

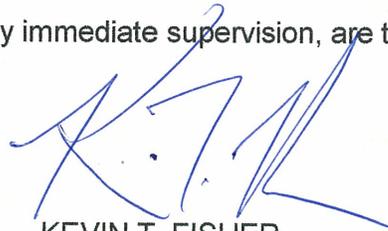
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of DIGITAL TELEVISION, LLC, in support of its Application for Construction Permit for a new digital low power television station on Channel 25 in Vero Beach, Florida.

It is proposed to mount a standard ERI (Andrew) directional antenna at the 85-meter level of an existing 99-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. 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.

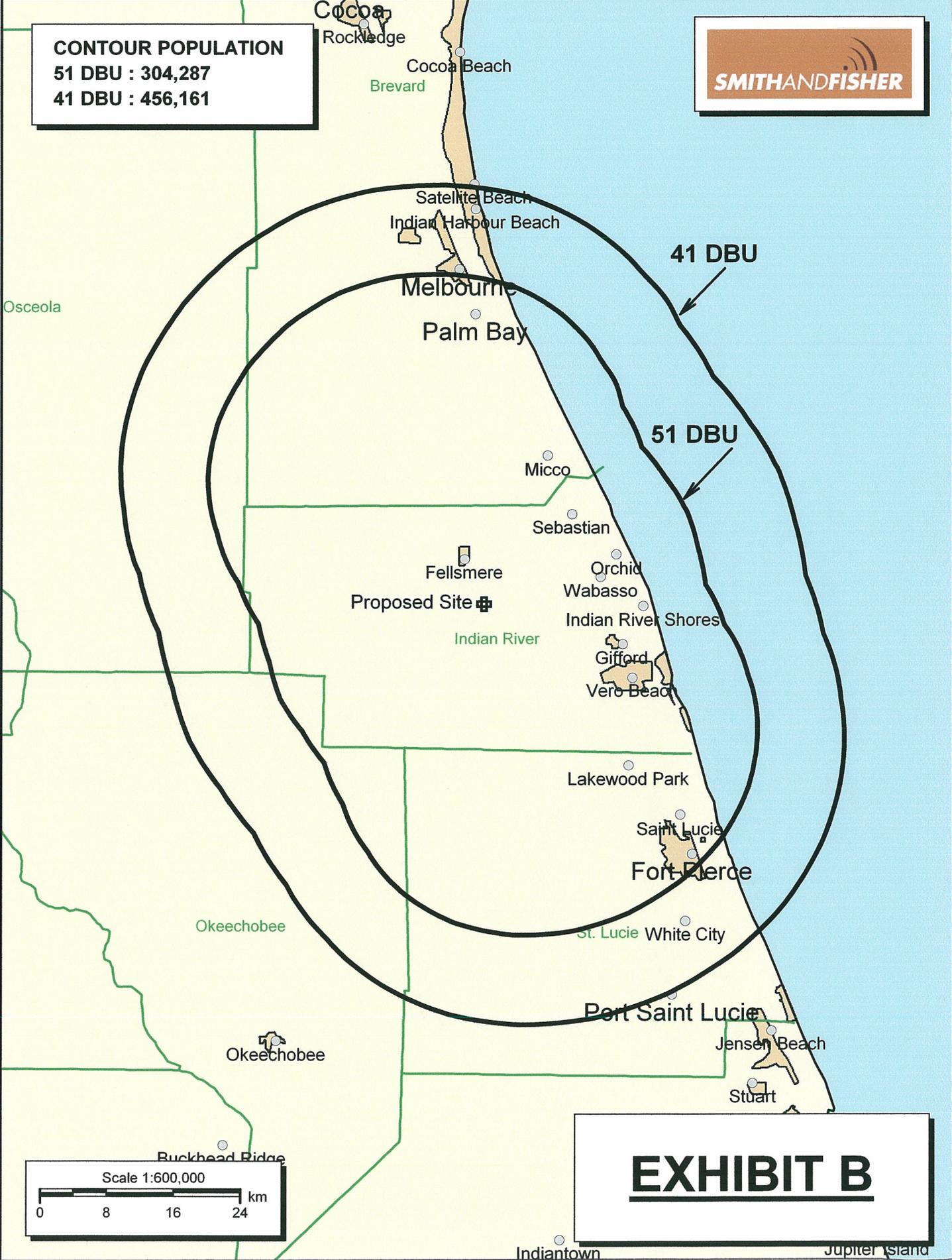
Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1003082 to this tower.

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.

  
KEVIN T. FISHER

July 22, 2010

**CONTOUR POPULATION**  
51 DBU : 304,287  
41 DBU : 456,161

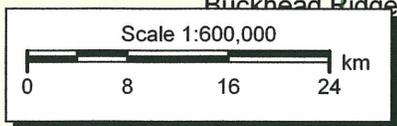


41 DBU

51 DBU

Fellsmere  
Proposed Site

**EXHIBIT B**



Indiantown      Jupiter Island

## PROPOSED OPERATING PARAMETERS

PROPOSED DIGITAL LOW POWER TELEVISION STATION  
CHANNEL 25 – VERO BEACH, FLORIDA

Transmitter Power Output:	1.0 kW
Transmission Line Efficiency:	67.4%
Antenna Power Gain – Toward Horizon:	22.26
Antenna Power Gain – Main Lobe:	22.26
Effective Radiated Power – Toward Horizon:	15.0 kW
Effective Radiated Power – Main Lobe:	15.0 kW
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	300 feet*
Antenna Make and Model:	ERI (Andrew) ALP8L1-HSH
Orientation	65 degrees true**
Beam Tilt	0.25 degrees
Radiation Center Above Ground:	85 meters
Radiation Center Above Mean Sea Level:	93 meters

\*estimated

\*\*main lobes oriented at 335°T and 155°T

LONGLEY-RICE INTERFERENCE STUDY  
PROPOSED DIGITAL LOW POWER TELEVISION STATION  
CHANNEL 25 – VERO BEACH, FLORIDA

We conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The SUNDTV software utilizes a 1-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 2000 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 the proposed station) already is predicted to exist (also known as "masking"). The results of this study are provided in Exhibit D-2. It concludes 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 digital LPTV 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.

Florida25\_summary  
Summary Study

Census data selected: 2000

Post DTV Transition Database Selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 07-21-2010 Time: 09:33:44

Record Selected for Analysis

FLORIDA USERRECORD-01 ?? US  
Channel 25 ERP 15. kw HAAT 86. m RCAMSL 00093 m STRINGENT MASK  
Latitude 027-43-08 Longitude 0080-34-42  
Status APP Zone 1 Border  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 315.  
Last update Cutoff date Docket  
Comments  
Applicant

cell size for service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kw)	HAAT (m)	51.0 dBu F(50,90) (km)
0.0	10.247	85.1	38.9
45.0	0.878	87.7	26.9
90.0	1.110	87.0	28.0
135.0	11.855	86.8	39.9
180.0	10.559	85.1	39.0
225.0	0.998	84.9	27.2
270.0	1.270	86.3	28.6
315.0	12.069	87.0	40.0

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward west Virginia quiet zone

Proposed facility OK toward Table Mountain



EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED DIGITAL LOW POWER TELEVISION STATION  
CHANNEL 25 – VERO BEACH, FLORIDA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Vero Beach facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kw, an antenna radiation center 85 meters above ground, and the vertical pattern of the ERI (Andrew) antenna, maximum power density two meters above ground of  $0.0043 \text{ mw/cm}^2$  is calculated to occur 34 meters north-northwest and south-southeast of the base of the tower. Since this is only 1.2 percent of the  $0.36 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 25 (536-542 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.