

TECHNICAL EXHIBIT  
MINOR CHANGE APPLICATION  
STATION WBTS(FM) (FACILITY ID 11710)  
DORAVILLE, GEORGIA  
CH 238C1 40 KW 432 M

Technical Narrative

This Technical Exhibit was prepared on behalf of FM radio station WBTS at Athens, Georgia, in support of a minor change application. Station WBTS is currently licensed to operate as a Class C1 station on channel 238 (95.5 MHz) with a non-directional antenna effective radiated power (ERP) of 74 kilowatts with an antenna height above average terrain (HAAT) of 340 meters (BLH-20050620AAW).

This application proposes only to increase the radiation center to an antenna height above average terrain of 432 meters and decrease the effective radiated power to 40 kilowatts. No change in station class, transmitter site location is requested. WBTS(FM) will remain a maximum equivalent Class C1 facility.

Proposed Facilities

This application proposes to remain at the licensed site coordinates (NAD 27): 34-07-32 N, 83-51-32 W. The non-directional ERP will be 40 kW and antenna HAAT of 432 meters. The existing tower registration number (ASRN) is 1019528 (see Figure 1).

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Blanketing Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially 2.5 kilometers from the transmitting site. The applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

FCC Predicted Coverage Contours

The predicted coverage contours for the proposed operation were calculated in accordance with the provisions of Section 73.313. Pursuant with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors.

Figure 2 is a map showing the predicted coverage contours (eight evenly spaced radials). The map indicates that the FCC predicted 70 dBu coverage contour entirely encompasses all of the Doraville city limits (2000 U.S. Census).

Allocation Study

Figure 3 is an allocation study for channel 238C1 from the current site. The study indicates that the proposal does not meet the minimum required separation distances in Section 73.207 to the following stations: WLTM(FM), on channel 235C1 at Atlanta, GA; WHMA-FM on channel 238A at Hobson City, AL and WKLS(FM) on channel 241C0 at Atlanta, GA.

Continued § 73.213(a) processing is requested towards WLTM(FM) and WKLS(FM). There is no change in proposed site, channel or class and therefore the existing “grandfathered” short-spacings with these two stations remains unchanged.

Station WHMA-FM created the short-spacing with the WBTS facility when it filed its recent application for construction permit.<sup>1</sup> WHMA-FM is authorized to operate pursuant to § 73.215 towards WBTS. Since there is no change in proposed site by WBTS, this is not an allocation issue.

#### Radiofrequency Electromagnetic Field Exposure

The proposed WBTS facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the existing antenna is located 476 meters above ground level. The total ERP (horizontal & vertical polarizations) is 80 kW. The calculated power density at a point 2 meters above ground level for an assumed “conservative” relative value of 0.5 is  $0.003 \text{ mW/cm}^2$ . This is less than 5% of the FCC's recommended limit of  $0.2 \text{ mW/cm}^2$  for FM frequencies for an “uncontrolled” environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

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<sup>1</sup> See BPH-20040521AEP

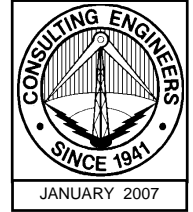
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

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January 3, 2007

Figure 1



809.1 m AMSL  
(2655 ft AMSL)

Proposed WBTS  
Antenna System

Radiation Center  
747 m AMSL  
(2452 ft AMSL)

537.9 m  
(1765 ft)

476 m  
(1562 ft)

Site Coordinates:  
34° 07' 32" N  
83° 51' 32" W  
(NAD 27)

271.2 m AMSL  
(890 ft AMSL)

