Federal Communications Commission
Washington, D. C. 20554

Approved by OMB
3060-0027

FOR FCC USE ONLY

FCC 301

APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY

FILE NO.

Section I - General Information

1

Legal Name of the Applicant Hope Broadcasting, Inc.		
Mailing Address P.O. Box 216		
City Dalton	State or Country (if foreign address) GA	ZIP Code 30722
Telephone Number (include area code) (706) 673-2222	E-Mail Address (if available) deborah@wttiradio.com	
FCC Registration Number 0027047661	Call Sign WTTI	Facility ID Number 53957

2.

Contact Representative (if other than applicant)	Firm or Company Name	
Mailing Address		
City	State or Country (if foreign address)	ZIP Code
Telephone Number (include area code)	E-Mail Address (if available)	

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

☐ Governmental Entity ☐ Other _____

4. **Application Purpose.**

☐ New Station

☐ New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments

☐ New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments using Tribal Priority

☐ Major Change in licensed facility

☒ Minor Change in licensed facility

☐ Major Modification of construction permit

☐ Minor Modification of construction permit

☐ Major Amendment to pending application

☐ Minor Amendment to pending application

a. File number of original construction permit: _____ ☒ N/A

b. Service Type: ☒ AM ☐ FM ☐ TV ☐ DTV ☐ DTS

c. DTV Type: ☐ Pre-Transition ☐ Post-Transition ☐ Both

d. Community of License:

City	State
Dalton	GA

e. Facility Type: ☒ Main ☐ Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a ''No'' response is provided.

Section II - Legal

1. **Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.

☒ Yes ☐ No

2. **Parties to the Application.**

a. List the applicant, and, if other than a natural person, its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

(1) Name and address of the applicant and each party to the application holding an attributable interest (if other than individual also show name, address and citizenship of natural person authorized to vote the stock or holding the attributable interest). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and other entities with attributable interests, and partners.

(2) Citizenship.

(3) Positional Interest: Officer, director, general partner, limited partner, LLC member, investor/creditor attributable under the Commission's **equity/debt plus** standard, etc.

(4) Percentage of votes.

(5) Percentage of total assets (equity plus debt).

(1)	(2)	(3)	(4)	(5)

b. Applicant certifies that equity and financial interests not set forth above are non-attributable.

☐ Yes ☐ No ☐ N/A

See Explanation in Exhibit No.

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

Exhibit No. ☐ N/A

4. **Multiple Ownership.**

a. Is the applicant or any party to the application the holder of an attributable radio joint sales agreement or an attributable radio or television time brokerage agreement in the same market as the station subject to this application?

☐ Yes ☒ No

If "YES," radio applicants must submit as an Exhibit a copy of each such agreement for radio stations.

Exhibit No.

Section II - Legal

b. Applicant certifies that the proposed facility complies with the Commission's multiple ownership rules.

[X] Yes [ ] No

Radio applicants only: If "Yes," submit an Exhibit providing information regarding the market, broadcast station(s), and other information necessary to demonstrate compliance with 47 C.F.R. Section 73.3555(a).

See Explanation in Exhibit No.

All Applicants: If "No," submit as an Exhibit a detailed explanation in support of an exemption from, or waiver of, 47 C.F.R Section 73.3555.

c. Applicant certifies that the proposed facility:

[X] Yes [ ] No

(1) does not present an issue under the Commission's policies relating to media interests of immediate family members;

See Explanation in Exhibit No.

(2) complies with the Commission's policies relating to future ownership interests; and

(3) complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

d. Does the Applicant claim status as an "eligible entity," that is, an entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping (as set forth in 13 C.F.R. Section 121.201), and holds:

[ ] Yes [X] No

See Explanation in Exhibit No.

(1) 30 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet; or

(2) 15 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet, provided that no other person or entity owns or controls more than 25 percent of the outstanding stock or partnership interests; or

(3) more than 50 percent of the voting power of the corporation that will own the media outlet (if such corporation is a publicly traded company)?

All applicants: If "Yes," submit as an Exhibit a detailed showing demonstrating proof of status as an eligible entity.

5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application

[ ] Yes [ ] No

See Explanation in Exhibit No.

a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or

b. any pending broadcast application in which character issues have been raised.

6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.

[ ] Yes [ ] No

See Explanation in Exhibit No.

7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.

[ ] Yes [ ] No

See Explanation in Exhibit No.

8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.

[ ] Yes [ ] No

9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.

[ ] Yes [ ] No

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

14. **Tribal Priority - Threshold Qualifications.** Is the Applicant applying for an FM allotment set forth in a Public Notice announcing a Tribal Threshold Qualifications window? An Applicant answering "Yes" must provide an Exhibit demonstrating that it would have been qualified to add the allotment for which it is applying using the Tribal Priority.

☐ Yes ☐ No

Exhibit No.

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
Deborah Boyd	Deborah Boyd
Signature: Deborah Boyd	Date: 3-24-22

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	Relationship to Applicant (e.g., Consulting Engineer)	
George S. Cissey	Technical Consultant	
Signature: George S Cissey	Date: 3/24/2022	
Mailing Address: 3600 Dallas Highway, Suite 230 - PMB 164		
City: Marietta	State or Country (if foreign address): GA	ZIP Code: 30064
Telephone Number (include area code): 404-636-2257	E-Mail Address (if available): Stephen@bromocom.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).

SECTION III - A AM 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. Frequency: 1530 kHz

2. Class: ☐ A ☐ B ☐ C ☒ D

3. Hours of Operation: ☐ Unlimited ☐ Limited ☒ Daytime ☐ Share Time ☐ Specified Hours: _____

4. **Daytime Operation:** ☒ Yes ☐ No

   a. Power: 1.0 kW

   b. Antenna Location Coordinates: (NAD 27)

   34 ° 47 ' 02.8 " ☒ N ☐ S Latitude

   85 ° 02 ' 43.4 " ☐ E ☒ W Longitude

   c. **Nondirectional:** ☒ Yes ☐ No

   If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

   Exhibit No.

   Theoretical 305.77 mV/m per kW at 1 km

Tower	1
Overall height above ground (include obstruction lighting) (meters)	49.9
Antenna structure registration	_____ Number ☐ Notification filed with FAA ☒ Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)	49.0
Electrical height of radiator (degrees)	90.0
Top-Loaded/Sectionalized apparent height (degrees)	N/A
A	
B	
C	
D	

TECH BOX - DAYTIME OPERATION

d. **Directional:** ☐ Yes ☒ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented: ☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/rn at 1 krn

Azimuth	Span	Augmentation radiation (mV/m at 1 km)

TECH BOX - NIGHTTIME OPERATION

5. **Nighttime Operation:** ☐ Yes ☒ No

a. Power: _____ kW

b. Antenna Location Coordinates: (NAD 27)

°	'	"		
_____	_____	_____	☐ N	☐ S Latitude
°	'	"		
_____	_____	_____	☐ E	☐ W Longitude

c. **Nondirectional:** ☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical _____ mV/m per kW at 1 km

Tower	
Overall height above ground (include obstruction lighting) (meters)	
Antenna structure registration	_____ Number ☐ Notification filed with FAA ☐ Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height (degrees)	
A	
B	
C	
D	

TECH BOX - NIGHTTIME OPERATION

d. **Directional:** ☐ Yes ☐ No

Exhibit No.

