

EXHIBIT 13
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OVERLAP REQUIREMENTS
Mid-West Management, Inc.
Madison, WI

Figure 13.0 is an allocation study showing the interfering contours for the proposed W227BL facilities in relation to the protected contours for all FM broadcast and FM translator stations operating on channels 246 through 252 which require protection consideration. As shown in this figure, these proposed operating facilities provide the contour protection required by Section 74.1204(a) of the FCC Rules to all other stations requiring protection consideration except second adjacent channel station WMGN(FM) - Madison, Wisconsin, which operates on Channel 251B. As is documented below in more detail, however, the proposed W227BL facilities are not likely to result in any actual interference to WMGN. Thus, based on this lack of interference, Section 74.1204(d) of the FCC Rules permits the attached application to be granted in spite of this prohibited contour overlap.

Section 74.1204(a) of the FCC Rules prohibits any overlap between the proposed W227BL 94 dBu contour and the 54 dBu protected contour for WMGN. Compliance with this requirement, however, is obviously not possible from this site, since the proposed site is located within the 54 dBu protected contour for WMGN.

Figure 13.1 is a map exhibit depicting the predicted 94 dBu contour for the proposed W227BL facilities. As shown in this figure, the proposed 94dBu contour extends a maximum of 1700 meters from the proposed site. This figure also shows that there are buildings and public highways located within this distance of the proposed site. As a result, it was necessary to undertake a more detailed analysis to document that there is

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no population that is predicted to receive interference within this area of prohibited overlap.

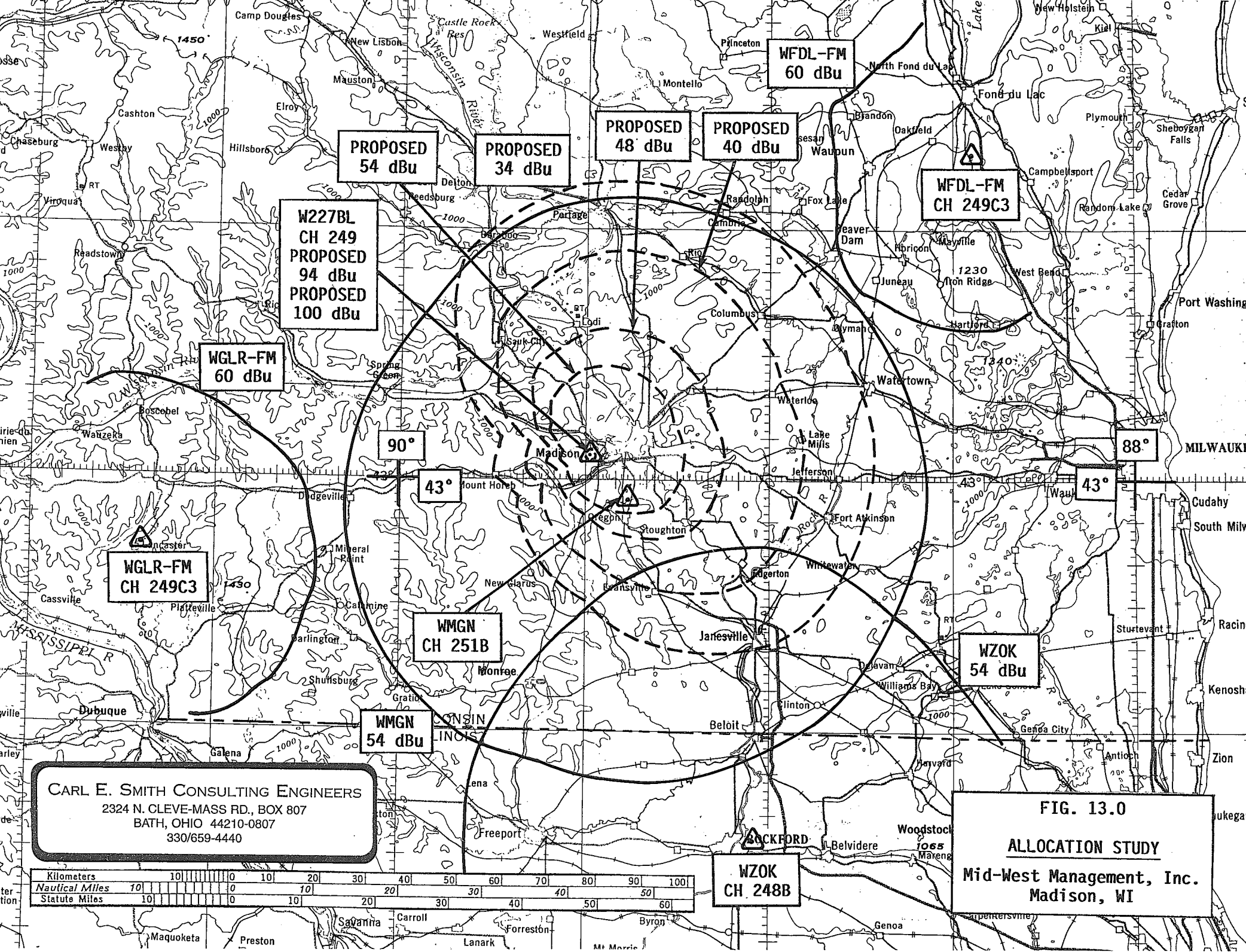
As part of this detailed analysis, it was determined that the predicted WMGN signal strength at the proposed site is 84.9 dBu.¹ Based on the 40 dB undesired to desired (“U/D”) signal strength ratio specified for third adjacent channel stations in Section 74.1204(a)(3) of the FCC Rules, a signal level exceeding 124.9 dBu would be required to cause predicted interference to WMGN. The vertical radiation pattern data for the proposed Kathrein/Scala 3X HDCA-5/HRM circularly polarized antenna was utilized in conjunction with free space propagation prediction techniques to calculate the maximum distance (in the main lobe of the directional pattern) to the 124.9 dBu contour for the proposed facilities at depression angles ranging from 0° down through 90°. The result of these calculations are tabulated in Table 13.2 and depicted in Figure 13.2, which shows a side view of the predicted 124.9 dBu contour for this proposed antenna system in the main lobe of the directional pattern. As shown in this figure, the predicted 124.9 dBu contour for these proposed operating facilities never reaches ground level, with its closest approach being 36 meters (118 feet) at a depression angle of 35°. Since, as shown in Figure 13.1, there are no tall buildings or other publicly accessible tall structures located near the proposed site, it is obvious that there is no population within the area where this overlap would result in interference being predicted to WMGN. Thus, pursuant to Section 74.1204(d) of the FCC Rules, the attached application can be granted in spite of this prohibited contour overlap, due to the total lack of population within the area

