

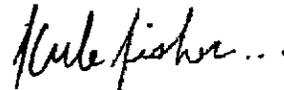
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of MITTS TELECASTING COMPANY, permittee of KXVO-DT, Channel 38 in Omaha, Nebraska, in support of its application for modification of Construction Permit BPCDT-19991029ADQ, to specify an increase in effective radiated power. No change in site location, antenna height or antenna model is proposed herein.

It is ~~still proposed~~ to mount the authorized Andrew omnidirectional circularly-polarized antenna at the 506-meter level of the existing 560-meter tower. Exhibit B provides antenna elevation pattern data, and proposed operating parameters are tabulated in Exhibit C. Exhibit D is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. Since the proposed ERP is greater than that specified in the allotment in certain directions, an interference study is included in Exhibit E. A power density calculation is provided in Exhibit F.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1026025 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.


KYLE T. FISHER

June 14, 2004



ANDREW.

ELEVATION PATTERN

Type:	ATW30HS3H	
Directivity:	Numeric	dBd
Main Lobe:	30.00	14.77
Horizontal:	18.44	12.66
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	38	
Location:		
Note:		

Relative Field

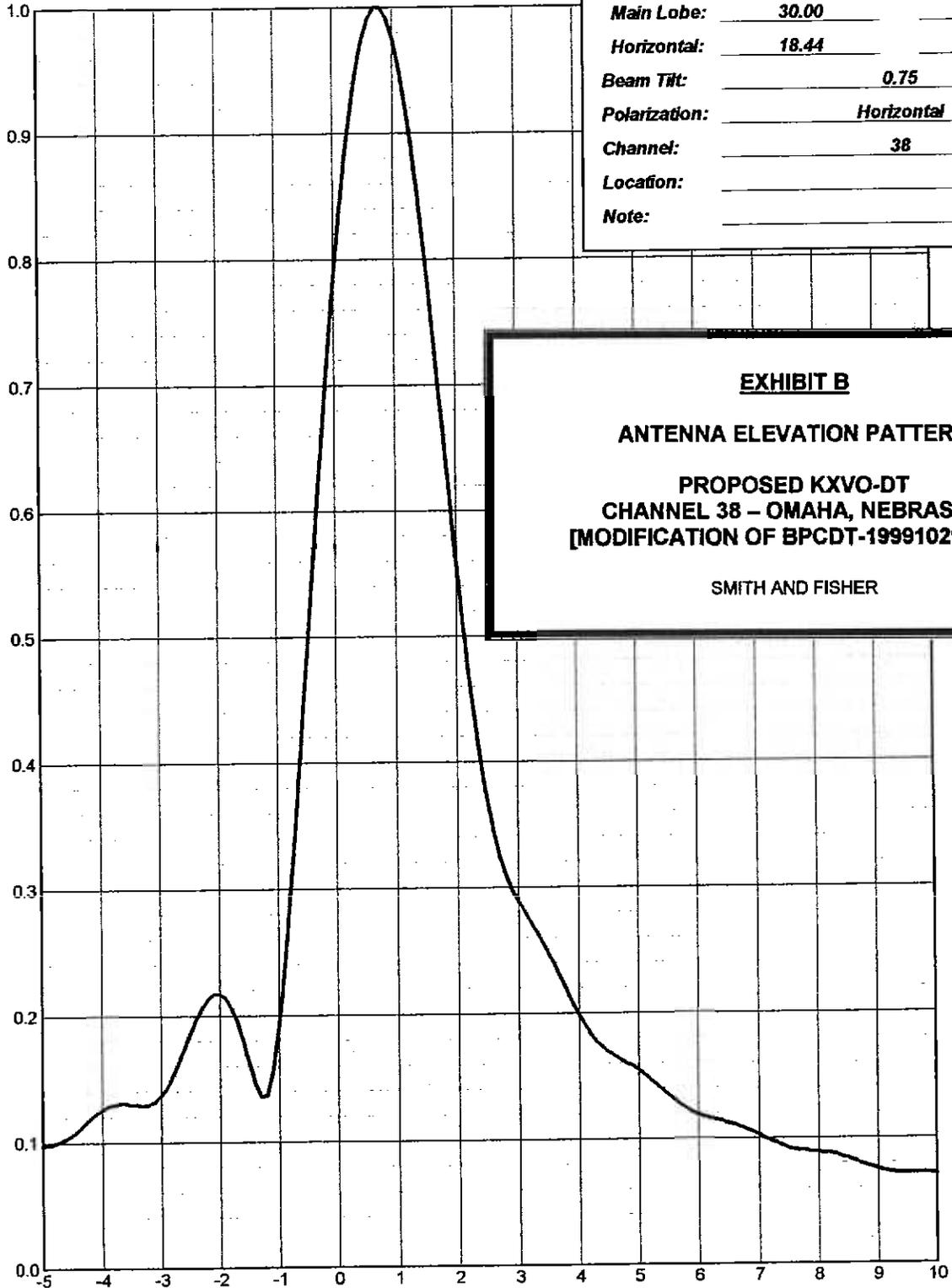


EXHIBIT B

ANTENNA ELEVATION PATTERN

PROPOSED KXVO-DT
CHANNEL 38 - OMAHA, NEBRASKA
[MODIFICATION OF BPCDT-19991029ADQ]

