

Channel Study

REFERENCE		CH# 260D - 99.9 MHz, Pwr= 0.25 kW DA, HAAT= 253.4 M, COR= 489 M								DISPLAY DATES	
35 55 02.0 N.		Average Protected F(50-50)= 20.8 km								DATA 01-06-11	
80 17 38.0 W.		Standard Directional								SEARCH 01-06-11	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
260D High Point	W260BG	APP DV NC		0.0 0.0	0.0 BFPT20101013ACJ	35 55 02.0 80 17 38.0	0.250	11.4 489	2.8 Educational Media Foundati	-16.4*	-20.9*
260D High Point	W260BG	LIC C NC		91.4 271.6	18.9 BLFT20070305ACD	35 54 46.0 80 05 04.0	0.014	20.4 339	6.2 Educational Media Foundati	-21.3*	-48.3
258C High Point	WMAG	LIC DCX NC		97.1 277.4	41.3 BMLH20050613AFW	35 52 13.0 79 50 25.0	100.000 456	10.6 681	78.6 Capstar Tx Llc	10.5	-38.3*<
262C High Point	WVBZ	LIC CN NC		82.1 262.4	42.7 BLH19880805LB	35 58 09.0 79 49 29.0	100.000 316	10.3 554	73.3 Capstar Tx Llc	13.5	-31.5*<
259C1 Kannapolis	WRFK	LIC DCX NC		207.5 27.3	78.8 BMLH20081103AAM	35 17 14.0 80 41 45.0	84.000 322	98.2 522	67.4 Capstar Tx Llc	-23.5*<	5.0
260D Winston-salem	W260BK	LIC C NC		344.1 164.0	33.2 BLFT20070620AEF	36 12 16.0 80 23 43.0	0.013	21.4 352	6.4 Educational Media Foundati	4.6	2.0
260C3 Stanleytown	WZBB	LIC NCN VA		15.3 195.5	114.8 BLH19960311KF	36 54 50.0 79 57 07.0	3.600 220	100.2 586	39.2 Wnlb Radio, Inc.	10.5	61.0
260C2 Holly Springs	WCMC-FM	LIC NCX NC		99.1 280.1	161.2 BLH20100423ACB	35 40 35.0 78 32 08.0	26.500 206	130.2 297	51.8 Wcmc-fm, Llc	10.7	47.1
207A Winston-salem	WBFJ-FM	LIC DCN NC		11.0 191.1	20.5 BLED19940825KA	36 05 56.0 80 15 00.0	2.500 129	29.4 388	27.3 Triad Family Network, Inc.	9.5R	11.0M
260C Old Fort	AL7225	RSV-A NC		256.9 75.5	229.6 RM10197	35 25 32.0 82 45 25.0	100.000 600	205.2 1589	96.3	14.8	101.3
260D Burlington	646971	APP C NC		75.6 256.1	80.0 BNPFT20030317GTB	36 05 35.8 79 25 59.2	0.027	18.9 279	5.7 Edgewater Broadcasting, In	43.0	17.2
260C Old Fort	WKSF	LIC C NC		256.9 75.5	229.6 BMLH20031105AEC	35 25 32.0 82 45 25.0	53.000 799	202.1 1781	95.8 Capstar Tx Llc	17.8	101.9
260D Sanford	646995	APP C NC		114.5 295.1	111.6 BNPFT20030317GUT	35 29 49.4 79 10 23.9	0.013	21.7 195	6.5 Edgewater Broadcasting, In	69.4	42.3
260D Chapel Hill	646977	APP C NC		87.8 268.5	108.5 BNPFT20030317GTL	35 56 54.2 79 05 30.3	0.013	13.2 220	4.2 Edgewater Broadcasting, In	75.8	43.8
260D Southern Pines	639865	APP C NC		138.8 319.3	112.7 BNPFT20030314BRI	35 09 04.0 79 28 40.0	0.013	18.0 239	5.5 Fayetteville State Univers	75.3	47.1
260D Southern Pines	640757	APP C NC		138.8 319.3	112.7 BNPFT20030317KNJ	35 09 04.4 79 28 39.9	0.038	14.0 178	4.4 Triad Family Network, Inc	79.4	48.3
261D Wilkesboro	633997	APP C NC		283.5 103.0	77.3 BNPFT20030311ABR	36 04 34.0 81 07 43.0	0.010	11.8 705	8.4 Cumberland Communities Com	54.9	54.2
261D Huntersville	640826	APP C NC		221.5 41.1	76.8 BNPFT20030317BID	35 23 54.0 80 51 17.0	0.055	9.4 275	6.6 Radio Training Network, In	62.1	62.3
207A Elon College	WSOE	LIC CN NC		73.2 253.7	74.1 BLED19840126AD	36 06 25.0 79 30 22.0	0.500 37	8.5 232	8.5 Elon College	9.5R	64.6M

