

SOUND COMMUNICATIONS, LLC
Radio Station WENY
Elmira, NY
1230 kHz, 1 kW-D, 0.91 kW, U

ENGINEERING STATEMENT

This engineering statement, together with the attached figures, has been prepared on behalf of Sound Communications, LLC, licensee of AM radio station WENY (facility ID #71510), in support of a minor change application for construction permit. By way of background, the WENY tower was damaged by a tornado on July 28, 2012 and the station has been operating on reduced power under Special Temporary Authorization BESTA-20130913ABQ. The damaged portion of the tower has been removed and obstruction lighting has been re-installed on the structure.

As shown in Figure 1, the overall height of the WENY tower is now 100.5 meters and bears antenna structure registration number 1053420. The antenna structure registration shall be amended to reflect the new overall height after the FAA issues a determination of no hazard to air navigation. The shortened tower is 99.1 meters above base insulator (146.3° at 1230 kHz) and will have an efficiency of 344.9 mV/m/kW. The WENY ground system consists of 120 copper radials 137.2 meters in length, along with a 14.6 meter square screen fabricated from 7.5 cm copper strap.

ENVIRONMENTAL CONSIDERATIONS

The Commission's Rules implementing the Environmental Policy Act does not categorize this proposal as a major action, as it does not involve any of the facilities or actions listed under §1.305 or §1.307 of the Rules.

Regarding the non-ionizing radiofrequency emission from the proposed antenna, Table 3 on page 5 of O.E.T. Bulletin No. 65 (August 1997 Edition) list the distances in meters at which fields from AM stations are predicted to fall below the FCC and ANSI maximum.

Assuming WENY operates with 1 kW with a 0.406 wavelength antenna, the tower fence must be at least 2 meters from the tower face. Since the applicant has fencing more than complying with that distance requirement, the FCC and ANSI limits will not be exceeded.

Should any maintenance worker require access to the towers, the proposed facility will either reduce power or cease operation until workers are outside the tower fence. Appropriate RF warning signs have been placed on all sides of the fences and it may be assumed that there will be no significant effect on the human environment with regard to exposure of the general public.

DAYTIME ALLOCATION CONSIDERATIONS

Since the reduction of the WENY daytime inverse field will be 51 mV/m less than the licensed 395.9 mV/m, no new interference will be caused to any facility between 1200 to 1260 kHz. Figure 6 shows the proposed daytime 0.5 mV/m contour well within the licensed 0.5 mV/m contour.

NIGHTTIME ALLOCATION CONSIDERATIONS

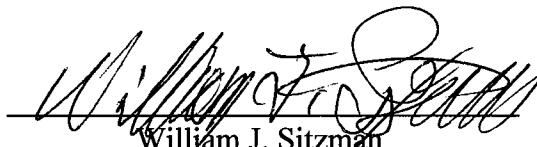
Figure 8 is a detailed night limit study of this proposal showing the 50% RSS limit to be 24.172 mv/m with contributions from WBPZ, WTIV, WCRO and WHUC. The 25% RSS limit was found to be 35.807 mv/m with contributions from WBPZ, WTIV, WCRO, WHUC, WECK, WIXT, WMML, WCMD, WNAW, WFAS, and WNEZ.

Figure 9 is a detailed limit study of CKMP, Midland, Ontario, Canada and indicates a 50% RSS of 15.719 mV/m. The smallest contributor imposes a limit of 7.533 mV/m. The proposed WENY operation will be reduced to 0.91 kW nighttime to keep the imposed limit at 7.509 mV/m and hence will not increase the CKMP night limit .

PROPOSED SERVICE CONTOURS

Figure 4 shows the proposed 5 mv/m daytime contour, while Figure 5 shows the proposed 2 mV/m contour. Figure 6 shows the proposed 0.5 mv/m daytime contour. Figure 7 shows in detail the nighttime coverage of the community of license. The nighttime 24.172 mv/m interference-free contour serves 100% of Elmira, NY while the nighttime 5 mV/m contour serves several nearby communities subject to received interference.

