

TECHNICAL EXHIBIT  
APPLICATION FOR FM CONSTRUCTION PERMIT  
FM BOOSTER  
RADIO STATION KPEB (FM)  
OGDEN, UTAH

APRIL 14, 2004

CH 276 0.5 KW (MAX-DA)

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for a new FM booster at Ogden, Utah. The primary station is KPEB(FM) on Channel 276C assigned to Coalville, Utah.

Proposed Transmitter Location

The location is uniquely described by the following geographic coordinates:

41° 20' 32" North Latitude  
112° 00' 30" West Longitude

A map showing the transmitter location is included herein as Figure 1. A sketch showing the proposed antenna and supporting structure is shown on Figure 2.

Coverage Contours

Figure 3 is a map showing the proposed booster station's 60 dBu (1.0 mV/m) coverage contour encompassed by the

primary station's (KPEB(FM), Channel 276C, Coalville, Utah) 60 dBu protected contour.<sup>1</sup>

The appendix contains the information on the proposed Jampro directional antenna that will be shared with another booster for station KOTB.

#### Allocation Study

The proposed booster facility appears to satisfy the protection requirements toward first adjacent channel stations as required by Section 74.1204(i) of the Commission's Rules as to all facilities.

#### Radiofrequency Electromagnetic Field Exposure

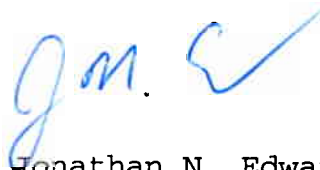
Due to the multiple emitters either proposed or presently located on the tower, the applicant will undertake a radiofrequency electromagnetic field exposure survey after construction to ensure that any areas at ground level that exceed the Commission's exposure guideline values are appropriately marked and fenced. The results of the survey will be provided with the application for license.

When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency electromagnetic fields will not exceed the FCC guidelines.

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<sup>1</sup> The KPEB(FM) authorized facility, BMPH-20040204ABK, is used to define the primary station.

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 as part of the tower registration process.



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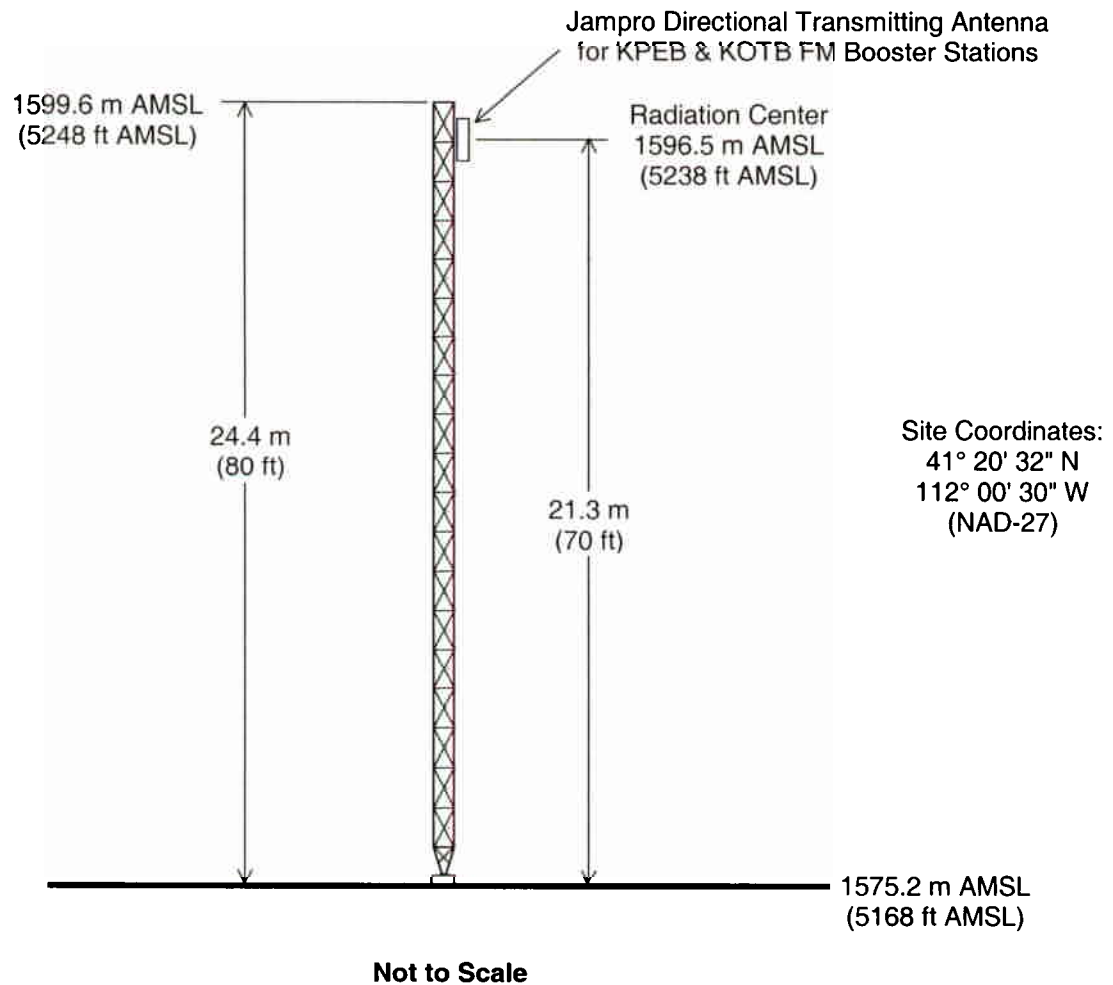
April 14, 2004

