

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING OF TEXAS, INC., licensee of full-power digital television station WTJP-TV, Channel 26 in Gadsden, Alabama, in support of its request for Special Temporary Authority (STA) to operate at a power level of 50% of the licensed facility until such time as it can make repairs to the station's transmitter. No change in site location, antenna azimuth pattern or antenna height is proposed herein.

It is proposed to continue to utilize the licensed ERI omnidirectional horizontally-polarized antenna, which is mounted at the 214-meter level of the existing WTJP-TV 222-meter tower. The proposed effective radiated power for the STA facility is 500 kW. Exhibit B is a map upon which the predicted service contours are plotted. As shown, the community of Gadsden is completely encompassed by the proposed STA 48 dBu city-grade service contour.

Elevation pattern information for the licensed antenna is provided in Exhibit C. Because the only change in facilities proposed herein is a power reduction, the proposed STA facility has a service contour that is completely contained within that licensed to WTJP-TV under FCC File Number BLCDDT-20110304ACB. Therefore, no interference study is included herein. A power density calculation appears as Exhibit D.

Since no change in the overall height or location of the existing WTJP-TV tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1036344 to this tower.

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.

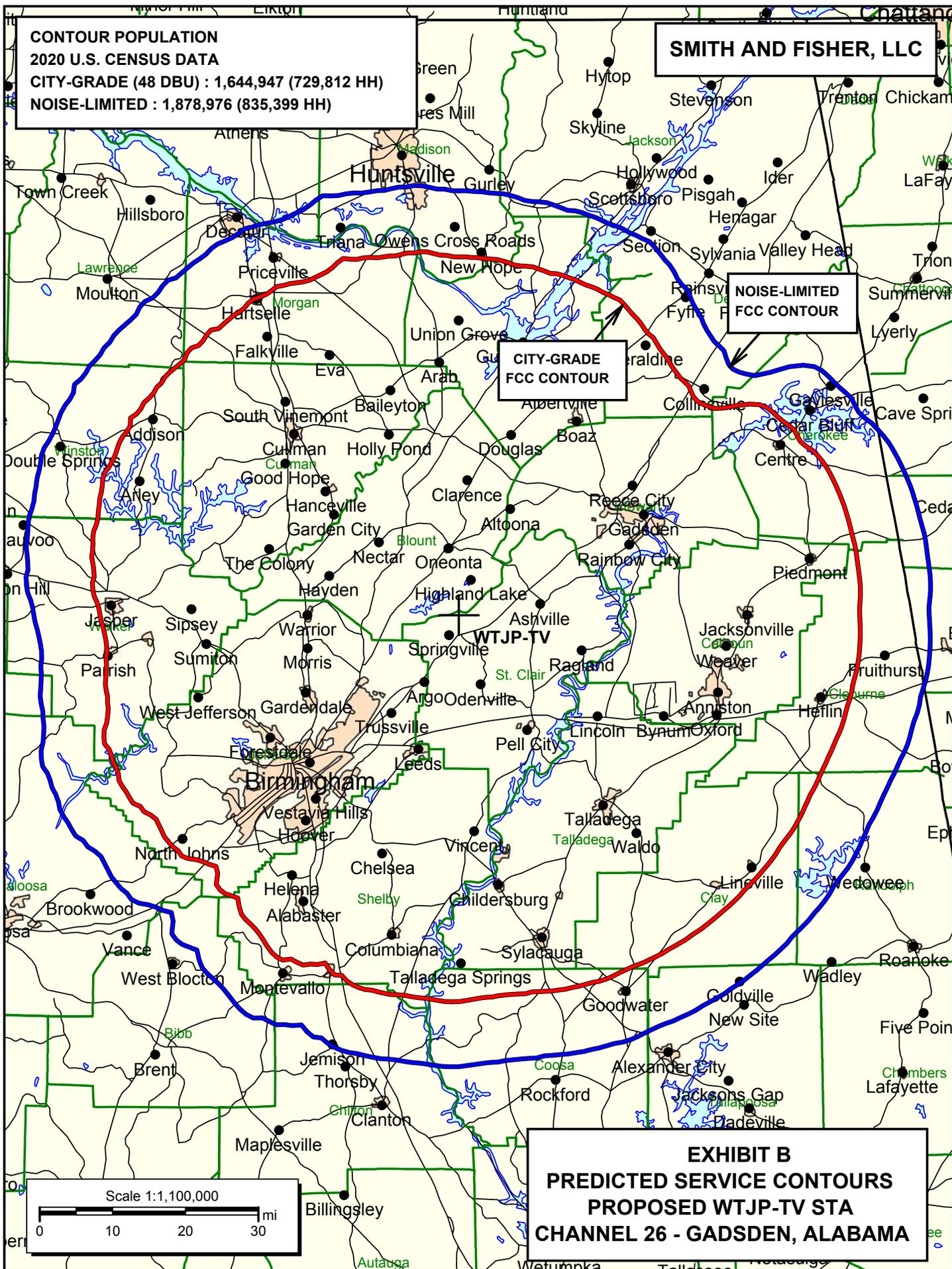
A handwritten signature in blue ink, appearing to read "K. T. Fisher". The signature is stylized with a large "K" and "F".

