

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
NEW FM STATION (FACILITY ID 88360)  
STEAMBOAT SPRINGS, COLORADO

AUGUST 27, 2010

CH 255A 1.85 KW 183 M

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Table of Contents

Technical Narrative

Figure 1	Proposed Antenna and Supporting Structure
Figure 2	Predicted FCC Coverage Contours
Figure 3	FM Separation Study

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Technical Narrative

This Technical Exhibit was prepared on behalf of Ramsey Leasing, Inc., applicant for a new Class A FM station on channel 255, at Steamboat Springs, Colorado. Ramsey Leasing, Inc. prevailed in FCC Auction No. 88, and is required to file an application for construction permit by August 30, 2010.<sup>1</sup>

Proposed Facilities

This application proposes a new Class A FM radio facility at the following NAD27 site coordinates: 40-27-43 N, 106-50-58 W. The proposed antenna structure is existing and identified by ASRN 1023535 (see Figure 1). The applicant proposes to install an ERI, model LPX-1, 1-bay "rototiller" antenna at the 15 meter level. The proposed effective radiated power (ERP) is 1.85 kilowatts (kW) and the antenna height above average terrain (HAAT) of 183 meters (equivalent to maximum Class A facilities).

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station is predicted to extend radially 0.5 kilometer from the transmitting site. No interference is expected. However, the applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

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<sup>1</sup> See MM-FM746-255A in DA 10-1360, released July 29, 2010

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Proposed Coverage Analysis

Figure 2 is a map showing the predicted FCC coverage contours for the proposed operation. The FCC predicted 70 dBu coverage contour will encompass all of the Steamboat Springs city limits as derived from 2000 U.S. Census data, using 8 evenly spaced radials, as noted below.

The overall average HAAT (183 meters, rounded to the nearest meter) was determined using the FCC's online *Antenna Height Above Average Terrain (HAAT)* program, the 30-second terrain database and 8 evenly spaced radials (every 45 degrees of azimuth).

Allocation Study

There is no proposed change in station class and only a 1 second correction in longitude (due to tower registration) as compared to the "short-form" application. As shown in Figure 3, the proposed operation meets the FCC's minimum separation requirements as specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations.

Radiofrequency Electromagnetic Field Exposure

The proposed FM facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Based on the FCC's FM Model program using a 1-bay ERI "rototiller" antenna, the calculated power density at a point 2 meters above ground level will not exceed  $0.165 \text{ mW/cm}^2$ , which is 82% of the FCC's recommended limit of  $0.2 \text{ mW/cm}^2$  for FM channels, applicable to general population/uncontrolled exposure areas. RF measurements will be taken to determine the actual power density at the site and location of a fence to be erected, if needed.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by

spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed operation appears to be otherwise categorically excluded from environmental processing.

