

## ENGINEERING EXHIBIT

### **“Maximization” Application to Modify Digital Television Station Construction Permit**

prepared for

#### **WPB TV Licensee Corp.**

WTVX-DT Fort Pierce, FL

Facility ID 35575

Ch. 34 1000 kW 456 m

*WPB TV Licensee Corp.* (“*WPB*”) is the licensee of television station WTVX(TV), analog Channel 34, digital Channel 50, Fort Pierce, FL. A Construction Permit (“CP”, BPCDT-20080325AHT) authorizes construction of the WTVX-DT post-transition digital facility on Channel 34, as established in Appendix B of the Seventh Report and Order in MB Docket 87-278. *WPB* herein seeks to modify the CP to expand the WTVX-DT post-transition Channel 34 digital facility. The instant application is intended to be filed by June 20, 2008 in response to the FCC’s lifting of the August 3, 2004 “freeze” concerning expansion in service area.<sup>1</sup>

The current CP authorizes operation with an effective radiated power (“ERP”) of 290 kW at 456 meters antenna height above average terrain (“HAAT”), with a directional antenna. An increase in ERP to 1000 kW is proposed herein. No other changes are proposed

The proposed antenna is a horizontally polarized Dielectric model TFU-30JTT P216. The directional antenna’s azimuthal pattern is depicted in **Figure 1**. **Figures 2** and **2A** provide the theoretical vertical plane (elevation) pattern<sup>2</sup>. The antenna is top-mounted on the existing WTVX antenna supporting structure, having FCC Antenna Structure Registration number 1029632. No change to the overall structure height and no tower work are required to carry out this proposal.

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<sup>1</sup>Public Notice “*Commission Lifts the Freeze On the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*” DA 08-1213, released May 30, 2008.

<sup>2</sup> These patterns are supplied in terms of relative field. In recent years, FCC Staff have not required pattern data in dBk format however such patterns are available upon request.

A map is supplied as **Figure 3**, which depicts the standard predicted coverage contours. This map includes the boundaries of Fort Pierce, WTVX-DT's principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1), as the entire principal community will be encompassed by the 48 dBμ contour.

The proposed WTVX-DT facility's predicted service population provides a 112.9 percent match of the Appendix B facility, as detailed in the table below.

<b>Post-Transition Population Summary</b>		
Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	2,144,578	2,569,084
Not affected by terrain losses	2,144,578	2,569,084
Lost to all interference	66	147,539
Net DTV Service	<b>2,144,512</b>	<b>2,421,545</b>
Match of Appendix B	---	<b>112.92%</b>

A detailed interference study per OET Bulletin 69<sup>3</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to the Appendix B facilities and current post-transition authorizations of pertinent nearby stations. The interference study output report is provided as **Table 1**. Protection requirements towards authorized Class A stations are also satisfied.

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 456 meters currently permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. The total area within the proposed WTVX-DT 41 dBμ contour is 32,800 square kilometers, which does not exceed the 32,835 square kilometers within the post-transition Construction Permit for station WPTV-DT (Ch. 12, West Palm Beach, FL, BPCDT-20080228AAA). WTVX-DT and WPTV-DT are both in the West Palm Beach - Ft. Pierce DMA. A coverage contour comparison map is provided as **Figure 4**. Thus, the ERP specified herein is in compliance with §73.622(f)(5) of the Commission's Rules.

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<sup>3</sup>FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

The nearest FCC monitoring station is 58.9 km distant at Vero Beach, FL. Using the FCC propagation curves, the proposed F(50,90) signal level at the monitoring station is 3.98 mV/m, which is below the 10 mV/m threshold of §73.1030(c) for further analysis. Further, the proposal represents a decrease in signal level from the current WTVX analog Channel 34 facility, which operates at 5000 kW ERP and results in a F(50,50) signal of 13.2 mV/m at the monitoring station. The site is not located within the areas requiring coordination with “quiet” zones specified in §73.1030(a) and (b). There are no AM stations within 3.2 kilometers of the site, based on information contained within the Commission’s database. The site location is beyond the border areas requiring international coordination.

#### **Human Exposure to Radiofrequency Electromagnetic Field (Environmental)**

The proposal will involve use of an existing transmitting antenna. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. No tower construction or change in structure height is proposed. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission’s OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 10 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $1.6 \mu\text{W}/\text{cm}^2$ , which is 0.4 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal’s contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC’s guidelines. RF exposure warning signs will continue to be posted. With respect to

worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

### **Certification**

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.

Joseph M. Davis, P.E.  
June 10, 2008

**Chesapeake RF Consultants, LLC**  
11993 Kahns Road  
Manassas, VA 20112  
703-650-9600

### List of Attachments

Figure 1	Antenna Horizontal Plane Pattern
Figure 2, 2A	Antenna Vertical Plane (Elevation) Pattern
Figure 3	Proposed Coverage Contours
Figure 4	Largest Station in Market
Table 1	OET Bulletin 69 Interference Study
Form 301	Saved Version of Engineering Sections from FCC Form at Time of Upload

*This material was entered June 10, 2008 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.*



Exhibit No.