Terrain database is USGS 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
 Contour distances are on direct line to and from reference station. Reference Zone = 2, Co to 3rd adjacent.  
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
 < = Station meets FCC minimum distance spacing for its class.  
 < = Contour Overlap

\*\*\*For purposes of this application, the 03 second USGS terrain database was utilized to better reflect the actual performance of the proposed facility in relation to adjacent facilities.

**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WMAG, channel 258C, High Point, NC. The predicted F(50-50) field strength of WMAG at the proposed translator site is 76.3 dBu, (see Exhibit 13A-1). Therefore, the respective predicted interfering contour generated by the proposed FM Translator is 116.3 dBu. This interfering contour extends approximately 169.5 meters from the proposed transmit antenna, and the area of overlap does not reach the ground (the antenna will be mounted at the 256 meter level on a 320 meter tower).

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WVBZ, channel 262C, High Point, NC. The predicted F(50-50) field strength of WVBZ at the proposed translator site is 74.0 dBu, (see Exhibit 13A-2). Therefore, the respective predicted interfering contour generated by the proposed FM Translator is 114.0 dBu. This interfering contour extends approximately 220.8 meters from the proposed transmit antenna, and the area of overlap does not reach the ground (the antenna will be mounted at the 256 meter level on a 320 meter tower).

To confirm the absence of population within the interference aperture, EMF has examined the attached topographic map (see Exhibit 13B), which indicates a lack of structures near the proposed tower, and therefore no structure which could be tall enough to enter the 169.5 or 220.8 meter interference apertures.

Therefore, EMF respectfully requests a waiver of C.F.R 74.1204 based on no population within the area of predicted interference.