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Theoretical _____ mV/m at 1 kin

Standard RMS: _____ mV/rn at 1 kin

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented: ☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth	Span	Augmentation radiation

TECH BOX - CRITICAL HOURS OPERATION

6. Critical Hours Operation: [X] Yes [ ] No

a. Power: 0.32 kW

b. Antenna Location Coordinates: (NAD 27)

34	° 47	' 02.8	"	[X] N	[ ]	S Latitude
85	° 02	' 43.4	"	[ ] E	[X]	W Longitude

c. Nondirectional: [X] Yes [ ] No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical 305.77 mV/m per kW at 1 km

Tower	1
Overall height above ground (include obstruction lighting) (meters)	49.9
Antenna structure registration	_____ Number [ ] Notification filed with FAA [X] Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)	49.0
Electrical height of radiator (degrees)	90.0
Top-Loaded/Sectionalized apparent height (meters)	N/A
A	
B	
C	
D	

TECH BOX - CRITICAL HOURS OPERATION

d. **Directional:** ☐ Yes ☒ No

Exhibit No.

if "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Theoretical _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable	_____ Number ☐ Notification filed with FAA ☐ Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented: ☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth	Span	Augmentation radiation

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a ''No'' response is provided.

CERTIFICATION

7. **Broadcast Facility.** The proposed facility complies with the engineering standards and assignment requirements of 47 C.F.R. Sections 73.24(e), 73.24(g), 73.33, 73.45, 73.150, 73,152, 73.160, 73.182(a)-(i), 73.186, 73.189, 73.1650. **Exhibit Required.**

☒ Yes ☐ No — See Explanation in Exhibit No. —

Exhibit No. Aerial Photo &

8. **Community Coverage.** The proposed facility complies with community coverage requirements of 47 C.F.R. Section 73.24(i).

☒ Yes ☐ No — See Explanation in Exhibit No.

9. **Main Studio Location.** The proposed main studio location complies with requirements of 47 C.F.R. Section 73.1125.

☒ Yes ☐ No — See Explanation in Exhibit No.

10. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all those that apply. An exhibit is required for each applicable section.

☒ Yes ☐ No — See Explanation in Exhibit No.

Groundwave.

a. ☒ 47 C.F.R. Section 73.37

Exhibit No. Daytime Alloca

Skywave.

b. ☐ 47 C.F.R. Section 73.182.

Exhibit No.

Critical Hours.

c. ☒ 47 C.F.R. Section 73.187.

Exhibit No. Critical Hours

11. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radio frequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an **Exhibit is required.**

☒ Yes ☐ No — See Explanation in Exhibit No.

By checking "Yes" above, 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.

12. **Community of License Change - Section 307(b).** If the application is being submitted to change the facility's community of license, then the applicant certifies that it has attached an exhibit containing information demonstrating that the proposed community of license change constitutes a preferential arrangement of assignments under Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b)).

☐ Yes ☐ No ☒ N/A

Exhibit No.

An exhibit is required unless this question is not applicable.

13. **Dispositive Section 307(b) Preference**

a. Was the AM facility that is the subject of this application awarded on the basis of a dispositive Section 307(b) preference?

☐ Yes ☒ No

b. If yes to 13(a), applicant certifies that: (i) the community of license proposed in the subject application is the same as that on which the Section 307(b) preference was based, or (ii) as shown in the attached Exhibit, the service area proposed in the subject application is substantially equivalent to the service area on which the Section 307(b) preference was based.

☐ Yes ☐ No ☐ N/A

Exhibit No.

c. If yes to 13(a) and no to 13(b), applicant certifies that, although in the subject application it proposes to: (i) change the community of license, or (ii) modify service to the area on which the Section 307(b) preference was based, it has for a period of four years of on-air operations: (1) served the community of license, or (2) provided full service to the area on which the Section 307(b) preference was based.

☐ Yes ☐ No

Exhibit No.

PREPARER'S CERTIFICATION ON PAGE 5 MUST BE COMPLETED AND SIGNED.

WTTI (AM)
1530 kHz
1 kW Daytime – 0.320 kW Critical Hours
Dalton, Georgia
March 2022

Technical Statement

The purpose of this instant application is for WTTI (AM) 1530 kHz Dalton, GA to delete its directional antenna and operate nondirectionally with 1 kW Daytime and 0.320 kW Critical Hours utilizing the southern tower of the currently licensed two-tower directional array.

The reason for this amendment is to incorporate the complete printed Form 301-AM into the application. No changes are being made to the proposed facility in this amendment.

Multiple Ownership:

WTTI (AM) is the only broadcast station owned by Hope Broadcasting, Inc. Therefore, this proposal is in compliance with §73.3555 of the Commission's rules.

Broadcast Facility:

The proposed facility complies with the engineering standards and assignment requirements of 47 C.F.R. Sections 73.24(e), 73.24(g), 73.33, 73.45, 73.150. 73.152, 73.160, 73.182(a)-(i), 73.186, 73.189, 73.1650. See the attached Aerial Photo with Ground System Drawing, Proposed Daytime and Critical Hours Contour maps and Vertical Plan Sketch.

Community Coverage:

The proposed facility complies with community coverage requirements of 47 C.F.R. Section 73.24(i). The daytime 5 mV/m contour of this proposal covers 72.8% of the city of Dalton, GA, the community of license. See the attached Daytime Community Coverage map.

Interference:

The proposed facility complies with 47 C.F.R. Section 73.37 (Groundwave) and 47 C.F.R. Section 73.187 (Critical Hours). See the attached Daytime Allocation Study and Critical Hours Radiation Report.

Environmental Protection Act:

The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306. See the attached Radiofrequency Radiation Calculation.

The following technical exhibits are included in this application:

1. Aerial Site Photo with Ground System Drawing

2. Proposed Daytime Contour Maps

3. Proposed Critical Hours Contour Maps

4. Vertical Plan Sketch

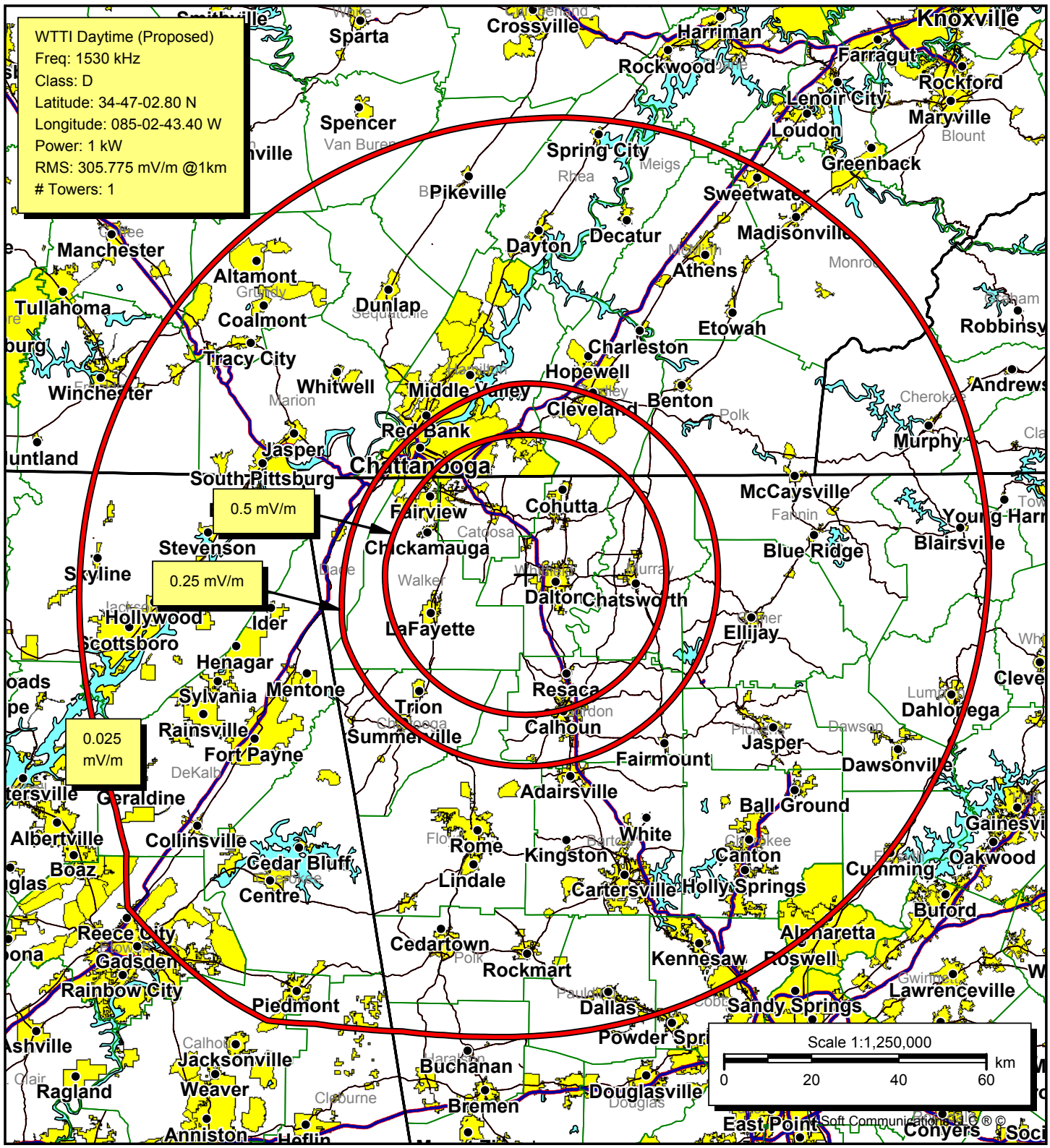
5. Community Coverage Map

6. Daytime Allocation Study

7. Critical Hours Radiation Report

8. Radiofrequency Radiation Calculation


Ground system consists of 120 evenly spaced radials at 49.0 meters in length.
Aerial Site Photo
with Ground System
WTTI (AM)
1530 kHz
1 kW Daytime – 0.320 kW Critical Hours
Dalton, Georgia
March 2022
Property Boundary
Studio
Tuning Box
49.0 meters
N
0 m
15.24 m
30.48 m
45.72 m
60.96 m
Scale
Google Earth



Proposed Daytime 0.5, 0.25 and 0.025 mV/m Contours

WTTI (AM)