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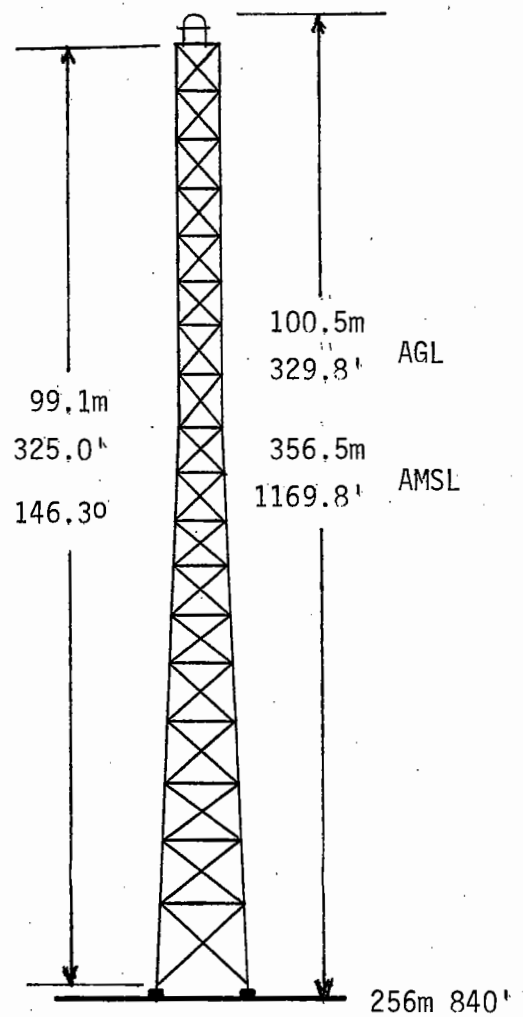
