

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf FOX TELEVISION STATIONS, INC., licensee of WFXT-DT, Channel 31 in Boston, Massachusetts, in support of its Application for Construction Permit to operate on Channel 31 with a maximized post-transition DTV facility.

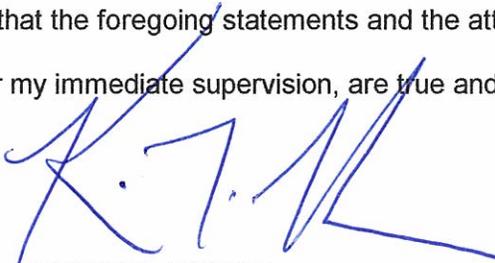
It is proposed to mount a standard Dielectric omnidirectional antenna at the 360-meter level of the existing 366-meter tower on which the present WFXT-DT antenna is mounted. Exhibit B provides elevation pattern data for the proposed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. An interference study is included as Exhibit D, and it is important to note that the analysis employed a cell size of 1.0 kilometer and an increment spacing of 0.1 kilometer. In addition, the applicant requests a waiver of the Commission's interference requirements with respect to station WBPX-DT, Channel 32 in Boston, Massachusetts, for the reasons stated in Exhibit D. 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 WFXT-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

EXHIBIT A

Since no change in 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 1004233 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.