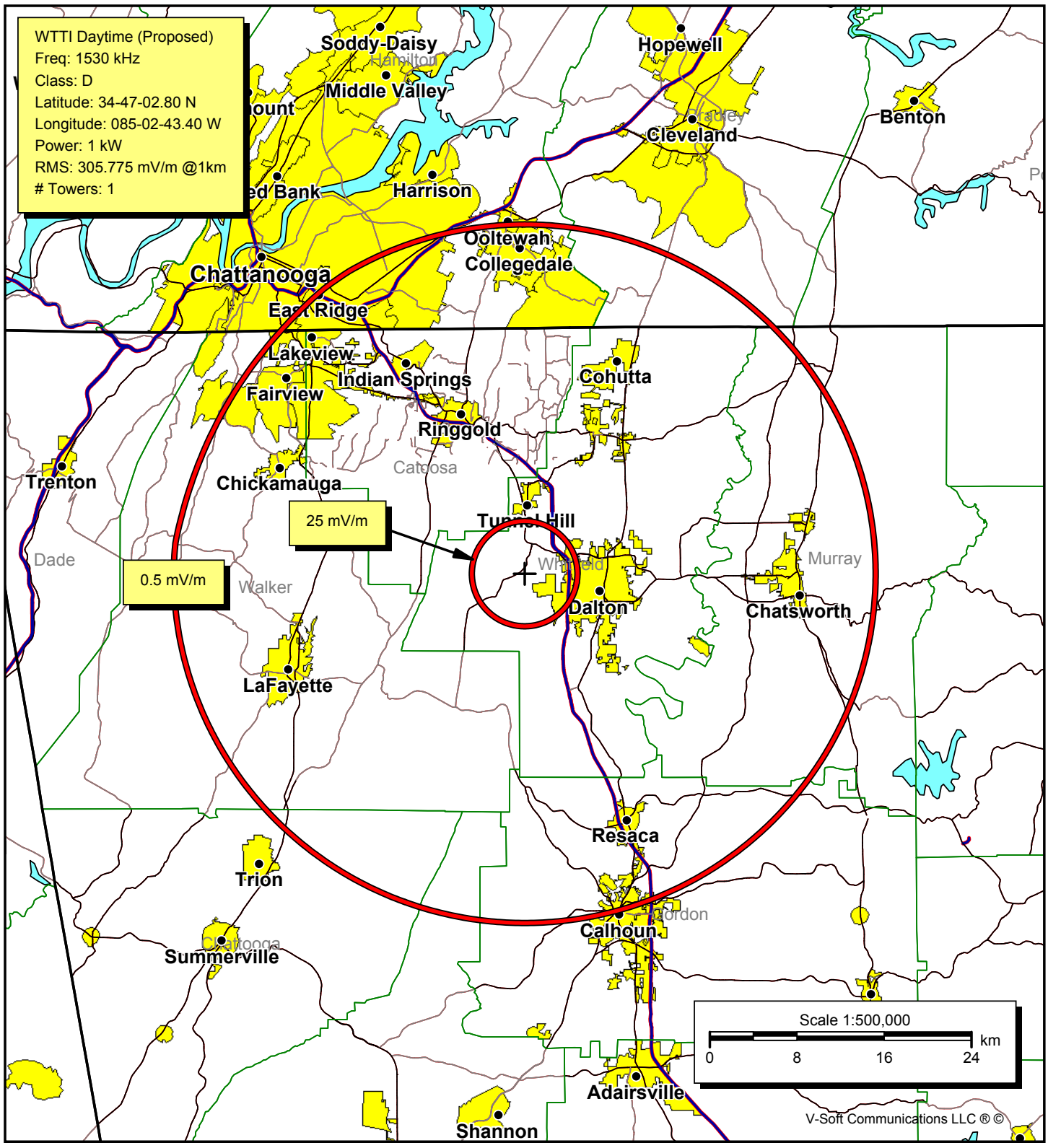
1530 kHz

1 kW Daytime - 0.320 kW Critical Hours

Dalton, Georgia

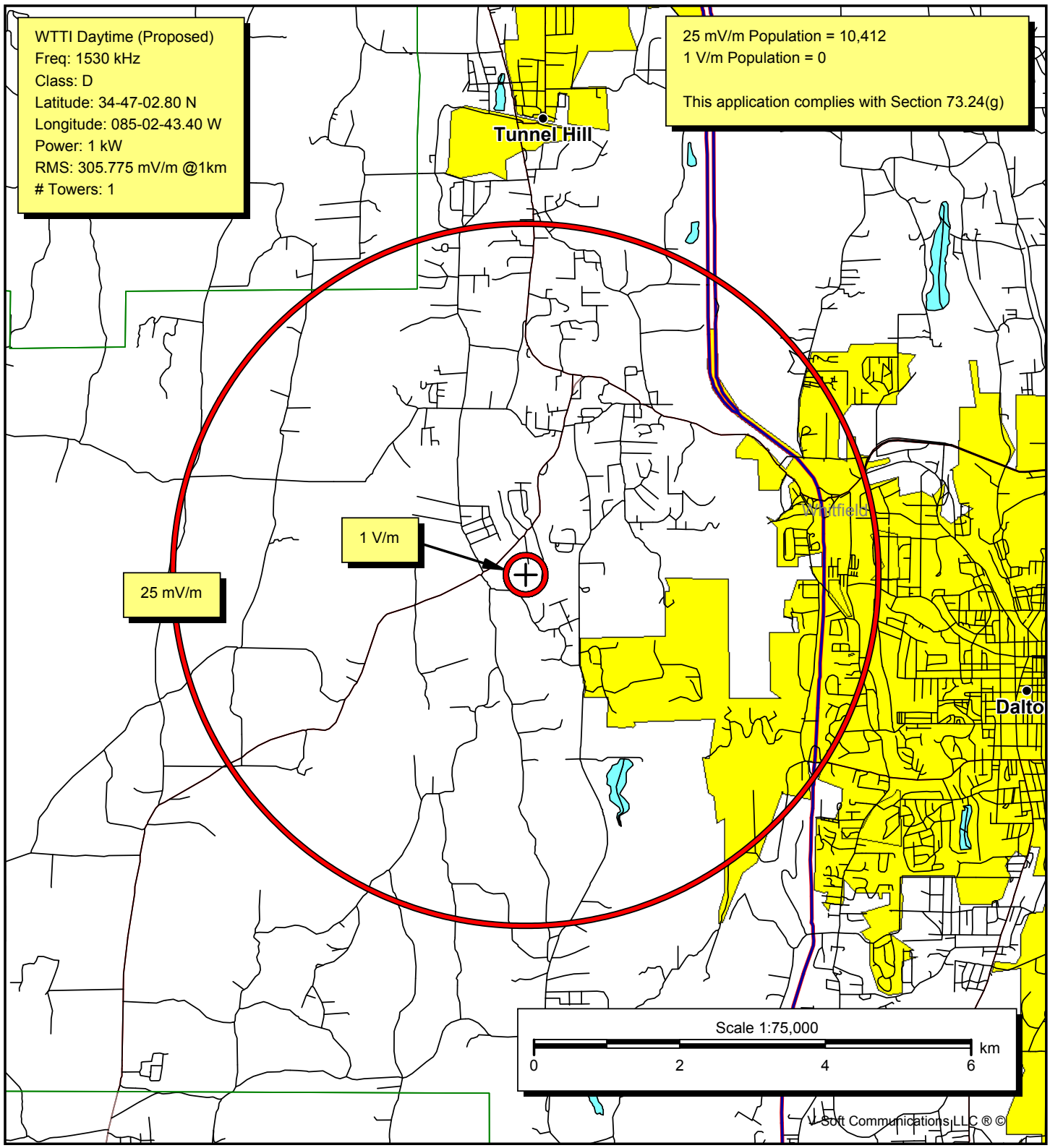
Bromo Communications, Inc.

March 2022



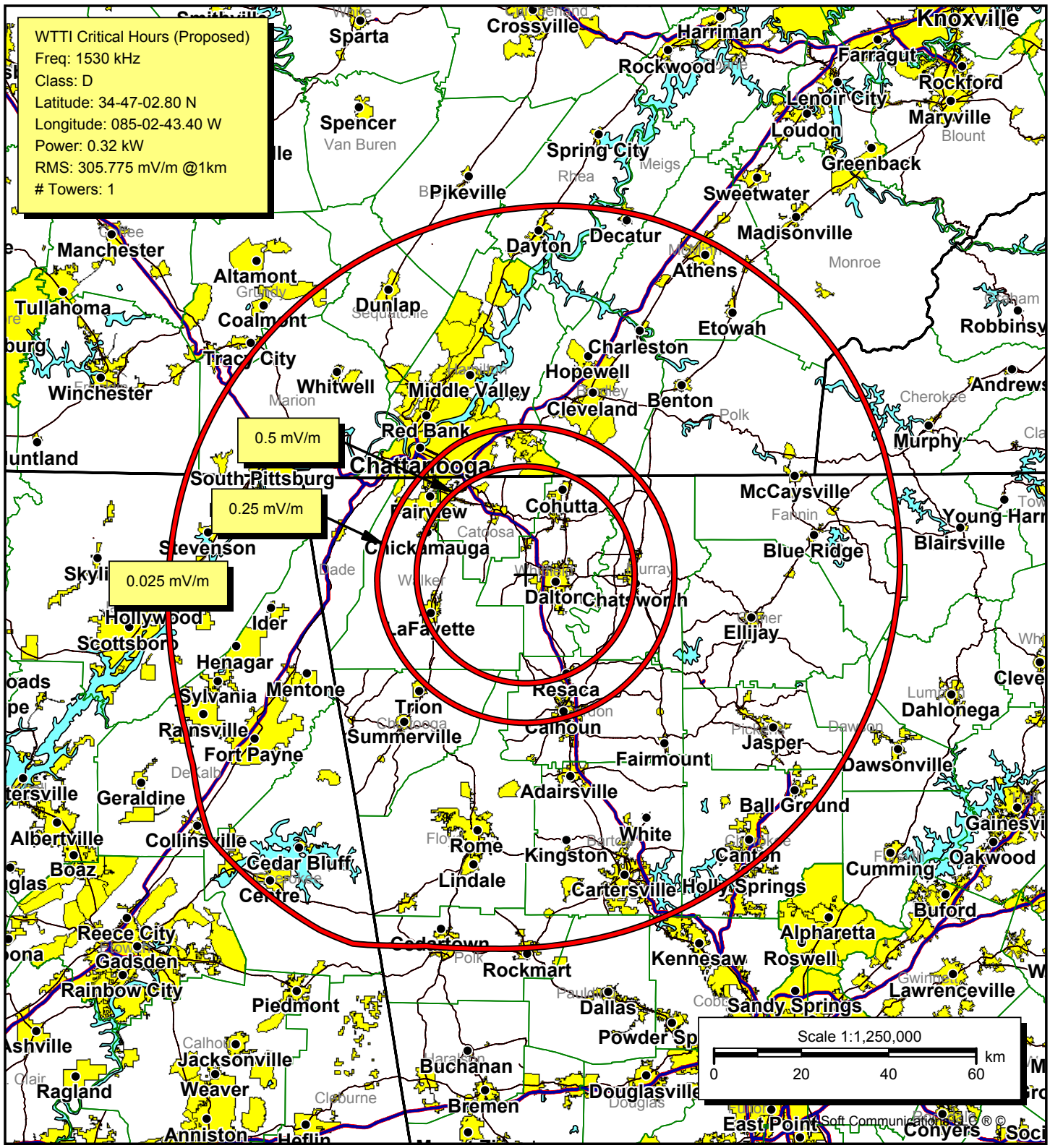
Proposed Daytime 25 and 0.5 mV/m Contours
WTTI (AM)
1530 kHz
1 kW Daytime - 0.320 kW Critical Hours
Dalton, Georgia

Bromo Communications, Inc.
March 2022



Proposed Daytime 25 mV/m and 1 V/m Contours
WTTI (AM)
1530 kHz
1 kW Daytime - 0.320 kW Critical Hours
Dalton, Georgia

Bromo Communications, Inc.
March 2022



Proposed Critical Hours 0.5, 0.25 and 0.025 mV/m Contours

WTTI (AM)

