURS
X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED			
XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE.			
XII. WASTE TRANSPORTER			
NAME		ADDRESS	
CITY		STATE	ZIP CODE
CONTACT PERSON		TELEPHONE NUMBER WITH AREA CODE	
XIII. WASTE DISPOSAL SITE			
NAME			
LOCATION			
CITY		STATE	ZIP CODE
TELEPHONE NUMBER WITH AREA CODE			
XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW			
NAME		TITLE	
AUTHORITY			
DATE OF ORDER (MM/DD/YY) INCLUDE A COPY OF THE ORDER.		DATE ORDERED TO BEGIN (MM/DD/YY)	
XV. FOR EMERGENCY RENOVATIONS			
A. DATE AND HOUR OF EMERGENCY (MM/DD/YY)			
B. DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT			
C. EXPLANATION OF HOW THE EVENT CAUSED UNSAFE CONDITIONS OR WOULD CAUSE EQUIPMENT DAMAGE OR AN UNREASONABLE FINANCIAL BURDEN			
XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUS NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.			
XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS (REQUIRED 1 YEAR AFTER PROMULGATION).			
SIGNATURE OF OWNER/OPERATOR			DATE
XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.			
SIGNATURE OF OWNER/OPERATOR			DATE