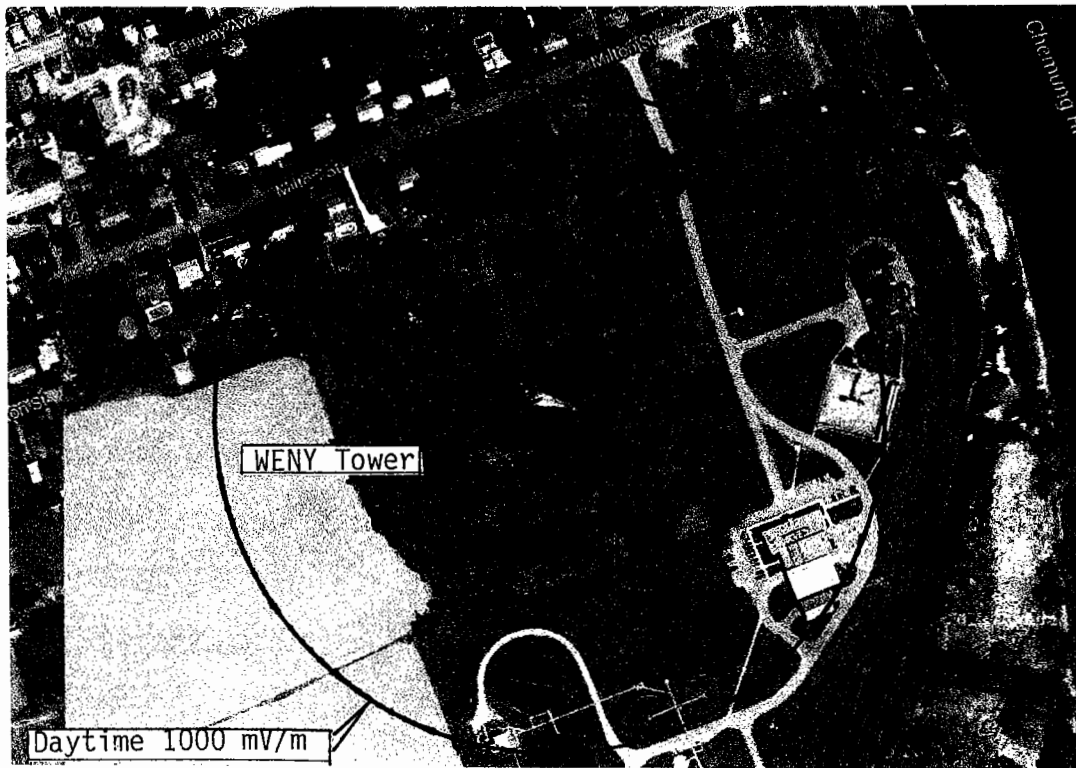
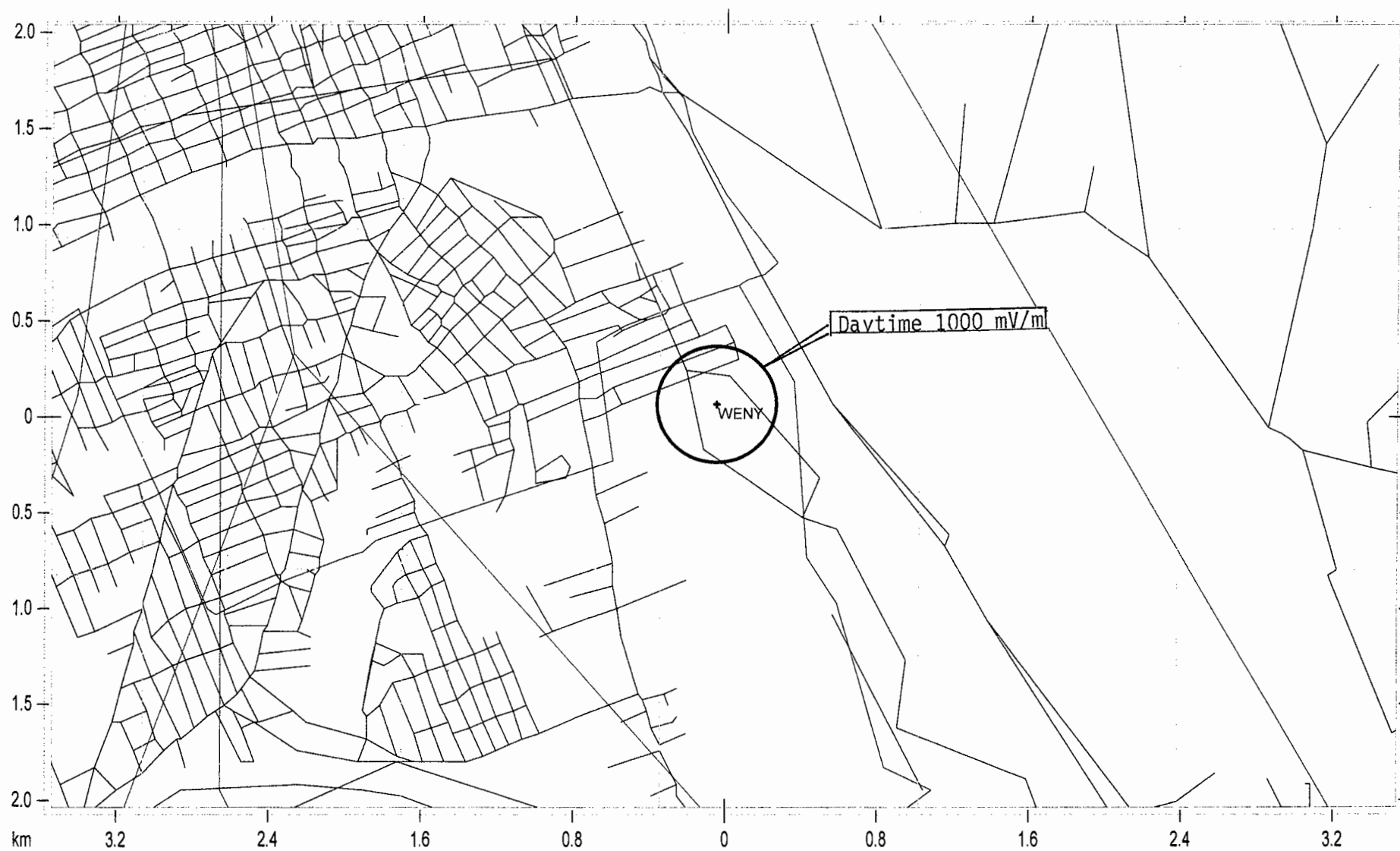
VERTICAL PLAN SKETCH OF WENY ANTENNA

