

ENGINEERING STATEMENT  
FOR MODIFICATION OF CONSTRUCTION PERMIT  
FCC FILE NO. BMPCDT-20090605ACA  
TO OPERATE POST-TRANSITION  
WJCL-DT, SAVANNAH, GEORGIA  
CHANNEL 22 350 KW MAX ERP 436 METERS HAAT

SEPTEMBER 2009

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington )  
 ) ss  
District of Columbia )

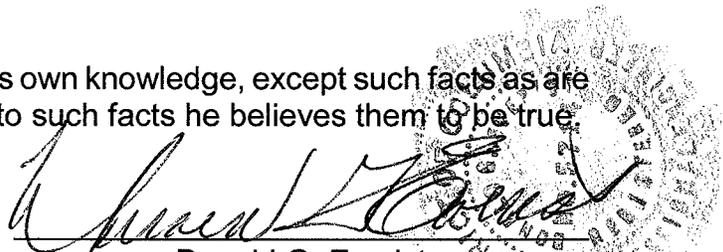
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

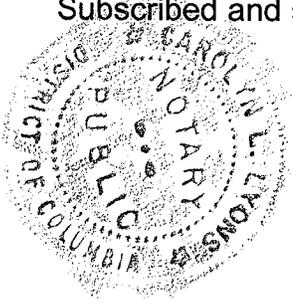
That his qualifications are a matter of record in the Federal Communications Commission;

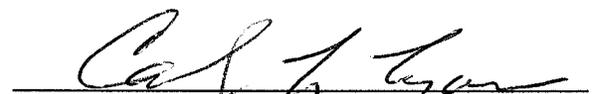
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 16<sup>th</sup> day of September, 2009.



  
Notary Public

My Commission Expires: 2/28/2013

This engineering statement has been prepared in support of an application for modification of construction permit (FCC File No. BMPCDT-20090605ACA) to operate post-transition on behalf of NVT Savannah Licensee, L.L.C. Debtor-in-Possession, licensee of WJCL(TV), Savannah, Georgia. The purpose of this application is to operate DTV on its authorized post-transition channel.<sup>1</sup> The existing analog antenna will be utilized on Channel 22; and an effective radiated power (“ERP”) of 350 kW is proposed until WJCL(TV) constructs its authorized 1000 kW ERP facility (FCC File No. BMPCDT-20080619AFS).<sup>2</sup>

The existing TV antenna is top-mounted on the existing tower structure height above ground of 451 meters (1480 feet). The existing transmitter site is located approximately 5.5 km south-southwest of Bloomingdale, Georgia. The registration number for the tower is 1032655. Exhibit E-1 is a vertical sketch of the existing tower and the existing transmitting antenna.

There are no AM stations located within 3.2 km of the existing WJCL tower site. There are three licensed FM stations on the same tower as WJCL(TV). There will be no NTSC stations or other full-service DTV facilities within 100 meters.

The geographic coordinates of the existing site are as follows:

North Latitude: 32° 03' 29"  
West Longitude: 81° 20' 19"  
NAD-27

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

<sup>2</sup>“In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service”, MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Released March 6, 2008.

Equipment Data

(no change)

Antenna: RCA, Type TFU-45J custom (or equivalent) antenna with 0.75° electrical beam tilt and 0.15 degree mechanical tilt at a bearing of N 225.315°E. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included as Exhibit E-2a, E-2b, E-2c and E-2d.

Transmission Line: 445 meters (1460 ft) of ERI, Type MACX350A, 3-1/8", 50 ohm rigid line or equivalent

Power Data

Transmitter output	17.34 kW	12.39 dBk
Combiner/Transmission line efficiency/loss	47.5%	3.23 dB
Input power to the antenna	8.24 kW	9.16 dBk
Antenna power gain, Main Lobe	42.5	16.28 dB
Effective Radiated Power, Maximum	350 kW	25.44 dBk

Elevation Data

(unchanged)

Vertical dimension for Channel 22 antenna including beacon and lightning protection	27.4 meters 90 feet
Overall height above ground of the existing structure with existing antenna	451 meters 1480 feet
Center of radiation of Channel 22 antenna above ground	437.2 meters 1434.4 feet
Elevation of site above mean sea level	5.8 meters 19 feet

Center of radiation of Channel 22 antenna above mean sea level	443 meters 1453.4 feet
Overall height above mean sea level of existing tower and existing antenna (including beacon)	456.8 meters 1499 feet
Antenna height above average terrain	436 meters

Note: Slight height differences may result due to conversion to metric.

#### Allocation

An allocation study from the proposed site has not been performed since the proposed DTV service area does not exceed the authorized service area per the FCC authorization (FCC File No. BMPCDT-20080619AFS).

#### Coverage

The average elevation data for 3.2 to 16.1 km along each radial are based upon the WJCL(TV) license file (FCC File No. BLCT-19980514KF) and the terrain data. This 3-second NGDC profile data conforms closely to the terrain information of that determined by using the 7.5 minute topographic maps on file at the Commission.

