

**DELAWDER COMMUNICATIONS, INC.**

2121 Eisenhower Avenue, Suite 200

Alexandria, Virginia 22314

(703) 299-9222

**ENGINEERING REPORT**

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**New NCE-FM Application: Newport, MN Channel 201A**

**EXHIBIT 16 –ENGINEERING STATEMENT REGARDING NCE-FM STATION  
PROTECTION PURSUANT TO SECTIONS 73.509 AND 73.207**

Religious Information Network (“Applicant”) herein proposes a new NCE-FM station at Newport, Minnesota, for channel 201A. The proposed facility requires interference studies to other FM facilities pursuant to 47 CFR Sections 73.509 and 73.207. (Regarding Section 73.207, the intermediate frequency distance separation requirements—those stations operating on channels 254 and 255 that are 53 and 54 channels above the specified channel 201—are the only protection requirement of this rule section that is pertinent to this application.)

Table 1, attached, is a channel 201A channel study from the proposed transmitter site. Table 1 identifies those FM facilities that are protected by a showing of non-contour overlap, pursuant to Section 73.509. (Those requiring protection to Section 73.207 are also identified. Any Section 73.215 studies are included in Exhibit 18.) Figures E16.1 through E16.7, attached, are contour overlap study results to those FM facilities showing adequate contour protection to all facilities examined pursuant to Section 73.509.

The 60 dBu service contour serves 100% of the population listed for Newport in the latest US Census Data (3,715 persons).

Each service and interference contour of the contour overlap study (those shown on Figures E16.1 through E16.7) has been determined at one-degree intervals for 360 degrees based on the requirements outlined in Section 73.509 of the FCC Rules. All service contours are F50,50 contours as determined using Figure 1 of Section 73.333 of the FCC Rules. All interference contours are F50,10 contours as determined using Figure 1a of Section 73.333 of the FCC Rules. USGS 3 arc-second terrain data have been used.

Note that all population data supplied in this application are based on the latest (year 2000) US Census Block Centroid Data. (When provided, the DataWorld channel 6 TV study of Exhibit 19 sometimes also includes 1990 Census Data.) Only the population associated with a centroid that is located within the pertinent contour or area that is being studied is accumulated for a total population count. Similarly, the

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geographical area is determined using computerized software that divides the studied area into very small contiguous grid blocks. The small grid blocks that are located within the pertinent area under study are accumulated for a total count of the land area within the studied contour or area. (Large areas of water are excluded.)

**Delawder Communications, Inc.  
Alexandria, VA**

Table 1, Page 1 of 1  
Monday, October 15, 2007

BIAfn/Dataworld FM Interference Study

**Title: Newport, MN**

Channel: 201 A (88.1 MHz)      ERP: 1.58 kW      HAAT: 58.0 m  
Database: FCC 10/11/2007 12:00:00 AM

Latitude: N 44° 47' 45.0"  
Longitude: W 93° 02' 42.0"  
Safety Zone: 30.0 km

Call	Auth	Licensee name	Chan	HAAT(m)	ERP	Latitude	Br-to	Dist	Req
City of License		St	FCC File Number	Freq	HAMSL(m)	(kW)	Longitude	-from	(km)
KAAL	LIC	KAAL-TV, LLC	6 II	320.0	100	N 43° 37' 42.0"	183.8	130.0	
AUSTIN		MN	BLCT-2236	82	696.0	W 93° 09' 12.0"	3.8		

**NOTE: Station protected. See Study in Exhibit 19**

NEW	APP	PENSACOLA CHRISTIAN COLLEGE, INC	*201 A	85.3	0 H	N 44° 41' 21.0"	190.4	12.05	
ROSEMOUNT		MN	BNPED-20000131AAX	88.1	0.0	0.095 V	W 93° 04' 21.0"	10.4	

DA: ODD ODD20000131AAX @ 0.0°

**NOTE: This application has not been cut-off by the FCC and does not require protection by this proposal. The FCC may deem the Applicant's proposal mutually exclusive with this application.**

KRLX	LIC	CARLETON COLLEGE	*201 A	5.0	0.1 H	N 44° 27' 39.0"	193.3	38.25	
NORTHFIELD		MN	BLED-19851024KG	88.1	309.0	0.1 V	W 93° 09' 21.0"	13.2	

**NOTE: Station protected. See Contour Overlap Study to this station in this exhibit (Exhibit 16).**

KVSC	LIC	ST. CLOUD STATE UNIVERSITY	*201 C2	136.0		N 45° 31' 00.0"	311.2	122.9	
ST. CLOUD		MN	BLED-19921103KB	88.1	463.0	16.5 V	W 94° 13' 52.0"	130.3	

