

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of PAPPAS TELECASTING OF CENTRAL NEBRASKA, L.P., licensee of digital Low Power Television Station KWNB-LD, Channel 29 in McCook, Nebraska, in support of this request for Special Temporary Authority to operate with reduced power. No change in site location, antenna model or antenna height is proposed herein. The station is currently operating at 80 percent power due to a transmitter malfunction. This STA request will allow the station to operate at this power level until such time as the transmitter can be repaired.

It is proposed to utilize the licensed ERI omnidirectional antenna which is mounted at the 76-meter level of an existing 98-meter communications tower. Exhibit B is a map upon which the predicted service contours of the STA facility are plotted. It is important to note that the temporary 51 dBu contour is completely encompassed by that which obtains from the authorized KWNB-LD facility. As a result, no interference study is provided herein. Operating parameters for the proposed facility are tabulated in Exhibit C. A power density calculation follows as Exhibit D.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1027244 to this tower.

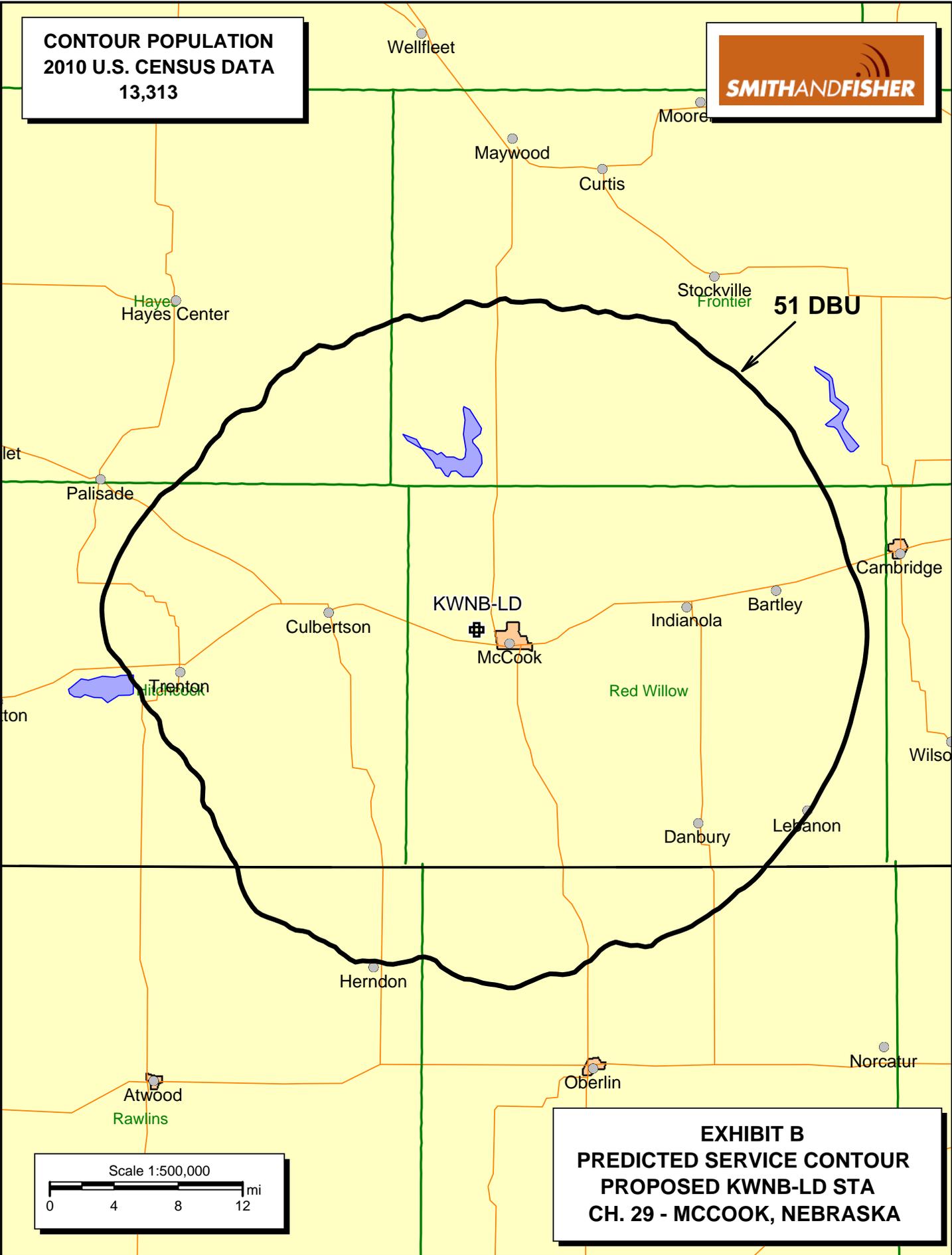
I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read 'K. T. Fisher', is written over a light blue grid background.

KEVIN T. FISHER

September 12, 2012

**CONTOUR POPULATION  
2010 U.S. CENSUS DATA  
13,313**



**51 DBU**

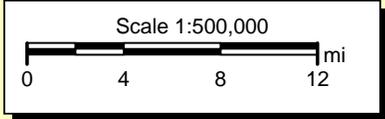
**KWNB-LD**



**McCook**

**Red Willow**

**EXHIBIT B  
PREDICTED SERVICE CONTOUR  
PROPOSED KWNB-LD STA  
CH. 29 - MCCOOK, NEBRASKA**



PROPOSED OPERATING PARAMETERS

PROPOSED KWNB-LD STA  
CHANNEL 29 – MCCOOK, NEBRASKA

Transmitter Power Output:	0.4 kW
Transmission Line Efficiency:	66.9*
Antenna Power Gain – Main Lobe:	14.06
Effective Radiated Power – Main Lobe:	3.8 kW

Transmitter Make and Model: Type-accepted

Transmission Line Make and Model: Andrew LDF7-50A

Size and Type: 1-5/8" foam heliax

Length: 258 feet

Antenna Make and Model: ERI AL8

Orientation: Omnidirectional

Beam Tilt: 1.75 degrees

Radiation Center Above Ground: 76 meters

Radiation Center Above Mean Sea Level: 889 meters

\*including other losses

POWER DENSITY CALCULATION  
PROPOSED KWNB-LD STA  
CHANNEL 29 – MCCOOK, NEBRASKA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this McCook facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 3.8 kw, an antenna radiation center 76 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.00022 mw/cm<sup>2</sup> is calculated to occur 67 meters from the base of the tower. Since this is less than 0.1 percent of the 0.37 mw/cm<sup>2</sup> reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 29 (560-566 MHz), this proposal may be excluded from consideration with respect to public 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.