

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of HIC BROADCAST, INC., licensee of KFWD-DT, Channel 51 in Fort Worth, Texas, in support of its Application for Construction Permit to operate on Channel 9 with its post-transition DTV facility.

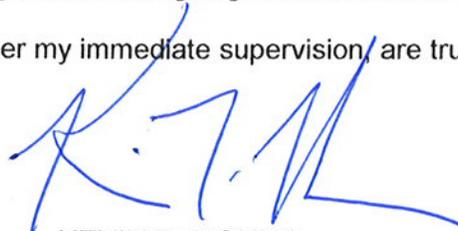
It is proposed to mount a standard Dielectric directional antenna at the 493-meter level of the existing 506-meter tower on which the present KFWD-DT antenna is mounted. Exhibit B provides antenna azimuth and elevation pattern data, and proposed operating parameters are tabulated in Exhibit C. Exhibit D is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 43 dBu service contour. It can be seen in Exhibit E that the newly proposed 36 dBu contour extends slightly beyond that of the allotment facility assigned to KFWD-DT in Appendix B of the Commission's DTV Table of Allotments. However, at no azimuth does the proposed contour exceed that of the allotment facility by more than five miles. Accordingly, since the station's post-transition DTV Channel (9) is different than its pre-transition DTV Channel (51), the applicant requests a waiver of the current freeze on the filing of such an application. An interference study is included in Exhibit F, and a power density calculation is provided in Exhibit G.

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 KFWD-DT site.

However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

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 1045531 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

