

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of WFAA-TV, INC., licensee of WFAA-DT, Channel 8 in Dallas, Texas, in support of its Application for Construction Permit to operate with an increase in effective radiated power and a directional antenna. No change in site location or antenna height is proposed herein.

Ever since the conversion to digital operation on Channel 8, the station has received a tremendous number of complaints from viewers who can no longer receive a WFAA signal. It is believed that the Commission's digital television planning factors severely under estimate the level of signal from a high-band VHF digital television station required to translate into consistently viewable reception by the consumer. Accordingly, an increase in effective radiated power, from 45 kw to 55 kw, is requested.

It is proposed to utilize a standard Dielectric directional antenna mounted at the 457-meter level of the existing 481-meter tower. Exhibit B provides elevation and azimuth 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 43 dBu service contour.

It is important to note that the proposed facility exceeds the FCC's maximum power limitations for high-band VHF operations located in Zone 2. According to Section 73.622(f)(7)(i) of the Commission's Rules, the maximum allowable power for such a station with an effective antenna height of 510 meters is 49.3 kw. The facility proposed herein specifies an effective radiated power of 55 kw. Exhibit D is a map upon which the presently authorized 36 dBu contour is plotted in relation to that proposed in the instant application. The area within the present contour is 45,923 square kilometers. The proposed 36 dBu contour extends over an

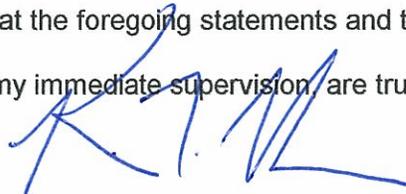
area of 46,668 square kilometers, an increase of only 1.6 percent over the present contour's area. Additionally, a hypothetical WFAA-DT omnidirectional facility with an effective radiated power of 49.3 kw (the maximum allowable under FCC Rules) would create a 36 dBu contour encompassing an area of 46,628 square kilometers, almost identical to that proposed herein. As a result, a waiver of Section 73.622(f)(7)(i) of the FCC's Rules is respectfully requested and believed to be justified.

An interference study is included in Exhibit E, and it is important to note that the study utilized a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometers. In addition, the exhibit contains an interference agreement with the owners of KLTV-DT, Channel 7 in Tyler, Texas. A power density calculation is provided in Exhibit F.

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 WFAA-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 1011407 to this tower.