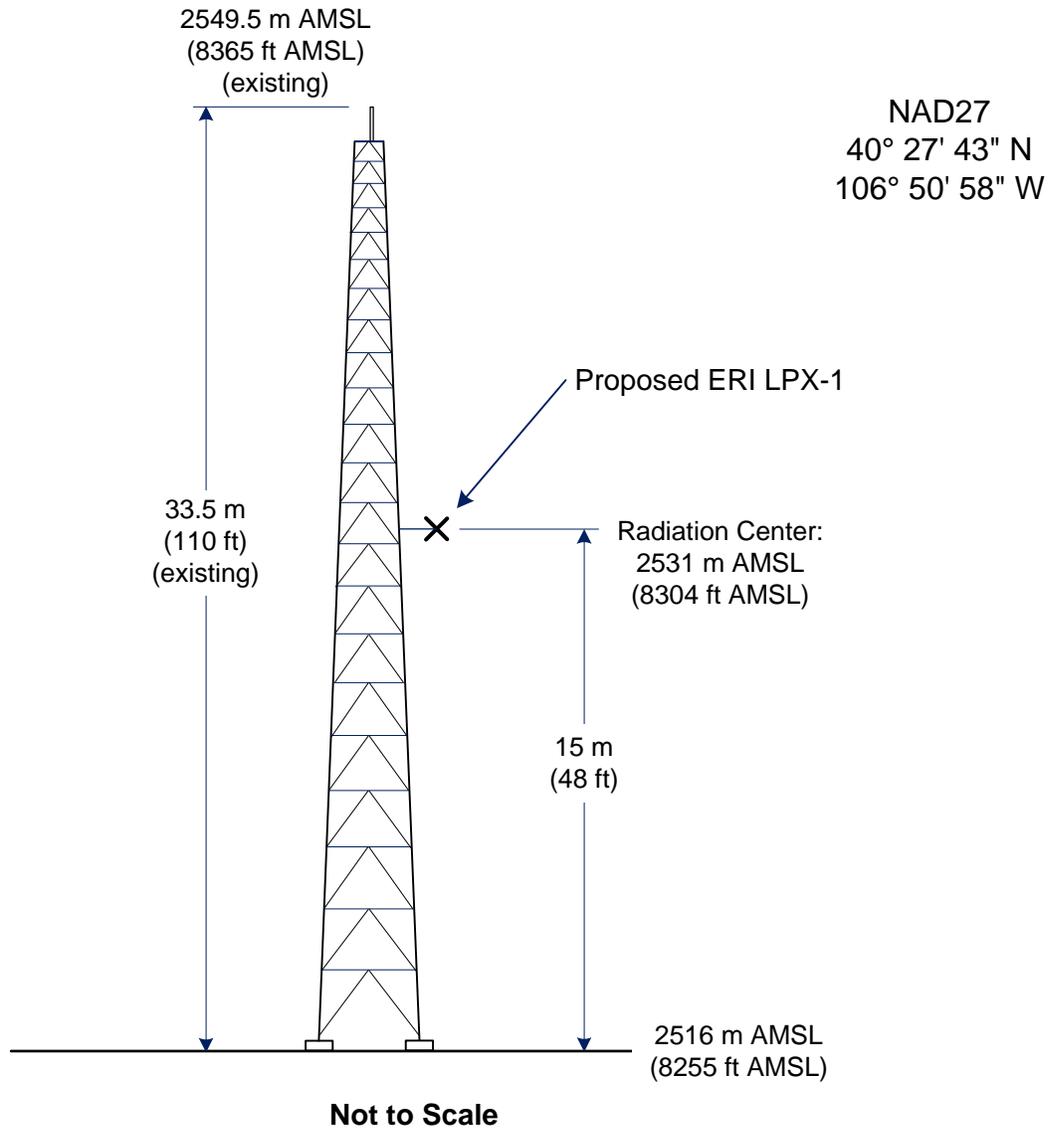
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