The F(50,90) DTV coverage contour has been computed from reference to the propagation data for Channels 14-69, as published by the FCC in Figure 10b and Figure 10c, Section 73.699 of the FCC Rules and Regulations.

Utilizing the formula in Section 73.625(b)(2) of the Rules for the effective heights, it is found that the depression angle,  $A_h$ , varies from 0.574 to 0.581 degrees. Since the relative

vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Table I includes the distances to the 48 dBu F(50,90) community coverage contour, 41 dBu F(50,90) service contour, the average elevation 3.2 to 16.1 km, and the antenna height above average terrain calculated every ten degrees in azimuth commencing with True North. Exhibit E-3 shows the 48 and 41 dBu F(50,90) coverage contours on a map and demonstrates that the community of license is covered by the F(50,90) 48 dBu contour.

#### Interference Analysis

A study of predicted interference caused by the proposed Channel 22 DTV service has not been performed since the predicted 41 dBu will be totally contained within that now authorized as shown in Exhibit E-4.

#### Total Radiofrequency Field Levels at WJCL-DT Tower Site

The following equations from OET Bulletin No. 65 have been used to calculate the predicted radiofrequency fields at 2 meters above ground at the base of the tower:

#### **FM and Digital Television Broadcast Stations**

$$S = [(33.4)(F^2)(ERP^2)]/R^2$$

S = Power Density in Microwatts/sq. cm ( $\mu\text{W}/\text{cm}^2$ )

F = Relative Field Factor in the downward direction of interest ( $-60^\circ$  to  $-90^\circ$  elevation)

ERP = Power in Watts

R = Distance from 2 meters above ground to center of radiation in meters

The total percentage of radiofrequency field levels ("RFF") can be calculated by combining the percentage contribution of each station. Since the proposed operation is

post-transition, all analog full-service stations have been omitted from the RFF analysis. The RFF analysis and the stations considered are shown in Table II.

The total “worst-case” post-transition RFF contribution of all stations two meters above the ground near the base of the WJCL-DT tower is less than ten percent of the FCC guidelines for an uncontrolled environment and which is no more than two percent of the proposed FCC guidelines for a controlled environment.

Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

#### Environmental Assessment

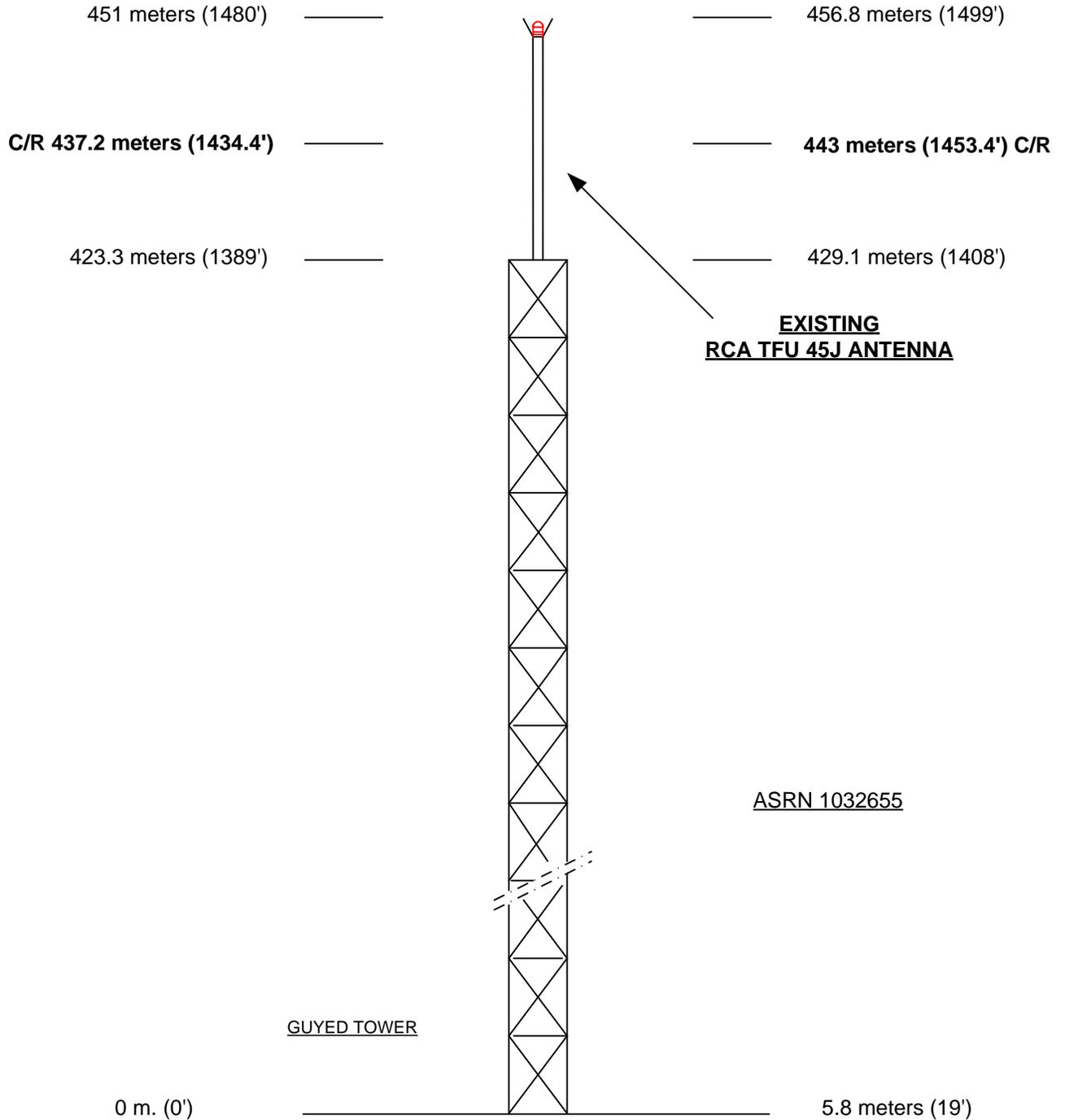
An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the permittee indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.

- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) Reuse by DTV of the facilities on an existing guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to alter the existing lighting unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

ABOVE GROUND

ABOVE MEAN SEA LEVEL



NOT TO SCALE

EXHIBIT E - 1  
VERTICAL SKETCH  
FOR THE PROPOSED DTV CHANNEL 22 OPERATION OF  
**WJCL-DT, SAVANNAH, GEORGIA**  
SEPTEMBER 2009

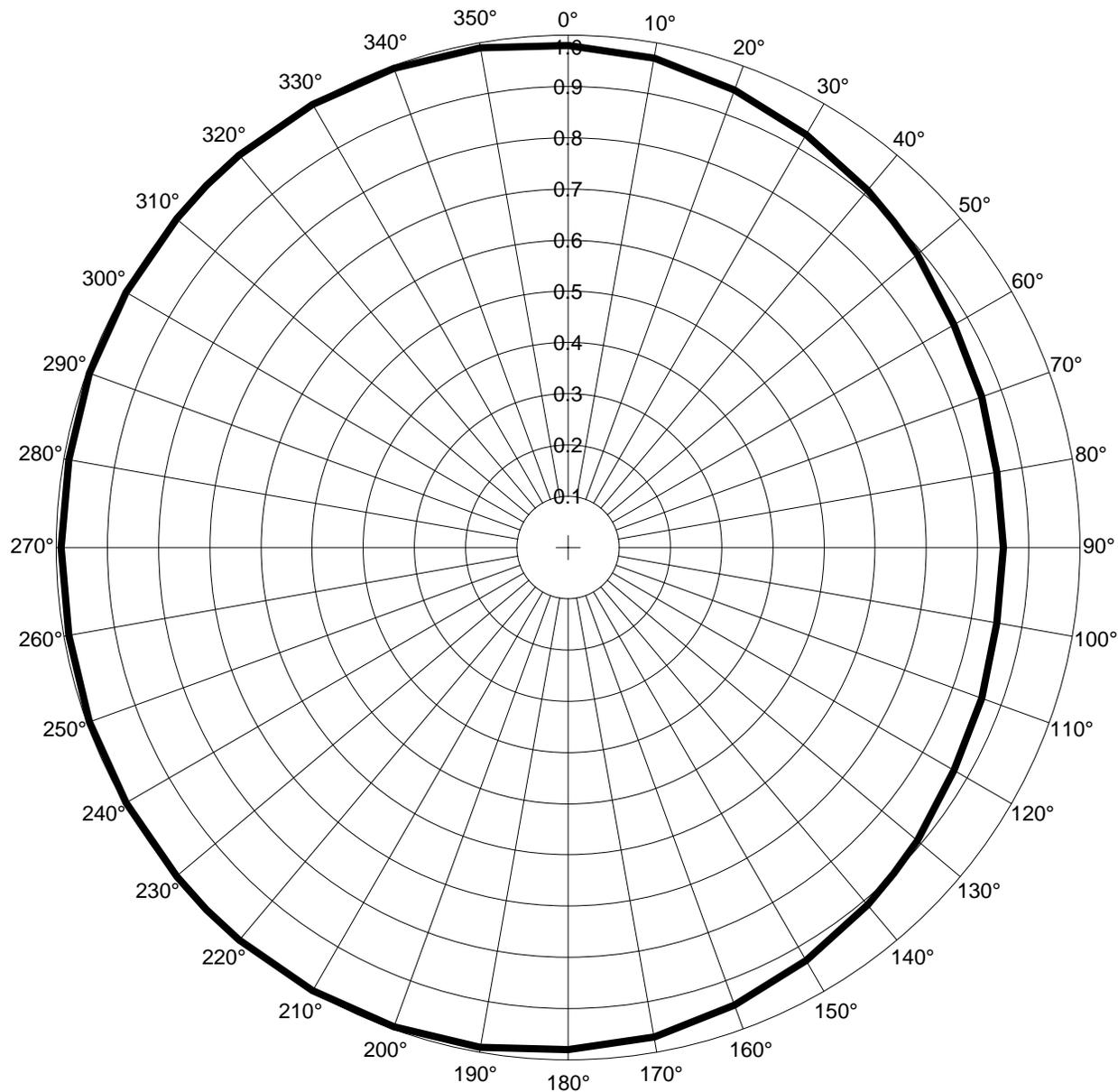
Cohen, Dippell and Everist, P.C.

