

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., permittee of WDCA-DT, Channel 35 in Washington, D.C., in support of its application for modification of Construction Permit BMPCDT-20010816AAF, to specify a change in transmitter site. It is proposed to utilize a combined antenna system at the licensed WTTG-DT site on Wisconsin Avenue.

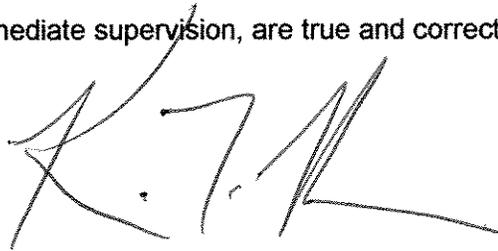
Exhibit B provides antenna elevation pattern data, and proposed operating parameters are tabulated in Exhibit C. Exhibit D-1 is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. Since the newly proposed 41 dBu contour lies completely within that of the authorized facility, as depicted in Exhibit D-2, this application meets the terms of acceptability under the Commission's present freeze on the filing of DTV modification proposals. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the new WDCA-DT site. However, if such should occur, the owner of WDCA-DT recognizes its obligation to take whatever corrective actions are necessary.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1042983 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 black ink, appearing to read 'K. T. Fisher', with a stylized flourish at the end.

KEVIN T. FISHER

May 17, 2006



Proposal Number **DCA-10690** Revision: **2**
Date **15-Dec-05**
Call Letters **WDCA** Channel **35**
Location **Washington, DC**
Customer
Antenna Type **TUC-O5-16/80H-1-B**

ELEVATION PATTERN

RMS Gain at Main Lobe **31.40 (14.97 dB)** Beam Tilt **0.50 deg**
RMS Gain at Horizontal **21.00 (13.22 dB)** Frequency **599.00 MHz**
Calculated / Measured **Calculated** Drawing # **16U314050-90**

