

**TECHNICAL EXHIBIT  
CHANGE OF PRINCIPAL COMMUNITY  
WIBA-FM  
FACILITY ID No. 17385**

**MADISON, WISCONSIN  
SAUK CITY, WISCONSIN**

Technical Narrative

This technical narrative and accompanying Figures have been prepared on behalf of station WIBA-FM, Madison, Wisconsin, Facility ID No. 17385, in support of a minor change application to specify operations on channel 268B at Sauk City, Wisconsin, in lieu of channel 268B at Madison, Wisconsin. This application is a contingent application with the concurrently-filed application for the minor modification of WMAD(FM), Sauk City, Wisconsin, for change of community of license to Cross Plains, Wisconsin.

As the requested change is mutually exclusive with the Station's current allotment, this modification is appropriately requested on a minor modification application. See 47 C.F.R. Sections 73.203(a), 73.3573(a)(i) and 73.3573(g).

The following is a summary of the merits of this proposal:

- The community of Sauk City, Wisconsin (2000 Census population 3,109 persons) would continue to be served with a local aural transmission service.
- The community of Madison, Wisconsin (2000 Census population 208,054 persons) would continue to have local aural transmission service from AM stations WHA, WIBA, WLMV, WTDY, WTSO and WTUX, as well as FM stations WERN, WMGN, WNWC-FM, WORT, WSUM and WZEE.
- The proposed channel 268B allotment site at Sauk City, Wisconsin satisfies the Commission's allocations spacing rules for a fully spaced, full 50 kilowatt ("kW") Class B facility.<sup>1</sup>

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<sup>1</sup> The proposed allotment reference coordinates are the same as the present location, 43° 03' 21.0" North, 89° 32' 06.0" West. See this

- The 60 dBu service area associated with the proposed operation of WIBA-FM on channel 268B at Sauk City, Wisconsin will not change.
- This proposal will not create any loss area.

*Table of Figures Accompanying this Exhibit*

Figure 1	WIBA-FM Channel 268B Spacing Study
Figure 2	WIBA-FM Present and Proposed 70 dBu Service
Figure 3	Map of Protected Service to Proposed Community of License
Figure 4	Table of Protected Service to Proposed Community of License

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Exhibit under the heading "Compliance with FCC Rules" for details on allocations considerations with respect to this site. Also see *Figure 1* accompanying this Exhibit for the allocations spacing study.

### Proposed Change

Madison is located in Dane County, Wisconsin, and has a 2000 U.S. Census population of 208,054 persons. Madison would continue to be served by local aural transmission services, specifically, AM stations WHA, WIBA, WLMV, WTDY, WTSO and WTUX as well as FM stations WERN, WMGN, WNWC-FM, WORT, WSUM and WZEE.

Sauk City is located in Sauk County, Wisconsin, and has a 2000 U.S. Census population of 3,109 persons. With the concurrent reallocation of WMAD(FM) from Sauk City, Wisconsin to Cross Plains, Wisconsin, the reallocation of WIBA-FM would continue to provide Sauk City with a local aural transmission service.

### Compliance With FCC Rules

The attached *Figure 1* is a tabulation of required separations pertinent to use of channel 268B at Sauk City, Wisconsin. The site complies with the Commission's minimum distance separations contained in Section 73.207 of the FCC's rules to all existing, authorized and proposed stations and allotments as a full 50 kW Class B allotment, except for WIBA-FM's existing channel 268B operation at Madison, Wisconsin, for which this proposal is a mutually exclusive substitute.

Operation from the channel 268B reference site would provide the requisite community grade (70 dBu) signal to all of Sauk City. *Figure 2* is a map which depicts the community grade coverage (70 dBu) contour based on maximum class B facilities (ERP 50 kW/HAAT 150 meters) at the site. As shown, all (100%) of Sauk City is located within the predicted 70 dBu community grade contour.

### Proposed 60 dBu Area

There are and will be 556,042 persons residing within WIBA-FM's 60 dBu contour based on maximum Class B facilities; the area within WIBA-FM's 60 dBu contour is and will be 8,484 square kilometers.

