

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator W66DH in Decatur, Alabama, in support of this application for modification of Construction Permit BPTT-20050713ADK to specify digital operation on Channel 33 (its displacement channel) from the licensed W66DH site, as a "flashcut" proposal.

It is proposed to mount a standard ERI directional antenna at the authorized height on the side of the existing 69-meter communications tower. 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 W66DH 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 tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1046184 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

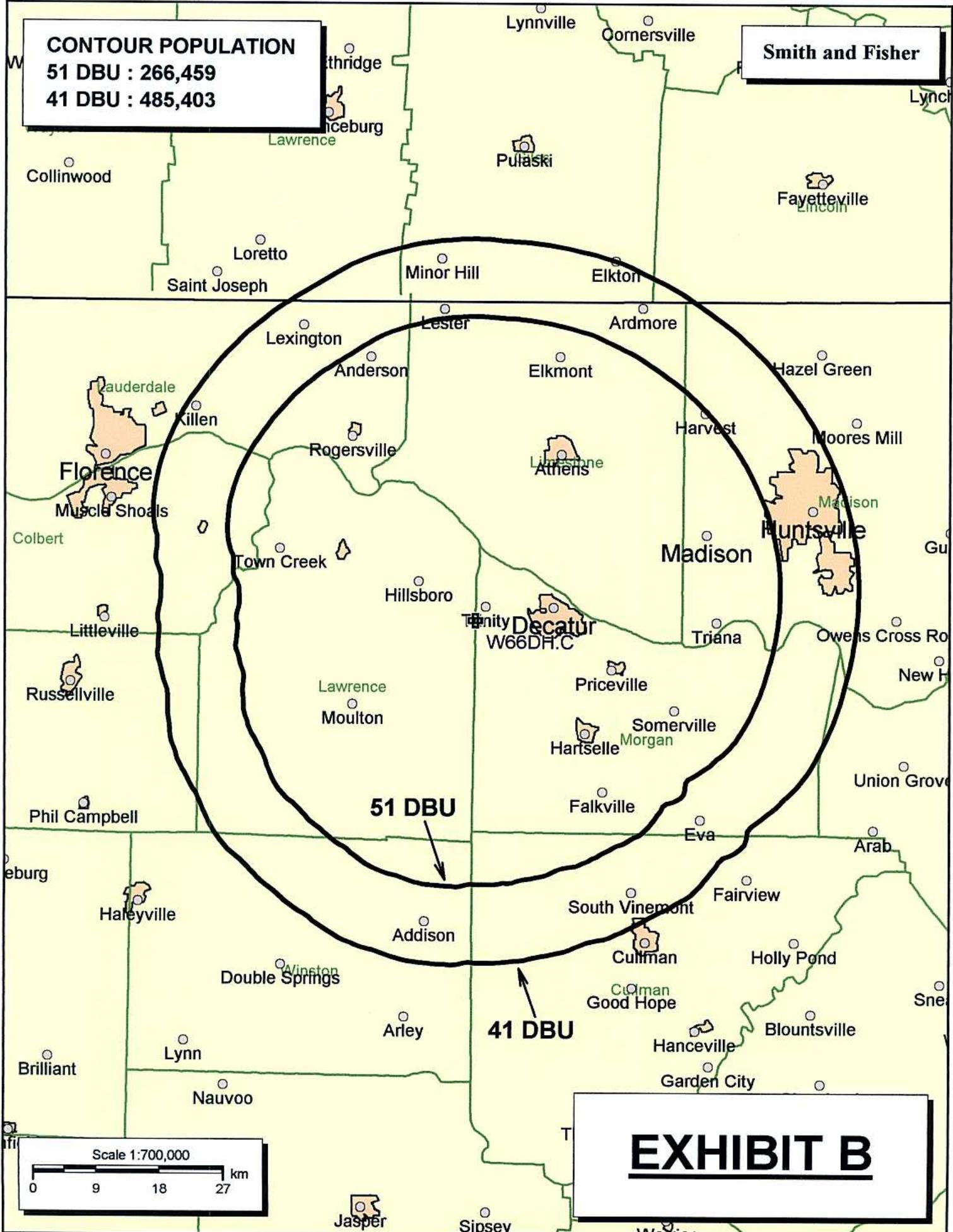
February 13, 2006

CONTOUR POPULATION

51 DBU : 266,459

41 DBU : 485,403

Smith and Fisher



51 DBU

41 DBU

EXHIBIT B

Scale 1:700,000



PROPOSED OPERATING PARAMETERS

PROPOSED W66DH-D
CHANNEL 33 – DECATUR, ALABAMA
[MODIFICATION OF BPTT-20050713ADK]

Transmitter Power Output:	1.3 kw
Transmission Line Efficiency:	80.2%
Antenna Power Gain – Toward Horizon:	14.06
Antenna Power Gain – Main Lobe:	14.06
Effective Radiated Power – Toward Horizon:	15 kw
Effective Radiated Power – Main Lobe:	15 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.5 kw
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	160 feet
Antenna Make and Model:	ERI AL8
Orientation	40 degrees true
Beam Tilt	1.75 degrees
Radiation Center Above Ground:	41 meters
Radiation Center Above Mean Sea Level:	291 meters

LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W66DH-D
CHANNEL 33 – DECATUR, ALABAMA
[MODIFICATION OF BPTT-20050713ADK]

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 W66DH-D) already is predicted to exist (also known as "masking"). 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 W66DH-D facility complies with the 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 W66DH-D
 CHANNEL 33 – DECATUR, ALABAMA
 [MODIFICATION OF BPTT-20050713ADK]

<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>
WCLP-DT BPEDT-20000425AAP	CP	Chatsworth, GA	33	2,067,970	2,246	0.1
WFIQ (TV) BLET-19960129KG	Lic.	Florence, AL	36	259,872	672	0.3
WCFT-DT BFRCCCT-20050815AAU	Appl.	Tuscaloosa, AL	33	1,249,713	1,190	0.1
WCFT-TV BLCT-19961025KE	Lic.	Tuscaloosa, AL	33	1,330,607	4,823	0.4
WAAY-DT BMPCDT-20040730ART	CP	Huntsville, AL	32	1,134,098	1,009	0.1
WAAY-TV BPCT-20020508AAF	CP	Huntsville, AL	31	747,340	5	<0.1
WAAY-TV BLCT-2537	Lic.	Huntsville, AL	31	814,188	5	<0.1

POWER DENSITY CALCULATION
PROPOSED W66DH-D
CHANNEL 33 – DECATUR, ALABAMA
[MODIFICATION OF BPTT-20050713ADK]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Decatur facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15 kw, an antenna radiation center 41 meters above ground, and the vertical pattern of the antenna, maximum power density two meters above ground of 0.0031 mw/cm^2 is calculated to occur 35 meters northeast of the base of the tower. Since this is only 0.8 percent of the 0.39 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 33 (584-590 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.