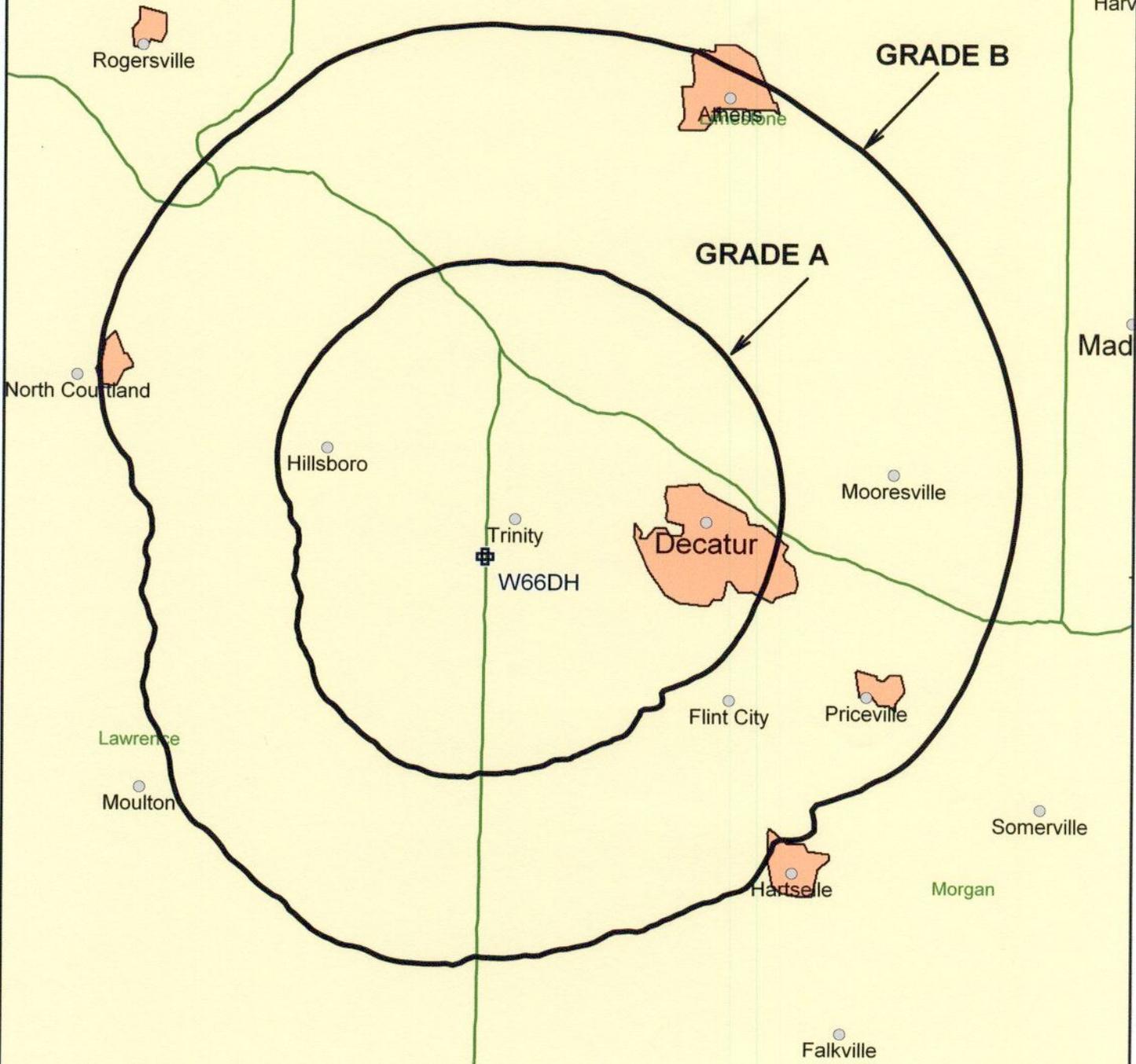
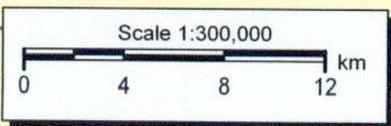