**EXHIBIT E-2**

**ANTENNA MANUFACTURER DATA**

**WJCL-DT, SAVANNAH, GEORGIA**

HORIZONTAL PLANE PATTERN



Relative Intensity

Pattern file: WJCL.pat

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2b  
TABLE OF RELATIVE FIELD  
FOR THE PROPOSED OPERATION OF  
WJCL-DT, SAVANNAH, GEORGIA  
CHANNEL 22 565 KW MAX DA 436 METERS HAAT  
JUNE 2009

<u>Azimuth</u> N ° E, T	<u>Relative</u> <u>Field</u>	<u>Azimuth</u> N ° E, T	<u>Relative</u> <u>Field</u>
0	0.980	180	0.980
10	0.970	190	0.990
20	0.950	200	0.995
30	0.930	210	0.998
40	0.910	220	1.000
50	0.890	230	0.998
60	0.870	240	0.997
70	0.860	250	0.995
80	0.850	260	0.990
90	0.850	270	0.990
100	0.850	280	0.990
110	0.860	290	0.995
120	0.870	300	0.997
130	0.890	310	0.998
135	0.900	315	0.999
140	0.910	320	1.000
150	0.930	330	0.998
160	0.950	340	0.995
170	0.970	350	0.990

# RCA

## VERTICAL PATTERN

ANT. TYPE TFU45 J CUSTOM

CHANNEL \_\_\_\_\_ STATION \_\_\_\_\_

FREQUENCY \_\_\_\_\_ MHz BEAM TILT 0.75°

GAIN Power db

Main Lobe 42.5 16.28

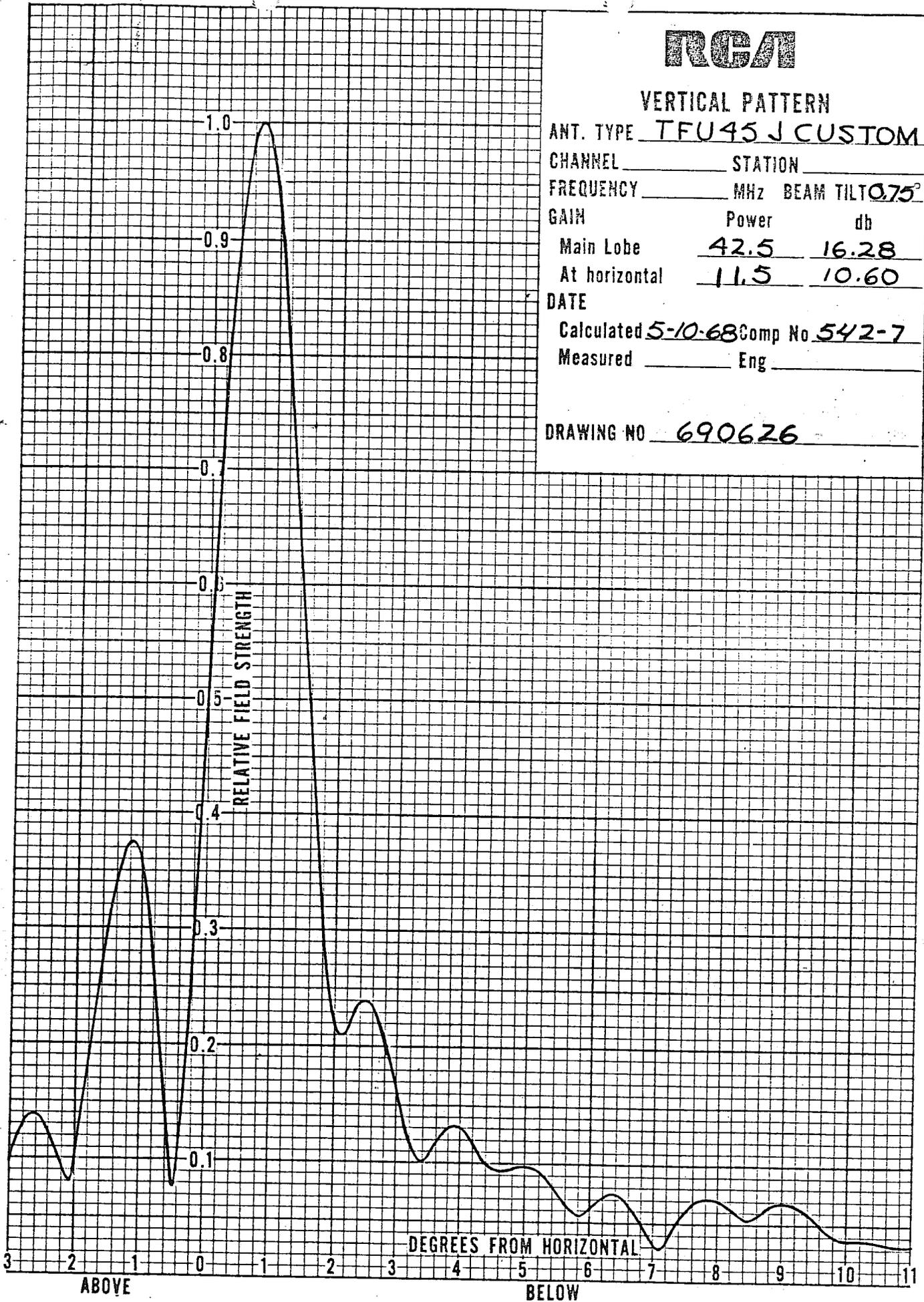
At horizontal 11.5 10.60

DATE

Calculated 5-10-68 Comp No 542-7

Measured \_\_\_\_\_ Eng \_\_\_\_\_

DRAWING NO 690626



BROADCAST ANTENNA SPECIFICATION SUMMARY



Proposal No. 9-309-501 Date September 15, 1969 Revision 1  
 Station WJCL Channel 22 Type TFU 45J Custom  
 Customer Lewis Broadcasting Location Savannah, Ga.

ELECTRICAL SPECIFICATIONS	VALUE	DB	UNITS	REMARKS
Vertical Power Gain, Main Lobe (Same as RMS Gain)	42.5	16.28	Ratio Over Dipole	
Vertical Power Gain at Horizontal	11.5	10.60	"	
Horizontal Gain, Main Lobe			Area Ratio	D/λ _____
Directional Gain	-		Ratio Over Dipole	
Circularity		1.0	± From Avg. Circle	
Peak TV Power Capability (20% Aural)	128		KW	Harness Diameter <u>8 3/16</u> Inches
Beam Tilt	0.75		Degree(s)	
Vertical Pattern Dwg. No.				690626
Horizontal Pattern Dwg. No.	-			
Input Line Size and MI No.	8 3/16		Inches	MI-561566
Input Characteristic Impedance	75		Ohms	
Antenna Input Specification	1.10 to 1.0	max	VSWR	
MECHANICAL SPECIFICATIONS				
Height with Lightning Protector (H4)	90.0		Feet	16 x 8 x 4 wide cover