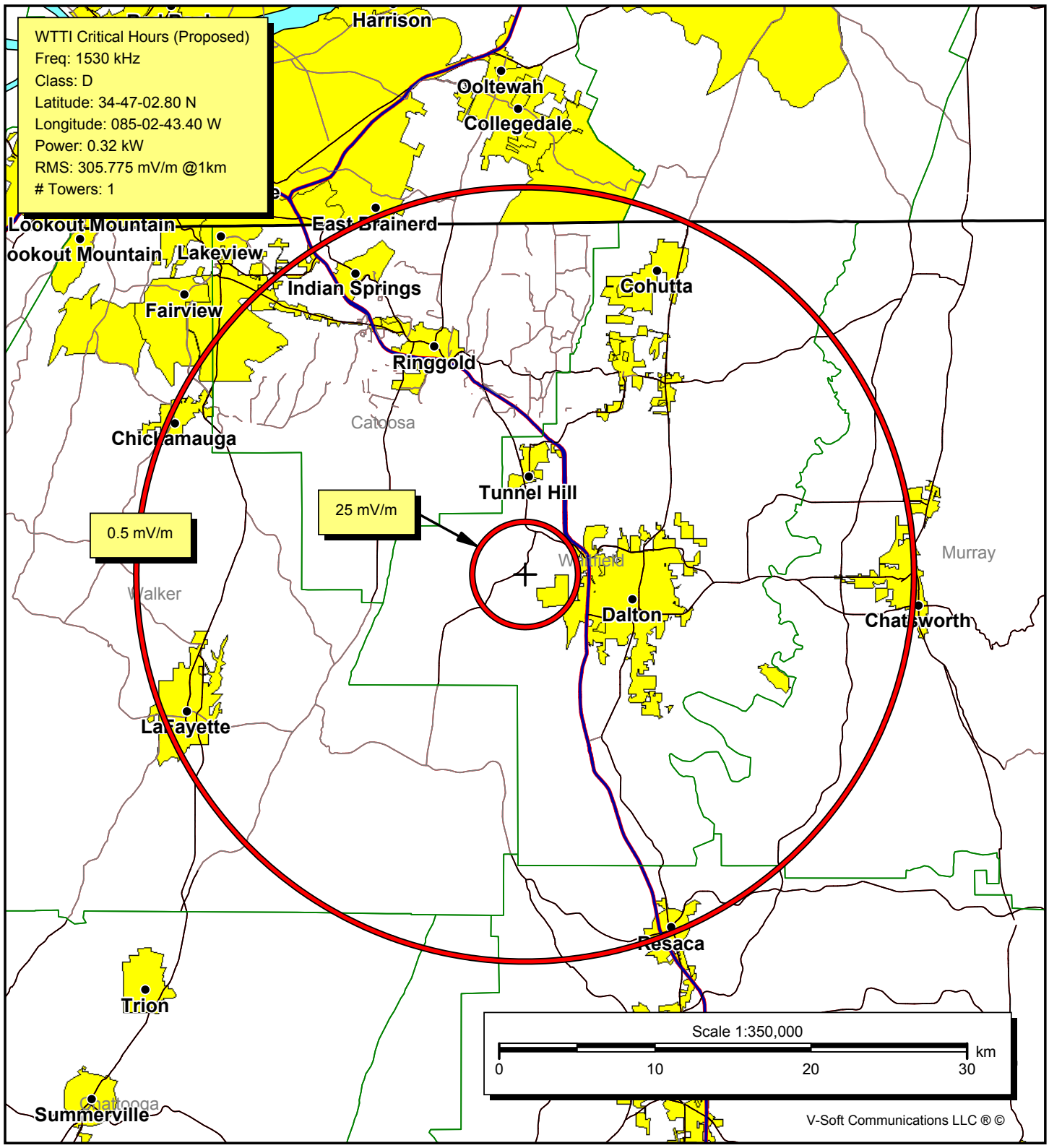
1530 kHz

1 kW Daytime - 0.320 kW Critical Hours

Dalton, Georgia

Bromo Communications, Inc.

March 2022



Proposed Critical Hours 25 and 0.5 mV/m Contours

WTTI (AM)

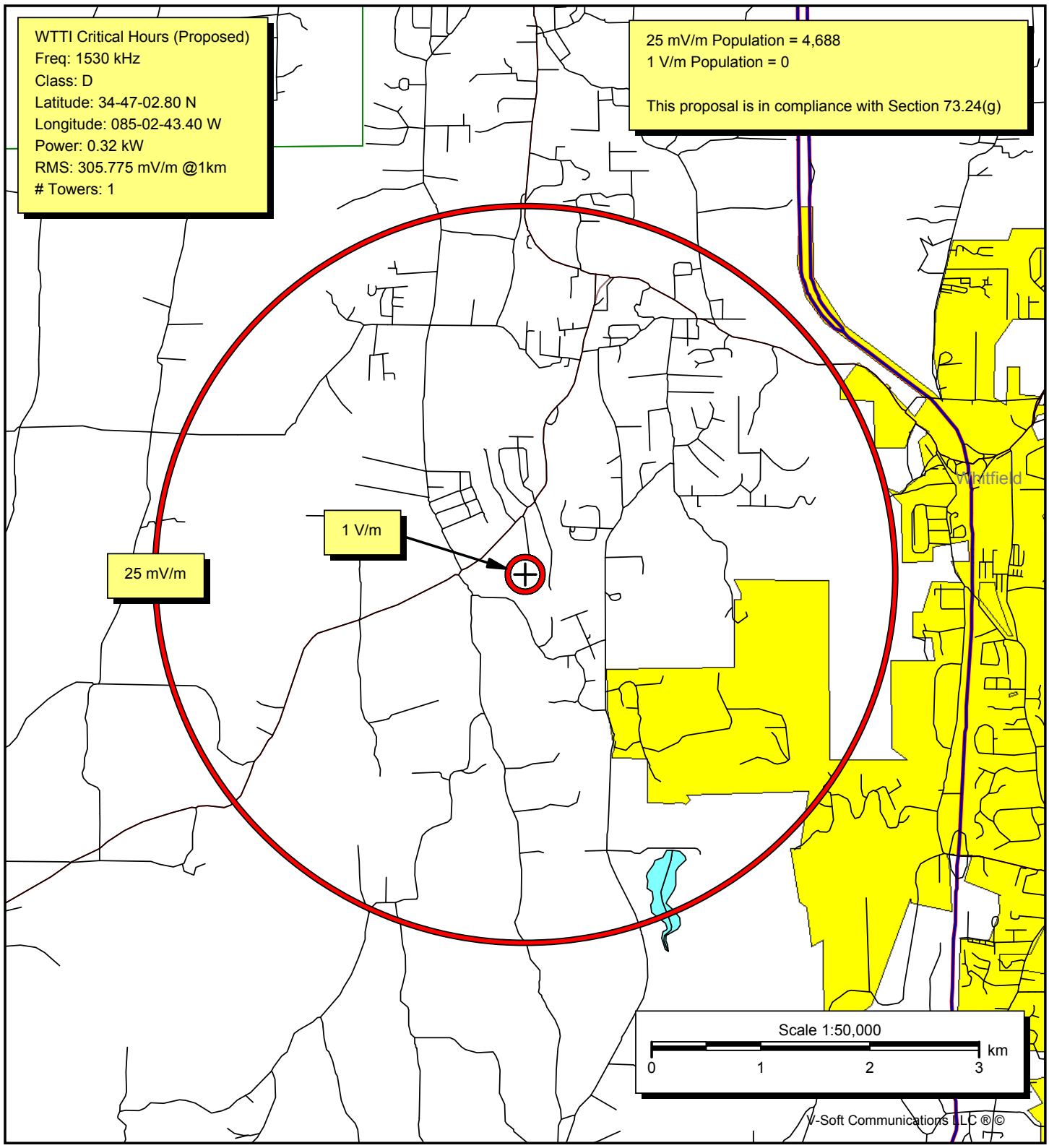
1530 kHz

1 kW Daytime - 0.320 kW Critical Hours

Dalton, Georgia

Bromo Communications, Inc.