Figure 1



**PROPOSED TRANSMITTER SITE**  
**RADIO STATION KPEB(FM) BOOSTER**  
**OGDEN, UTAH**  
**CH 276 0.5 KW (MAX-DA)**

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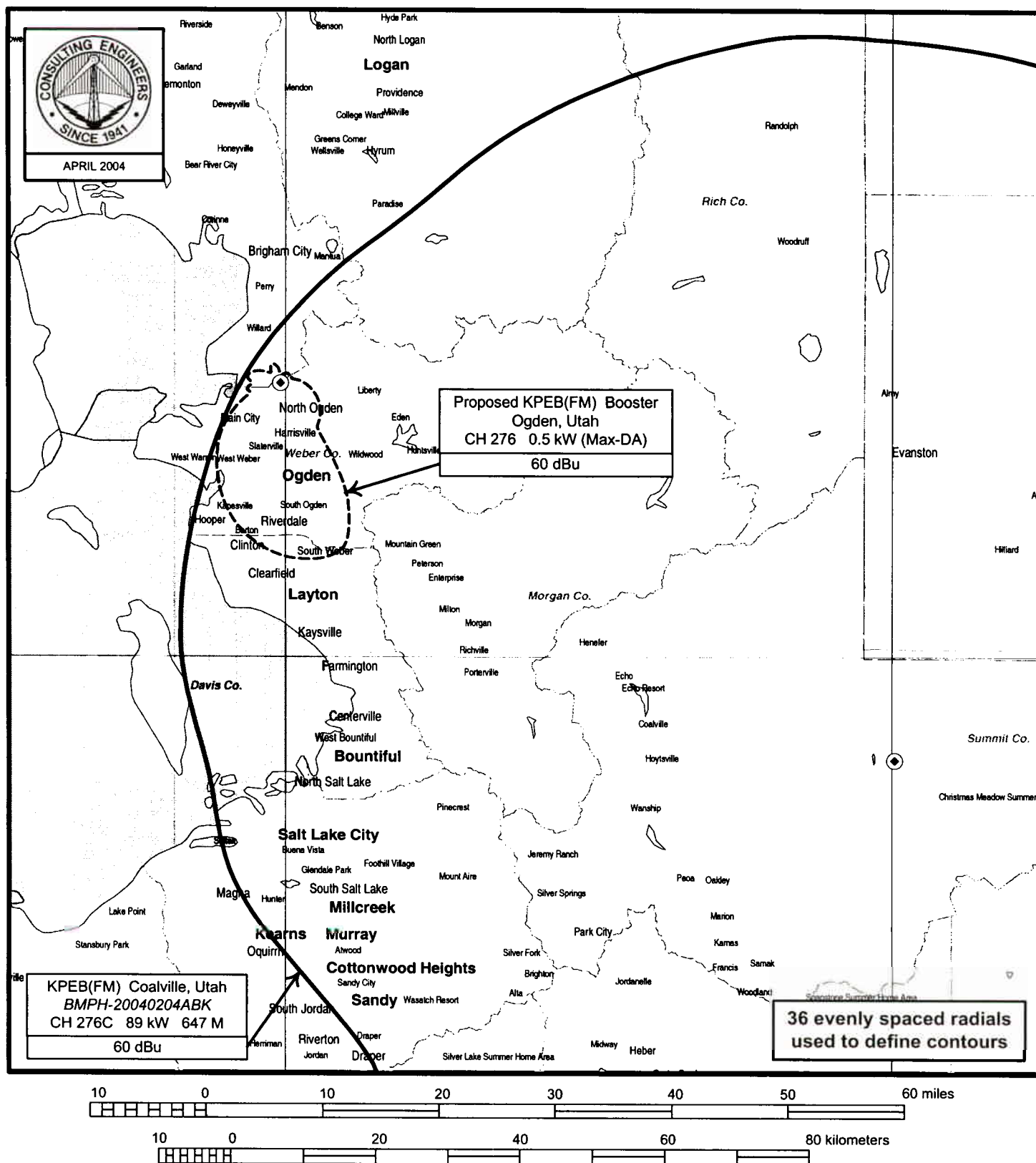
## **PROPOSED ANTENNA AND SUPPORTING STRUCTURE**