Date  
Call Letters  
Location  
Customer  
Antenna Type

21 Mar 2008  
WTVX Channel  
Fort Pierce FL

**Figure 1  
Antenna Horizontal  
Plane Pattern**

**AZIMUTH PATTERN**

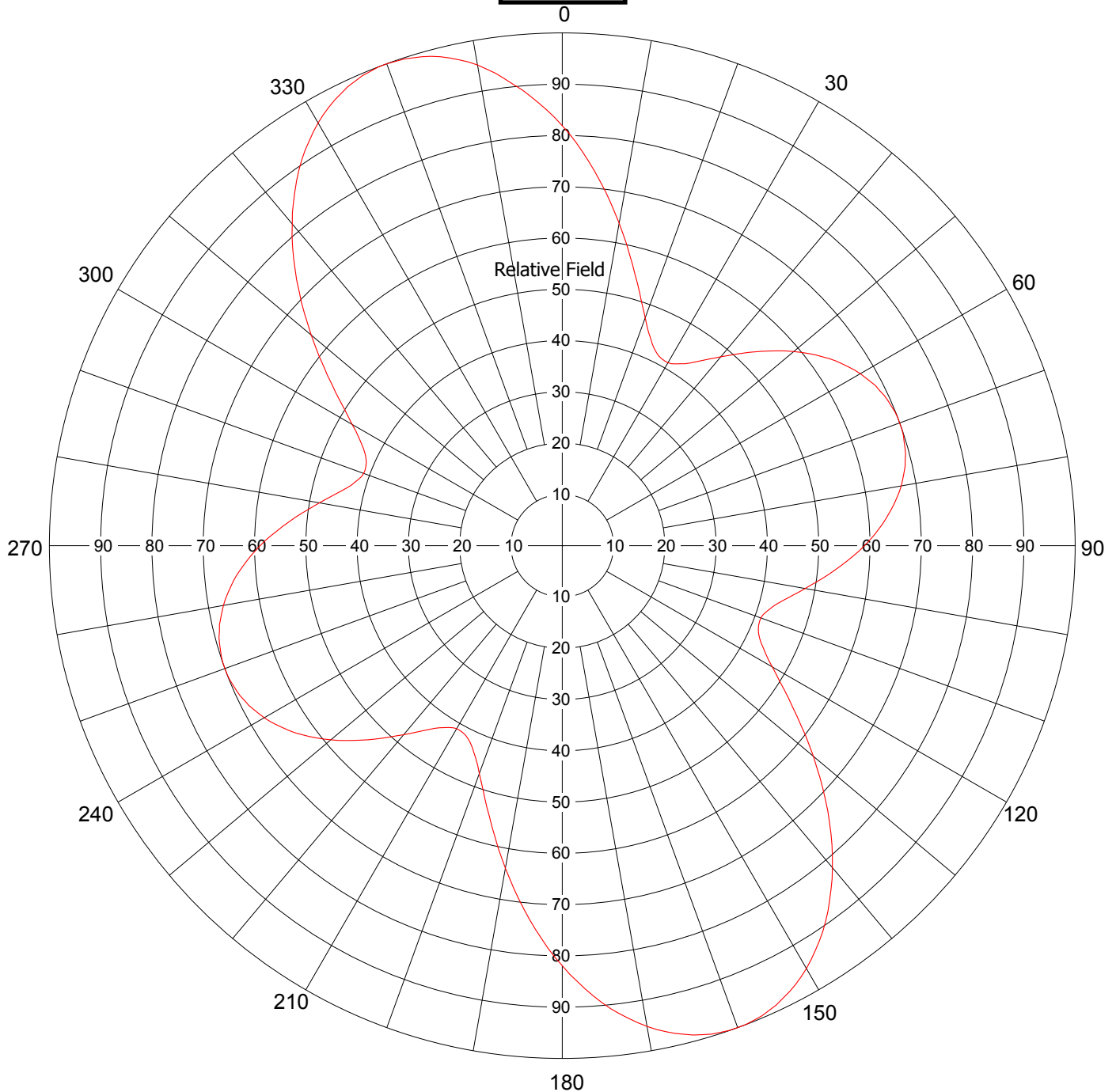
Gain  
Calculated / Measured

**2.16 (3.34 dB)**  
**Calculated**

Frequency  
Drawing #

**MHz**  
**TFU-P216**

True North

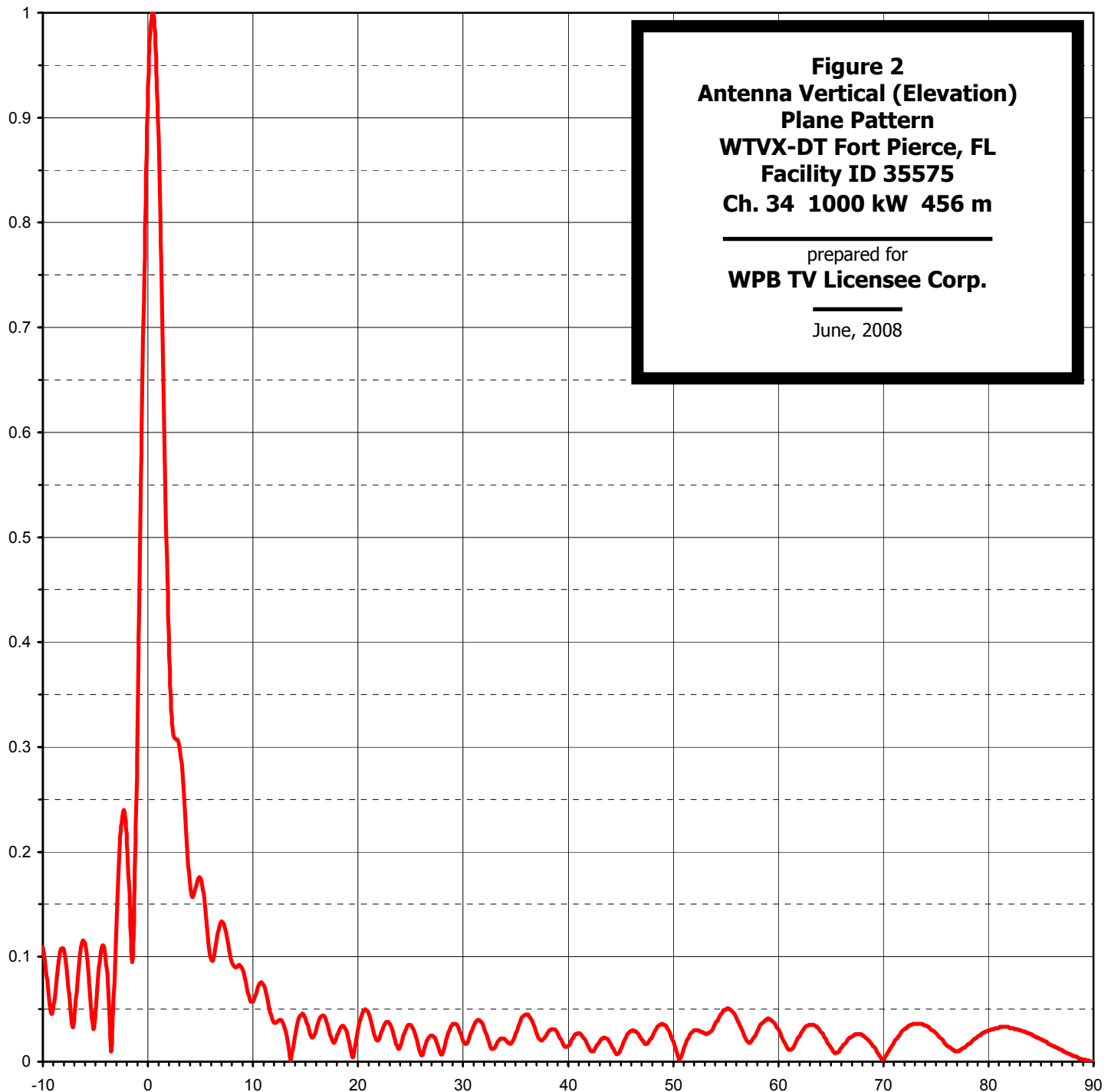




Proposal Number	<b>DCA-7789</b>	Revision	<b>1</b>
Date	<b>2-Mar-98</b>		
Call Letters	<b>WTVX</b>	Channel	<b>34</b>
Location	<b>Ft. Pierce, FL</b>		
Customer			
Antenna Type	<b>TFU-30JTT P216</b>		