March 2022



Proposed Critical Hours 25 mV/m and 1 V/m Contours

WTTI (AM)

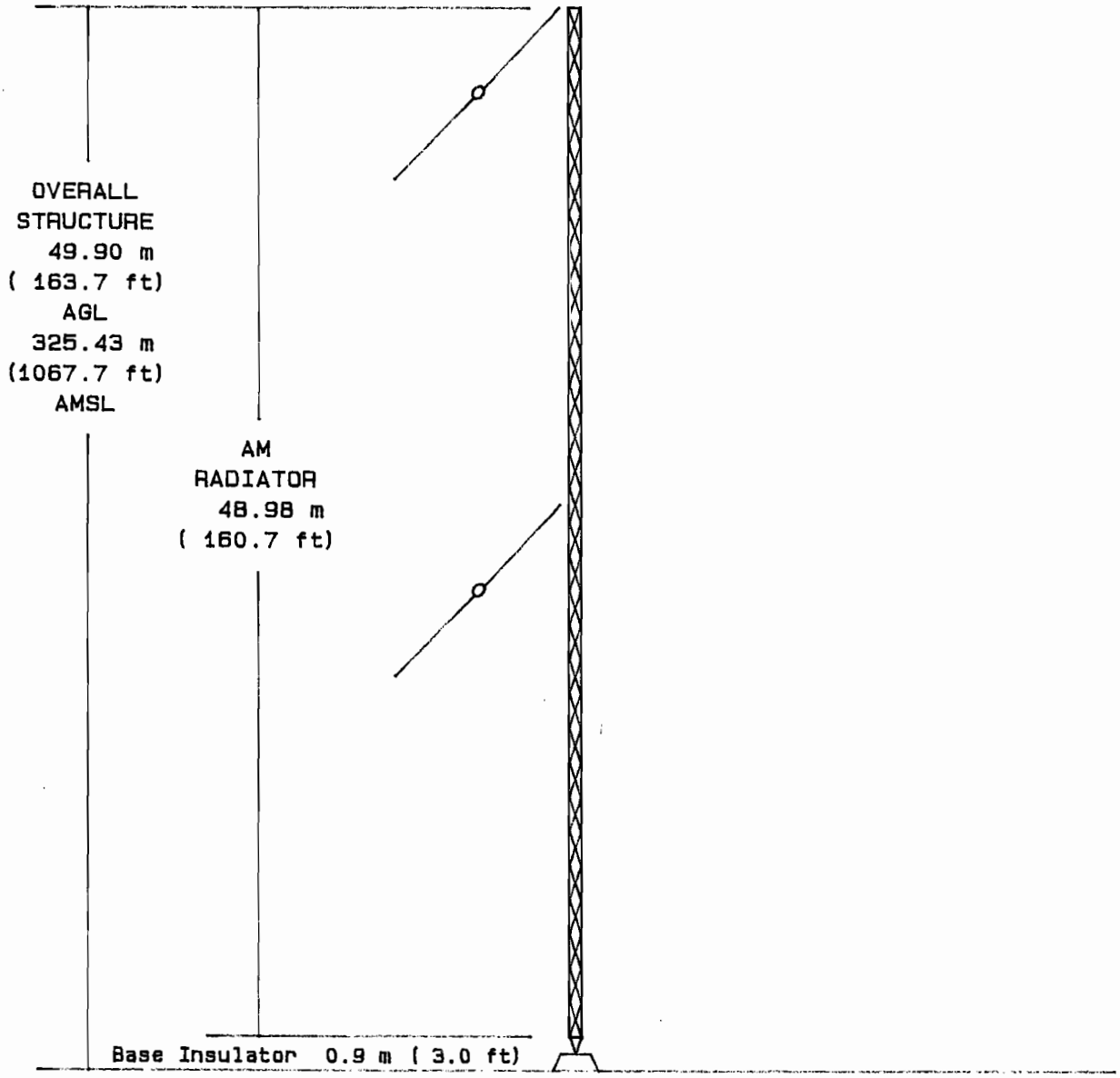
1530 kHz

1 kW Daytime - 0.320 kW Critical Hours

Dalton, Georgia

Bromo Communications, Inc.

March 2022



Vertical Plan Sketch

SITE ELEVATION – 276 m (904 ft) AMSL

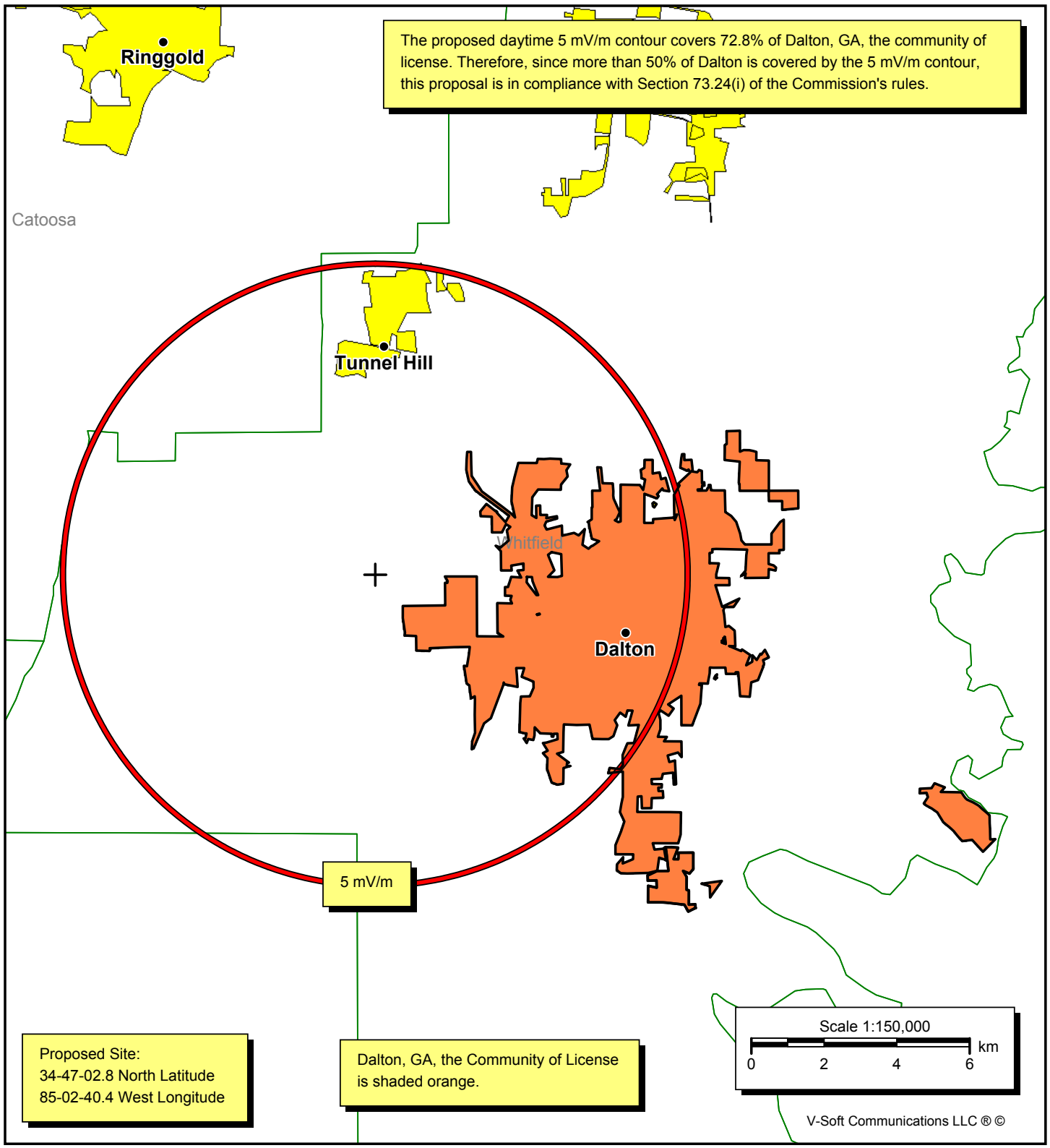
TOP OF STRUCTURE – 50 m (164 ft) AGL
325 m (1068 ft) AMSL

AM Radiator – 49 m (161 ft)

FIGURES ROUNDED TO NEAREST METER (FOOT).