Height Over Tower Top (H2)	86.0		Feet	
Height Center of Radiation (H3)	43.0		Feet	
R1 (Reaction)	4267		Pounds	
D1 (Moment Arm Above Base)	44.4		Feet	
Overtum Moment Normal: With .15 mechanical tilt:	189,215 191,272		Foot Pounds	Wind Load <u>50/33</u> PSF
Weight	9.1		Ton(s)	
Antenna Outer Diameter	16 -		Inches	No. of Sections <u>2</u>
Deicer Power (Maximum)	52		KW	@ 460 V - 3φ

Prepared By: WFS William F. Schacht

Antenna Engineering Center  
 Gibbsboro, New Jersey  
 Commercial Electronic Systems Division

Approved By: NN M. Nicholas

TABLE I  
COMPUTED COVERAGE DATA  
FOR PROPOSED DTV OPERATION OF  
WJCL-DT, SAVANNAH, GEORGIA  
CHANNEL 22 350 KW ERP 436 METERS HAAT  
SEPTEMBER 2009

<u>Radial</u> N ° E, T	<u>Average*</u> <u>Elevation</u>	<u>Effective</u> <u>Height</u>	<u>Depression</u> <u>Angle</u>	<u>ERP At</u> <u>Radio</u> <u>Horizon</u>	<u>Distance to Contour F(50,90)</u>	
	<u>3.2-16.1 km</u> meters				<u>48 dBu</u> <u>City Grade</u>	<u>41 dBu</u> <u>Noise-Limited</u>
		<u>meters</u>	<u>degrees</u>	<u>kW</u>	<u>km</u>	<u>km</u>
0	9.2	433.8	0.577	336.1	86.3	98.5
10	8.1	434.9	0.578	329.3	86.2	98.4
20	6.3	436.7	0.579	315.9	86.0	98.2
30	6.6	436.4	0.579	302.7	85.7	97.8
40	6.0	437.0	0.579	289.8	85.4	97.5
50	6.3	436.7	0.579	283.5	85.3	97.2
60	6.2	436.8	0.579	277.2	85.1	97.1
70	6.4	436.6	0.579	264.9	84.8	96.6
80	4.3	438.7	0.580	258.9	84.8	96.6
90	4.9	438.1	0.580	252.9	84.6	96.4
100	4.9	438.1	0.580	252.9	84.6	96.4
110	4.6	438.4	0.580	252.9	84.6	96.4
120	3.6	439.4	0.581	258.9	84.8	96.6
130	3.4	439.6	0.581	264.9	85.0	96.9
140	3.0	440.0	0.581	277.2	85.3	97.3
150	3.3	439.7	0.581	283.5	85.4	97.5
160	3.2	439.8	0.581	289.8	85.6	97.7
170	2.7	440.3	0.581	302.7	85.9	98.1
180	2.3	440.7	0.581	315.9	86.2	98.5
190	3.0	440.0	0.581	329.3	86.4	98.8
200	3.0	440.0	0.581	336.1	86.6	99.0
210	3.2	439.8	0.581	343.0	86.7	99.2
220	3.2	439.8	0.581	346.5	86.8	99.3
230	5.0	438.0	0.580	348.6	86.7	99.2
240	5.8	437.2	0.579	350.0	86.7	99.2
250	6.0	437.0	0.579	349.3	86.7	99.1
260	6.2	436.8	0.579	348.6	86.6	99.1
270	6.6	436.5	0.579	347.9	86.6	99.0
280	6.6	436.4	0.579	346.5	86.6	99.0