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>28.5 ( 14.55 dB )</b>	Beam Tilt	<b>0.50 deg</b>
RMS Gain at Horizontal	<b>24.1 ( 13.82 dB )</b>	Frequency	<b>593.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>30N285050-90</b>



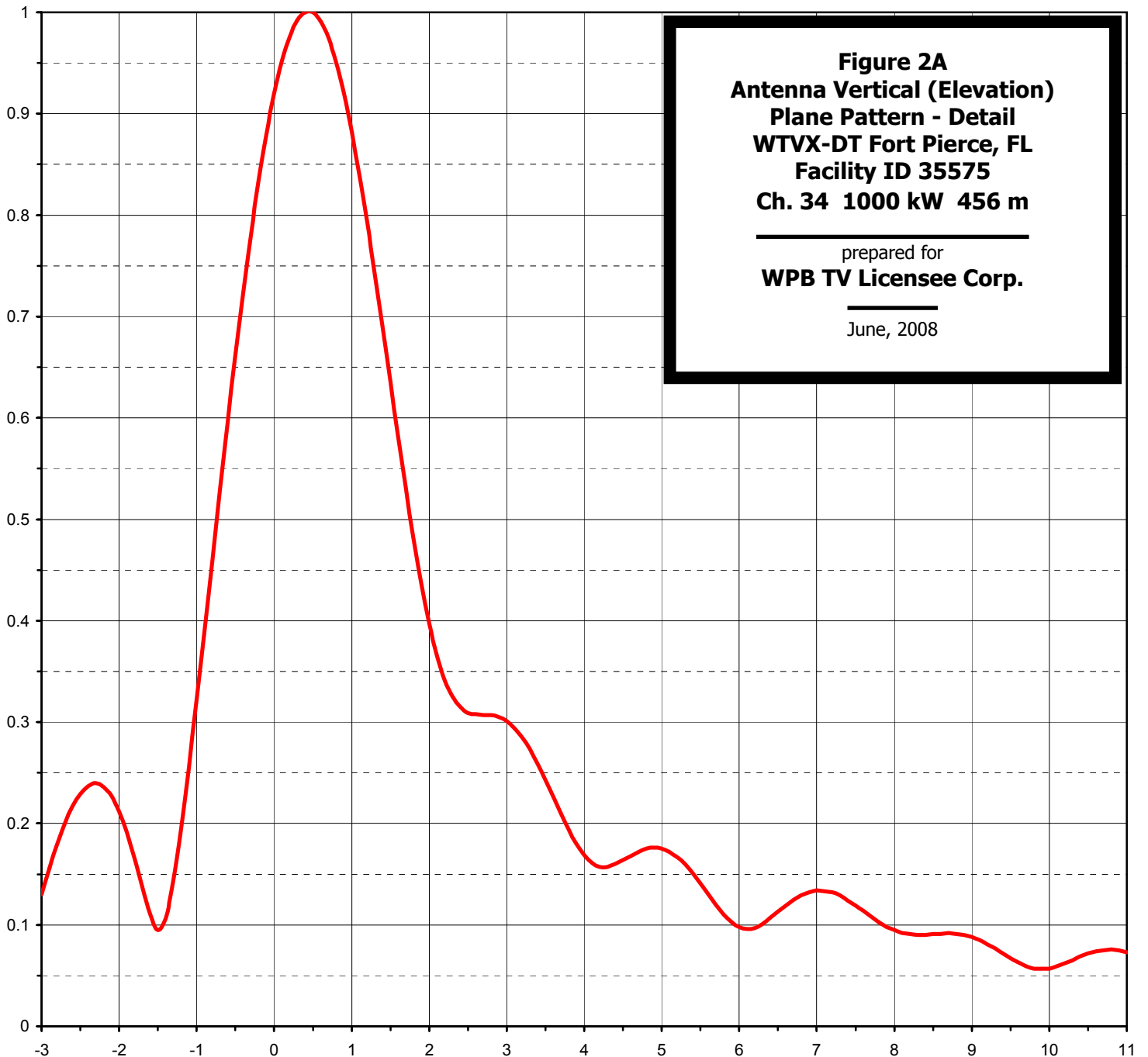


Proposal Number	<b>DCA-7789</b>	Revision:	<b>1</b>
Date	<b>2-Mar-98</b>		
Call Letters	<b>WTVX</b>	Channel	<b>34</b>
Location	<b>Ft. Pierce, FL</b>		
Customer			
Antenna Type	<b>TFU-30JTT P216</b>		

## ELEVATION PATTERN

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Calculated / Measured	<b>Calculated</b>	