Vertical Polarization Onl

**NOTE: Station protected. See Contour Overlap Study to this station in this exhibit (Exhibit 16).**

WHWC	LIC	STATE OF WISCONSIN - EDUCATIONAL	*202 C1	320.0	70 H	N 45° 02' 49.0"	72.9	97.41	
MENOMONIE		WI	BLED-19980904KB	88.3	625.0	70 V	W 91° 51' 47.0"	253.7	

DA: ODD ODD971103IA @ 0.0°

**NOTE: Station protected. See Contour Overlap Study to this station in this exhibit (Exhibit 16).**

KBEM-FM	LIC	BOARD OF EDUCATION, SPECIAL SCHO	*203 A	113.0	2.15 H	N 44° 58' 38.0"	319.4	26.63	
MINNEAPOLIS		MN	BLED-813	88.5	371.0	2.15 V	W 93° 15' 55.0"	139.2	

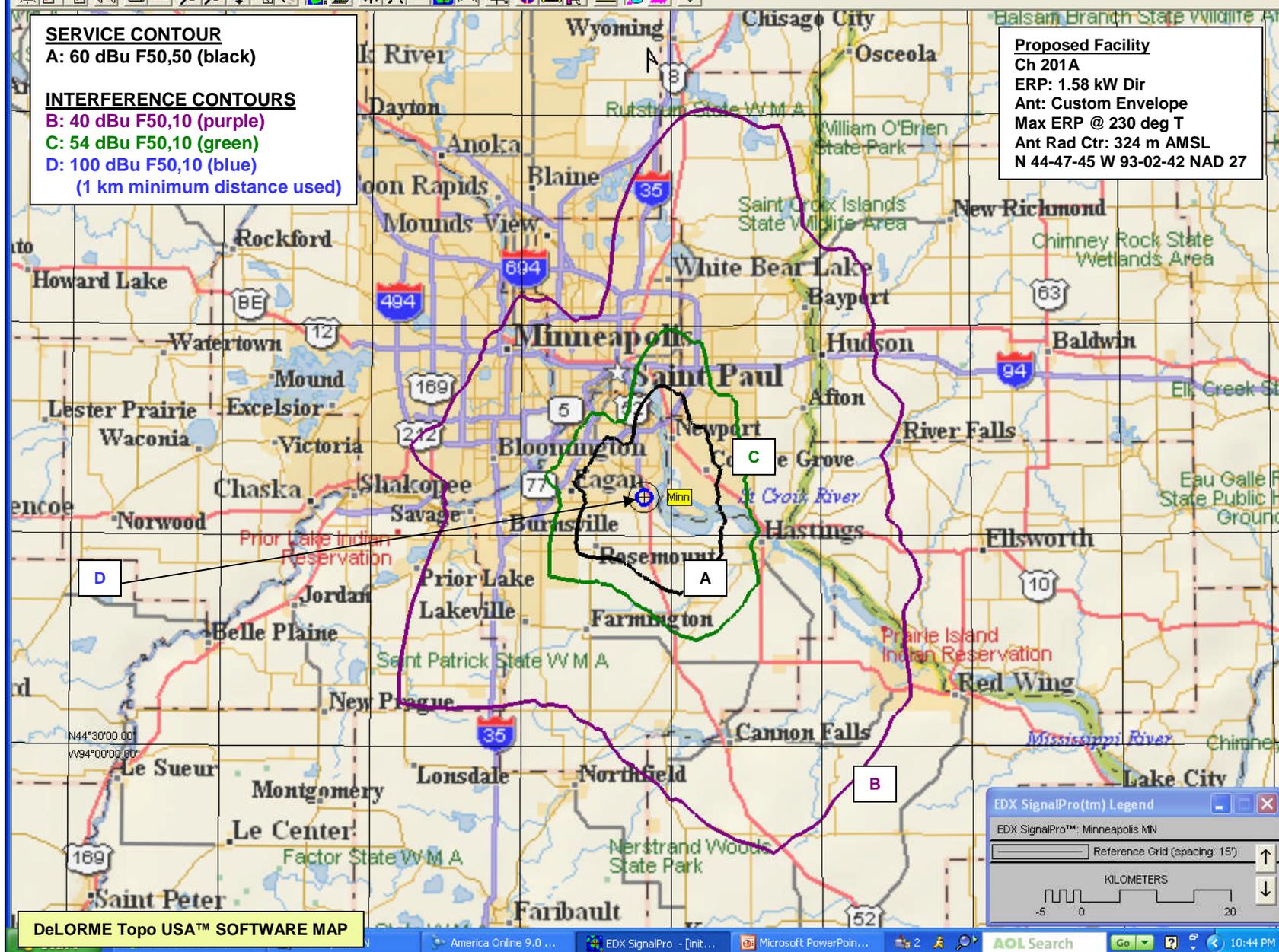
**NOTE: Station protected. See Contour Overlap Study to this station in this exhibit (Exhibit 16).**