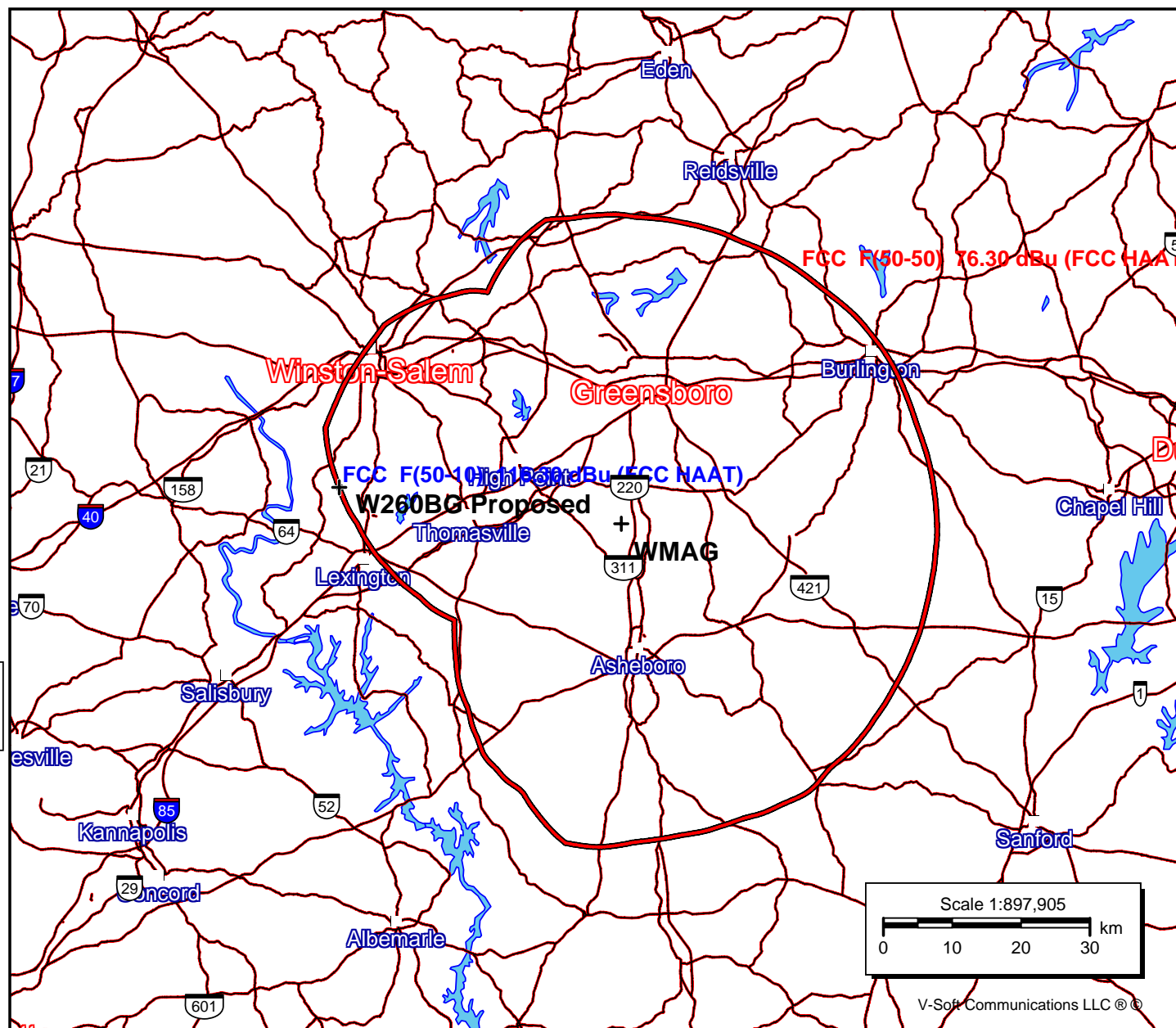
**W260BG Proposed**

Latitude: 35-55-02 N  
Longitude: 080-17-38 W  
ERP: 0.25 kW  
Channel: 260  
Frequency: 99.9 MHz  
AMSL Height: 489.0 m  
Elevation: 233.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

**WMAG**



BMLH20050613AFW  
Latitude: 35-52-13 N  
Longitude: 079-50-25 W  
ERP: 100.00 kW  
Channel: 258  
Frequency: 99.5 MHz  
AMSL Height: 681.0 m  
Elevation: 224.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