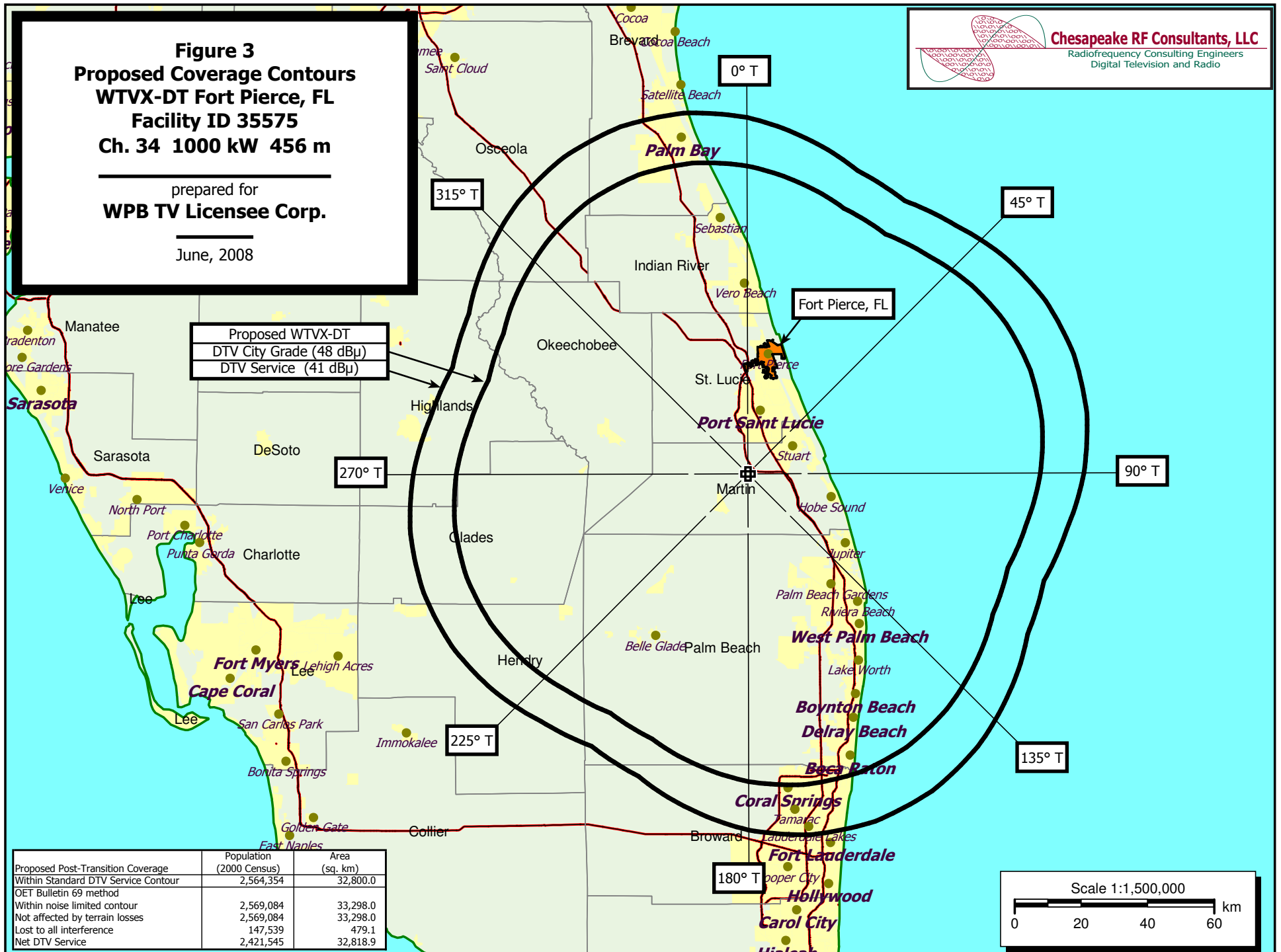
Beam Tilt	<b>0.50 deg</b>
Frequency	<b>593.00 MHz</b>
Drawing #	<b>30N285050</b>



**Figure 3**  
**Proposed Coverage Contours**  
**WTVX-DT Fort Pierce, FL**  
**Facility ID 35575**  
**Ch. 34 1000 kW 456 m**

prepared for  
**WPB TV Licensee Corp.**

June, 2008

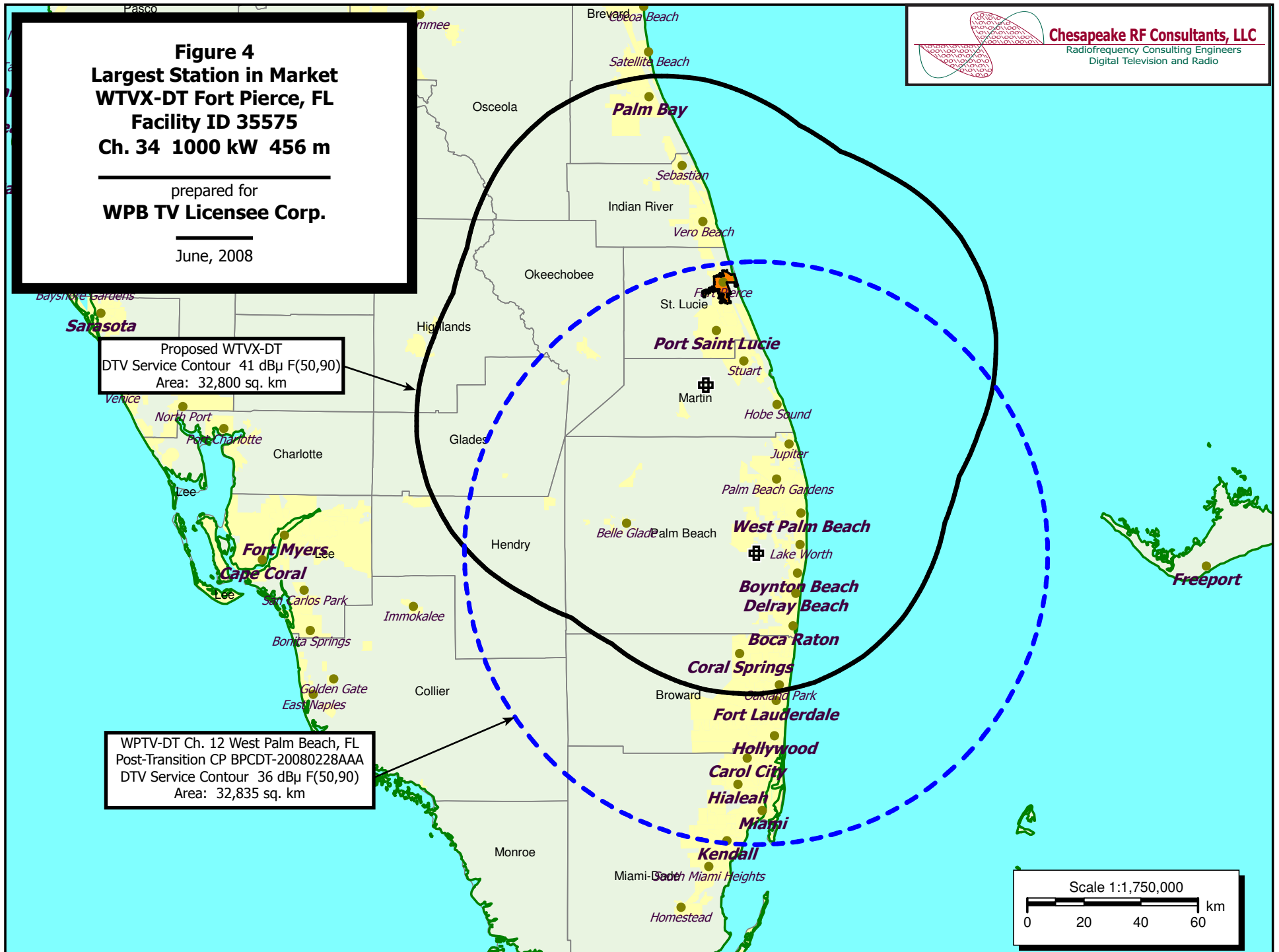




**Figure 4**  
**Largest Station in Market**  
**WTVX-DT Fort Pierce, FL**  
**Facility ID 35575**  
**Ch. 34 1000 kW 456 m**

prepared for  
**WPB TV Licensee Corp.**

June, 2008



**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 1 of 9)

TW Census data selected 2000  
Post Transition Data Base Selected /space/software/cdbs/pt\_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-10-2008 Time: 21:07:49