### Proposed 70 dBu Area

There are and will be 429,705 persons residing within WIBA-FM's 70 dBu contour as calculated from the proposed allotment reference site and based on maximum Class B facilities; the area within WIBA-FM's 70 dBu contour is and will be 3,213 square kilometers.

### 60 dBu Gain and Loss Areas

There will be no change in the 60 dBu area.

### Urbanized Area Considerations

Both the existing and proposed channel 268B 70 dBu contour encompasses more than 96% of the population and 98% of the area of the Madison, Wisconsin Urbanized Area.

### Coverage Contours

The FM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.313, except that, in accordance with current FCC practice, uniform terrain was assumed in all directions. The AM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.182.

### Population and Area

The population within the FM service contour (1 mV/m or 60 dBu) was calculated using a computer program that utilizes the 2000 U.S. Census database of "population centroids". The program adds the populations of those U.S. Census designated areas whose centroid lies within each service area.

### Protected Service to Proposed Community of License

Sauk City, Wisconsin, the proposed community of license, currently receives protected aural service from 20 radio stations, as shown in *Figures 3 and 4* (counting

those stations which provide protected service to at least 80 percent of the area of the community of license).

Conclusion

WIBA-FM can be modified from operation on channel 268B at Madison, Wisconsin, to operation on channel 268B at Sauk City, Wisconsin, in compliance with all applicable Commission rules. The community of Sauk City, Wisconsin would continue to be provided with a local aural transmission service, and the community of Madison, Wisconsin would continue to have 12 local aural transmission services. No service will be lost in any area, and no new underserved areas would be created as a result of this proposal. Therefore, the licensee requests the issuance of a construction permit for the minor modification of WIBA-FM to specify operations on channel 268B at Sauk City, Wisconsin.

Respectfully submitted,

Troy G. Langham  
FCC Engineering Supervisor  
April 23, 2008

Figure 1  
Spacing Study

ComStudy 2.2 search of channel 268 (101.5 MHz Class B) at 43-03-21.0 N, 89-32-06.0

Callsign	State	City	Freq	Chanl	ERP_w	Class	Status	Dist_km	Sep	Clr
	WI	AUGUSTA	101.5	268	0	C3	APP	213.02	211	2
KUUL	IL	EAST MOLINE	101.3	267	50000	B	LIC	171.4	169	2.4
NEW	WI	CROSS PLAINS	90.9	215	400	A	APP	18.15	15	3.2
WRCO-FM	WI	RICHLAND CENTER	100.9	265	8400	C3	LIC	77.99	71	7
WQLF	IL	LENA	102.1	271	5200	A	LIC	82.35	69	13.3
WQFL	IL	ROCKFORD	100.9	265	2700	A	LIC	92.1	69	23.1
WRCV	IL	DIXON	101.7	269	6000	A	LIC	136.79	113	23.8
WLGS-LP	IL	LAKE VILLA	101.5	268	100	LP100	LIC	136.56	112	24.6
WVRE	WI	DICKEYVILLE	101.1	266	3700	A	LIC	106.07	69	37.1