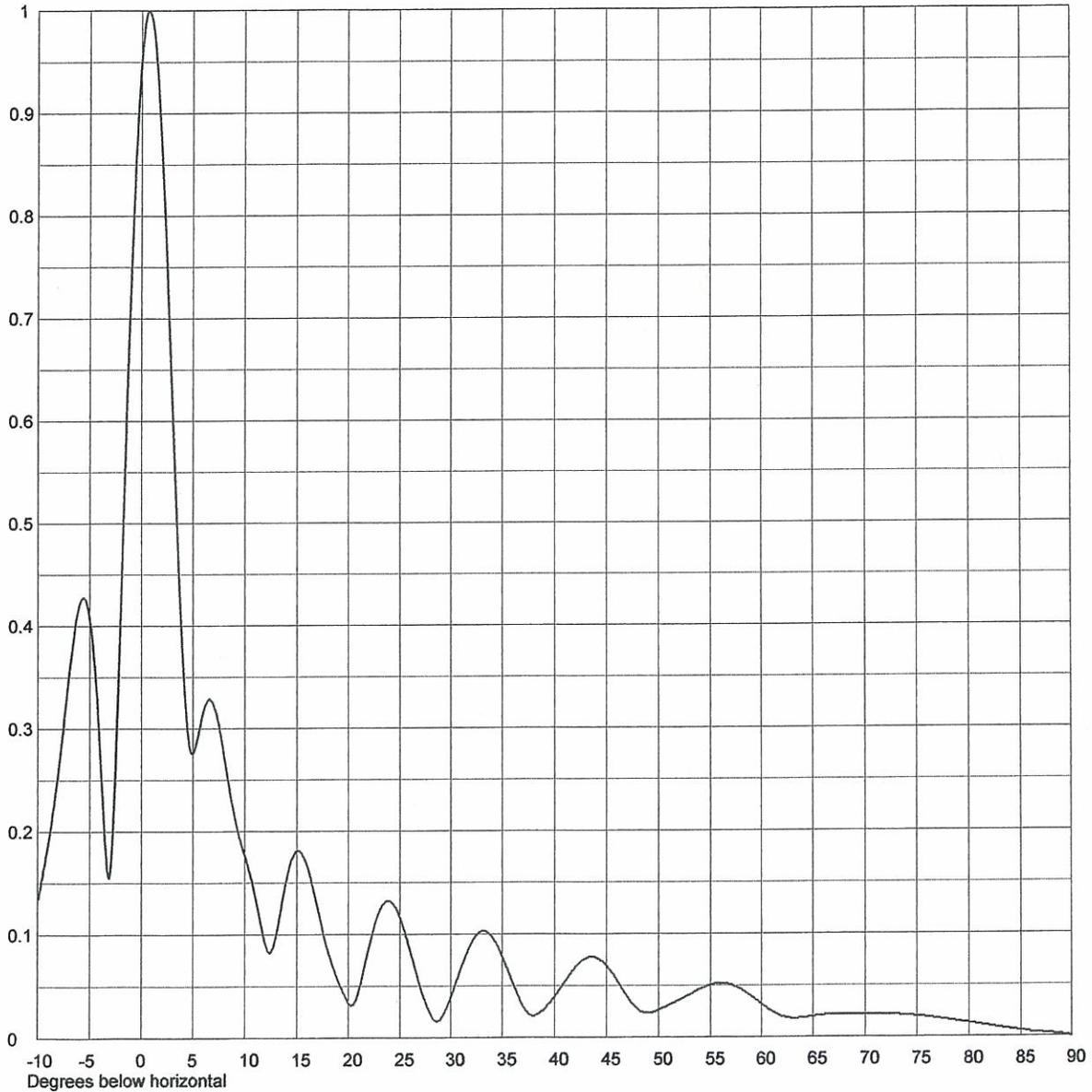
I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.


KEVIN T. FISHER

December 17, 2009

ELEVATION PATTERN

RMS Gain at Main Lobe	4.7 (6.72 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	4.2 (6.23 dB)	Frequency	183.00 MHz
Calculated / Measured	Calculated	Drawing #	02T047075-90