Record Selected for Analysis

WTVX-DT USERRECORD-01 FORT PIERCE FL US  
Channel 34 ERP 1000. kW HAAT 456. m RCAMSL 00463 m  
Latitude 027-07-19 Longitude 0080-23-20  
Status APP Zone 3 Border  
Dir Antenna Make CDB Model 00000000085661 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 34 ERP = 1000.00 HAAT = 456.

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	670.761	455.4	107.0
45.0	286.225	459.0	99.1
90.0	346.921	458.4	100.8
135.0	531.441	456.2	104.7
180.0	670.761	455.0	107.0
225.0	286.225	453.7	98.7
270.0	346.921	453.7	100.4
315.0	531.441	454.0	104.5

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

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

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 2 of 9)

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
34	WTVX-DT	FORT PIERCE FL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	178.0	LIC	BLEDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	178.0	PLN	DTVPLN	-DTVPI1213
33	WRXY-TV	TICE FL	144.2	LIC	BLCDT	-20060627ABA
33	WRXY-TV	TICE FL	144.2	PLN	DTVPLN	-DTVPI1214
34	WCWJ	JACKSONVILLE FL	368.9	LIC	BLCDT	-20060630AFM
34	WCWJ	JACKSONVILLE FL	368.9	PLN	DTVPLN	-DTVPI1245
34	WUSF-TV	TAMPA FL	201.7	LIC	BLEDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	201.7	PLN	DTVPLN	-DTVPI1247
35	WFTX	CAPE CORAL FL	144.6	LIC	BLCDT	-20050311ACY
35	WFTX	CAPE CORAL FL	144.6	PLN	DTVPLN	-DTVPI1284
35	WPXM	MIAMI FL	127.8	CP	BPCDT	-20080306AAZ
35	WPXM	MIAMI FL	127.8	PLN	DTVPLN	-DTVPI1285

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	BLEDT	-20050121AKU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WAWS	JACKSONVILLE FL	192.2	LIC	BLCDT	-20030328ANQ
32	WAWS	JACKSONVILLE FL	192.2	PLN	DTVPLN	-DTVPI1175
33	WRXY-TV	TICE FL	215.3	LIC	BLCDT	-20060627ABA
33	WRXY-TV	TICE FL	215.3	PLN	DTVPLN	-DTVPI1214
34	WTVX	FORT PIERCE FL	178.0	CP	BPCDT	-20080325AHT
34	WTVX	FORT PIERCE FL	178.0	PLN	DTVPLN	-DTVPI1244
34	WCWJ	JACKSONVILLE FL	191.6	LIC	BLCDT	-20060630AFM
34	WCWJ	JACKSONVILLE FL	191.6	PLN	DTVPLN	-DTVPI1245
34	WUSF-TV	TAMPA FL	145.1	LIC	BLEDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	145.1	PLN	DTVPLN	-DTVPI1247
34	WTVX-DT	FORT PIERCE FL	178.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	DTVPLN	-DTVPI1213

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 3 of 9)

Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WAWS	JACKSONVILLE FL	192.2	LIC	BLCDDT	-20030328ANQ
32	WAWS	JACKSONVILLE FL	192.2	PLN	DTVPLN	-DTVPI175
33	WRXY-TV	TICE FL	215.3	LIC	BLCDDT	-20060627ABA
33	WRXY-TV	TICE FL	215.3	PLN	DTVPLN	-DTVPI214
34	WTVX	FORT PIERCE FL	178.0	CP	BPCDDT	-20080325AHT
34	WTVX	FORT PIERCE FL	178.0	PLN	DTVPLN	-DTVPI244
34	WCWJ	JACKSONVILLE FL	191.6	LIC	BLCDDT	-20060630AFM
34	WCWJ	JACKSONVILLE FL	191.6	PLN	DTVPLN	-DTVPI245
34	WUSF-TV	TAMPA FL	145.1	LIC	BLEDDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	145.1	PLN	DTVPLN	-DTVPI247
34	WTVX-DT	FORT PIERCE FL	178.0	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 3

Analysis of current record						
Channel	Call	City/State		Application	Ref. No.	
33	WRXY-TV	TICE FL		BLCDDT	-20060627ABA	

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WBFS-TV	MIAMI FL	182.2	LIC	BLCDDT	-20021025AAM
32	WBFS-TV	MIAMI FL	182.2	PLN	DTVPLN	-DTVPI176
33	WCEU	NEW SMYRNA BEACH FL	215.3	LIC	BLEDDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	215.3	PLN	DTVPLN	-DTVPI213
34	WTVX	FORT PIERCE FL	144.2	CP	BPCDDT	-20080325AHT
34	WTVX	FORT PIERCE FL	144.2	PLN	DTVPLN	-DTVPI244
34	WUSF-TV	TAMPA FL	126.8	LIC	BLEDDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	126.8	PLN	DTVPLN	-DTVPI247
34	WTVX-DT	FORT PIERCE FL	144.2	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 4

Analysis of current record						
Channel	Call	City/State		Application	Ref. No.	
33	WRXY-TV	TICE FL		DTVPLN	-DTVPI214	

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WBFS-TV	MIAMI FL	182.2	LIC	BLCDDT	-20021025AAM
32	WBFS-TV	MIAMI FL	182.2	PLN	DTVPLN	-DTVPI176
33	WCEU	NEW SMYRNA BEACH FL	215.3	LIC	BLEDDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	215.3	PLN	DTVPLN	-DTVPI213
34	WTVX	FORT PIERCE FL	144.2	CP	BPCDDT	-20080325AHT
34	WTVX	FORT PIERCE FL	144.2	PLN	DTVPLN	-DTVPI244
34	WUSF-TV	TAMPA FL	126.8	LIC	BLEDDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	126.8	PLN	DTVPLN	-DTVPI247
34	WTVX-DT	FORT PIERCE FL	144.2	APP	USERRECORD-01	

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 4 of 9)