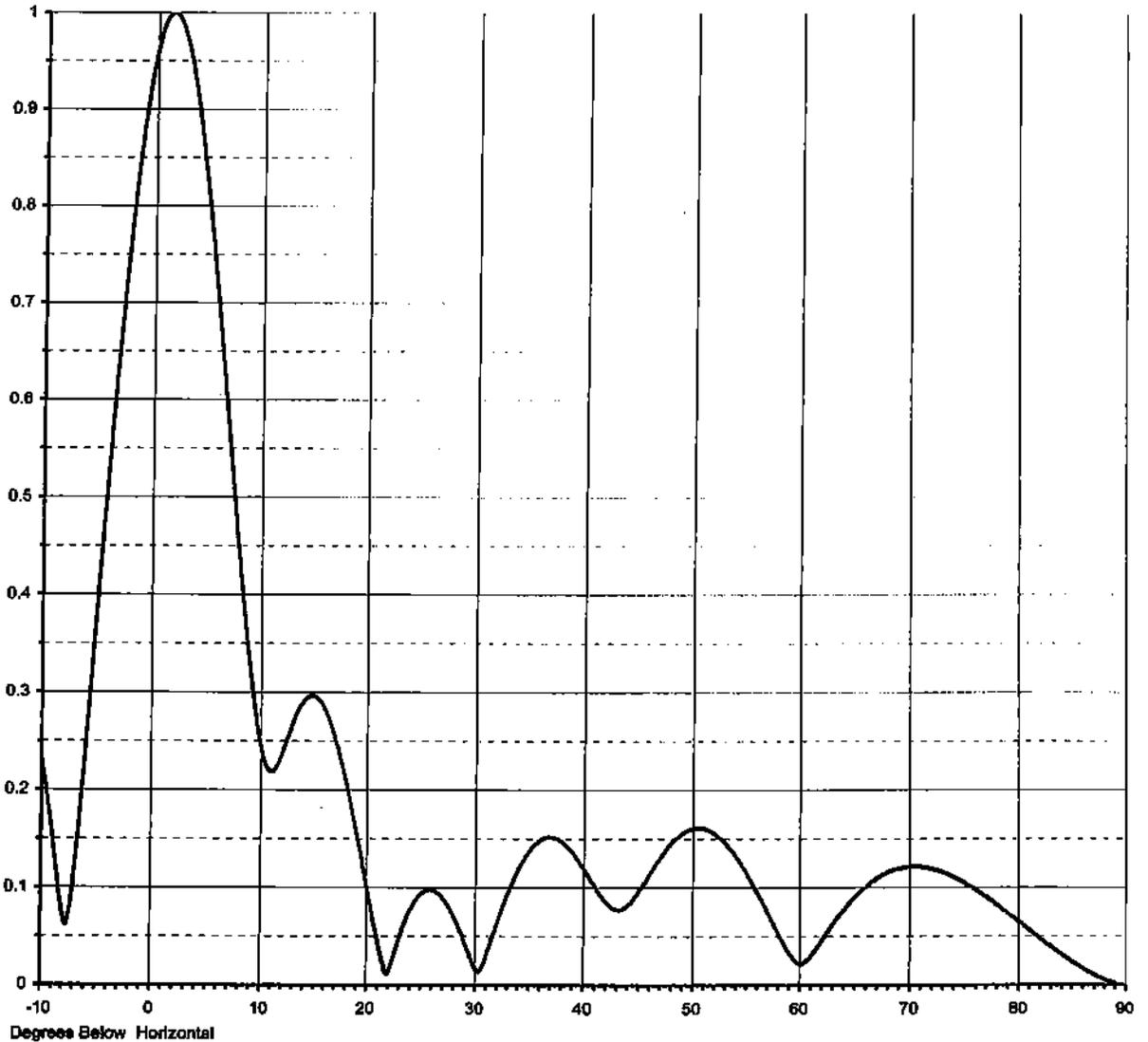
February 22, 2008



Proposal Number **C-02000**
Date **1-Oct-07**
Call Letters **KFWD-DT** Channel **9**
Location **Dallas, TX**
Customer **Belo**
Antenna Type **THV-6A9-R C180**

ELEVATION PATTERN

RMS Gain at Main Lobe	6.00 (7.78 dB)	Beam Tilt	1.50 deg
RMS Gain at Horizontal	5.50 (7.40 dB)	Frequency	189.00 MHz
Calculated / Measured	Calculated	Drawing #	06V060150-00



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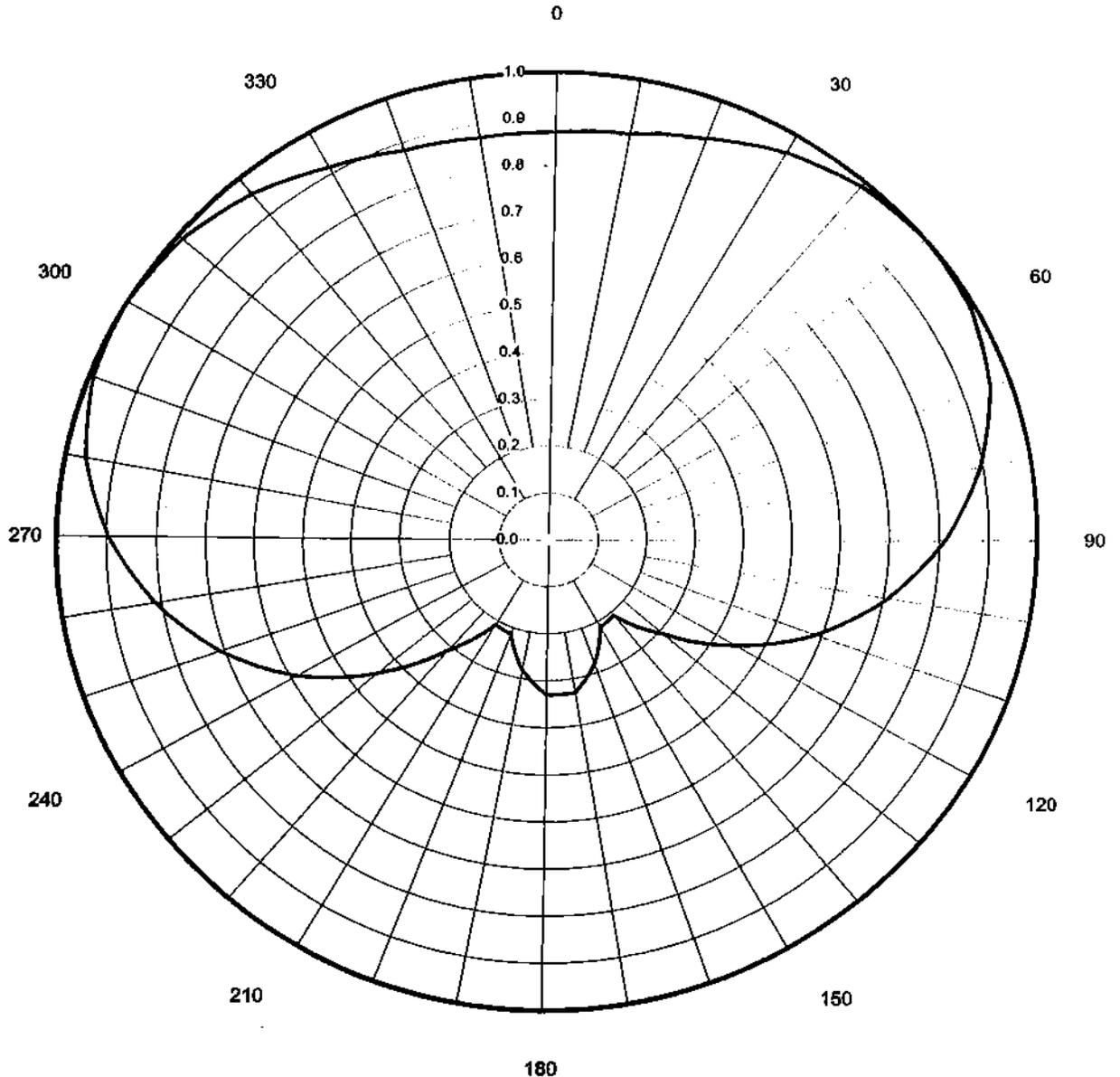
EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED KFWD-DT
CHANNEL 9 - FORT WORTH, TEXAS
SMITH AND FISHER

