

ENGINEERING STATEMENT

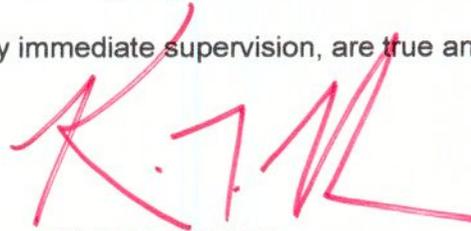
The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator W66BV, Channel 66 in Detroit, Michigan, in support of this Application for Construction Permit to specify digital operation on Channel 47 from the licensed W66BV site. This proposal is being submitted in response to the Commission's reclamation of Channel 66 spectrum for future auction, thereby placing this translator in a displacement situation. It is important to note that there are no analog channels available in the core spectrum (Channels 2-51) at the licensed site.

It is proposed to mount a standard MCI directional antenna at the authorized height on top of the existing 224-meter Detroit Plaza Hotel at the intersection of Randolph and Jefferson Avenues in downtown Detroit. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 51 dBu contour encompasses a significant portion of the Grade A contour that obtains from the licensed W66BV facility. Operating parameters for the proposed facility are tabulated in Exhibit C. An interference study is provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing building is proposed, the FAA has not been notified of this application. Further, since the addition of the proposed antenna will not increase the overall height of the building by more than 20 feet, FCC antenna structure registration is not required.

EXHIBIT A

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.