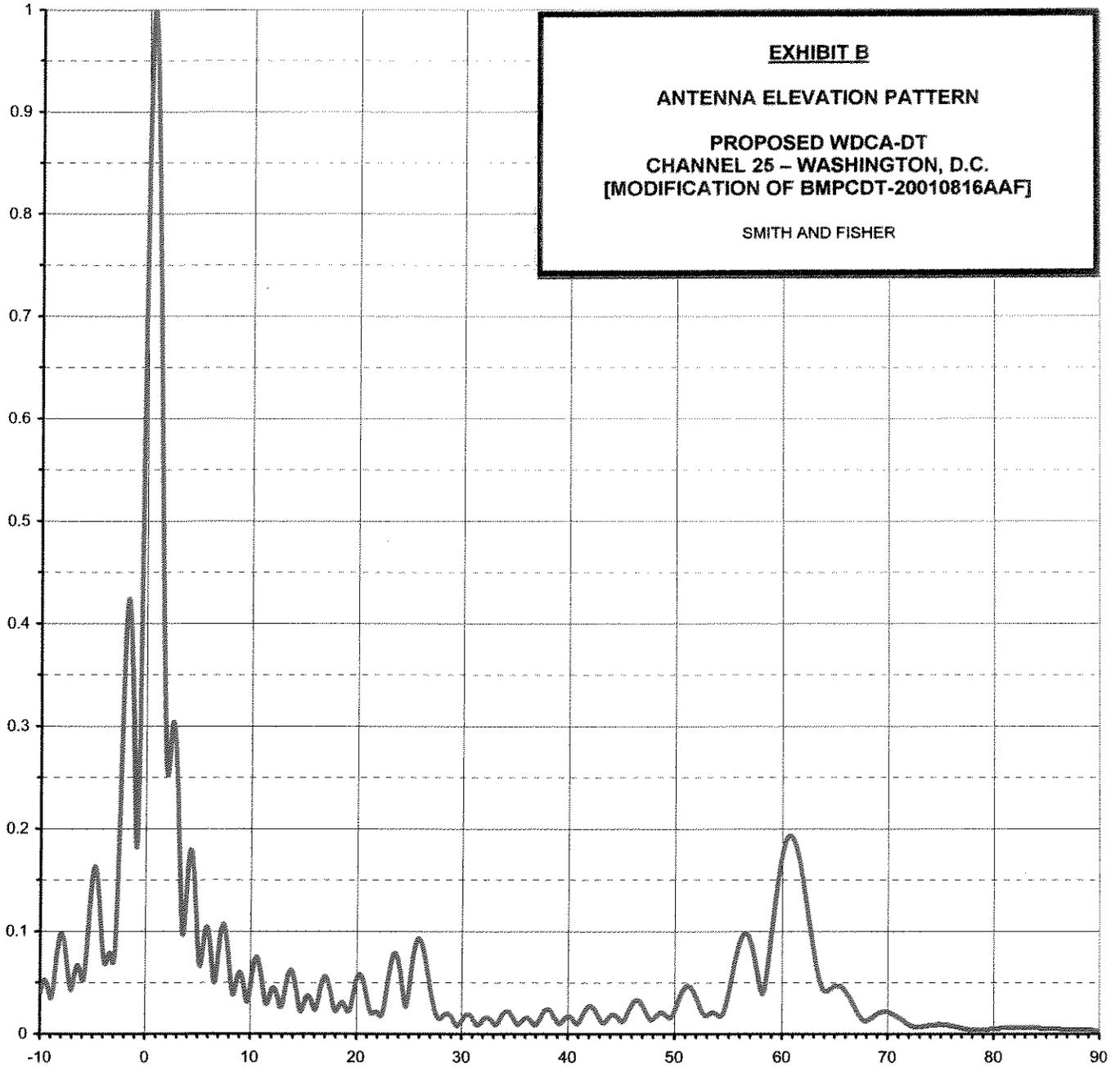


EXHIBIT C

PROPOSED OPERATING PARAMETERS

PROPOSED WDCA-DT
CHANNEL 35 – WASHINGTON, D.C.

[MODIFICATION OF BMPCDT-20010816AAF]

Transmitter Power Output:	20.9 kw
Transmission Line Efficiency:	76.1%*
Input to Antenna	15.9 kw
Antenna Power Gain – Main Lobe:	31.4
Effective Radiated Power – Main Lobe:	500 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	EIA-EHT
Size and Type:	7-3/16" rigid
Length:	900 feet
Antenna Make and Model:	Dielectric TUC-O5-16/80H-1-B
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Effective Height Above Ground:	191 meters
Effective Height Above Mean Sea Level:	296 meters