SMITH AND FISHER



ANDREW CORPORATION
 10500 W. 153rd Street
 Orland Park, Illinois U.S.A 60462

PROPOSED OPERATING PARAMETERS

PROPOSED KXVO-DT
CHANNEL 38 – OMAHA, NEBRASKA
[MODIFICATION OF BPCDT-19991029ADQ]

Transmitter Power Output:	48.0 kw
Transmission Line Efficiency:	88.1%
Antenna Power Gain – Main Lobe:	14.21 (H, V)
Effective Radiated Power – Main Lobe:	600 kw (H, V)
Transmitter Make and Model:	Type-accepted
Rated Output	50 kw
Transmission Line Make and Model:	Andrew GLW1750
Size and Type:	17-1/2" wave guide
Length:	1,760 feet*
Antenna Make and Model:	Andrew ATW30HS3-ESO-38H
Orientation	Omnidirectional
Beam Tilt	0.75 degrees
Effective Height Above Ground:	506 meters
Effective Height Above Mean Sea Level:	876 meters

*estimated

CONTOUR POPULATION

48 DBU : 1,171,486

41 DBU : 1,272,718

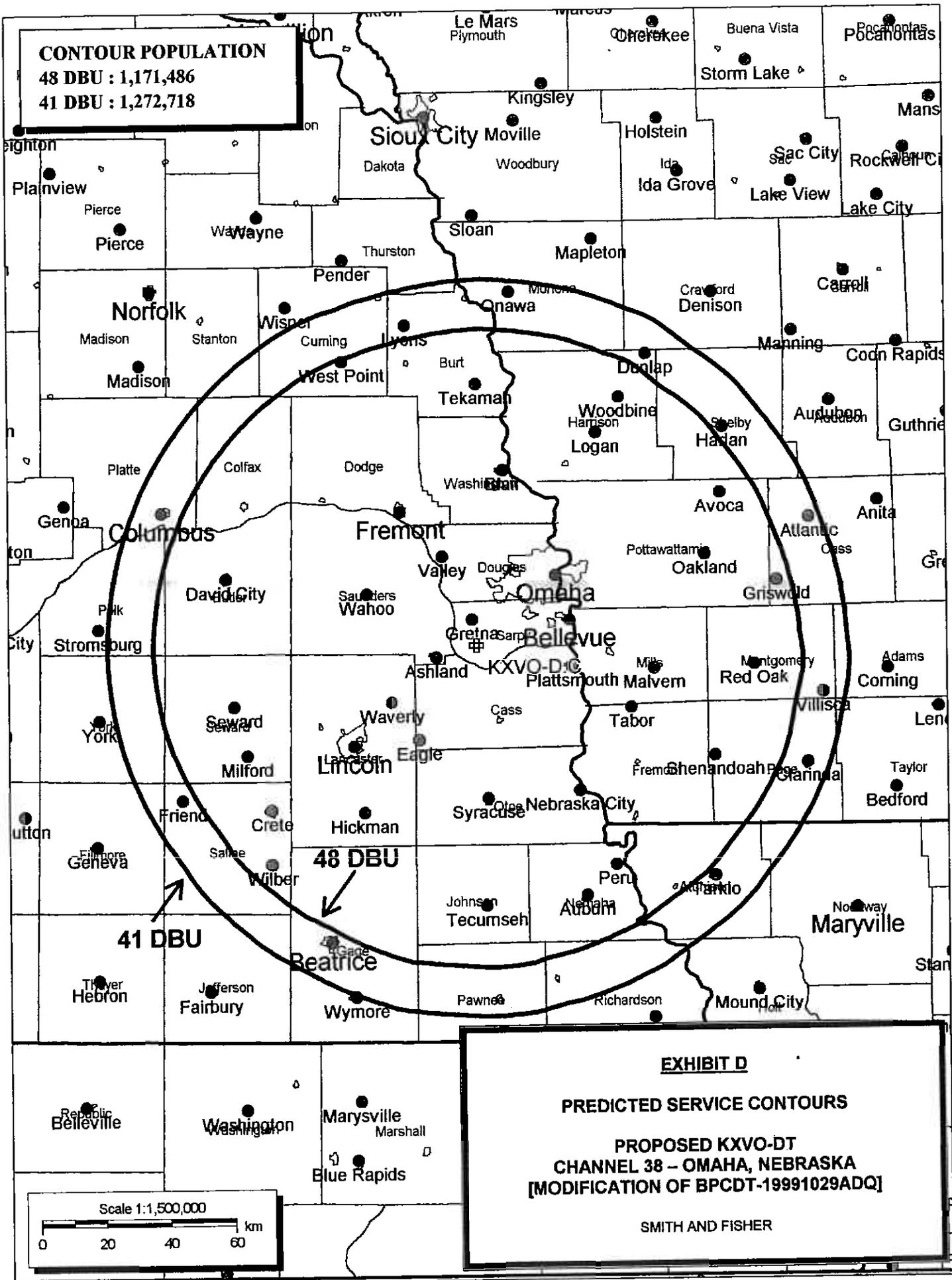


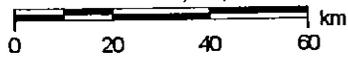
EXHIBIT D

PREDICTED SERVICE CONTOURS

**PROPOSED KXVO-DT
CHANNEL 38 - OMAHA, NEBRASKA
[MODIFICATION OF BPCDT-19991029ADQ]**

SMITH AND FISHER

Scale 1:1,500,000



INTERFERENCE STUDY
PROPOSED KXVO-DT
CHANNEL 38 - OMAHA, NEBRASKA
[MODIFICATION OF BPCDT-19991029ADQ]

The instant application specifies an ERP of 600 kw at 506 meters, which we have determined to be allowable under the FCC's *de minimis* standards with respect to various NTSC and DTV facilities.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe II" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a signal resolution of 2 kilometers and an increment spacing of 1.0 kilometer along each radial, unless otherwise noted. In addition, we utilized the 1990 U.S. Census. Changes in interference caused by KXVO-DT to other pertinent stations are tabulated in Exhibit E-2.

As shown, the proposed KXVO-DT facility would not contribute more than two percent DTV interference to the service population of any affected NTSC or DTV station. In addition, this proposal does not result in any NTSC or DTV station receiving more than ten percent total DTV interference to viewers living within its authorized service area.