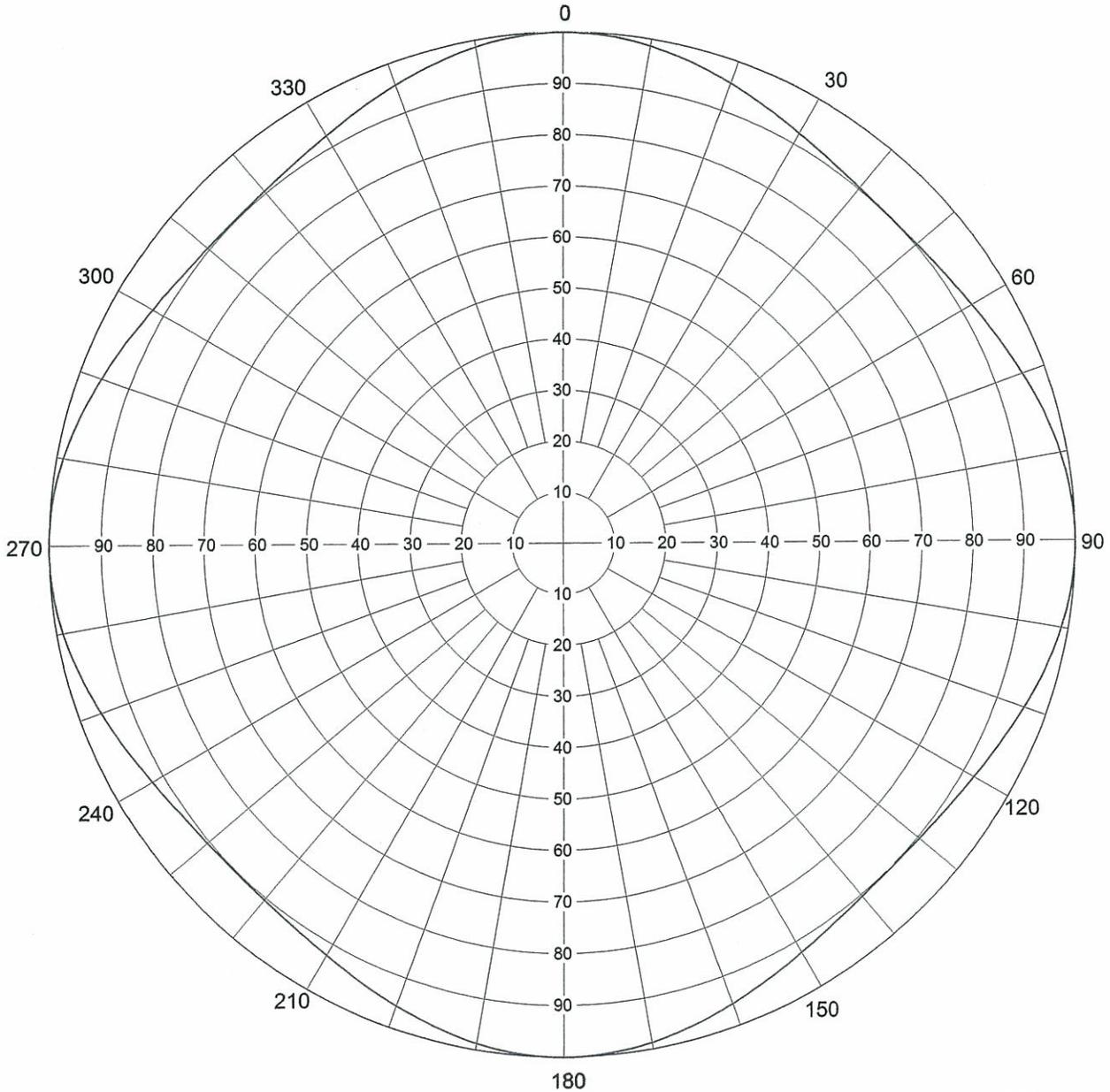


Remarks:

EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED WFAA-DT
CHANNEL 8 – DALLAS, TEXAS
SMITH AND FISHER

AZIMUTH PATTERN

Gain **1.10 (0.41 dB)** Frequency **183 MHz**
Calculated / Measured **Calculated** Drawing # **TCL-O-HP**



Remarks:

EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED WFAA-DT
CHANNEL 8 - DALLAS, TEXAS
SMITH AND FISHER



Date **17 Dec 2009**
 Call Letters Channel **8**
 Location
 Customer
 Antenna Type **TCL-12A8**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **TCL-O-HP**

Angle	Field	ERP (kW)	ERP (dBk)
0	1.000	55.0	17.40
10	0.987	53.6	17.29
20	0.956	50.3	17.01
30	0.924	47.0	16.72
40	0.904	44.9	16.53
50	0.904	44.9	16.53
60	0.924	47.0	16.72
70	0.956	50.3	17.01
80	0.987	53.6	17.29
90	1.000	55.0	17.40
100	0.987	53.6	17.29
110	0.956	50.3	17.01
120	0.924	47.0	16.72
130	0.904	44.9	16.53
140	0.904	44.9	16.53
150	0.924	47.0	16.72
160	0.956	50.3	17.01
170	0.987	53.6	17.29
180	1.000	55.0	17.40
190	0.987	53.6	17.29
200	0.956	50.3	17.01
210	0.924	47.0	16.72
220	0.904	44.9	16.53
230	0.904	44.9	16.53
240	0.924	47.0	16.72
250	0.956	50.3	17.01
260	0.987	53.6	17.29
270	1.000	55.0	17.40
280	0.987	53.6	17.29
290	0.956	50.3	17.01
300	0.924	47.0	16.72
310	0.904	44.9	16.53
320	0.904	44.9	16.53
330	0.924	47.0	16.72
340	0.956	50.3	17.01
350	0.987	53.6	17.29