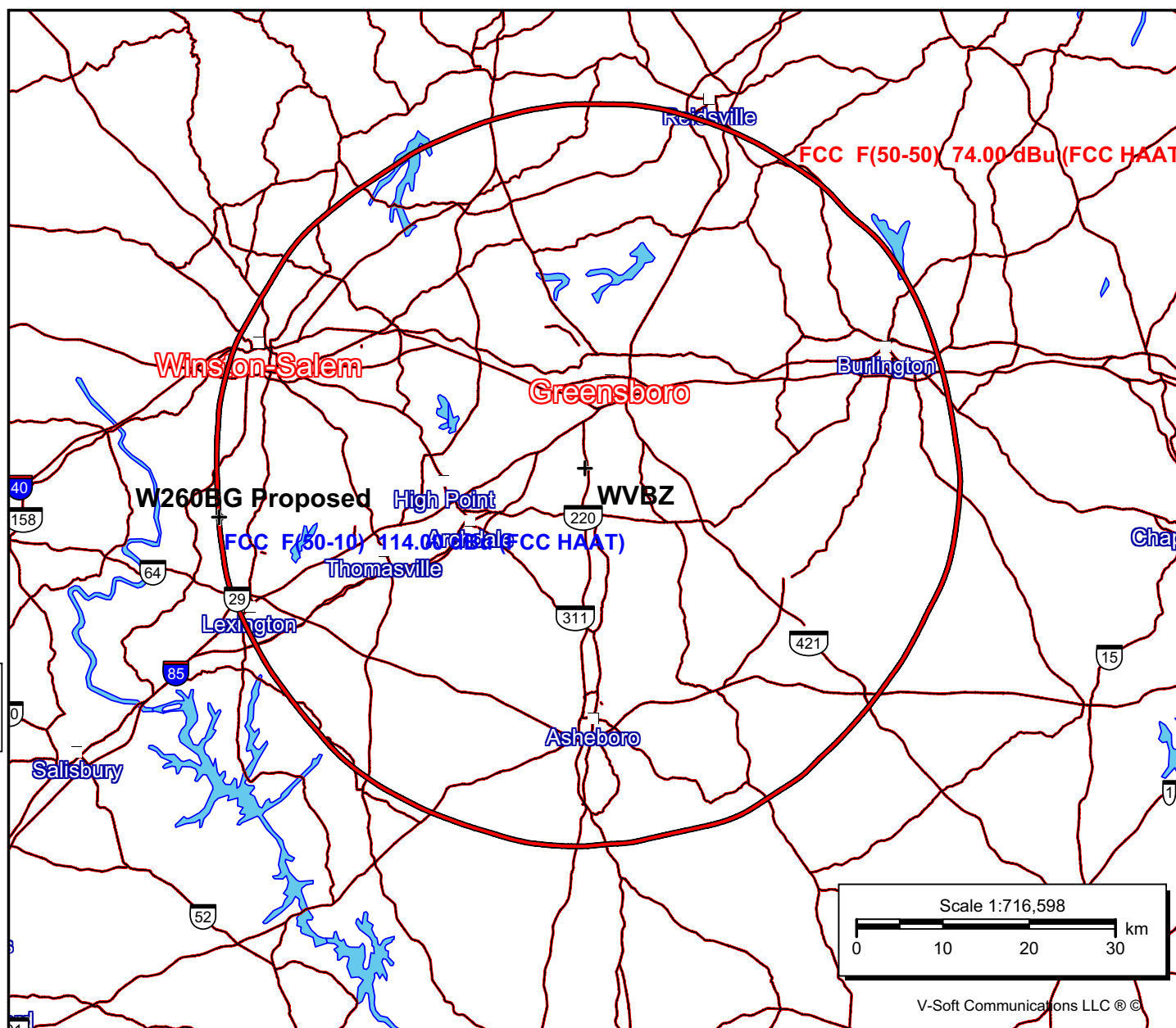
- W260BG Proposed (260)
- WMAG (258)