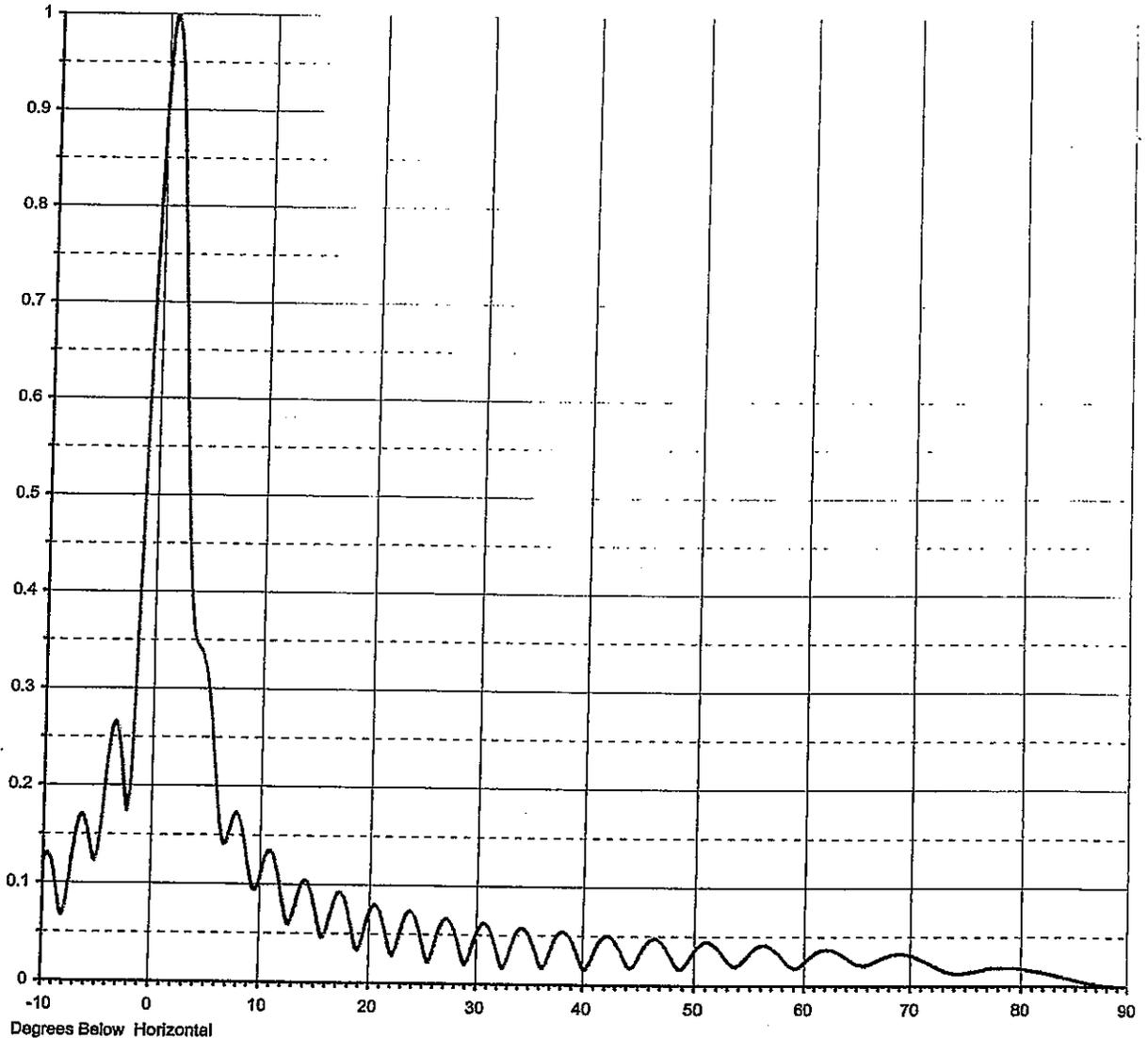


KEVIN T. FISHER

March 6, 2008

## ELEVATION PATTERN

RMS Gain at Main Lobe	17.50 (12.43 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	14.30 (11.55 dB)	Frequency	575.00 MHz
Calculated / Measured	Calculated	Drawing #	19E175075-90



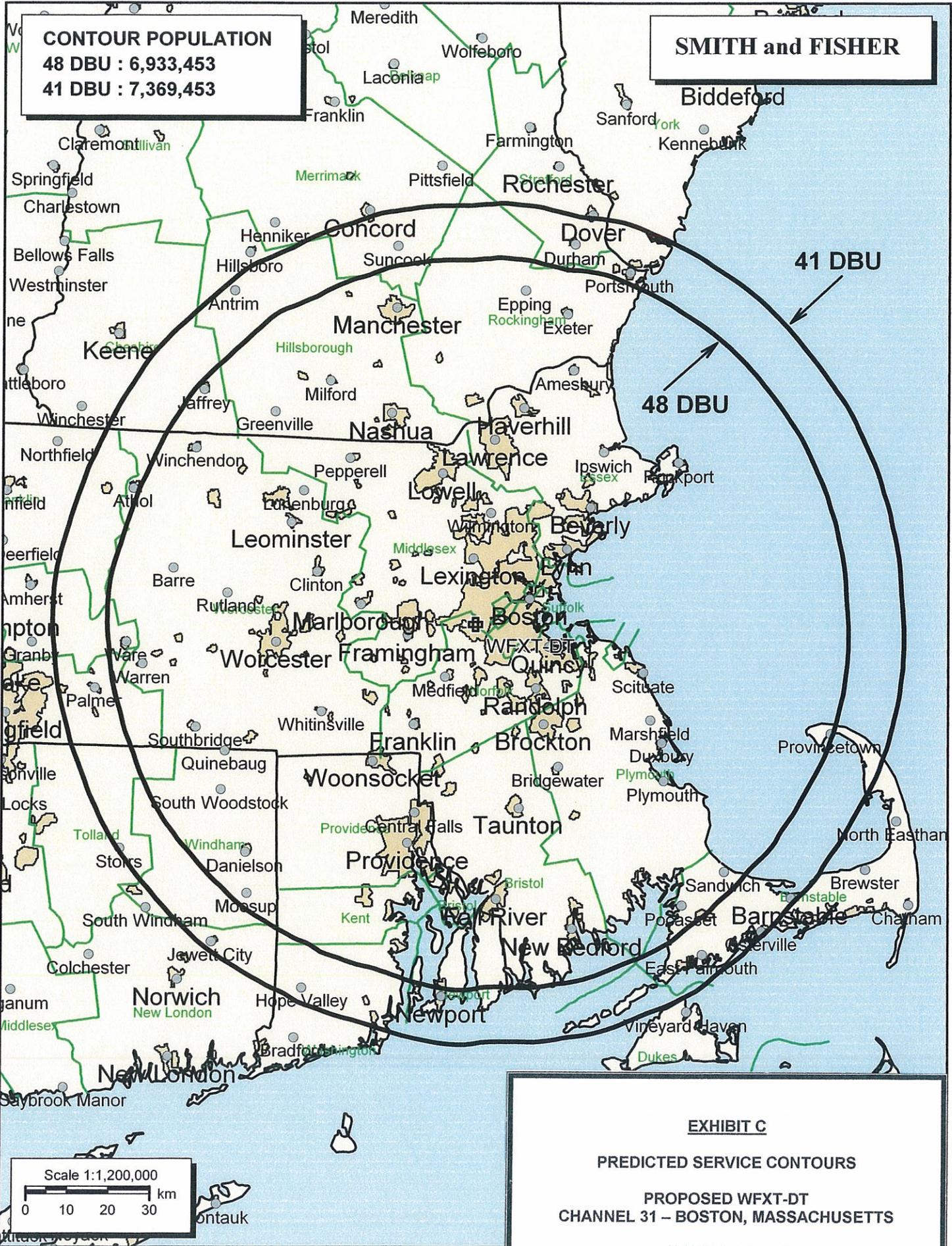
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### EXHIBIT B