WTTI (AM)
1530 kHz
1 kW Daytime – 0.320 kW Critical Hours
Dalton, Georgia
March 2022

BROMO COMMUNICATIONS
BROADCAST TECHNICAL CONSULTANTS



Daytime Community Coverage

WTTI (AM)

1530 kHz

1 kW Daytime - 0.320 kW Critical Hours

Dalton, Georgia

Bromo Communications, Inc.

March 2022

AM Daytime Study

Reference Station:
Call: WTTI Freq: 1530 kHz DALTON, GA, US
Lat: 34-47-02.80 N Power: 1.0 kW
Lng: 085-02-43.40 W Theo RMS: 305.77 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	90.0	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
WTTI	1530	DALTON	GA	0.2	24.3	-3220.75	-8185.00
WDCY	1520	DOUGLASVILLE	GA	117.9	163.9	44.58	44.28
WVSM	1500	RAINSVILLE	AL	79.7	246.4	71.01	71.01
WBRY	1540	WOODBURY	TN	151.3	319.8	82.29	83.16
WAZX	1550	SMYRNA	GA	109.2	160.3	86.25	86.25
WDPC	1500	DALLAS	GA	95.3	167.8	87.21	87.21
WCKY	1530	CINCINNATI	OH	477.1	4.8	169.48	101.05
WLOR	1550	HUNTSVILLE	AL	147.3	272.5	117.70	117.70
WKVQ	1540	EATONTON	GA	221.1	137.6	121.00	123.65
WTBI	1540	PICKENS	SC	212.6	88.4	126.00	129.03
WJJT	1540	JELLICO	TN	215.9	22.7	150.87	148.34
WASC	1530	SPARTANBURG	SC	282.8	87.2	152.84	151.38
WTLM	1520	OPELIKA	AL	238.5	188.4	167.43	165.43
WWDX	1530	HUNTINGDON	TN	336.1	292.7	185.67	202.81
WOGR	1540	CHARLOTTE	NC	385.7	83.1	316.79	314.99
WNWS	1520	BROWNSVILLE	TN	393.2	282.2	328.63	328.06
WBNL	1540	BOONVILLE	IN	415.4	330.6	336.78	339.24
WDSL	1520	MOCKSVILLE	NC	427.2	74.8	347.66	348.74
WFIC	1530	COLLINSVILLE	VA	510.6	66.7	385.67	379.17
WLLQ	1530	CHAPEL HILL	NC	564.5	78.3	385.78	415.58
WYMM	1530	JACKSONVILLE	FL	579.7	148.6	415.19	439.09
KVDW	1530	ENGLAND	AR	636.5	265.6	437.08	493.93

WTTI (AM) Radio Station
Critical Hours Radiation Report

Call: WTTI
Freq: 1530 kHz
DALTON, GA, US
Hours: C
Lat: 34-47-02.80 N
Lng: 085-02-43.40 W
Power: 0.32 kW
Theo RMS: 305.77 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	90.0	0	0	0.0	0.0	0.0	0.0

Interpolation factors for 1530 kHz:

K(500) = 0.000
K(1000) = 0.117
K(1600) = 0.883

Call: KFBK
Freq: 1530 kHz
SACRAMENTO, CA, US
Hours: D
Lat: 38-50-54 N
Lng: 121-28-58 W
Power: 50.0 kW - Custom Q Value Used: 97.5
Theo RMS: 3545.89 mV/m @ 1km @ 50.0 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	3	180.0	0.0	0.0	0.0
2	0.420	12.0	170.0	78.0	0.0	0	3	180.0	0.0	0.0	0.0

Permissible radiation calculated using FCC 73.190 curves.
Calculations performed using distance to the class A station's 0.1 mV/m contour.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km)/ (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
181.08	283.00	3300.4 / 2050.8	0.0	172.97	3339.4	3166.4
146.81	284.00	3126.7 / 1942.9	0.0	172.97	3007.9	2834.9
138.67	285.00	3112.7 / 1934.1	0.0	172.97	2995.5	2822.5
128.82	286.00	3104.0 / 1928.7	0.0	172.97	2993.8	2820.9
117.10	287.00	3103.9 / 1928.7	0.0	172.97	3009.1	2836.1
100.86	288.00	3099.4 / 1925.9	0.0	172.97	3016.9	2844.0
83.42	289.00	3063.8 / 1903.8	0.0	172.97	2966.4	2793.4
67.94	290.00	3075.7 / 1911.1	0.0	172.97	3006.8	2833.9
51.81	291.00	3096.9 / 1924.3	0.0	172.97	3066.4	2893.5
35.55	292.00	3128.3 / 1943.8	0.0	172.97	3147.3	2974.3
12.86	293.00	3201.6 / 1989.4	0.0	172.97	3315.9	3142.9

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km)/ (mi)	K(1000) Value (mV/m@1km)	K(1600) Value (mV/m@1km)	Permiss Radiation (mV/m@1km)
181.08	283.00	3300.4 / 2050.8	7471.76	2793.57	3339.4
146.81	284.00	3126.7 / 1942.9	6746.26	2514.11	3007.9
138.67	285.00	3112.7 / 1934.1	6712.61	2504.58	2995.5
128.82	286.00	3104.0 / 1928.7	6704.75	2503.73	2993.8
117.10	287.00	3103.9 / 1928.7	6736.00	2516.88	3009.1
100.86	288.00	3099.4 / 1925.9	6751.28	2523.71	3016.9
83.42	289.00	3063.8 / 1903.8	6638.96	2481.32	2966.4
67.94	290.00	3075.7 / 1911.1	6728.67	2515.29	3006.8
51.81	291.00	3096.9 / 1924.3	6859.86	2565.43	3066.4
35.55	292.00	3128.3 / 1943.8	7037.30	2633.52	3147.3
12.86	293.00	3201.6 / 1989.4	7408.03	2775.44	3315.9

Call: WCKY
Freq: 1530 kHz
CINCINNATI, OH, US
Hours: D
Lat: 39-04-07 N
Lng: 084-36-20 W
Power: 50.0 kW
Theo RMS: 405.55 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	196.0	0	0	0.0	0.0	0.0	0.0

Permissible radiation calculated using FCC 73.190 curves.
Calculations performed using distance to the class A station's 0.1 mV/m contour.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km)/ (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
191.71	0.00	287.4 / 178.6	39.1	172.97	191.8	18.8
190.20	1.00	286.7 / 178.1	39.2	172.97	190.5	17.5
188.70	2.00	286.1 / 177.8	39.2	172.97	189.2	16.3
187.20	3.00	285.7 / 177.5	39.3	172.97	188.1	15.1
185.71	4.00	285.5 / 177.4	39.3	172.97	187.0	14.0
184.22	5.00	285.6 / 177.4	39.3	172.97	186.0	13.0
182.73	6.00	285.8 / 177.6	39.3	172.97	185.0	12.0
181.24	7.00	286.0 / 177.7	39.2	172.97	184.1	11.1
179.81	8.00	284.9 / 177.0	39.3	172.97	182.8	9.8
178.42	9.00	283.8 / 176.3	39.5	172.97	181.5	8.5
177.11	10.00	282.1 / 175.3	39.6	172.97	180.1	7.1
175.88	11.00	280.2 / 174.1	39.8	172.97	178.7	5.7
174.69	12.00	278.6 / 173.1	40.0	172.97	177.4	4.4
173.49	13.00	277.7 / 172.5	40.1	172.97	176.3	3.3
172.04	14.00	279.5 / 173.7	39.9	172.97	176.0	3.0
170.53	15.00	281.9 / 175.2	39.6	172.97	175.8	2.8
168.98	16.00	284.5 / 176.8	39.4	172.97	175.7	2.8
167.34	17.00	287.7 / 178.7	39.1	172.97	175.8	2.8
165.62	18.00	291.3 / 181.0	38.7	172.97	176.0	3.0
163.81	19.00	295.2 / 183.4	38.3	172.97	176.3	3.3
161.79	20.00	300.3 / 186.6	37.8	172.97	176.8	3.8
159.51	21.00	306.6 / 190.5	37.2	172.97	177.7	4.7