FIGURE 2



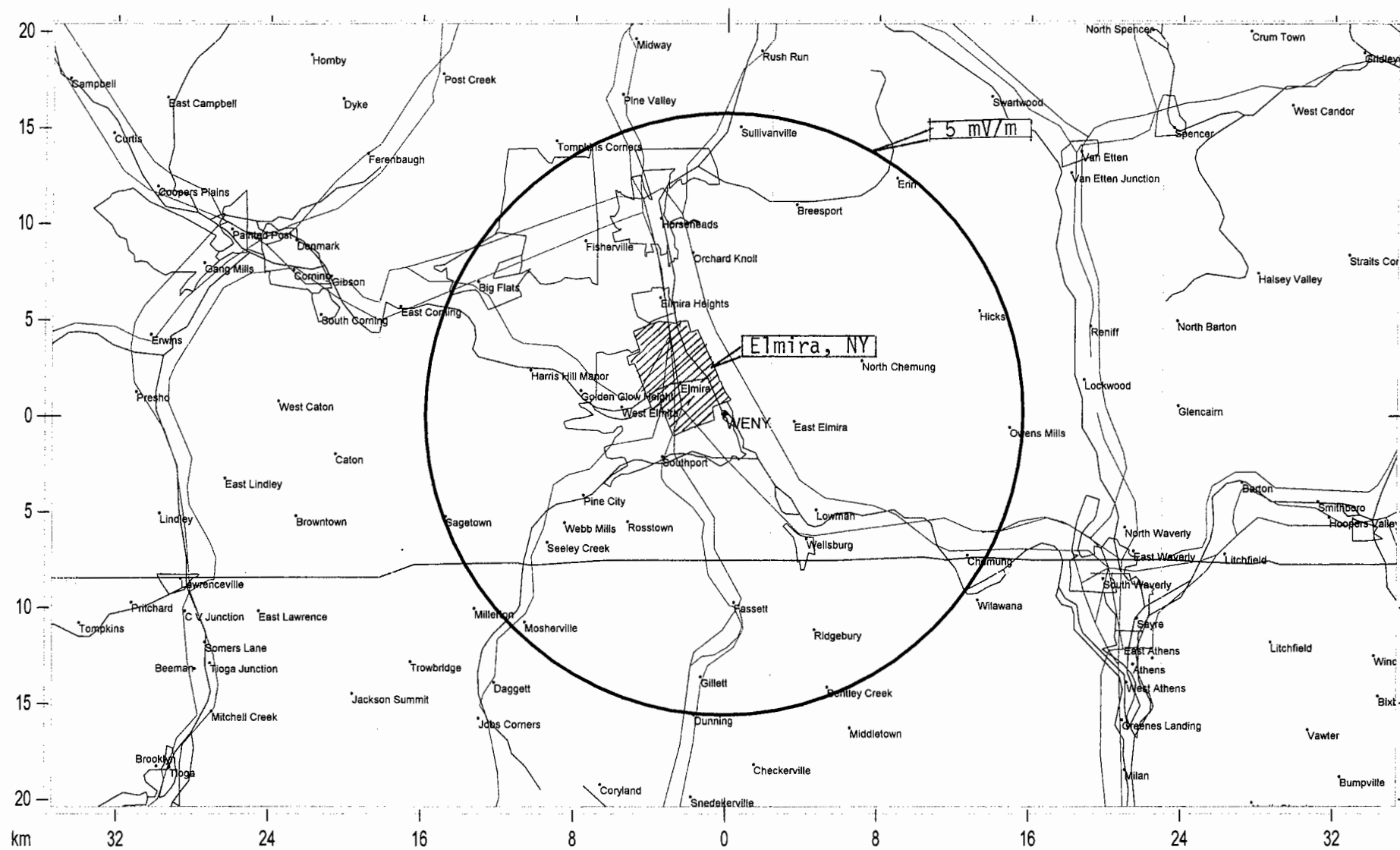
WENY Proposed 1000 mV/m Contour



Contours based on M-3 soil conductivity.