Proposal causes no interference

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#### Analysis of Interference to Affected Station 5

Analysis of current record						
Channel	Call	City/State		Application	Ref. No.	
34	WCWJ	JACKSONVILLE FL		BLCDDT	-20060630AFM	

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	191.6	LIC	BLEDDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	191.6	PLN	DTVPLN	-DTVPI213
34	WTVX	FORT PIERCE FL	368.9	CP	BPCDDT	-20080325AHT
34	WTVX	FORT PIERCE FL	368.9	PLN	DTVPLN	-DTVPI244
34	WUSF-TV	TAMPA FL	278.4	LIC	BLEDDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	278.4	PLN	DTVPLN	-DTVPI247
34	WCIV	CHARLESTON SC	343.1	LIC	BLCDDT	-20060630ADJ
34	WCIV	CHARLESTON SC	343.1	PLN	DTVPLN	-DTVPI271
35	WGSA	BAXLEY GA	197.9	LIC	BLCDDT	-20071120AJC
35	WGSA	BAXLEY GA	199.3	PLN	DTVPLN	-DTVPI286
34	WTVX-DT	FORT PIERCE FL	368.9	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 6

Analysis of current record						
Channel	Call	City/State		Application	Ref. No.	
34	WCWJ	JACKSONVILLE FL		DTVPLN	-DTVPI245	

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	191.6	LIC	BLEDDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	191.6	PLN	DTVPLN	-DTVPI213
34	WTVX	FORT PIERCE FL	368.9	CP	BPCDDT	-20080325AHT
34	WTVX	FORT PIERCE FL	368.9	PLN	DTVPLN	-DTVPI244
34	WUSF-TV	TAMPA FL	278.4	LIC	BLEDDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	278.4	PLN	DTVPLN	-DTVPI247
34	WCIV	CHARLESTON SC	343.1	LIC	BLCDDT	-20060630ADJ
34	WCIV	CHARLESTON SC	343.1	PLN	DTVPLN	-DTVPI271
35	WGSA	BAXLEY GA	197.9	LIC	BLCDDT	-20071120AJC
35	WGSA	BAXLEY GA	199.3	PLN	DTVPLN	-DTVPI286
34	WTVX-DT	FORT PIERCE FL	368.9	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 7

Analysis of current record						
Channel	Call	City/State		Application	Ref. No.	

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 5 of 9)

34	WUSF-TV	TAMPA FL	BLEDT	-20060913ABQ
Stations Potentially Affecting This Station				
Chan	Call	City/State	Dist(km)	Status Application Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	145.1	LIC BLEDT -20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	145.1	PLN DTVP LN -DTV P1213
33	WRXY-TV	TICE FL	126.8	LIC BLCDT -20060627ABA
33	WRXY-TV	TICE FL	126.8	PLN DTVP LN -DTV P1214
34	WTVX	FORT PIERCE FL	201.7	CP BPCDT -20080325AHT
34	WTVX	FORT PIERCE FL	201.7	PLN DTVP LN -DTV P1244
34	WCWJ	JACKSONVILLE FL	278.4	LIC BLCDT -20060630AFM
34	WCWJ	JACKSONVILLE FL	278.4	PLN DTVP LN -DTV P1245
35	WFTX	CAPE CORAL FL	125.6	LIC BLCDT -20050311ACY
35	WFTX	CAPE CORAL FL	125.6	PLN DTVP LN -DTV P1284
34	WTVX-DT	FORT PIERCE FL	201.7	APP USERRECORD-01

Total scenarios = 32

Result key: 1  
Scenario 1 Affected station 7  
Before Analysis

Results for: 34A FL TAMPA				BLEDT	20060913ABQ	LIC
HAAT	453.0 m,	ATV ERP	475.0 kW			
		POPULATION	AREA (sq km)			
within Noise Limited Contour		4017806	34145.9			
not affected by terrain losses		4017757	34141.9			
lost to NTSC IX		0	0.0			
lost to additional IX by ATV		75359	1103.8			
lost to ATV IX only		75359	1103.8			
lost to all IX		75359	1103.8			

Potential Interfering Stations Included in above Scenario 1

33A FL NEW SMYRNA BEACH	BLEDT	20050121AKU	LIC
33A FL TICE	BLCDT	20060627ABA	LIC
34A FL FORT PIERCE	BPCDT	20080325AHT	CP
34A FL JACKSONVILLE	BLCDT	20060630AFM	LIC
35A FL CAPE CORAL	BLCDT	20050311ACY	LIC

After Analysis

Results for: 34A FL TAMPA				BLEDT	20060913ABQ	LIC
HAAT	453.0 m,	ATV ERP	475.0 kW			
		POPULATION	AREA (sq km)			
within Noise Limited Contour		4017806	34145.9			
not affected by terrain losses		4017757	34141.9			
lost to NTSC IX		0	0.0			
lost to additional IX by ATV		88298	1651.7			
lost to ATV IX only		88298	1651.7			
lost to all IX		88298	1651.7			

Potential Interfering Stations Included in above Scenario 1

33A FL NEW SMYRNA BEACH	BLEDT	20050121AKU	LIC
33A FL TICE	BLCDT	20060627ABA	LIC
34A FL FORT PIERCE	BPCDT	20080325AHT	CP
34A FL JACKSONVILLE	BLCDT	20060630AFM	LIC
35A FL CAPE CORAL	BLCDT	20050311ACY	LIC
34A FL FORT PIERCE	USERRECORD01		APP

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 6 of 9)

Percent new IX = 0.3282%

Worst case new IX 0.3282% Scenario 1

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	WUSF-TV	TAMPA FL	DTVP LN -DTV P1247

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	145.1	LIC BLEDT	-20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	145.1	PLN DTVP LN	-DTV P1213
33	WRXY-TV	TICE FL	126.8	LIC BLCDT	-20060627ABA
33	WRXY-TV	TICE FL	126.8	PLN DTVP LN	-DTV P1214
34	WTVX	FORT PIERCE FL	201.7	CP BPCDT	-20080325AHT
34	WTVX	FORT PIERCE FL	201.7	PLN DTVP LN	-DTV P1244
34	WCWJ	JACKSONVILLE FL	278.4	LIC BLCDT	-20060630AFM
34	WCWJ	JACKSONVILLE FL	278.4	PLN DTVP LN	-DTV P1245
35	WFTX	CAPE CORAL FL	125.6	LIC BLCDT	-20050311ACY
35	WFTX	CAPE CORAL FL	125.6	PLN DTVP LN	-DTV P1284
34	WTVX-DT	FORT PIERCE FL	201.7	APP	USERRECORD-01