A Longley-Rice interference study also reveals that the proposed KXVO-DT facility does not cause significant interference within the protected 74 dBu contour of any potentially affected Class A low power television station, including: KKAZ-CA, Channel 24 in Omaha, Nebraska; and, K47FK, Channel 39 in Columbus, Nebraska.

With regard to K38DU, Channel 38 in Sioux City, Iowa, this station has a Class A authorization on Channel 51 (BPTTL-20000728AGI). Although the facility proposed herein causes predicted interference to the Channel 38 operation of K38DU, that facility is licensed as a

EXHIBIT E-1

low-power television station and as such is not afforded protection from interference from full-power digital station proposals.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

EXHIBIT E-2

INTERFERENCE STUDY SUMMARY

PROPOSED KXVO-DT
CHANNEL 38 – OMAHA, NEBRASKA

[MODIFICATION OF BPCDT-19991029ADQ]

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From KXVO-DT</u>	<u>%</u>	<u>Total DTV Interference</u>	<u>%</u>
KHIN(TV) BLET-19860923KP	Red Oak, IA	36	741,948	13,948	1.9	44,277	6.0
K38DU BLTTL-19990426JE	Sioux City, IA	38	106,723	639	0.6	—	—
KMEG-DT BPCDT-19990415KE	Sioux City, IA	39	617,533	3	<0.1	30,462	4.9
KMCI(TV) BLCT-20030626AFF	Lawrence, KS	38	1,737,827	2,726	0.2	7,105	0.4
KEYC-DT BMPCT-20010223AAQ	Mankato, MN	38	345,872	26	<0.1	26	<0.1
KKAZ-CA BLTTA-20030402AFC	Omaha, NE	24	442,964	0	0	—	—
K47FK BLTTL-19950807JL	Columbus, NE	39	1,899	0	0	—	—
APO64 BPCT-19951106KF	Lincoln, NE	45	417,821	0	0	276,076	66.1
AP074 BPCT-19951106KP	Lincoln, NE	45	592,145	0	0	307,519	51.9
KMEG-DT BLCT-1709	Sioux City, IA	39	255,901	30	<0.1	30	<0.1
KEYC-TV BLCT-2071	Mankato, MN	38	389,295	31	<0.1	31	<0.1

POWER DENSITY CALCULATION

PROPOSED KXVO-DT
CHANNEL 38 – OMAHA, NEBRASKA

[MODIFICATION OF BPCDT-19991029ADQ]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Omaha facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 600 kw (H, V), an effective antenna height of 506 meters above ground, and the elevation pattern of the Andrew antenna, maximum power density two meters above ground of 0.00024 mw/cm^2 is calculated to occur 340 meters from the base of the tower. Since this is less than 0.1 percent of the 0.41 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 38 (614-620 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.