¹These signal strength calculations were made using the F(50,50) curves from Section 73.333 of the FCC Rules and terrain data extracted from the NGDC 30 second terrain database.

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of predicted interference. If it is deemed to be necessary, a waiver of Section 74.1204(a) of the FCC Rules is respectfully requested with regard to this situation.

Since the proposed facilities operate on Channel 249, there are no in-band intermediate frequency spaced channels, therefore the proposed facilities will comply with the intermediate frequency separation requirements outlined in Section 73.207 of the FCC Rules.



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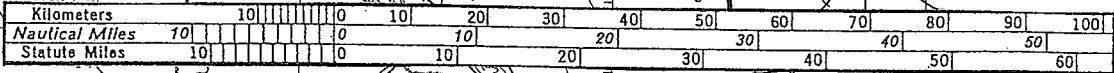
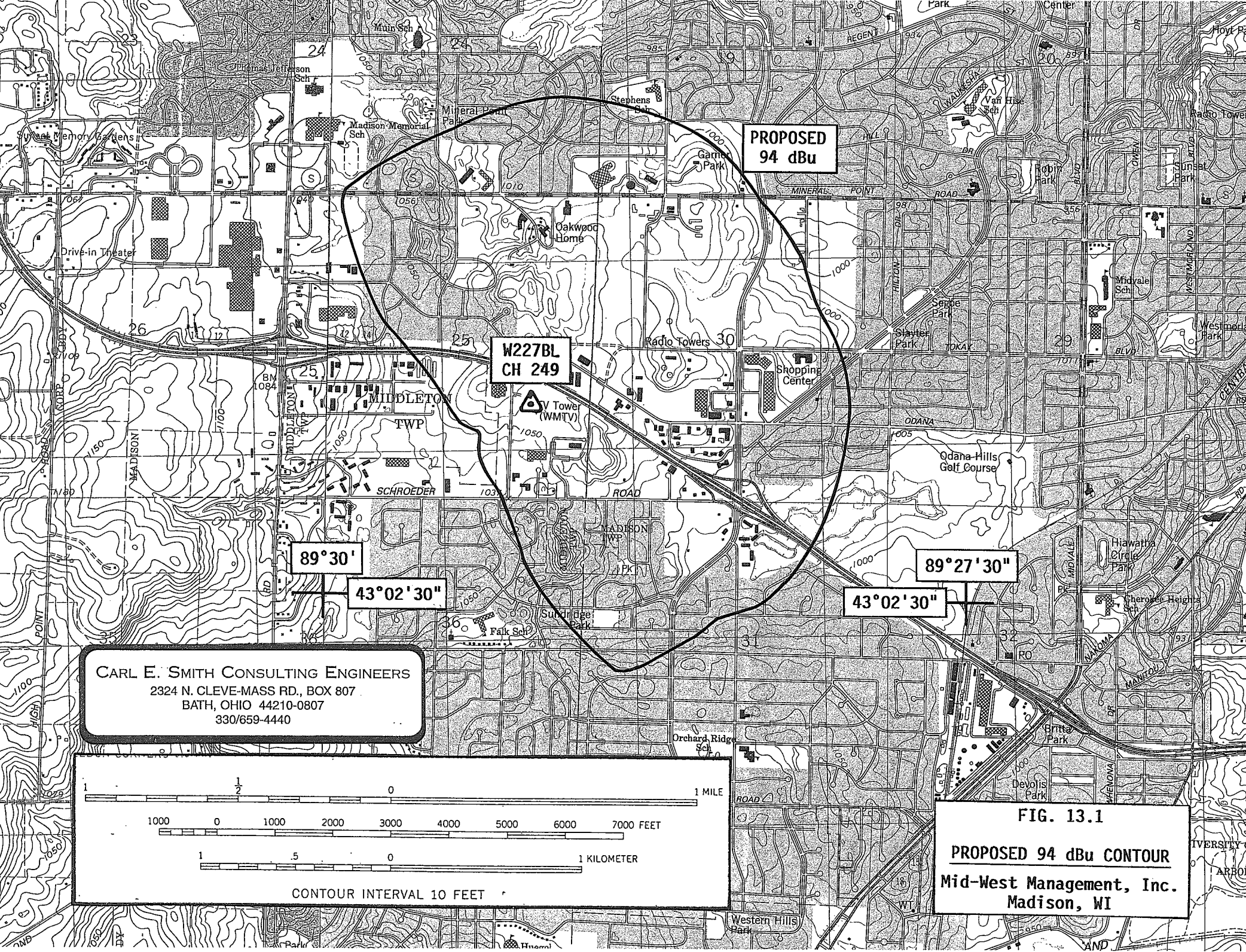


FIG. 13.0
ALLOCATION STUDY
Mid-West Management, Inc.
Madison, WI



PROPOSED
94 dBU

W227BL
CH 249