Total scenarios = 32

Result key: 33  
Scenario 1 Affected station 8  
Before Analysis

Results for: 34A FL TAMPA				DTVP LN	DTV P1247	PLN
HAAT	453.0 m,	ATV ERP	475.0 kW			
		POPULATION	AREA (sq km)			
within Noise Limited Contour		4017806	34145.9			
not affected by terrain losses		4017757	34141.9			
lost to NTSC IX		0	0.0			
lost to additional IX by ATV		75359	1103.8			
lost to ATV IX only		75359	1103.8			
lost to all IX		75359	1103.8			

Potential Interfering Stations Included in above Scenario 1

33A FL NEW SMYRNA BEACH	BLEDT	20050121AKU	LIC
33A FL TICE	BLCDT	20060627ABA	LIC
34A FL FORT PIERCE	BPCDT	20080325AHT	CP
34A FL JACKSONVILLE	BLCDT	20060630AFM	LIC
35A FL CAPE CORAL	BLCDT	20050311ACY	LIC

After Analysis

Results for: 34A FL TAMPA				DTVP LN	DTV P1247	PLN
HAAT	453.0 m,	ATV ERP	475.0 kW			
		POPULATION	AREA (sq km)			
within Noise Limited Contour		4017806	34145.9			
not affected by terrain losses		4017757	34141.9			

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 7 of 9)

lost to NTSC IX	0	0.0
lost to additional IX by ATV	88298	1651.7
lost to ATV IX only	88298	1651.7
lost to all IX	88298	1651.7

Potential Interfering Stations Included in above Scenario 1

33A FL NEW SMYRNA BEACH	BLEDT	20050121AKU	LIC
33A FL TICE	BLCDDT	20060627ABA	LIC
34A FL FORT PIERCE	BPCDDT	20080325AHT	CP
34A FL JACKSONVILLE	BLCDDT	20060630AFM	LIC
35A FL CAPE CORAL	BLCDDT	20050311ACY	LIC
34A FL FORT PIERCE	USERRECORD01	APP	

Percent new IX = 0.3282%

Worst case new IX 0.3282% Scenario 1

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Analysis of Interference to Affected Station 9

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
35	WFTX	CAPE CORAL FL	BLCDDT -20050311ACY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WTVX	FORT PIERCE FL	144.6	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	144.6	PLN	DTVPLN -DTVP1244
34	WUSF-TV	TAMPA FL	125.6	LIC	BLEDT -20060913ABQ
34	WUSF-TV	TAMPA FL	125.6	PLN	DTVPLN -DTVP1247
35	WPXM	MIAMI FL	183.6	CP	BPCDDT -20080306AAZ
35	WPXM	MIAMI FL	183.6	PLN	DTVPLN -DTVP1285
36	WPXP	LAKE WORTH FL	159.5	LIC	BLCDDT -20030808ABE
36	WPXP	LAKE WORTH FL	159.5	PLN	DTVPLN -DTVP1322
34	WTVX-DT	FORT PIERCE FL	144.6	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
35	WFTX	CAPE CORAL FL	DTVPLN -DTVP1284

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WTVX	FORT PIERCE FL	144.6	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	144.6	PLN	DTVPLN -DTVP1244
34	WUSF-TV	TAMPA FL	125.6	LIC	BLEDT -20060913ABQ
34	WUSF-TV	TAMPA FL	125.6	PLN	DTVPLN -DTVP1247
35	WPXM	MIAMI FL	183.6	CP	BPCDDT -20080306AAZ
35	WPXM	MIAMI FL	183.6	PLN	DTVPLN -DTVP1285
36	WPXP	LAKE WORTH FL	159.5	LIC	BLCDDT -20030808ABE

**Table 1 WTVX-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 8 of 9)

36	WPXP	LAKE WORTH FL	159.5	PLN	DTVPLN -DTVP1322
34	WTVX-DT	FORT PIERCE FL	144.6	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 11

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
35	WPXM	MIAMI FL	BPCDDT -20080306AAZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WTVX	FORT PIERCE FL	127.8	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	127.8	PLN	DTVPLN -DTVP1244
35	WFTX	CAPE CORAL FL	183.6	LIC	BLCDDT -20050311ACY
35	WFTX	CAPE CORAL FL	183.6	PLN	DTVPLN -DTVP1284
36	WPXP	LAKE WORTH FL	67.1	LIC	BLCDDT -20030808ABE
36	WPXP	LAKE WORTH FL	67.1	PLN	DTVPLN -DTVP1322
34	WTVX-DT	FORT PIERCE FL	127.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 12

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
35	WPXM	MIAMI FL	DTVPLN -DTVP1285

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WTVX	FORT PIERCE FL	127.8	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	127.8	PLN	DTVPLN -DTVP1244
35	WFTX	CAPE CORAL FL	183.6	LIC	BLCDDT -20050311ACY
35	WFTX	CAPE CORAL FL	183.6	PLN	DTVPLN -DTVP1284
36	WPXP	LAKE WORTH FL	67.1	LIC	BLCDDT -20030808ABE
36	WPXP	LAKE WORTH FL	67.1	PLN	DTVPLN -DTVP1322
34	WTVX-DT	FORT PIERCE FL	127.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 13

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
34	WTVX-DT	FORT PIERCE FL	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WCEU	NEW SMYRNA BEACH FL	178.0	LIC	BLEDT -20050121AKU

Table 1 WTVX-DT OET Bulletin 69 Interference Study  
(worst-case scenarios shown page 9 of 9)

33	WCEU	NEW SMYRNA BEACH FL	178.0	PLN	DTVPLN	-DTVP1213
33	WRXY-TV	TICE FL	144.2	LIC	BLCDT	-20060627ABA
33	WRXY-TV	TICE FL	144.2	PLN	DTVPLN	-DTVP1214
34	WCWJ	JACKSONVILLE FL	368.9	LIC	BLCDT	-20060630AFM
34	WCWJ	JACKSONVILLE FL	368.9	PLN	DTVPLN	-DTVP1245
34	WUSF-TV	TAMPA FL	201.7	LIC	BLEDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	201.7	PLN	DTVPLN	-DTVP1247
35	WFTX	CAPE CORAL FL	144.6	LIC	BLCDT	-20050311ACY
35	WFTX	CAPE CORAL FL	144.6	PLN	DTVPLN	-DTVP1284
35	WPXM	MIAMI FL	127.8	CP	BPCDT	-20080306AAZ
35	WPXM	MIAMI FL	127.8	PLN	DTVPLN	-DTVP1285