FIGURE 3

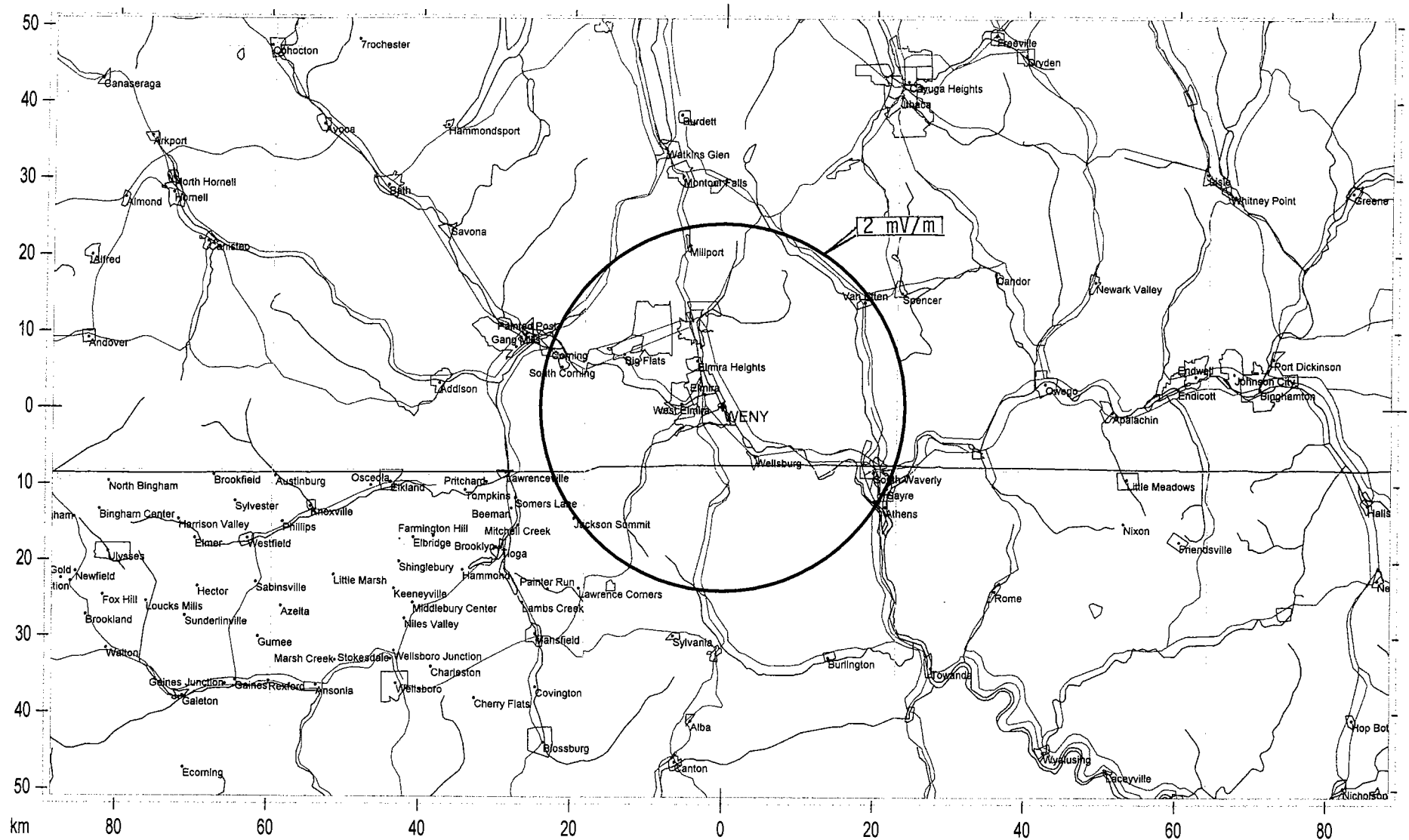
WENY Proposed 5 mV/m Contour



Contours based on M-3 soil conductivity.