157.07	22.00	313.3 /	194.7	36.6	172.97	178.7	5.7
153.97	23.00	322.9 /	200.7	35.8	172.97	180.4	7.5
149.00	24.00	340.0 /	211.2	34.3	172.97	184.0	11.0
141.72	25.00	364.3 /	226.3	32.4	172.97	189.4	16.4
124.07	26.00	420.2 /	261.1	28.7	172.97	203.0	30.0
242.77	339.00	406.8 /	252.8	29.5	172.97	204.2	31.2
240.53	340.00	399.8 /	248.4	30.0	172.97	203.2	30.2
236.59	341.00	387.2 /	240.6	30.8	172.97	200.7	27.8
231.19	342.00	369.9 /	229.8	32.0	172.97	196.9	23.9
226.96	343.00	356.9 /	221.7	33.0	172.97	194.3	21.3
223.40	344.00	346.4 /	215.2	33.8	172.97	192.4	19.4
220.32	345.00	337.8 /	209.9	34.5	172.97	190.9	18.0
217.59	346.00	330.5 /	205.4	35.1	172.97	189.9	16.9
215.08	347.00	324.2 /	201.5	35.7	172.97	189.1	16.1
212.75	348.00	318.6 /	198.0	36.1	172.97	188.5	15.6
210.57	349.00	313.7 /	194.9	36.6	172.97	188.1	15.2
208.51	350.00	309.4 /	192.2	37.0	172.97	187.9	14.9
206.59	351.00	305.7 /	189.9	37.3	172.97	187.9	14.9
204.74	352.00	302.4 /	187.9	37.6	172.97	187.9	15.0
202.96	353.00	299.5 /	186.1	37.9	172.97	188.1	15.1
201.24	354.00	296.9 /	184.5	38.2	172.97	188.4	15.4
199.58	355.00	294.7 /	183.1	38.4	172.97	188.8	15.8
197.95	356.00	292.8 /	181.9	38.6	172.97	189.2	16.3
196.36	357.00	291.1 /	180.9	38.7	172.97	189.8	16.8
194.79	358.00	289.7 /	180.0	38.9	172.97	190.4	17.4
193.24	359.00	288.4 /	179.2	39.0	172.97	191.1	18.1

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km)/ (mi)		K(1000) Value (mV/m@1km)	K(1600) Value (mV/m@1km)	Permiss Radiation (mV/m@1km)
191.71	0.00	287.4 /	178.6	474.50	154.47	191.8
190.20	1.00	286.7 /	178.1	471.83	153.33	190.5
188.70	2.00	286.1 /	177.8	469.35	152.25	189.2
187.20	3.00	285.7 /	177.5	467.06	151.23	188.1
185.71	4.00	285.5 /	177.4	464.94	150.28	187.0
184.22	5.00	285.6 /	177.4	462.98	149.38	186.0
182.73	6.00	285.8 /	177.6	461.17	148.55	185.0
181.24	7.00	286.0 /	177.7	459.35	147.72	184.1
179.81	8.00	284.9 /	177.0	456.61	146.60	182.8
178.42	9.00	283.8 /	176.3	453.92	145.52	181.5
177.11	10.00	282.1 /	175.3	450.88	144.34	180.1
175.88	11.00	280.2 /	174.1	447.71	143.13	178.7
174.69	12.00	278.6 /	173.1	444.86	142.05	177.4
173.49	13.00	277.7 /	172.5	442.50	141.14	176.3
172.04	14.00	279.5 /	173.7	441.98	140.85	176.0
170.53	15.00	281.9 /	175.2	441.80	140.69	175.8
168.98	16.00	284.5 /	176.8	441.77	140.60	175.7
167.34	17.00	287.7 /	178.7	442.05	140.62	175.8
165.62	18.00	291.3 /	181.0	442.61	140.75	176.0
163.81	19.00	295.2 /	183.4	443.38	140.97	176.3
161.79	20.00	300.3 /	186.6	444.83	141.42	176.8
159.51	21.00	306.6 /	190.5	446.99	142.13	177.7
157.07	22.00	313.3 /	194.7	449.44	142.95	178.7
153.97	23.00	322.9 /	200.7	453.54	144.35	180.4
149.00	24.00	340.0 /	211.2	461.96	147.27	184.0
141.72	25.00	364.3 /	226.3	474.65	151.70	189.4
124.07	26.00	420.2 /	261.1	506.52	162.90	203.0
242.77	339.00	406.8 /	252.8	509.52	163.82	204.2
240.53	340.00	399.8 /	248.4	507.34	163.04	203.2

236.59	341.00	387.2 /	240.6	501.56	161.01	200.7
231.19	342.00	369.9 /	229.8	492.56	157.87	196.9
226.96	343.00	356.9 /	221.7	486.36	155.71	194.3
223.40	344.00	346.4 /	215.2	481.77	154.14	192.4
220.32	345.00	337.8 /	209.9	478.33	152.98	190.9
217.59	346.00	330.5 /	205.4	475.75	152.15	189.9
215.08	347.00	324.2 /	201.5	473.72	151.52	189.1
212.75	348.00	318.6 /	198.0	472.13	151.08	188.5
210.57	349.00	313.7 /	194.9	470.92	150.78	188.1
208.51	350.00	309.4 /	192.2	470.06	150.64	187.9
206.59	351.00	305.7 /	189.9	469.61	150.65	187.9
204.74	352.00	302.4 /	187.9	469.38	150.76	187.9
202.96	353.00	299.5 /	186.1	469.35	150.96	188.1
201.24	354.00	296.9 /	184.5	469.55	151.26	188.4
199.58	355.00	294.7 /	183.1	469.99	151.64	188.8
197.95	356.00	292.8 /	181.9	470.58	152.09	189.2
196.36	357.00	291.1 /	180.9	471.34	152.61	189.8
194.79	358.00	289.7 /	180.0	472.24	153.18	190.4
193.24	359.00	288.4 /	179.2	473.30	153.80	191.1

Radiofrequency Radiation Calculation
WTTI (AM)
1530 kHz
1 kW Daytime – 0.320 kW Critical Hours
Dalton, Georgia
March 2022

This Radiofrequency Radiation Calculation is performed for WTTI (AM). WTTI (AM) is modifying its facility to change its operation to non-directional, using the southern tower of the former directional array. There are no proposed changes to the structure.

There is a fence at a minimum of 2 meters from the base of the existing tower. The AM radiator is 0.25 wavelength. Table 2 ,"Predicted Distances for Compliance with FCC Limits: 0.25 Wavelength" was consulted. This table requires a 1 kW station to protect the public at a distance of 1 meter. Given that the fence restricts persons to a distance of 2 meters, it is thought that this proposal is in compliance with FCC Radiofrequency requirements.

Bromo Communications, Inc.