Tower Registration No. 1019528

## **ANTENNA AND SUPPORTING STRUCTURE**

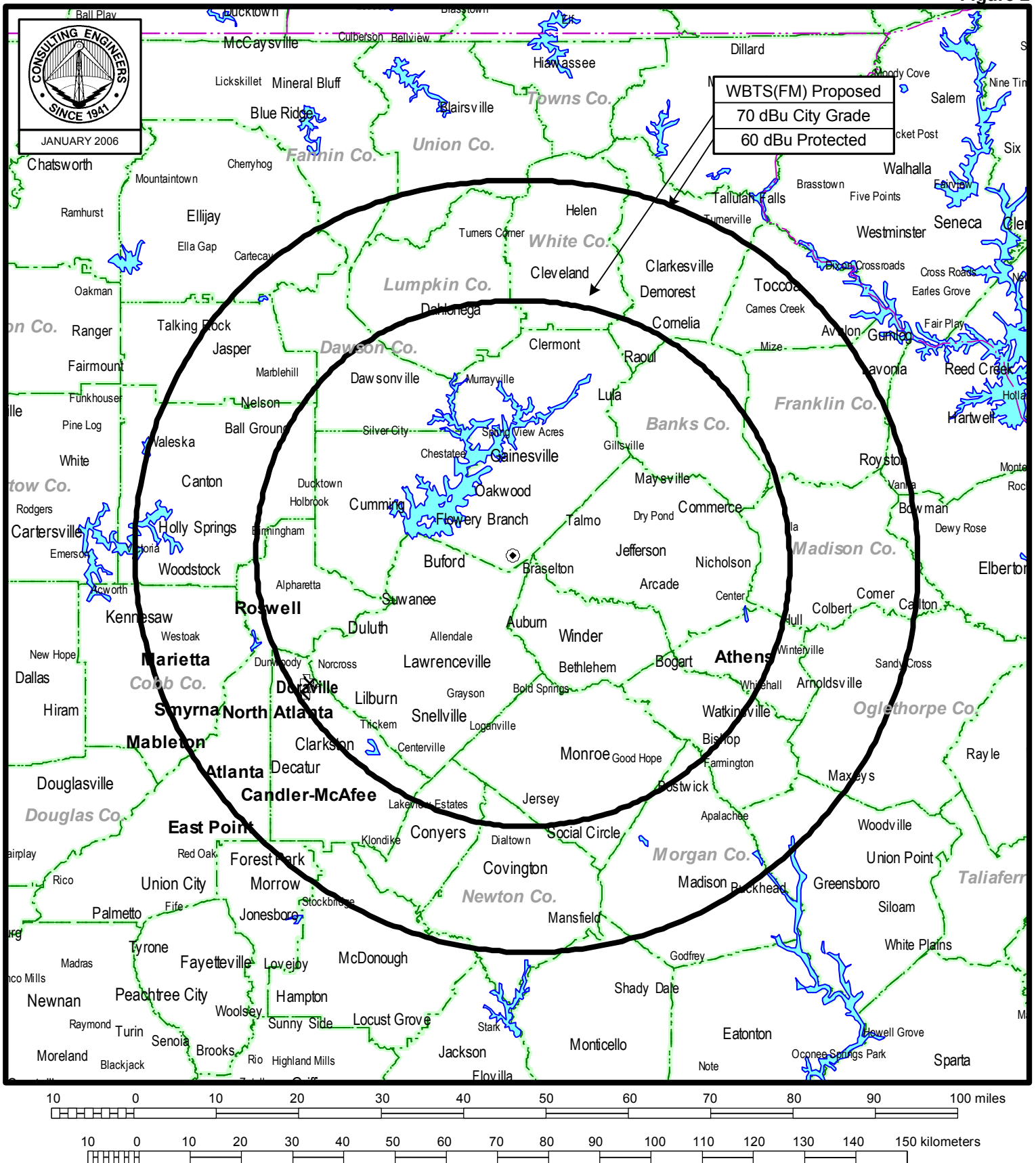
RADIO STATION WBTS(FM)

DORAVILLE, GEORGIA

CH 238C1 40 KW 432 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



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DORAVILLE, GEORGIA  
CH 238C1 40 KW 432 M

CDBS FM SEPARATION STUDY

Channel: 238C1

Coordinates: 34-07-32 N 83-51-32 W

Call Id	City St	Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 73.215 73.207
WUBL 29735	ATLANTA GA	LIC C	BLH 20000413ABM	235 C1 94.9	100.000 298	N 28457	33-48-27 084-20-27	N	231.6	56.82	76.0 82.0
<i>(Existing grandfathered short-spaced station. Section 73.213(a) processing requested.)</i>											
NEW 166080	DUE WEST SC	CP C	BNPH 20060324AFR	237 A 95.3	6.000 100	N	34-18-34 082-25-30	N	80.8	133.70 0.70	111.0 133.0 Close
WSRM 30623	COOSA GA	LIC C	BLH 20050225AAC	237 A 95.3	6.000 22	N	34-11-51 085-21-21	Y	273.7	138.27 5.27	111.0 133.0 Close
WSRM 30623	COOSA GA	CP C	BPH 20050321AAD	237 A 95.3	4.700 101	N	34-11-51 085-21-21	Y	273.7	138.27 5.27	111.0 133.0 Close
0	DILLSBORO NC	RM VAC C	9871	237 A 95.3	0.000		35-15-56 083-09-16		26.7	141.98 8.98	111.0 133.0 Close
WBTS 11710	DORAVILLE GA	LIC C	BLH 20050620AAW	238 C1 95.5	74.000 340	N	34-07-32 083-51-32	N	96.3	0.00 -245.00	224.0 245.0 Short
<i>(Applicant's existing facility)</i>											
WBTS 11710	DORAVILLE GA	BPH APP C	20060501AOE	238 C2 95.5	18.000 250	Y 75372	33-45-33 084-20-05	Y	227.3	59.89 -164.11	211.0 224.0 Short
<i>(Applicant's current application that the herein proposed facility is not modifying.)</i>											
WHMA-FM 52320	HOBSON CITY AL	BLH LIC C	20050527BCT	238 A 95.5	0.530 332	Y 67900	33-37-38 085-53-25	Y	254.1	195.90 -4.10	178.0 200.0 Short
<i>(WHMA-FM created this short-spacing to WBTS. See Technical Narrative.)</i>											
WATG 67769	TRION GA	BLH LIC C	19961009KB	239 A 95.7	1.300 213	N	34-28-10 085-17-48	Y	286.6	137.75 4.75	111.0 133.0 Close
WIOL 50534	GREENVILLE GA	BLH LIC C	19950303KB	239 C3 95.7	3.400 267	N	32-50-48 084-41-27	N	208.7	161.55 17.55	133.0 144.0 Clear
WKLS 11275	ATLANTA GA	BLH LIC C	19880104KC	241 C0 96.1	100.000 300	N	33-48-27 084-20-26	N	231.6	56.80 -37.20	88.0 94.0 Short
<i>(Existing grandfathered short-spaced station. Section 73.213(a) processing requested.)</i>											
WNGC 60810	TOCCOA GA	BLH LIC C	20000911ACX	291 C1 106.1	100.000 299	N	34-22-40 083-39-25	N	33.4	33.60 -0.40	0.0 34.0 Short
<i>(Separation distance rounds to 69 kilometers. Therefore, no actual short-spacing exists.)</i>											