89°30'

43°02'30"

89°27'30"

43°02'30"

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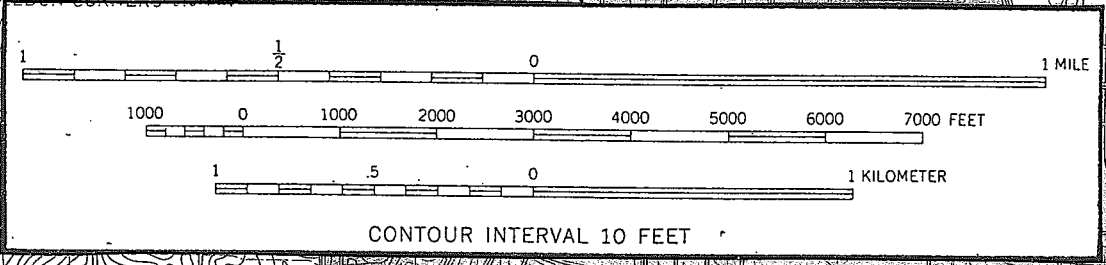


FIG. 13.1
PROPOSED 94 dBU CONTOUR
Mid-West Management, Inc.
Madison, WI

TABLE 13.2

PROPOSED 124.9 DBU CONTOUR

Mid-West Management, Inc.
Madison, WI

<u>Depression Angle (Degrees)</u>	<u>Relative Field</u>	<u>ERP (dBk)</u>	<u>124.9 dBu Contour* (Meters)</u>
0	1.000	-6.02	63.1
5	0.990	-6.11	62.6
10	0.977	-6.22	61.7
15	0.947	-6.49	59.8
20	0.900	-6.94	56.8
25	0.840	-7.54	53.0
30	0.770	-8.29	48.6
35	0.690	-9.24	43.6
40	0.600	-10.46	37.8
45	0.501	-12.02	31.6
50	0.405	-13.87	25.6
55	0.322	-15.86	20.3
60	0.250	-18.06	15.8
65	0.195	-20.22	12.3
70	0.190	-20.45	12.0
75	0.197	-20.13	12.4
80	0.207	-19.70	13.1
85	0.224	-19.02	14.1
90	0.230	-18.79	14.5

Horizontal ERP = 250 Watts = -6.02dBk

* - Contour distance calculated using free space calculation techniques.