WRFW	LIC	BOARD OF REGENTS, UNIVERSITY OF	*204 A	25.0	3 H	N 44° 53' 08.0"	71.9	32.37	
RIVER FALLS		WI	BLED-1630	88.7	351.0	3 V	W 92° 39' 20.0"	252.1	

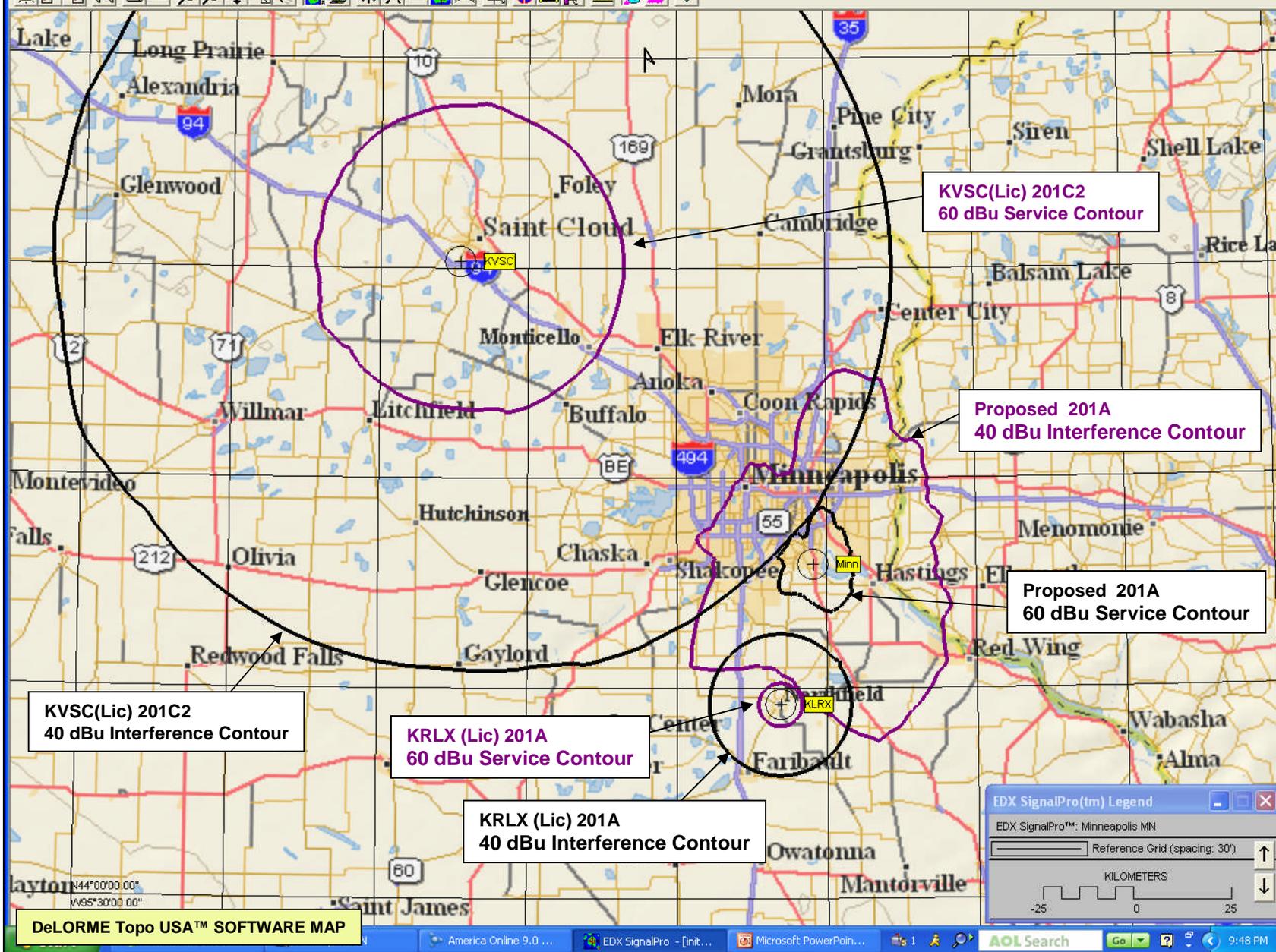
**NOTE: Station protected. See Contour Overlap Study to this station in this exhibit (Exhibit 16).**