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
0	1.000	55.0	17.40
90	1.000	55.0	17.40
180	1.000	55.0	17.40
270	1.000	55.0	17.40

Minima

Angle	Field	ERP (kW)	ERP (dBk)
45	0.902	44.7	16.51
135	0.902	44.7	16.51
225	0.902	44.7	16.51
315	0.902	44.7	16.51

Remarks:

EXHIBIT B-3

ANTENNA RELATIVE FIELD VALUES

PROPOSED WFAA-DT
CHANNEL 8 – DALLAS, TEXAS

SMITH AND FISHER

CONTOUR POPULATION
43 DBU : 5,384,978
36 DBU : 5,687,952

Smith and Fisher

36 DBU

43 DBU

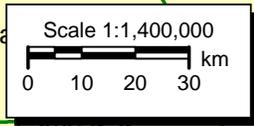
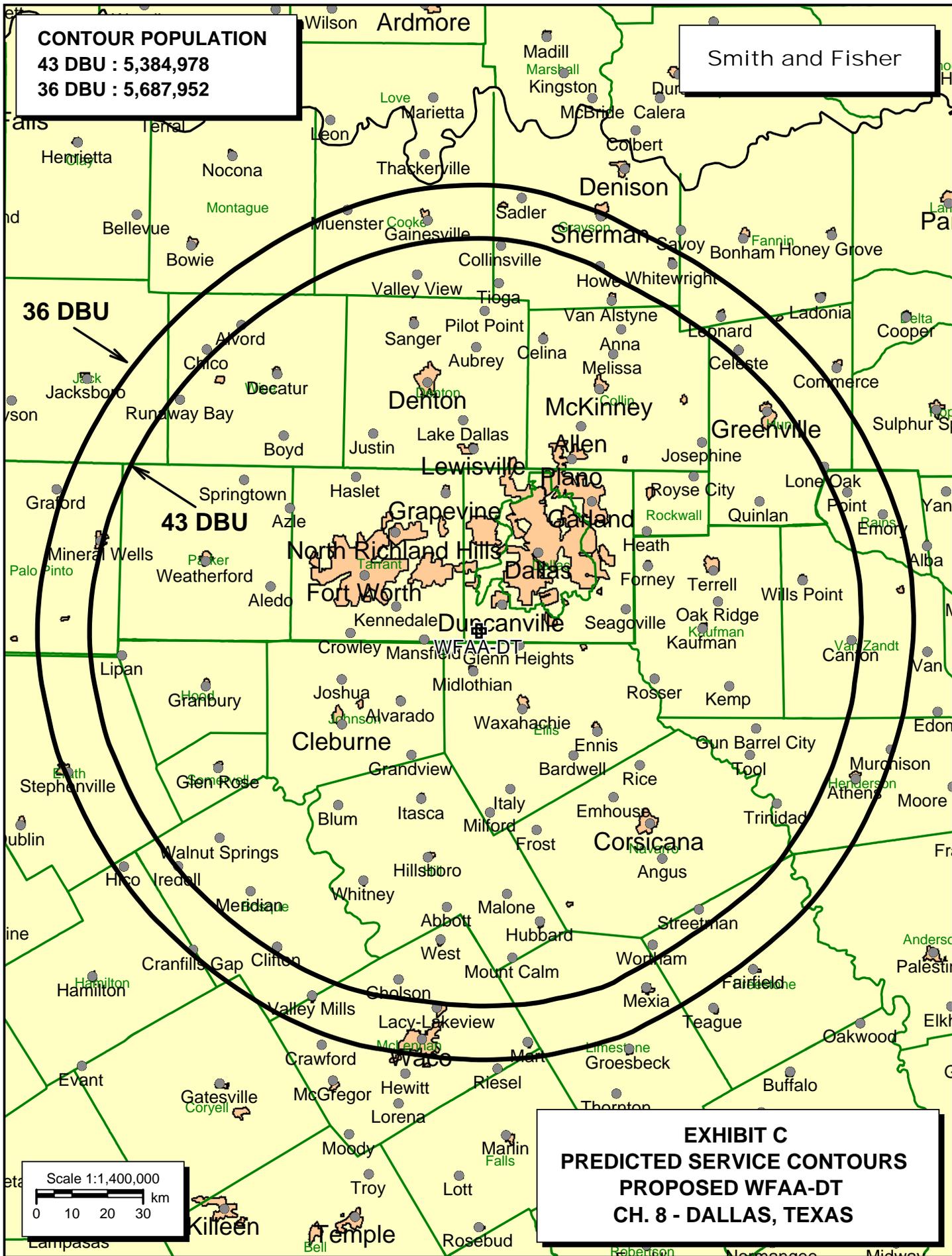