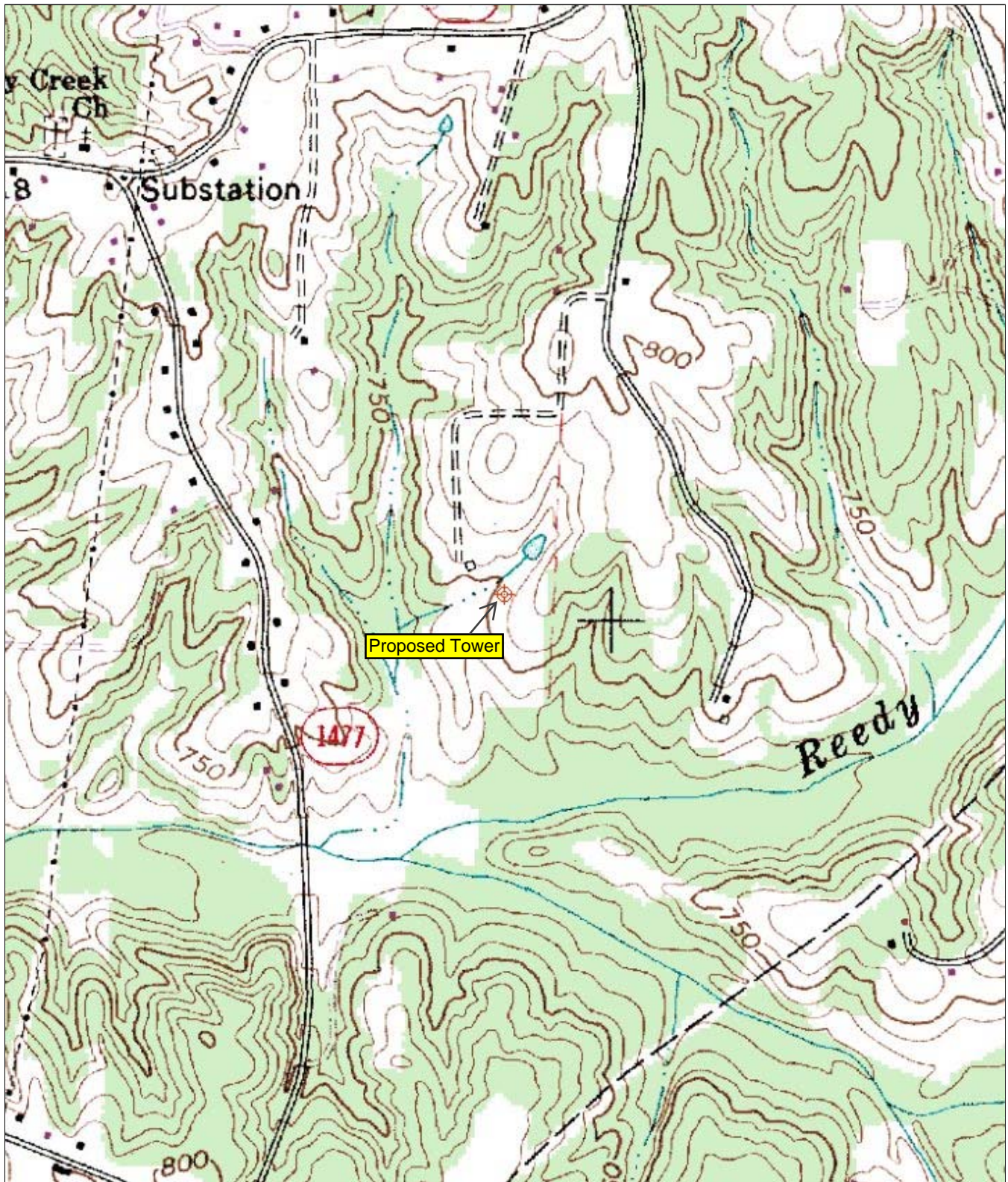
Latitude: 35-55-02 N  
Longitude: 080-17-38 W  
ERP: 0.25 kW  
Channel: 260  
Frequency: 99.9 MHz  
AMSL Height: 489.0 m  
Elevation: 233.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

BLH19880805LB  
Latitude: 35-58-09 N  
Longitude: 079-49-29 W  
ERP: 100.00 kW  
Channel: 262  
Frequency: 100.3 MHz  
AMSL Height: 554.0 m  
Elevation: 250.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

-  W260BG Proposed (260)  
 WVBZ (262)