Total scenarios = 4

Result key: 68  
Scenario 4 Affected station 13  
Before Analysis

Results for: 34A FL FORT PIERCE USERRECORD01 APP  
HAAT 456.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2569084	33298.0
not affected by terrain losses	2569084	33298.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	147539	479.1
lost to ATV IX only	147539	479.1
lost to all IX	147539	479.1

Potential Interfering Stations Included in above Scenario 4

34A FL TAMPA	DTVPLN	DTVP1247	PLN
35A FL MIAMI	DTVPLN	DTVP1285	PLN

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

**SECTION III-D - DTV Engineering****Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.**

**Pre-Transition Certification Checklist:** An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction permit application to change pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

**Post-Transition Expedited Processing.** An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

(a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.	<input checked="" type="radio"/> Yes <input type="radio"/> No
(b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B").	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
(e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. Applicant must <b>submit the Exhibit</b> called for in Item 13.	<input checked="" type="radio"/> Yes <input type="radio"/> No
3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.	<input checked="" type="radio"/> Yes <input type="radio"/> No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable.	<input checked="" type="radio"/> Yes <input type="radio"/> No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	<input checked="" type="radio"/> Yes <input type="radio"/> No

**SECTION III-D - DTV Engineering****TECHNICAL SPECIFICATIONS**

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

**TECH BOX**

1.	Channel Number:  DTV 34 Analog TV, if any 34
2.	Zone: <input type="radio"/> I <input type="radio"/> II <input checked="" type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 27 Minutes 7 Seconds 19 <input checked="" type="radio"/> North <input type="radio"/> South  Longitude: Degrees 80 Minutes 23 Seconds 20 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1029632 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 8.8 meters
6.	Overall Tower Height Above Ground Level: 463.5 meters
7.	Height of Radiation Center Above Ground Level: 454.2 meters
8.	Height of Radiation Center Above Average Terrain : 455.7 meters

9.	Maximum Effective Radiated Power (average power):	1000 kW																																																																																																
10.	<div>Antenna Specifications:</div> <div>a. Manufacturer DIE    Model TFU-30JTT P216</div> <div>b. Electrical Beam Tilt: 0.5 degrees    <input type="checkbox"/> Not Applicable</div> <div>c. Mechanical Beam Tilt: degrees toward azimuth degrees True    <input checked="" type="checkbox"/> Not Applicable Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). <span style="float: right;">[Exhibit 42]</span></div> <div>d. Polarization: <input checked="" type="radio"/> Horizontal    <input type="radio"/> Circular    <input type="radio"/> Elliptical</div> <div>e. Directional Antenna Relative Field Values:    <input type="checkbox"/> Not applicable (Nondirectional)</div> <div>[For a composite directional (not off-the-shelf) antenna, press the following button to fill in the relative field values subform.] [Relative Field Values]</div> <div style="text-align: center; padding: 10px;"><b>10e. Directional Antenna Relative Field Values</b> [Fill in this subform for a composite directional (not off-the-shelf) antenna, only.]</div> <div style="border: 1px solid black; padding: 5px;"><div>e. Directional Antenna Relative Field Values:</div><div>Rotation (Degrees): 0    <input checked="" type="checkbox"/> No Rotation</div><table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"><thead><tr><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th></tr></thead><tbody><tr><td>0</td><td>0.819</td><td>10</td><td>0.639</td><td>20</td><td>0.473</td><td>30</td><td>0.412</td><td>40</td><td>0.481</td><td>50</td><td>0.589</td></tr><tr><td>60</td><td>0.671</td><td>70</td><td>0.7</td><td>80</td><td>0.671</td><td>90</td><td>0.589</td><td>100</td><td>0.481</td><td>110</td><td>0.412</td></tr><tr><td>120</td><td>0.473</td><td>130</td><td>0.639</td><td>140</td><td>0.819</td><td>150</td><td>0.952</td><td>160</td><td>1</td><td>170</td><td>0.952</td></tr><tr><td>180</td><td>0.819</td><td>190</td><td>0.639</td><td>200</td><td>0.473</td><td>210</td><td>0.412</td><td>220</td><td>0.481</td><td>230</td><td>0.589</td></tr><tr><td>240</td><td>0.671</td><td>250</td><td>0.7</td><td>260</td><td>0.671</td><td>270</td><td>0.589</td><td>280</td><td>0.481</td><td>290</td><td>0.412</td></tr><tr><td>300</td><td>0.473</td><td>310</td><td>0.639</td><td>320</td><td>0.819</td><td>330</td><td>0.952</td><td>340</td><td>1</td><td>350</td><td>0.952</td></tr><tr><td colspan="2">Additional Azimuths</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table><div style="text-align: center; color: blue; margin-top: 5px;"><a href="#">Relative Field Polar Plot</a></div></div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"><div>If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. <b>Exhibit required.</b> <span style="float: right;">[Exhibit 43]</span></div></div>		Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0	0.819	10	0.639	20	0.473	30	0.412	40	0.481	50	0.589	60	0.671	70	0.7	80	0.671	90	0.589	100	0.481	110	0.412	120	0.473	130	0.639	140	0.819	150	0.952	160	1	170	0.952	180	0.819	190	0.639	200	0.473	210	0.412	220	0.481	230	0.589	240	0.671	250	0.7	260	0.671	270	0.589	280	0.481	290	0.412	300	0.473	310	0.639	320	0.819	330	0.952	340	1	350	0.952	Additional Azimuths											
Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value																																																																																							
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180	0.819	190	0.639	200	0.473	210	0.412	220	0.481	230	0.589																																																																																							
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Additional Azimuths																																																																																																		
11.	Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if <b>Certification Checklist</b> Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?  If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.	<input checked="" type="radio"/> Yes <input type="radio"/> No  [Exhibit 44]																																																																																																
12.	If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if <b>Certification Checklist</b> item 3 is answered "No.")	[Exhibit 45]																																																																																																
13.	<b>Environmental Protection Act. Submit in an Exhibit</b> the following: If <b>Certification Checklist</b> Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.  By checking "Yes" to <b>Certification Checklist</b> Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.  If <b>Certification Checklist</b> Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R Section 1.1311.	[Exhibit 46]																																																																																																
<b>PREPARERS CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.</b>																																																																																																		



**SECTION III - PREPARER'S CERTIFICATION**

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 6/10/2008	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

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Any specified rotation has already been applied to the plotted pattern.

Field strength values shown on a rotated pattern may differ from the listed values because intermediate azimuths are interpolated between entered azimuths.