TABLE I  
COMPUTED COVERAGE DATA  
FOR PROPOSED DTV OPERATION OF  
WJCL-DT, SAVANNAH, GEORGIA  
CHANNEL 22 350 KW ERP 436 METERS HAAT  
SEPTEMBER 2009  
 (continued)

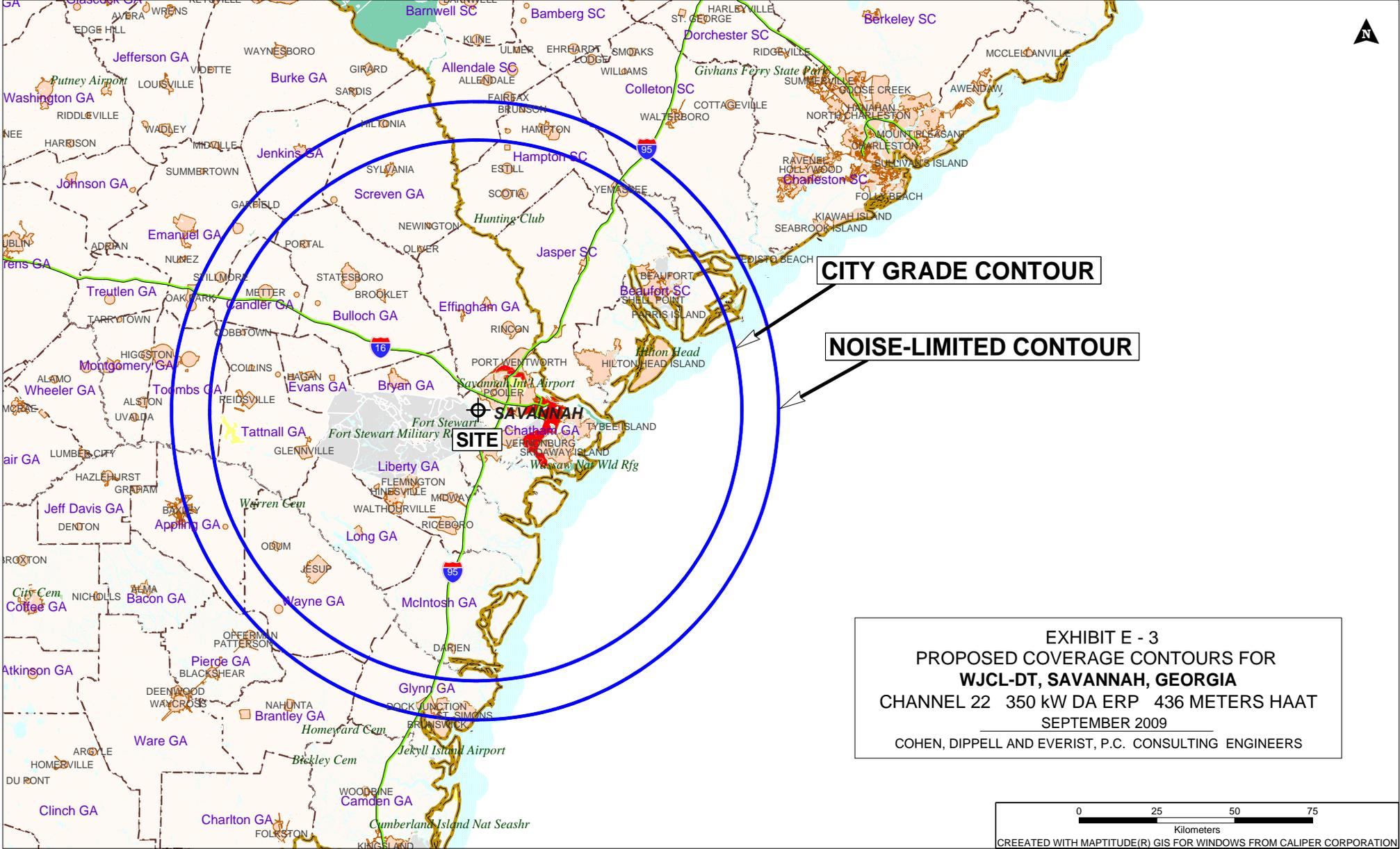
<u>Radial</u> N ° E, T	Average*	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u> degrees	<u>ERP At</u> <u>Radio</u> <u>Horizon</u> kW	<u>Distance to Contour F(50,90)</u>	
	<u>Elevation</u> <u>3.2-16.1 km</u> meters				<u>48 dBu</u> <u>City Grade</u> km	<u>41 dBu</u> <u>Noise-Limited</u> km
290	10.4	432.6	0.576	343.0	86.3	98.6
300	11.7	431.3	0.575	343.0	86.3	98.5
310	13.3	429.7	0.574	343.0	86.2	98.4
320	14.6	428.4	0.573	346.5	86.2	98.4
330	13.8	429.2	0.574	347.9	86.3	98.5
340	9.2	433.8	0.577	348.6	86.5	98.9
350	9.5	433.5	0.577	349.3	86.5	98.9