**RADIO STATION KPEB(FM) BOOSTER**

**OGDEN, UTAH**

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## FCC PREDICTED COVERAGE CONTOURS

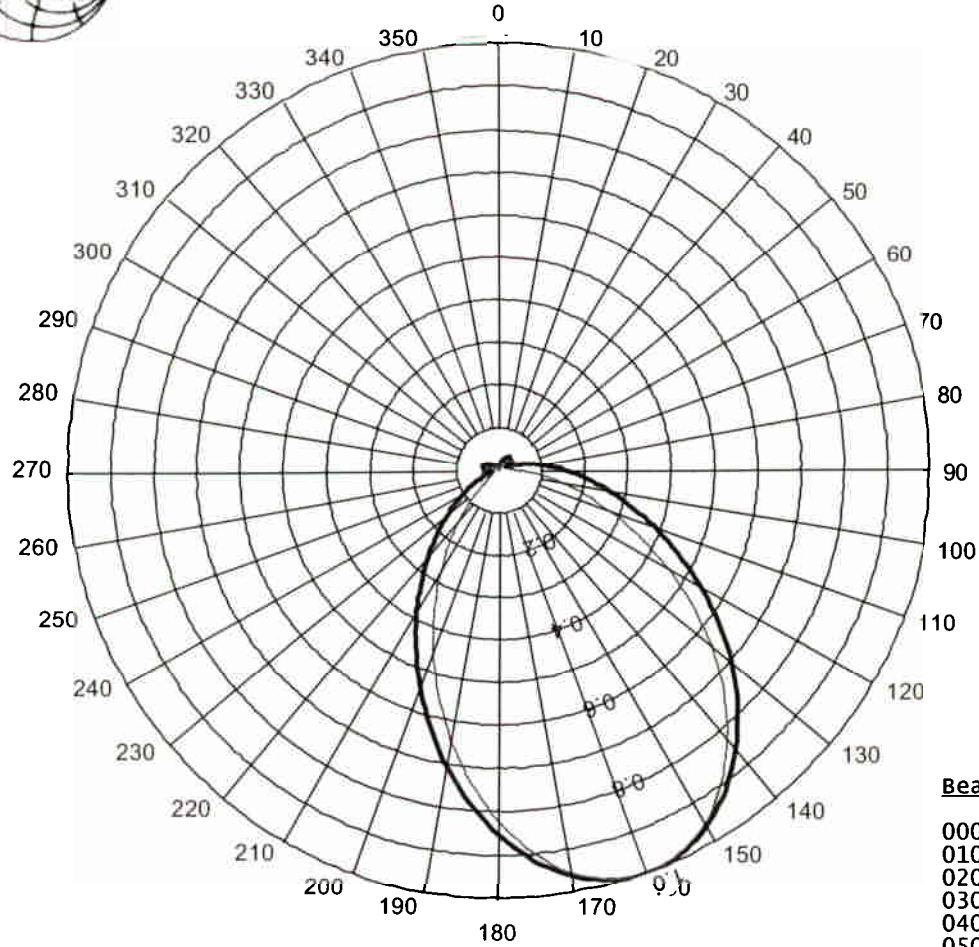
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## APPENDIX A

### MANUFACTURER DIRECTIONAL ANTENNA SPECIFICATION



### Azimuth Pattern Details

Customer: Simmons Media/  
Millcreek Broadcasting

Type: FM Panel Booster Antenna

Notes: Circularly Polarized, 1-bay, 4-dipole FM Panel Antenna, ¼ wave off-set  
Blue = H-Pol      Red = V-Pol

**Ogden, UT**

Model: JCPD Modified

Channels: 95.9-107.9 MHz

### Bearing      Field Value

000	=	0.014
010	=	0.017
020	=	0.027
030	=	0.036
040	=	0.039
050	=	0.032
060	=	0.040
070	=	0.040
080	=	0.081
090	=	0.153
100	=	0.252
110	=	0.382
120	=	0.538
130	=	0.703
140	=	0.854
150	=	0.961
160	=	1.000
170	=	0.961
180	=	0.854
190	=	0.703
200	=	0.538
210	=	0.382
220	=	0.252
230	=	0.153
240	=	0.081
250	=	0.040
260	=	0.040
270	=	0.032
280	=	0.039
290	=	0.036
300	=	0.027
310	=	0.017
320	=	0.014
330	=	0.020
340	=	0.022
350	=	0.020