FIGURE 4

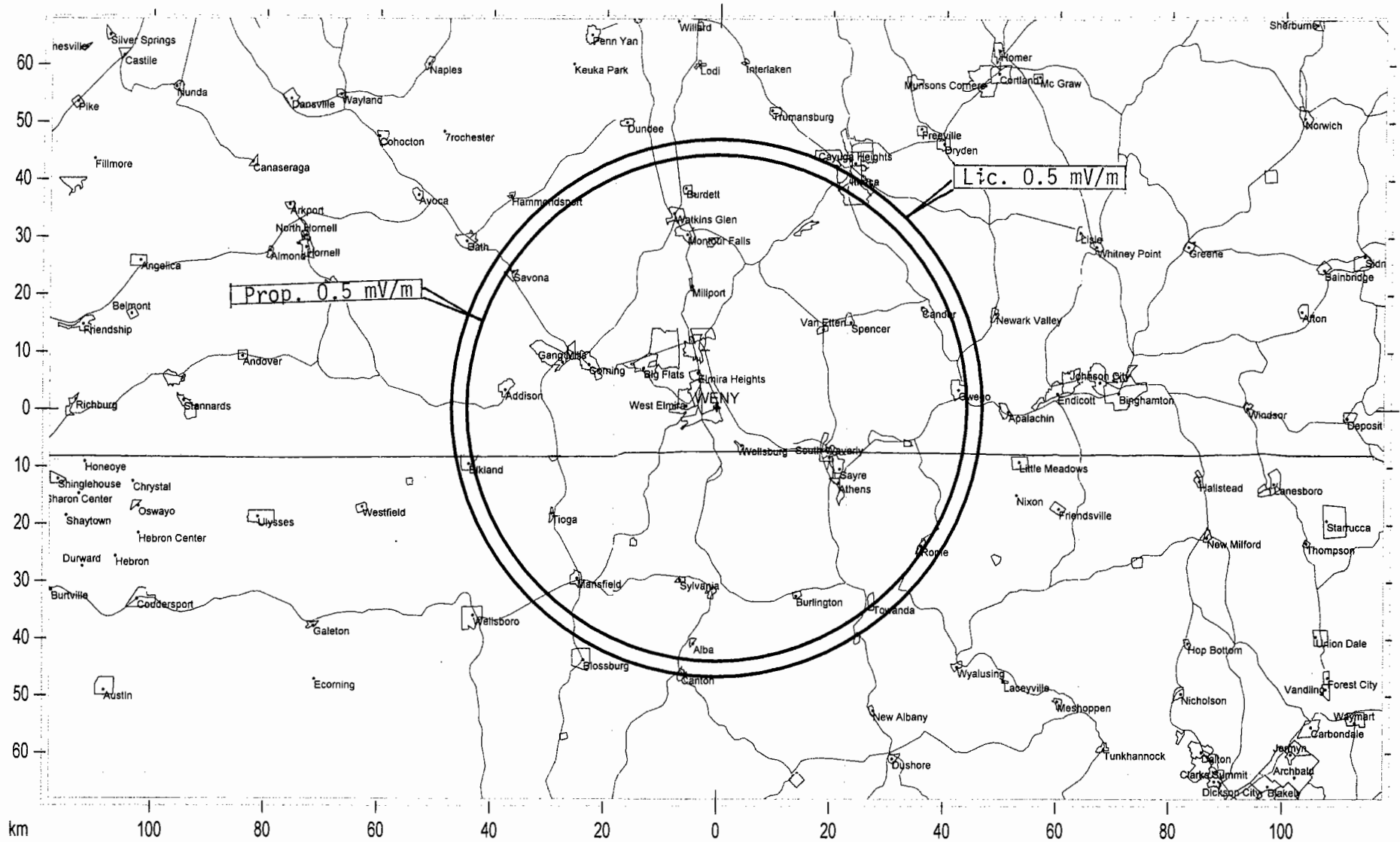
WENY Proposed 2 mV/m Contour



Contours based on M-3 soil conductivity.