**CONTOUR POPULATION**  
**GRADE A (74 DBU) : 64,335**  
**GRADE B (64 DBU) : 118,094**

**SMITH and FISHER**



**EXHIBIT B**



## PROPOSED OPERATING PARAMETERS

PROPOSED W66DH  
CHANNEL 33 - DECATUR, ALABAMA

Transmitter Power Output:	1.0 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:	11.3 kw
Effective Radiated Power – Main Lobe:	11.3 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam dielectric
Length:	160 feet
Antenna Make and Model:	Andrew AL8
Orientation	40 degrees true
Beam Tilt	1.75 degrees
Effective Height Above Ground:	41 meters
Effective Height Above Mean Sea Level:	291 meters

CONTOUR OVERLAP AND  
LONGLEY-RICE INTERFERENCE STUDIES  
PROPOSED W66DH  
CHANNEL 33 – DECATUR, ALABAMA

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, and 74.707 of the FCC's Rules with respect to analog full-power, digital full-power, and low power television stations, respectively. It concludes that the facility proposed herein meets these requirements except to six stations: WCFT-TV, Channel 33 in Tuscaloosa, Alabama; WCLP-DT, Channel 33 in Chatsworth, Georgia; WAAY-DT, Channel 32 in Huntsville, Alabama; WUNF1, Channel 33 in Cherokee, North Carolina; WHNT-TV, Channel 19 in Huntsville, Alabama; and, WBKO-DT, Channel 33 in Bowling Green, Kentucky.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to these facilities of concern. The software utilizes a 2-square kilometer cell size (except where noted), calculates signal strength at 1.0 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 Trinity's proposed W66DH) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that

the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, waivers of Section 74.705 of the Commission's Rules with respect to interference to WCFT-TV and WHNT-TV, Section 74.706 with regard to WCLP-DT, WAAY-DT, and WBKO-DT, and Section 74.707 with respect to WUNF1, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED W66DH  
CHANNEL 33 - DECATUR AL

REFERENCE  
34 35 22 N  
87 06 17 W

LPTV Pwr = 12 kW, HAMS L COR= 291 M

DISPLAY DATES  
DATA 05-14-05  
SEARCH 06-28-05

..... Channel 33-, 584 MHz .....

Call	Channel	Location	Dist	Azi	FCC	Margin
WCFTTV LI	33Z	Tuscaloosa	AL 126.68	193.8	> 217.11	-90.43
WCLP-D CP	33	Chatsworth	GA 219.77	84.6	> 309.48	-89.71
WAAY-D CPM	32	Huntsville	AL 54.89	72.5	> 118.36	-63.47
WUNF1 CP	33-	Cherokee	NC 358.78	73.0	> 421.89	-63.11
WHNTTV LI	19Z	Huntsville	AL 55.02	72.3	> 095.40	-40.38
WBKO-D CP	33	Bowling Green	KY 281.19	12.2	> 286.34	-5.15
WBKO-D ST	33	Bowling Green	KY 281.19	12.2	> 268.61	12.58
W69DB AP	34+	Columbia	TN 58.97	5.4	> 038.49	20.48
WJSUTV LI	40-	Anniston	AL 126.12	149.7	> 100.00	26.12

INTERFERENCE SUMMARY  
 PROPOSED W66DH  
 CHANNEL 33 - DECATUR, ALABAMA

<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>
WCFT-TV BLCT-19961025KE	Lic.	Tuscaloosa, AL	33	1,340,402	4,200	0.3
WCLP-DT BPEDT-20000425AAP	CP	Chatsworth, GA	33	2,119,331	743	<0.1
WAAY-DT BMPCDT-20040730ARJ	CP	Huntsville, AL	32	1,140,802	0	0
WUNF1 BNPTTB-20040326AEF	CP	Cherokee, NC	33	4,057	0	0
WHNT-TV BLCT-20011116ABY	Lic.	Huntsville, AL	19	877,651	0	0
WBKO-DT BPCDT-19991028ADV	CP	Bowling Green, KY	33	529,727	0	0

POWER DENSITY CALCULATION  
PROPOSED W66DH  
CHANNEL 33 - DECATUR, ALABAMA

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 11.3 kw, an effective antenna height of 41 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of  $0.0012 \text{ mw/cm}^2$  is calculated to occur 35 meters northeast of the base of the tower. Since this is only 0.3 percent of the  $0.39 \text{ mw/cm}^2$  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.