Figure 2  
Present and Proposed 70 dBu Service

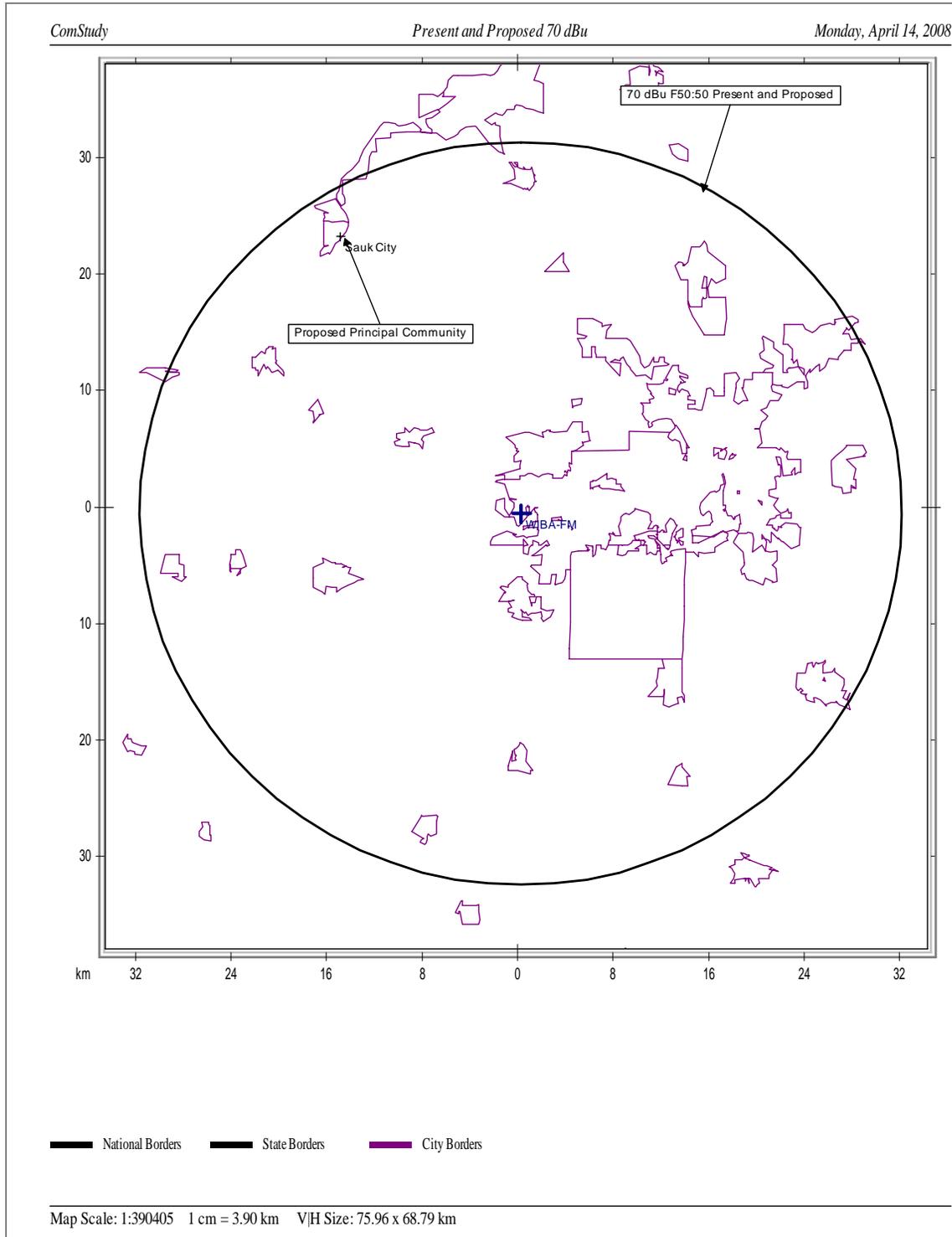


Figure 3  
Map of Protected Service to Proposed Community of License

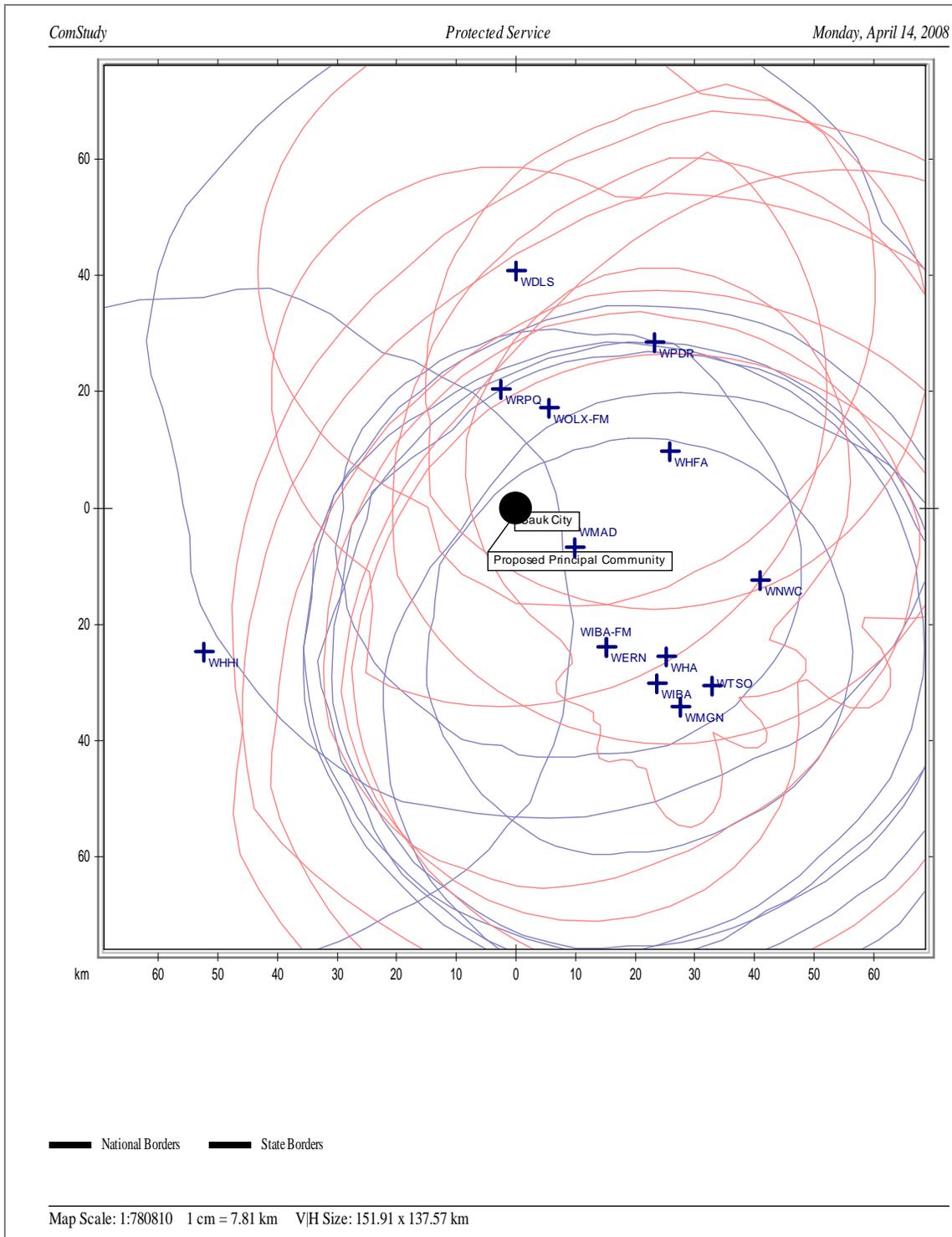


Figure 4  
Table of Protected Service to Proposed Community of License

Call Sign	Facility_id	City	State
WHHI	63056	HIGHLAND	WI
WMGN	41900	MADISON	WI
WNWC-FM	49781	MADISON	WI
WORT	3596	MADISON	WI
WMAD	50055	SAUK CITY	WI
WOLX-FM	60236	BARABOO	WI
WERN	63030	MADISON	WI
WIBA-FM	17385	MADISON	WI
WZEE	41980	MADISON	WI
WRPQ	3712	BARABOO	WI
WDLS	2807	WISCONSIN DELLS	WI
WHFA	54617	POYNETTE	WI
WPDR	35516	PORTAGE	WI
WIBA	17384	MADISON	WI
WHA	6139	MADISON	WI
WTDY	87154	MADISON	WI
WNWC	17381	SUN PRAIRIE	WI
WLMV	41901	MADISON	WI
WTSO	41973	MADISON	WI
WTUX	19622	MADISON	WI