EXHIBIT C
PREDICTED SERVICE CONTOURS
PROPOSED WFAA-DT
CH. 8 - DALLAS, TEXAS



■ PRESENTLY LICENSED 36 DBU CONTOUR (45 KW, OMNI)
■ PROPOSED 36 DBU CONTOUR (55 KW, DA)

Smith and Fisher

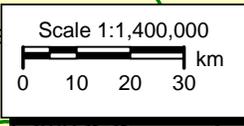
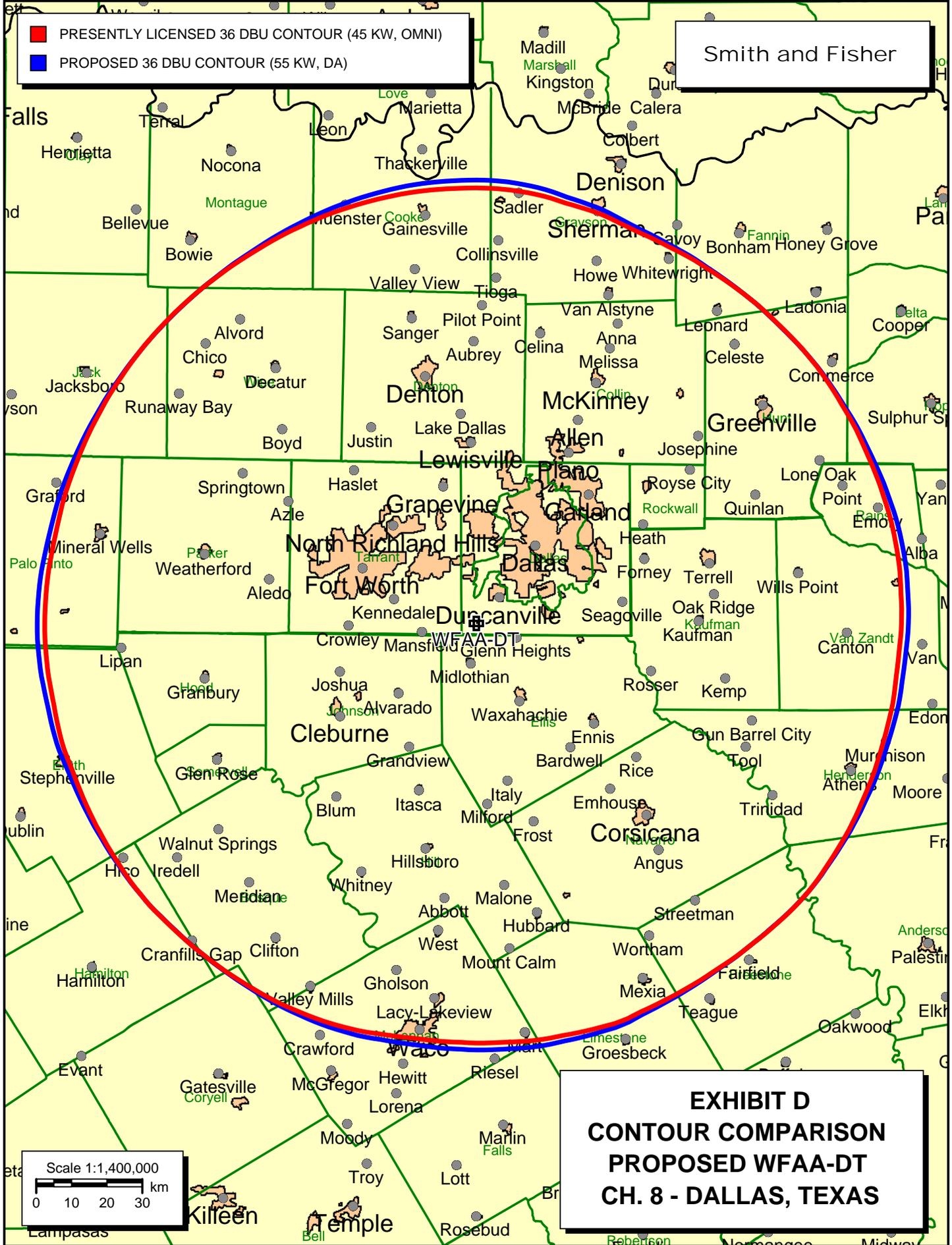