>> End of channel 201 A study <<

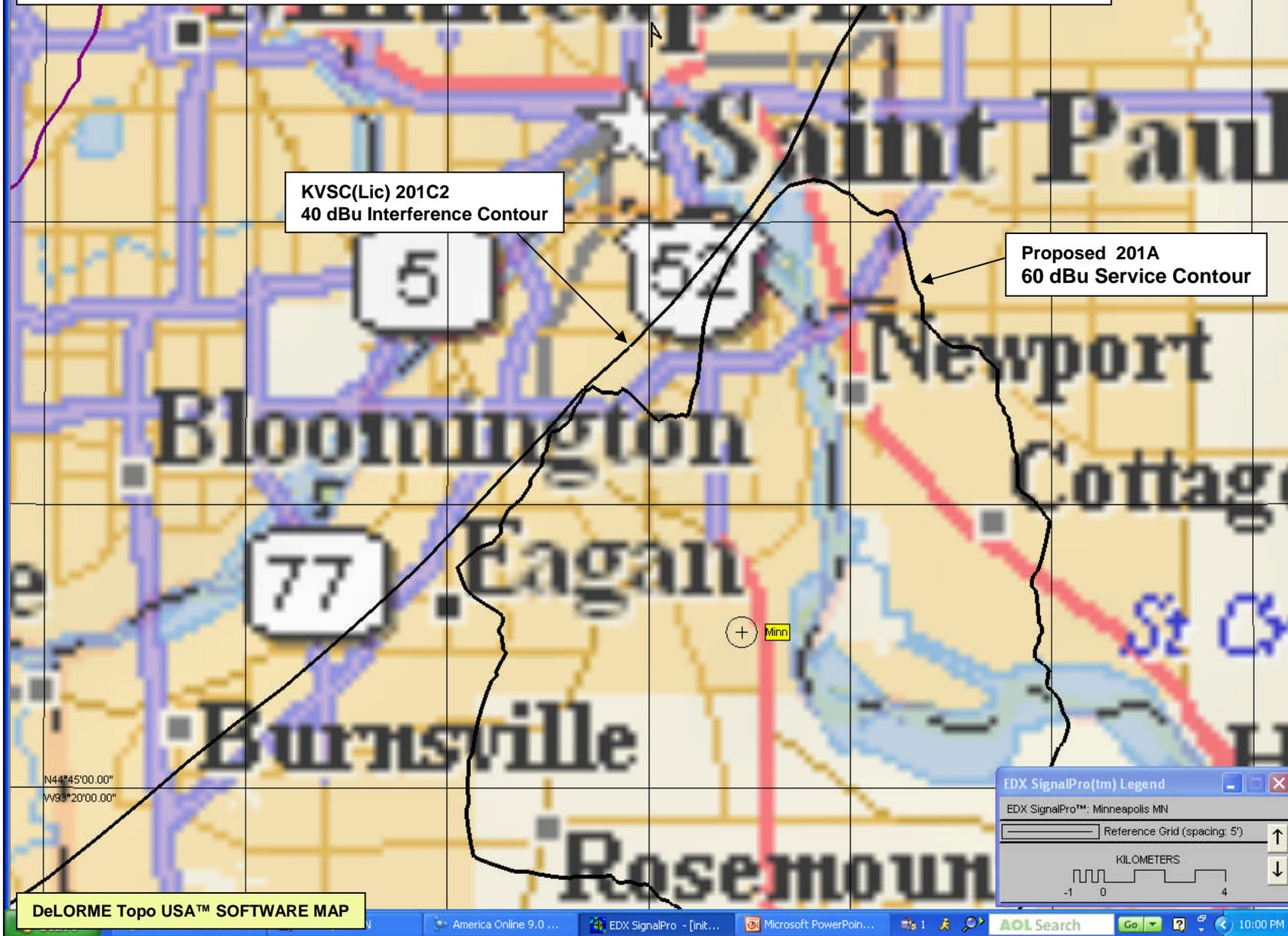
**FIGURE E16.1—PROPOSED NEWPORT, MN 201A PERTINENT CONTOURS**



**FIGURE E16.2—PROPOSED NEWPORT, MN 201A CO-CHANNEL PROTECTION**



**FIGURE E16.3—PROPOSED NEWPORT, MN 201A CO-CHANNEL PROTECTION  
(MAGNIFIED REGARDING KVSC)**



**FIGURE E16.4—PROPOSED NEWPORT, MN 201A CO-CHANNEL PROTECTION  
(MAGNIFIED REGARDING KRLX)**



DeLORME Topo USA™ SOFTWARE MAP



**FIGURE E16.6—PROPOSED NEWPORT, MN 201A 1<sup>st</sup> ADJACENT-CHANNEL PROTECTION (MAGNIFIED)**



**FIGURE E16.7—PROPOSED NEWPORT, MN 201A 2<sup>nd</sup> & 3<sup>rd</sup> ADJ-CHANNEL PROTECTION**