Proposal Number	C-02000	
Date	1-Oct-07	
Call Letters	KFWD-DT	Channel 9
Location	Dallas, TX	
Customer	Belo	
Antenna Type	THV-6A9-R C180	

AZIMUTH PATTERN

Gain **1.80** (2.55 dB)
Calculated / Measured **Calculated**

Frequency **189.00 MHz**
Drawing # **THV-C180**



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EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED KFWD-DT
CHANNEL 9 - FORT WORTH, TEXAS
SMITH AND FISHER

ANTENNA AZIMUTH PATTERN DATA

PROPOSED KFWD-DT
CHANNEL 9 – FORT WORTH, TEXAS

<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	0.871	9.9	180	0.330	1.5
10	0.882	10.0	190	0.281	0.1
20	0.914	10.4	200	0.214	-2.3
30	0.957	10.8	210	0.209	-2.5
40	0.988	11.0	220	0.309	0.9
50	1.000	11.1	230	0.446	4.1
60	0.991	11.1	240	0.587	6.5
70	0.958	10.8	250	0.709	8.2
80	0.895	10.2	260	0.812	9.3
90	0.812	9.3	270	0.895	10.2
100	0.709	8.2	280	0.958	10.8
110	0.587	6.5	290	0.991	11.1
120	0.446	4.1	300	1.000	11.1
130	0.309	0.9	310	0.988	11.0
140	0.209	-2.5	320	0.957	10.8
150	0.214	-2.3	330	0.914	10.4
160	0.281	0.1	340	0.882	10.0
170	0.330	1.5	350	0.871	9.9

EXHIBIT C

PROPOSED OPERATING PARAMETERS

PROPOSED KFWD-DT
CHANNEL 9 – FORT WORTH, TEXAS

Transmitter Power Output:	2.2 kw
Transmission Line Efficiency:	55.2%
Antenna Power Gain – Main Lobe:	10.8
Effective Radiated Power – Main Lobe:	13.0 kw

Transmitter Make and Model:	Type-accepted
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Transmission Line Make and Model:	Dielectric EIA/DCA
Size and Type:	3-1/8" rigid
Length:	1900 feet*

Antenna:

Make and Model:	Dielectric THV-6A9-R C180
Orientation	355 degrees true
Beam Tilt	1.5 degrees
Radiation Center Above Ground:	493 meters
Radiation Center Above Mean Sea Level:	737 meters