KEVIN T. FISHER

January 25, 2022

CONTOUR POPULATION
2020 U.S. CENSUS DATA
CITY-GRADE (48 DBU) : 1,644,947 (729,812 HH)
NOISE-LIMITED : 1,878,976 (835,399 HH)

SMITH AND FISHER, LLC

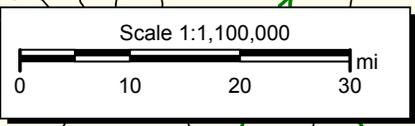


**NOISE-LIMITED
FCC CONTOUR**

**CITY-GRADE
FCC CONTOUR**

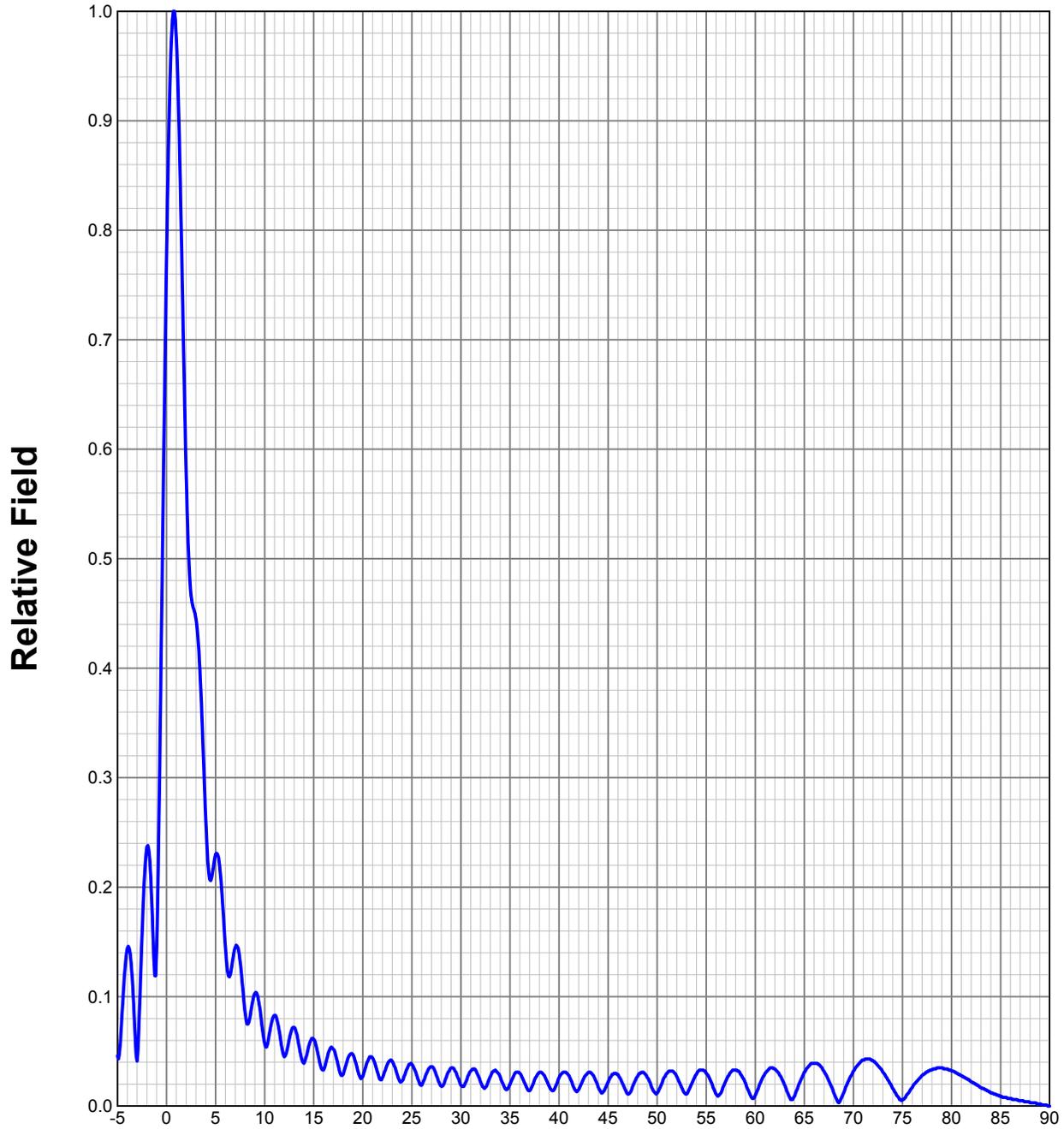
WTJP-TV

EXHIBIT B
PREDICTED SERVICE CONTOURS
PROPOSED WTJP-TV STA
CHANNEL 26 - GADSDEN, ALABAMA



ELEVATION PATTERN

Type:	ATW28H3H		Channel:	26
Directivity:	Numeric	dBd	Location:	
Main Lobe:	28.00	14.47	Beam Tilt:	0.75
Horizontal:	16.77	12.25	Polarization:	Horizontal



Preliminary, subject to final design and review.

POWER DENSITY CALCULATION

PROPOSED WTJP-TV STA
CHANNEL 26 – GADSDEN, 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 Gadsden facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 500 kW, an antenna radiation center 214 meters above ground, and the specific elevation pattern of the licensed ERI ATW28H3-HSO-26H antenna, maximum power density two meters above ground of 0.00062 mW/cm^2 is calculated to occur 71 meters from the base of the tower. Since this is only 0.2 percent of the 0.36 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 26 (542-548 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing 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 non-ionizing radiation.