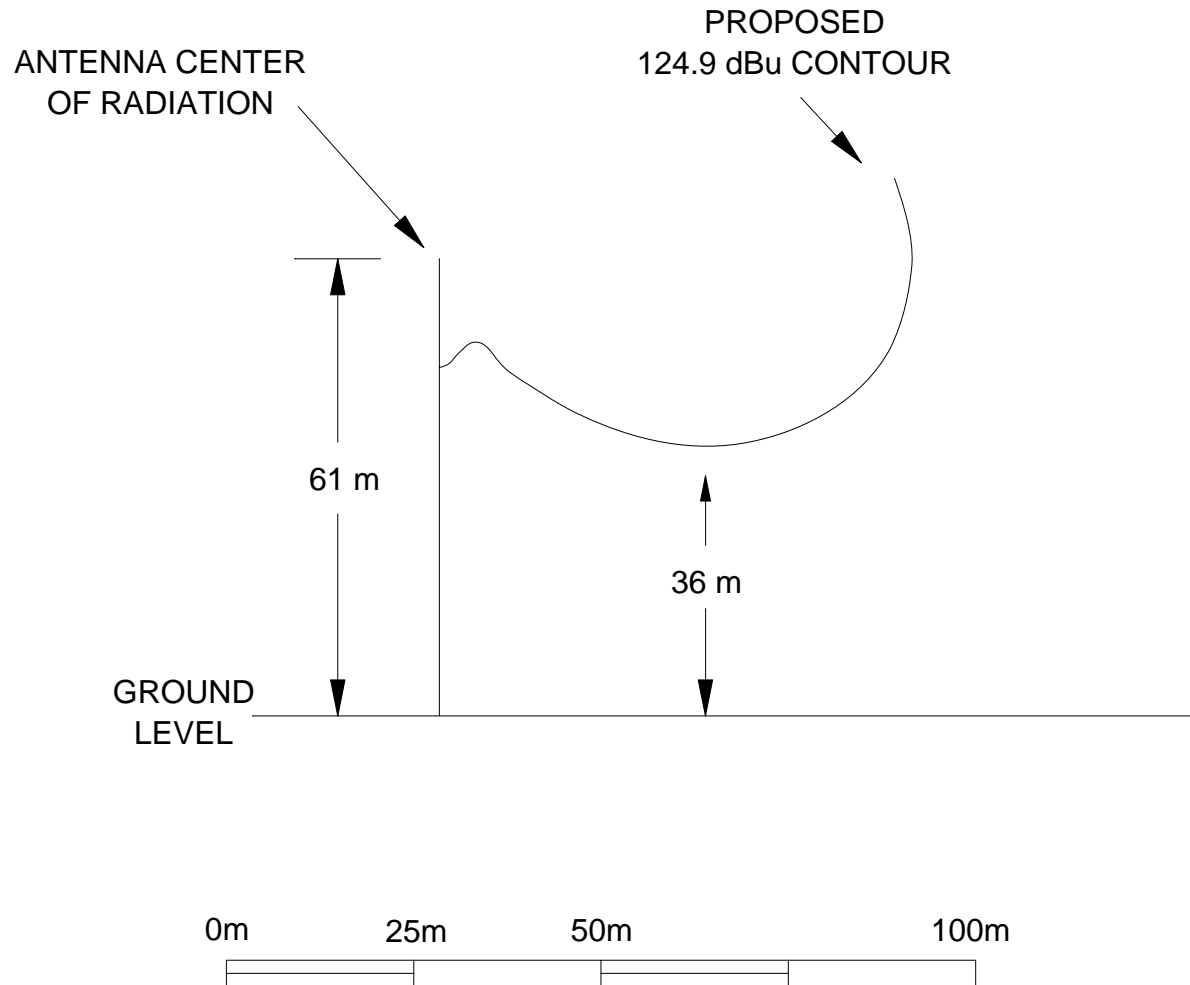


FIG. 13.2

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PROPOSED 124.9 dBu CONTOUR

MID-WEST MANAGEMENT, INC.
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