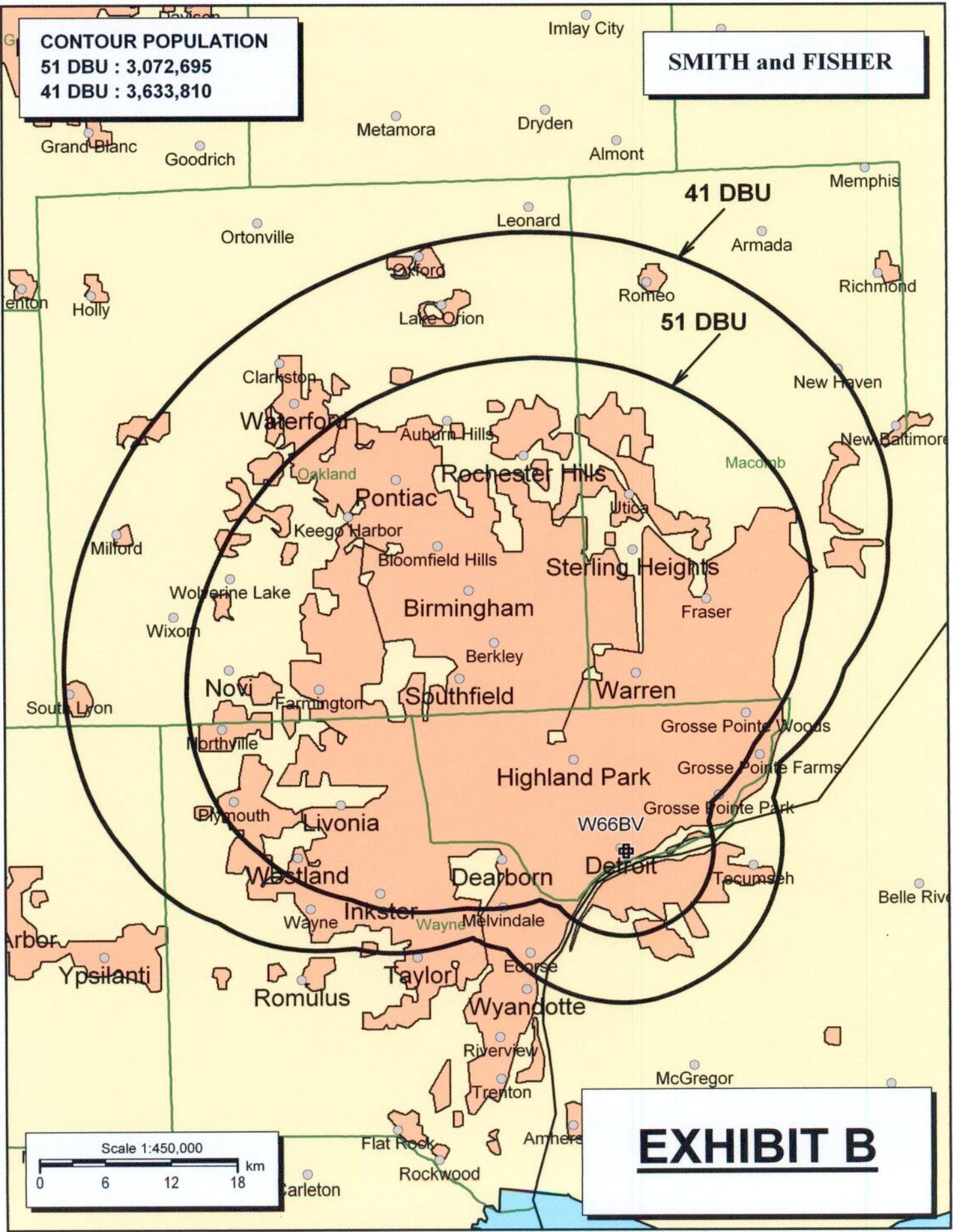


KEVIN T. FISHER

December 7, 2005

CONTOUR POPULATION
51 DBU : 3,072,695
41 DBU : 3,633,810

SMITH and FISHER

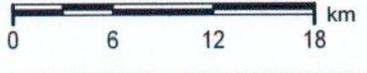


41 DBU

51 DBU

EXHIBIT B

Scale 1:450,000



PROPOSED OPERATING PARAMETERS

PROPOSED W66BV-D
CHANNEL 47 – DETROIT, MICHIGAN

Transmitter Power Output:	0.37 kw
Transmission Line Efficiency:	93.7%
Antenna Power Gain – Toward Horizon:	28.5
Antenna Power Gain – Main Lobe:	28.5
Effective Radiated Power – Toward Horizon:	10.0 kw
Effective Radiated Power – Main Lobe:	10.0 kw
Transmitter Make and Model:	Type-accepted
Rated Output	0.5 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	50 feet*
Antenna Make and Model:	Micro Communications 955512
Orientation	330 degrees true
Beam Tilt	0.5 degrees
Radiation Center Above Ground:	222 meters
Radiation Center Above Mean Sea Level:	396 meters

*estimated

LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W66BV-D
CHANNEL 47 – DETROIT, MICHIGAN

We conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 0.1 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than proposed W66BV-D) already is predicted to exist (also known as "masking").

It is important to note that the applicant has specified use of a "stringent" out-of-channel emission mask in order to take advantage of the d/u ratios that pertain to adjacent-channel interference relationships. A revised LPTV DTV elevation pattern, based on the new FCC Rules, has been applied to proposed facility for the referenced studies. The results of these studies are provided in Exhibit D-2. They conclude that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, it is believed that the proposed Channel 47 facility complies with the interference requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 of the Commission's Rules.

INTERFERENCE SUMMARY
PROPOSED W66BV-D
CHANNEL 47 – DETROIT, MICHIGAN

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
WSYM-TV BLCT-19821210KE	Lic.	Lansing, MI	47	1,026,068	4,405	0.4
WAQP-DT BMPCDT-20050818ABF	CP	Saginaw, MI	48	1,825,512	4,801	0.3

EXHIBIT E

POWER DENSITY CALCULATION
PROPOSED W66BV-D
CHANNEL 47 – DETROIT, MICHIGAN

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Detroit facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 10.0 kw, an antenna radiation center 222 meters above ground, and the vertical pattern of the MCI antenna, maximum power density two meters above ground of 0.000085 mw/cm^2 is calculated to occur 205 meters north-northwest of the base of the building. Since this is significantly less than 0.1 percent of the 0.45 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 47 (668-674 MHz), and since the building's roof is secure from unauthorized access, 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 on the roof and in the vicinity of the antenna are not exposed to excessive nonionizing radiation.