FIGURE 5

WENY Licensed and Proposed 0.5 mV/m Contour



Contours based on M-3 soil conductivity.

AM Allocation Study

WENY 50% & 25% RSS

Coordinates : 42-04-29.0 N 76-46-47.0 W
 Frequency : 1230
 Initial PWR: 0.910
 Initial Inv Field: 329.0 mV/M

SITE INFO		COUNTRY	CITY	ST DIST	CLASS	SLANT DIST	GEOMAG MID	AZIMUTH	GND RAD	MIN ELEV	MAX ELEV	MAX RAD	SWAVE FLD	LIMITATION	RSS 50%	RSS 25%
CALL	FRQ															
WBPZ	1230	US	LOCK HAVEN	PA 119.2	C	232.9	53.0	28.5	291.3	50.1	63.2	173.6	0.376876	13.087	13.087	13.087
WTIV	1230	US	TITUSVILLE	PA 246.5	C	317.5	53.2	77.1	305.8	29.7	43.5	249.3	0.239545	11.943	17.717	17.717
WCRO	1230	US	JOHNSTOWN	PA 263.4	C	330.7	52.5	41.9	305.8	28.1	41.6	256.2	0.227958	11.678	21.220	21.220
WHUC	1230	US	HUDSON	NY 249.4	C	319.7	53.6	266.4	291.3	29.4	43.2	246.2	0.235099	11.577	24.172	24.172
WECK	1230	US	CHEEKTOWAGA	NY 189.1	C	275.2	53.8	119.3	241.4	36.8	51.2	184.5	0.292293	10.783	0.000	26.468
WIXT	1230	US	LITTLE FALLS	NY 190.6	C	276.3	54.0	236.3	241.4	36.6	51.0	181.3	0.290005	10.516	0.000	28.481
WMML	1230	US	GLENS FALLS	NY 291.3	C	353.3	54.1	242.5	299.3	25.6	38.7	260.7	0.199551	10.403	0.000	30.322
WCMD	1230	US	CUMBERLAND	MD 316.6	C	374.5	52.2	30.8	292.9	23.7	36.3	258.1	0.190353	9.827	0.000	31.874
WNAW	1230	US	NORTH ADAMS	MA 309.2	C	368.2	53.8	258.6	291.3	24.3	37.0	259.6	0.188668	9.797	0.000	33.346
WFAS	1230	US	WHITE PLAINS	NY 271.9	C	337.5	53.0	296.4	416.8	27.3	40.7	213.0	0.219354	9.344	0.000	34.630
WNEZ	1230	US	MANCHESTER	CT 350.8	C	403.8	53.4	276.8	305.7	21.5	33.5	275.4	0.165313	9.105	0.000	35.807

CKMP 50% RSS

AM Allocation Study

Coordinates : 44-43-35.0 N 79-53-38.0 W
 Frequency : 1230
 Initial PWR: 1.000
 Initial Inv Field: 292.90 mV/M

SITE INFO															
CALL	FRQ	COUNTRY	CITY	ST	DIST	CLASS	SLANT	DIST	GEOMAG	MID	AZIMUTH	GND	RAD	MIN	ELEV
CJTT	1230	CA	NEW LISKEARD	ON	308.4	C	367.6	57.4		184.1	289.7	31.1	31.1	241.6	0.170018
WTIV	1230	US	TITUSVILLE	PA	346.1	C	399.8	54.4		357.4	305.8	28.2	28.2	254.5	0.157204
WSOO	1230	US	SAULT STE. MARI	MI	397.4	C	444.9	56.7		117.0	305.8	24.8	24.8	266.2	0.144037
WECK	1230	US	CHEEKTOWAGA	NY	219.4	C	296.9	55.1		336.3	241.4	40.6	40.6	173.5	0.217059
WENY	1230	US	ELMIRA	NY	387.5	C	436.1	54.7		320.6	329.0	25.4	25.4	256.3	0.146508
WTKG	1230	US	GRAND RAPIDS	MI	501.8	C	540.2	55.0		65.5	381.4	19.8	19.8	301.2	0.123972
														15.719	50%
														0.000	
														0.000	