Tower ID: 1006732

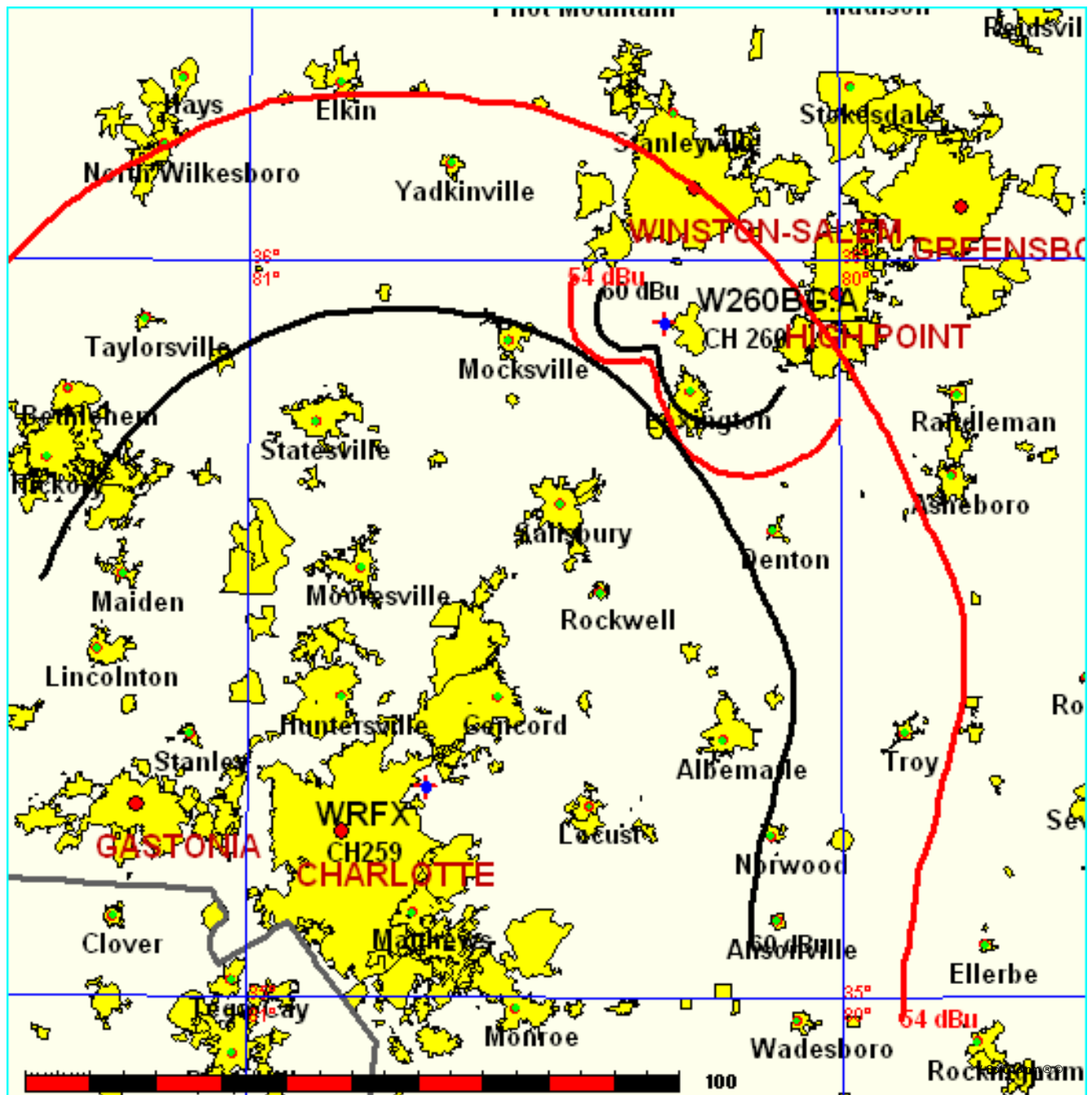
Coordinates (NAD27): 35-55-01.51 N, 080-17-37.81 W  
Coordinates (NAD83): 35-55-02 N, 080-17-37 W



FMCommander Single Allocation Study - 01-06-2011 - USGS 03 SEC  
W260BG.A's Overlaps (In= -23.53 km, Out= 4.97 km)

W260BG.A CH 260 D DA  
Lat= 35 55 02.0, Lng= 80 17 38.0  
0.25 kW 253.4 M HAAT, 489 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

WRFX CH 259 C1 DA BMLH20081103AAM  
Lat= 35 17 14.0, Lng= 80 41 45.0  
84.0 kW 322 M HAAT, 522 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



FMCommander Single Allocation Study - 01-06-2011 - USGS 03 SEC  
W260BG.A's Overlaps (In= -23.53 km, Out= 4.97 km)

W260BG.A CH 260 D DA  
Lat= 35 55 02.0, Lng= 80 17 38.0  
0.25 kW 253.4 M HAAT, 489 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

WRFX CH 259 C1 DA BMLH20081103AAM  
Lat= 35 17 14.0, Lng= 80 41 45.0  
84.0 kW 322 M HAAT, 522 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