\*Based on data from FCC 3-second data base.

DTV Channel 22 (518-524 MHz)  
 Average Elevation 3.2 to 16.1 km 6.5 meters AMSL  
 Center of Radiation 443 meters AMSL  
 Antenna Height Above Average Terrain 436 meters  
 Effective Radiated Power 350 kW (25.44 dBk) Max

North Latitude: 32°03' 29"  
 West Longitude: 81° 20' 19"

(NAD-27)



**CITY GRADE CONTOUR**

**NOISE-LIMITED CONTOUR**

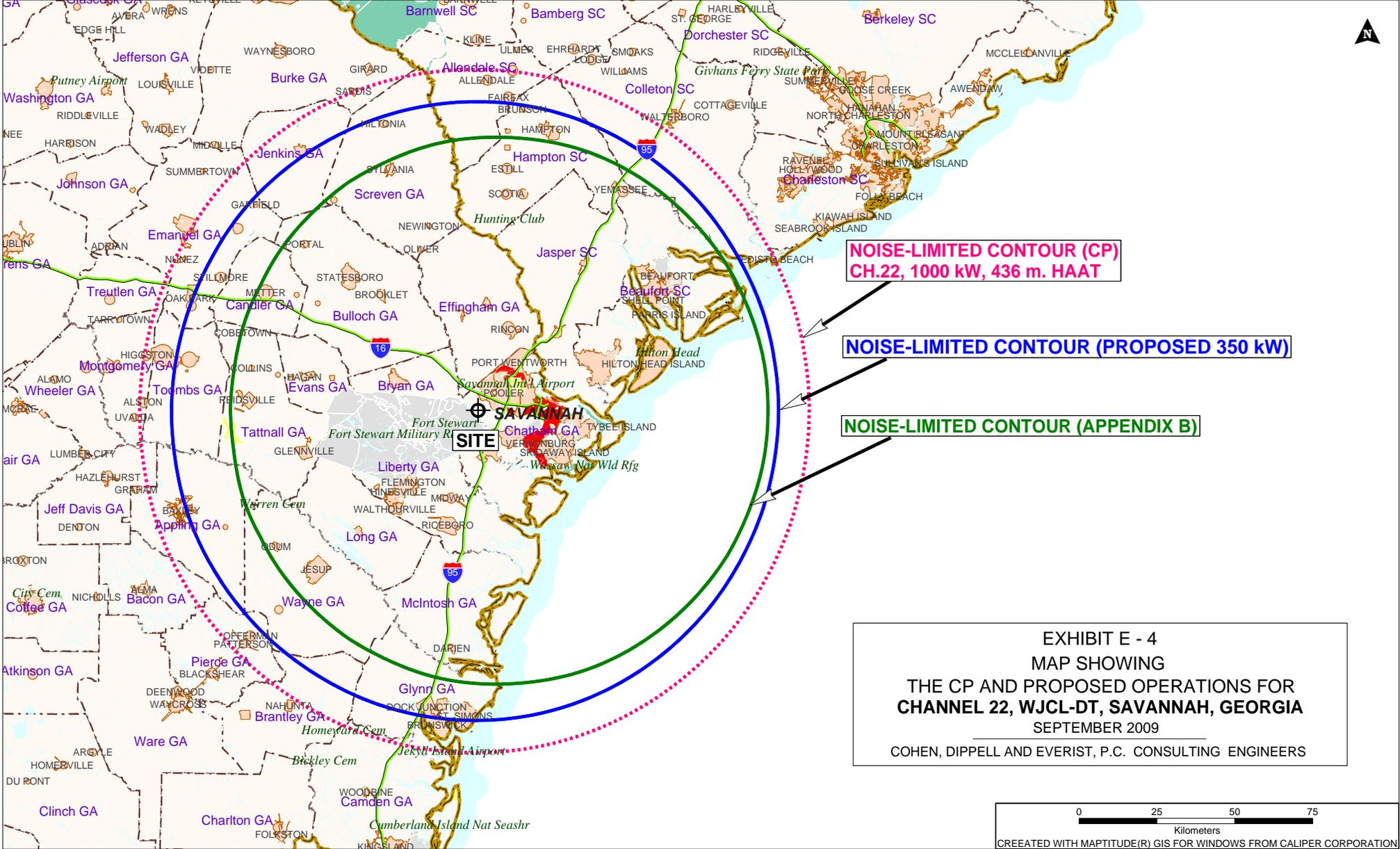
EXHIBIT E - 3  
 PROPOSED COVERAGE CONTOURS FOR  
**WJCL-DT, SAVANNAH, GEORGIA**  
 CHANNEL 22 350 KW DA ERP 436 METERS HAAT  
 SEPTEMBER 2009  
 COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS