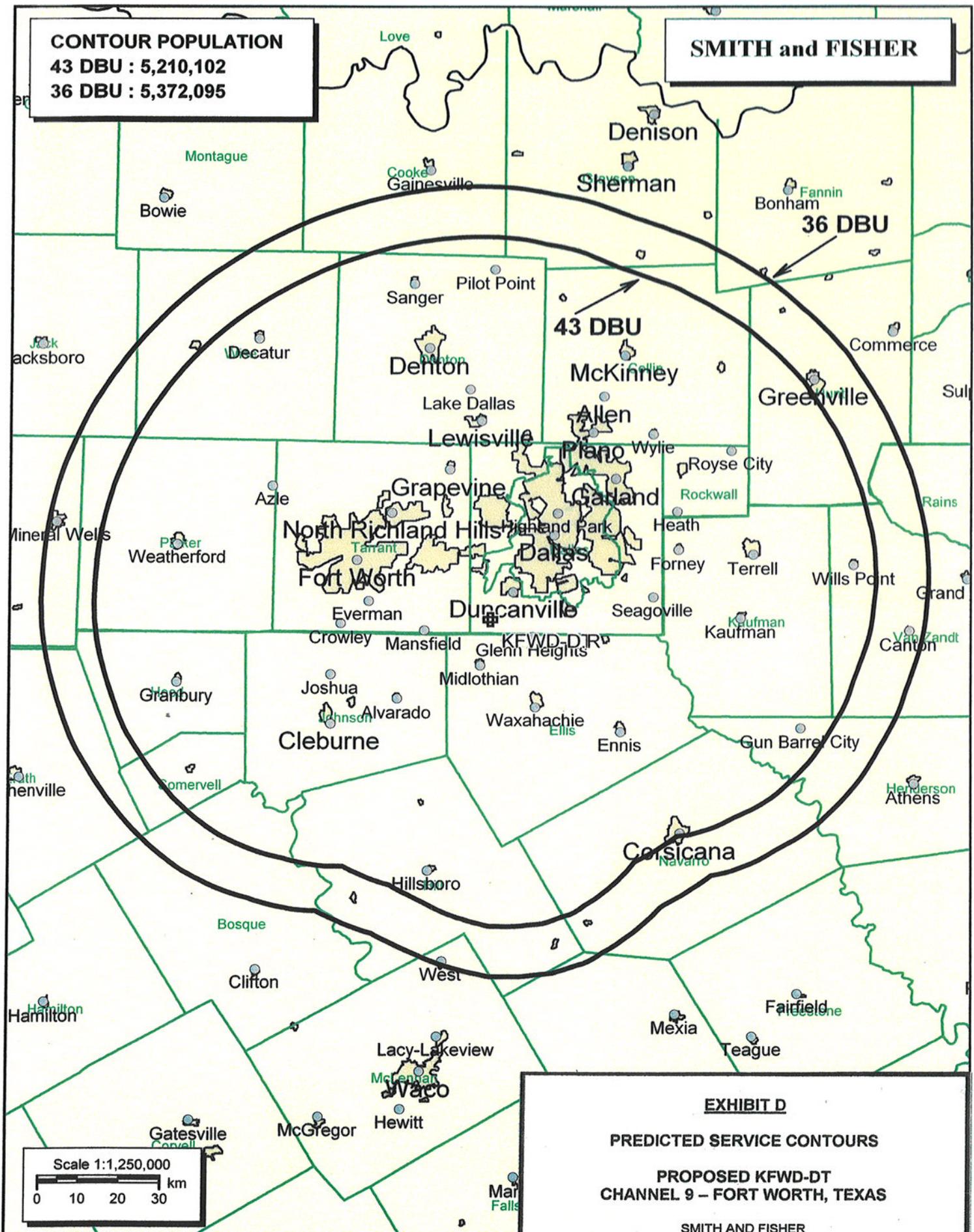
*estimated

CONTOUR POPULATION

43 DBU : 5,210,102

36 DBU : 5,372,095

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43 DBU

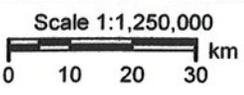
36 DBU

EXHIBIT D

PREDICTED SERVICE CONTOURS

**PROPOSED KFWD-DT
CHANNEL 9 - FORT WORTH, TEXAS**

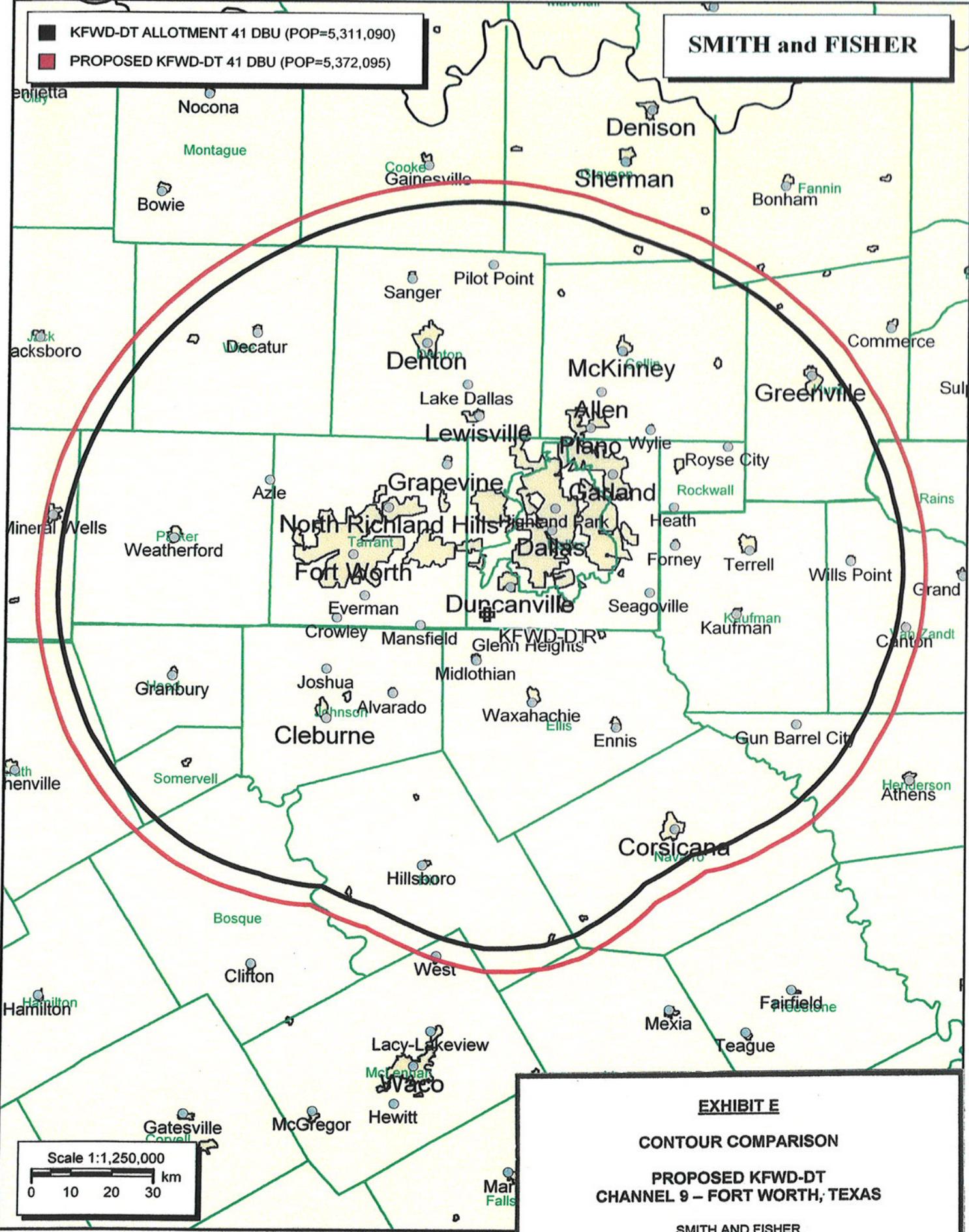
SMITH AND FISHER



KFWD-DT ALLOTMENT 41 DBU (POP=5,311,090)

 PROPOSED KFWD-DT 41 DBU (POP=5,372,095)

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Scale 1:1,250,000
 0 10 20 30 km

EXHIBIT E
CONTOUR COMPARISON
PROPOSED KFWD-DT
CHANNEL 9 - FORT WORTH, TEXAS
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INTERFERENCE STUDY
PROPOSED KFWD-DT
CHANNEL 9 – FORT WORTH, TEXAS

The instant application specifies an ERP of 13 kw (directional) at 546 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various 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 2.0 kilometers and an increment spacing of 1.0 kilometer along each radial (except where noted). In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed KFWD-DT to other pertinent stations are tabulated in Exhibit F-2.

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

A Longley-Rice interference study also reveals that the proposed KFWD-DT facility does not cause significant (0.5%) interference within the protected 74 dBu 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 KFWD-DT
 CHANNEL 9 – FORT WORTH, TEXAS

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From KFWD-DT*</u>	<u>%</u>
KCEN-DT Post-Transition	Temple, TX	9	1,363,081	4,607	0.3
KTRE-DT Post-Transition	Lufkin, TX	9	316,092	1,082	0.3
KWTV-DT Post-Transition	Oklahoma City, OK	9	1,440,961	548	<0.1
KWTX-DT Post-Transition	Waco, TX	10	1,176,227	11	<0.1

*Above that caused by the KFWD-DT allotment facility.

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

POWER DENSITY CALCULATION
PROPOSED KFWD-DT
CHANNEL 9 – FORTH WORTH, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Fort Worth facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 13 kw, an antenna radiation center 493 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.000028 mw/cm^2 is calculated to occur 398 meters north of the base of the tower. Since this is less than 0.1 percent of the 0.2 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 9 (186-192 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.