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August 27, 2010



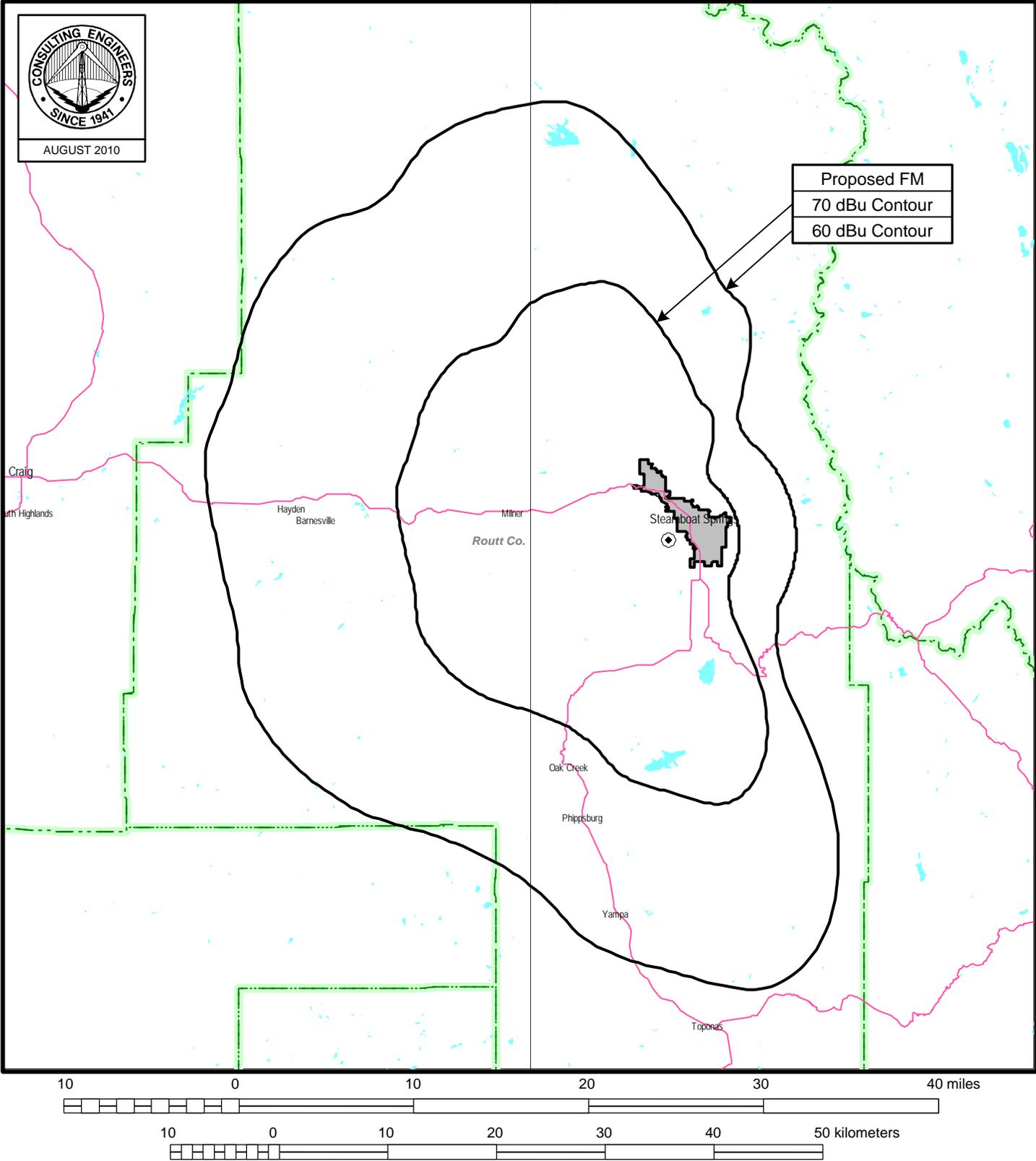
**PROPOSED ANTENNA AND SUPPORTING STRUCTURE**

NEW FM STATION

STEAMBOAT SPRINGS, COLORADO

CH 255A 1.85 KW 183 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida



**PREDICTED FCC COVERAGE CONTOURS**  
 NEW FM STATION  
 STEAMBOAT SPRINGS, COLORADO  
 CH255A 1.85 KW 183 M  
 du Treil, Lundin & Rackley, Inc Sarasota, Florida

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PROPOSED SITE FM SEPARATION STUDY

**Channel:** 255    **Coordinates:** 040-27-43 106-50-58 (NAD 27)  
**Class:** A    **Buffer Distance:** 16 km

**Date:** 08/27/2010

Callsign	Status	Chan.	Serv.	Freq.	City	State	Latitude	Dist.(km)	Sep.(km)
Fac.ID	ARN		Class	DA	Ant. ID	ERP(kW)	HAAT(m)	Bear.(deg)	73.215
970911MV	APP	255	FM	98.9	STEAMBOAT SPRINGS	CO	040-27-43	0.02	115
88360	BPH	19970911MV		A N		1.7	186	90	92
<i>(Applicant's short-form application)</i>									
970908MB	VAC	255	FA	98.9	STEAMBOAT SPRINGS	CO	040-29-12	3.13	115
88230				A			106-49-54	28.67	92
<i>(Allotment reference point for proposed assignemnt)</i>									