0 25 50 75  
 Kilometers  
 CREATED WITH MAPITUDE(R) GIS FOR WINDOWS FROM CALIPER CORPORATION

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II  
RFF ANALYSIS CONSIDERS STATIONS  
IN THE VICINITY OF THE PROPOSED OPERATION OF  
WJCL-DT, SAVANNAH, GEORGIA  
SEPTEMBER 2009

<u>Call Sign</u>	<u>Status</u>	<u>Channel</u>	<u>Frequency</u> MHz	<u>ERP</u> kW	<u>RCAGL</u> meters	<u>Assumed</u> <u>Relative Field Value</u>	<u>RFF</u> $\mu\text{W}/\text{cm}^2$	<u>Uncontrolled</u> <u>MPE</u> $\mu\text{W}/\text{cm}^2$	<u>% Uncontrolled</u>
WJCL-DT	Proposed	22	518-524	350 (H)	437.2	0.1	1.0	345	<1.0%
WIXV(FM)	License	238C1	95.5	98 (H&V)	302.2	0.35	8.9	200	4.45%
WJCL-FM	License	243C	96.5	100 (H&V)	355.2	0.3	4.8	200	2.41%
WZAT(FM)	License	271C0	102.1	98 (H&V)	404.2	0.3	3.6	200	<u>1.82%</u>
Total									<10%



**NOISE-LIMITED CONTOUR (CP)  
CH.22, 1000 kW, 436 m. HAAT**

**NOISE-LIMITED CONTOUR (PROPOSED 350 kW)**

**NOISE-LIMITED CONTOUR (APPENDIX B)**

**EXHIBIT E - 4**  
**MAP SHOWING**  
**THE CP AND PROPOSED OPERATIONS FOR**  
**CHANNEL 22, WJCL-DT, SAVANNAH, GEORGIA**  
 SEPTEMBER 2009  
 COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS

0 25 50 75  
 Kilometers  
 CREATED WITH MAPITUDE(R) GIS FOR WINDOWS FROM CALIPER CORPORATION

**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 modify 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 on or before March 17, 2008 (45 days of 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.  Yes  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.  Yes  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.  Yes  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").  Yes  No  
 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.  Yes  No  
 N/A
- 2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307.  Yes  No

Applicant must **submit the Exhibit** called for in Item 13.

- 3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.  Yes  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.  Yes  No
- 5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration 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.  Yes  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 \_\_\_\_\_ Analog TV, if any \_\_\_\_\_

2. Zone:  I  II  III

3. Antenna Location Coordinates: (NAD 27)

\_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  N  S Latitude  
 \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  E  W Longitude

4. Antenna Structure Registration Number: \_\_\_\_\_

Not applicable  FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: \_\_\_\_\_ meters

6. Overall Tower Height Above Ground Level: \_\_\_\_\_ meters

7. Height of Radiation Center Above Ground Level: \_\_\_\_\_ meters

8. Height of Radiation Center Above Average Terrain: \_\_\_\_\_ meters

9. Maximum Effective Radiated Power (average power): \_\_\_\_\_ kW

10. Antenna Specifications:

Manufacturer	Model
--------------	-------

a.  Not Applicable

b. Electrical Beam Tilt: \_\_\_\_\_ degrees  Not Applicable

c. Mechanical Beam Tilt: \_\_\_\_\_ degrees toward azimuth \_\_\_\_\_ degrees True  Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). Exhibit No.

d. Polarization:  Horizontal  Circular  Elliptical

**TECH BOX**

e. Directional Antenna Relative Field Values:  Not applicable (Nondirectional)  
 Rotation: \_\_\_\_\_  No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if **Certification Checklist** 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?  Yes  No

Exhibit No.

If "No," attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

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 **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No.

a. If **Certification Checklist 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 **Certification Checklist** 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 radio frequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.
- Yes  No  N/A
- Exhibit No.
- An exhibit is required unless this question is inapplicable.**
11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.
- Yes  No
12. **Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.
- Yes  No  N/A
13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application.
- Yes  No  N/A

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

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).

**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 <b>Donald G. Everist</b>		Relationship to Applicant (e.g., Consulting Engineer) <b>Consulting Engineer</b>	
Signature 		Date <b>September 16, 2009</b>	
Mailing Address <b>Cohen, Dippell and Everist, P.C., 1300 L Street, N.W., Suite 1100</b>			
City <b>Washington</b>	State or Country (if foreign address) <b>DC</b>	ZIP Code <b>20005</b>	
Telephone Number (include area code) <b>(202) 898-0111</b>		E-Mail Address (if available) <b>cde@attglobal.net</b>	

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