#### ANTENNA ELEVATION PATTERN

PROPOSED WFXT-DT  
CHANNEL 31 – BOSTON, MASSACHUSETTS

SMITH AND FISHER



INTERFERENCE STUDY  
PROPOSED WFXT-DT  
CHANNEL 31 – BOSTON, MASSACHSETTS

The instant application specifies an ERP of 950 kw (omnidirectional) at 363 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various post-transition digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 1.0 kilometers and an increment spacing of 0.1 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WFXT-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WFXT-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WFXT-DT facility) to the service population of any potentially affected post-transition DTV station, except one.

WBPX-DT presently operates on Channel 32 in Boston, from a site that is nearly co-located with that of WFXT-DT, and a highly directional antenna with an ERP of 300 kw. As a result of the low ERP and use of a directional antenna pattern by WBPX-DT, the proposed omnidirectional operation of WFXT-DT with an ERP of 950 kw causes interference to 2.5 percent of the licensed WBPX-DT service population, in apparent violation of the Commission's 0.5 percent interference guideline. However, it has been learned that WBPX-DT is filing a

maximization application on June 20, 2008, that specifies omnidirectional operation and an ERP of 1000 kw. As shown in Exhibit D-2, the WFXT-DT facility proposed herein causes less than 0.1 percent interference to the proposed WBPX-DT facility's service population. Accordingly, a waiver of the FCC's 0.5 percent interference requirement to the licensed and allotted facilities of WBPX-DT is requested and believed to be justified. The applicant will accept a construction permit conditioned on the grant and implementation of the proposed WBPX-DT facility.

A Longley-Rice interference study also reveals that the proposed WFXT-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

INTERFERENCE STUDY SUMMARY  
 PROPOSED WFXT-DT  
 CHANNEL 31 – BOSTON, MASSACHUSETTS

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WFXT-DT*</u>	<u>%</u>
WTIC-DT	Hartford, CT	31	4,390,994	21,335	0.49
WBZ-DT	Boston, MA	30	7,369,869	125	<0.1
WBPX-DT (Lic.)	Boston, MA	32	6,473,374	167,957**	2.6
WBPX-DT (Proposed)	Boston, MA	32	7,107,549	1,405	<0.1
WPXN-DT	New York, NY	31	19,068,767	7,779	<0.1

\*Above that caused by the allotment facility.

\*\*Waiver requested with respect to WBPX-DT. See Exhibit D-1.

Note: This study utilized a cell size of 1.0 km and an increment spacing of 0.1 km.

POWER DENSITY CALCULATION

PROPOSED WFXT-DT  
CHANNEL 31 – BOSTON, MASSACHUSETTS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Boston facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 950 kw (H, V), an antenna radiation center 360 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of  $0.00060 \text{ mw/cm}^2$  is calculated to occur 340 meters southeast of the base of the tower. Since this is only 0.2 percent of the  $0.38 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 31 (572-578 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.