EXHIBIT D
CONTOUR COMPARISON
PROPOSED WFAA-DT
CH. 8 - DALLAS, TEXAS

INTERFERENCE STUDY
PROPOSED WFAA-DT
CHANNEL 8 – DALLAS, TEXAS

The instant application specifies an ERP of 55 kw (directional) at 510 meters above average terrain, which we have determined to be allowable under the FCC's interference standards with respect to various post-transition digital television and Class A Low Power Television stations.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft SunDTV computer program, which produces the same results as the FCC's interference 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. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WFAA-DT to other pertinent co-channel and adjacent-channel stations are tabulated in Exhibit E-2.

As shown, the proposed WFAA-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WFAA-DT facility) to the service population of any potentially affected post-transition DTV station, except for KLTV-DT, Channel 7 in Tyler, Texas.

The WFAA-DT facility proposed herein causes calculated interference to approximately 1.5 percent of the service population of KLTV-DT, as authorized in BMPCDT-20080619AAU. However, the owners of WFAA-DT have secured an interference agreement from the owners of KLTV-DT, a copy of which is provided as Exhibit E-3. Therefore, interference to KLTV-DT can be ignored.

A Longley-Rice interference study also reveals that the proposed WFAA-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.

Summary Study

Percent allowed new interference: 0.500
Percent allowed new interference to Class A: 0.500
Census data selected 2000
Post Transition Data Base Selected ./data_files/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 12-17-2009 Time: 05:48:45

Record Selected for Analysis

WFAA-DT USERRECORD-01 DALLAS TX US
Channel 08 ERP 55. kW HAAT 511. m RCAMSL 00704 m
Latitude 032-35-06 Longitude 0096-58-41
Status APP Zone 2 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility does not meet maximum height/power limits
Channel 8 ERP = 55.00 HAAT = 511.

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	55.000	546.8	125.4
45.0	44.947	495.6	120.1
90.0	55.000	495.3	122.2
135.0	44.947	493.6	120.0
180.0	55.000	469.4	120.7
225.0	44.947	523.1	121.6
270.0	55.000	528.8	124.1
315.0	44.947	535.8	122.4

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WFAA-DT 08 DALLAS TX USERRECORD01

and station

SHORT TO: WFAA-TV 08 DALLAS TX DTVPLN DTVP0163
 32 -35-06 96 -58-41
 Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	Call	City/State	ARN
08	WFAA-DT	DALLAS TX		USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist (km)	Status	Application	Ref.
07	KLTV	TYLER TX	164.8	CP MOD	BMPCDT	-
20080619AAU						
07	KLTV	TYLER TX	164.8	PLN	DTVPLN	-
DTVP0101						
08	KWET	CHEYENNE OK	416.0	LIC	BLEDT	-
20060601BMA						
08	KWET	CHEYENNE OK	416.0	PLN	DTVPLN	-
DTVP0152						
08	KJRH	TULSA OK	400.2	CP	BPCDT	-
20080228ABB						
08	KJRH	TULSA OK	400.2	PLN	DTVPLN	-
DTVP0153						
08	KUHT	HOUSTON TX	363.2	APP	BMPEDT	-
20090730ACE						
08	KUHT	HOUSTON TX	363.2	PLN	DTVPLN	-
DTVP0164						
08	KUHT	HOUSTON TX	363.2	CP MOD	BMPEDT	-
20080619AJE						
09	KFWD	FORT WORTH TX	1.0	CP MOD	BMPCDT	-
20080620AKS						
09	KFWD	FORT WORTH TX	1.0	PLN	DTVPLN	-
DTVP0218						
09	KCEN-TV	TEMPLE TX	147.6	LIC	BLCDT	-
20021010AAB						
09	KCEN-TV	TEMPLE TX	147.6	PLN	DTVPLN	-
DTVP0222						