*includes combiner loss

CONTOUR POPULATION
48 DBU : 6,691,603
41 DBU : 6,986,111

SMITH and FISHER

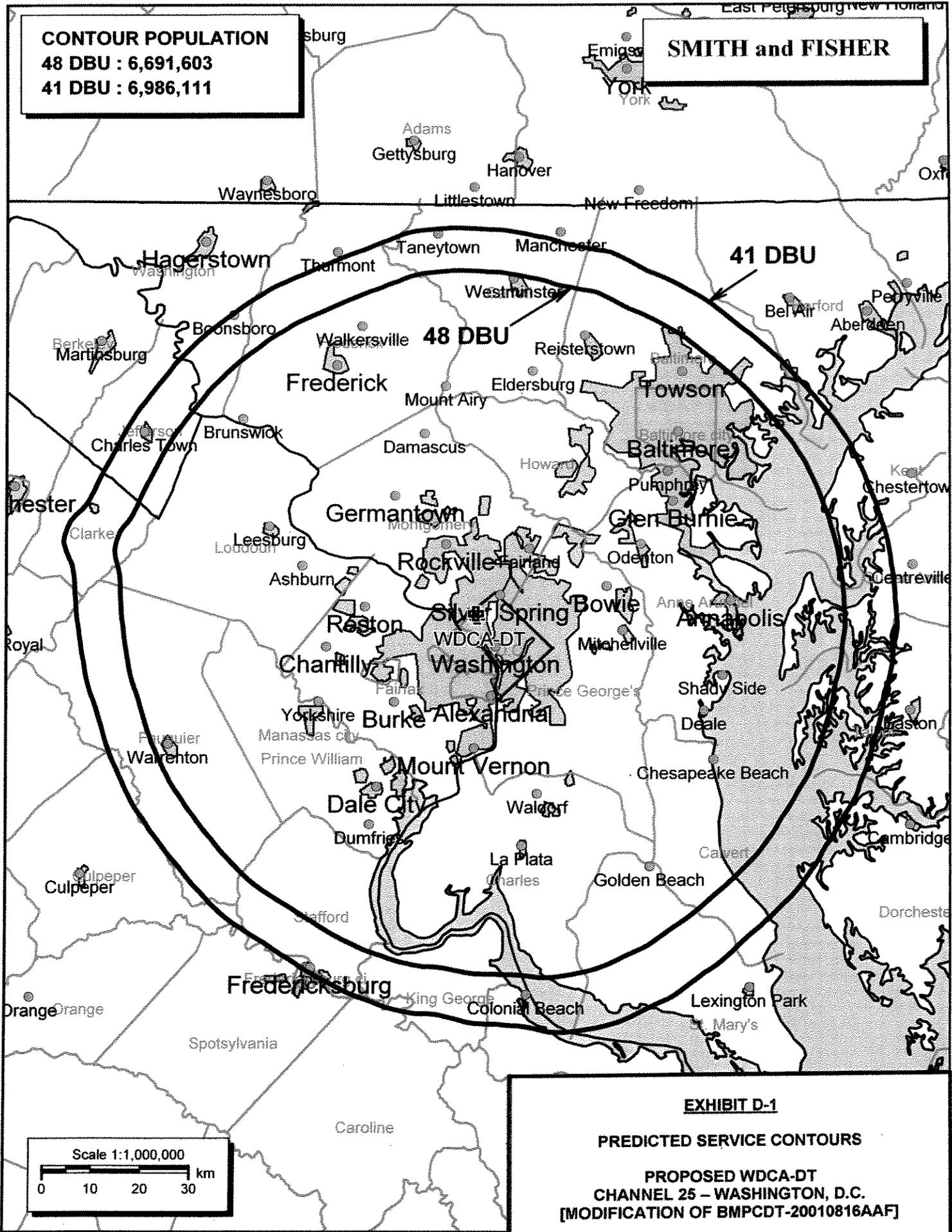


EXHIBIT D-1
PREDICTED SERVICE CONTOURS
PROPOSED WDCA-DT
CHANNEL 25 – WASHINGTON, D.C.
[MODIFICATION OF BMPCDT-20010816AAF]
SMITH AND FISHER

York

**AUTHORIZED
41 DBU**

**PROPOSED
41 DBU**

Hagerstown

Frederick

Towson

Baltimore

Columbia

Glen Burnie

Gaithersburg

Rockville

Severna Park

Reston

Silver Spring

Bowie

WDCA-D.C.
Washington

Annapolis

Chantilly

Centreville

Burke

Alexandria

Manassas

Mount Vernon

Dale City

Scale 1:1,000,000

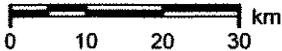


EXHIBIT D-2

AUTHORIZED AND PROPOSED CONTOURS

**PROPOSED WDCA-DT
CHANNEL 25 - WASHINGTON, D.C.
[MODIFICATION OF BMPCDT-20010816AAF]**

SMITH AND FISHER

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED WDCA-DT
CHANNEL 35 – WASHINGTON, D.C.

[MODIFICATION OF BMPCDT-20010816AAF]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Washington 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 191 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.013 mw/cm^2 is calculated to occur 105 meters from the base of the tower. Since this is only 3.3 percent of the 0.40 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 35 (596-602 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.