%%%

Study of this proposal found the following interference problem(s):

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 1

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 999999999999999

Percent new interference from proposal: 1.5071 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 2

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 999999999999999

Percent new interference from proposal: 1.5045 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 3

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 999999999999999

Percent new interference from proposal: 1.5000 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 4

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 999999999999999

Percent new interference from proposal: 1.4974 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 5

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 99999999999999

Percent new interference from proposal: 1.5079 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 6

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 99999999999999

Percent new interference from proposal: 1.5053 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 7

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 99999999999999

Percent new interference from proposal: 1.5011 to BMPCDT
20080619AAU

The following station failed the de minimis interference criteria.

8D TX DALLAS USERRECORD01
ERP 55.00 kW HAAT 511.0 m RCAMSL 704.0 m
Antenna usr USRPAT01

Due to interference to the following station and scenario: 8

7D TX TYLER BMPCDT 20080619AAU
ERP 66.00 kW HAAT 300.0 m RCAMSL 420.0 m
Antenna CDB 99999999999999

Percent new interference from proposal: 1.4985 to BMPCDT
20080619AAU

Interference Acceptance Agreement

This Interference Agreement ("Agreement") is entered into as of December 15, 2009 by WFAA-TV, Inc. and KLTV/KTRE License Subsidiary, LLC.

1. WTAA-TV, Inc is the licensee of Television Station WFAA, FCC Facility ID No. 72504, Dallas, Texas ("WFAA"). WFAA holds a construction permit issued by the FCC to operate a post-transition facility on channel 8 (see FCC File No. BMPCDT-20080619ADW) hereinafter referred to as the "WFAA CP facility".
2. KLTV/KTRE License Subsidiary, LLC. Is the licensee of Television Station KLTV, FCC facility ID No. 68540, Tyler, Texas ("KLTV"). KLTV holds a construction permit issued by the FCC to operate a post-transition facility on channel 7 (see FCC file NO. BMPCDT-20080619AAU) hereinafter referred to as the "KLTV CP facility".
3. The facility specified in the WFAA CP facility results in 2.6% interference to the KLTV CP facility.
4. The facility specified in the KTVF CP facility results in 0.02% interference to the WFAA CP facility.
5. The facility specified in the WFAA CP facility has an Effective Radiated Power (ERP) of 45 KW. WFAA proposes to file an application with the FCC requesting an increase of ERP to 55 KW. This proposed ERP will result in 3.0% predicted interference to the KLTV facility.
6. WFAA-TV, Inc. agrees to accept the interference from the KLTV CP facility referenced in paragraph 4.
7. KLTV/KTRE License Subsidiary, LLC agrees to accept the interference from WFAA's proposed increase in ERP referenced in paragraph 5.
8. The parties acknowledge that ongoing mutual cooperation is the only consideration being paid of promised in connection with this agreement.

WFAA-TV, Inc.

By: Mike Decker

Title: Pres/Gen WFAA-TV

Date: 12-14-09

KLTV/KTRE License Subsidiary, Inc.

By: Don d. Johnson

Title: VP/CPD

Date: 12/14/09

POWER DENSITY CALCULATION

PROPOSED WFAA-DT
CHANNEL 8 – DALLAS, 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 Dallas facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 55 kw (H, V), an antenna radiation center 457 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.000058 mw/cm^2 is calculated to occur 701 meters from 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 8 (180-186 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.