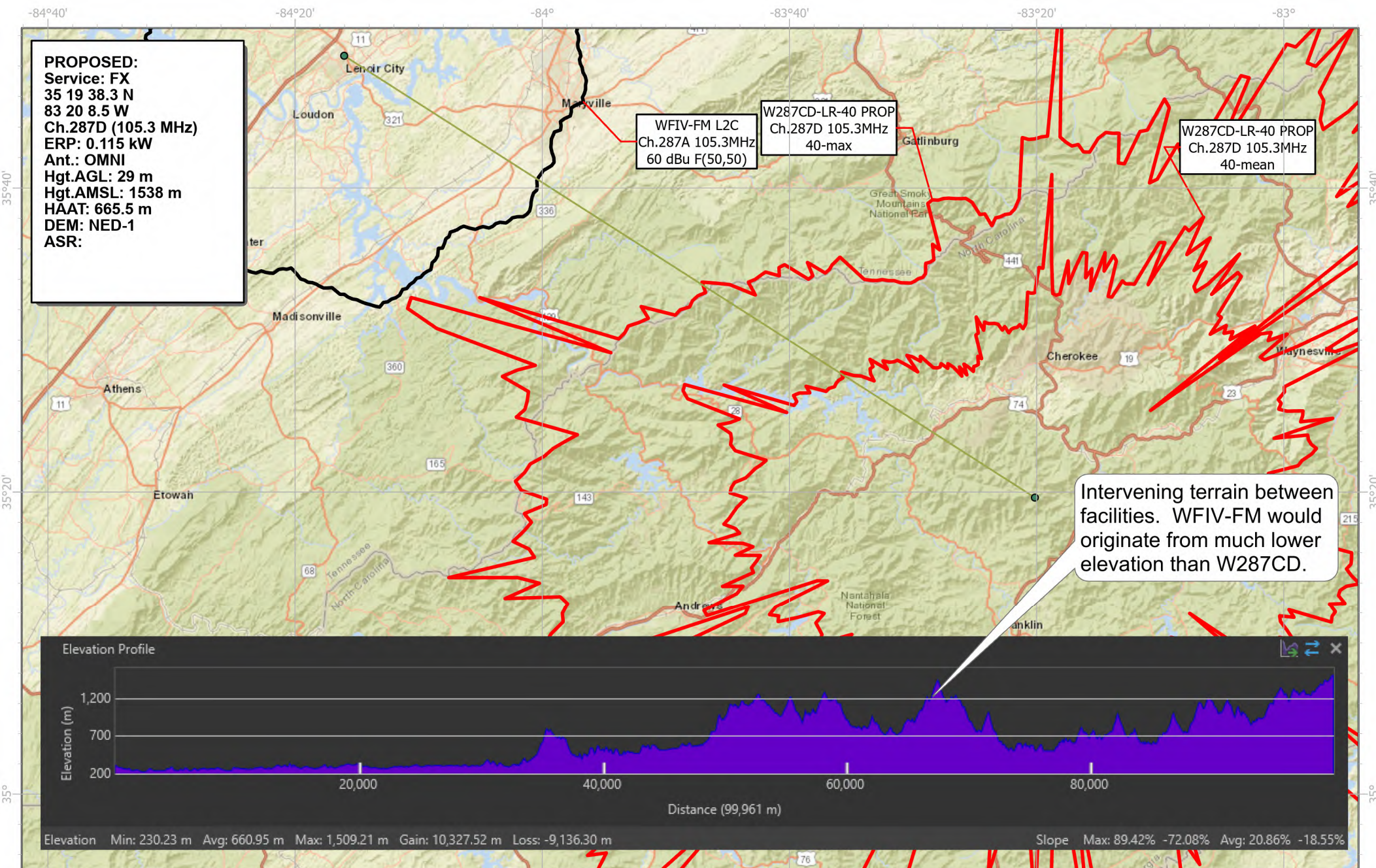


W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
 SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

0 15 30 60 Kilometers **Figure 1**

Co-channel and minor change showing.
 Population (2020 Census):

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W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
 SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

0 5 10 20 Kilometers

Figure 1.1

Demonstration that no actual interference will occur to WFIV-FM due to intervening terrain per 73.1204(d). Longley-Rice coverage shows mean and maximum occurrence of proposed 40 dBu field strength. No occurrence of a field strength exceeding 40 dBu is predicted to occur within the 60 dBu F(50,50) "FCC propagation Model" predicted contours of WFIV-FM. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).

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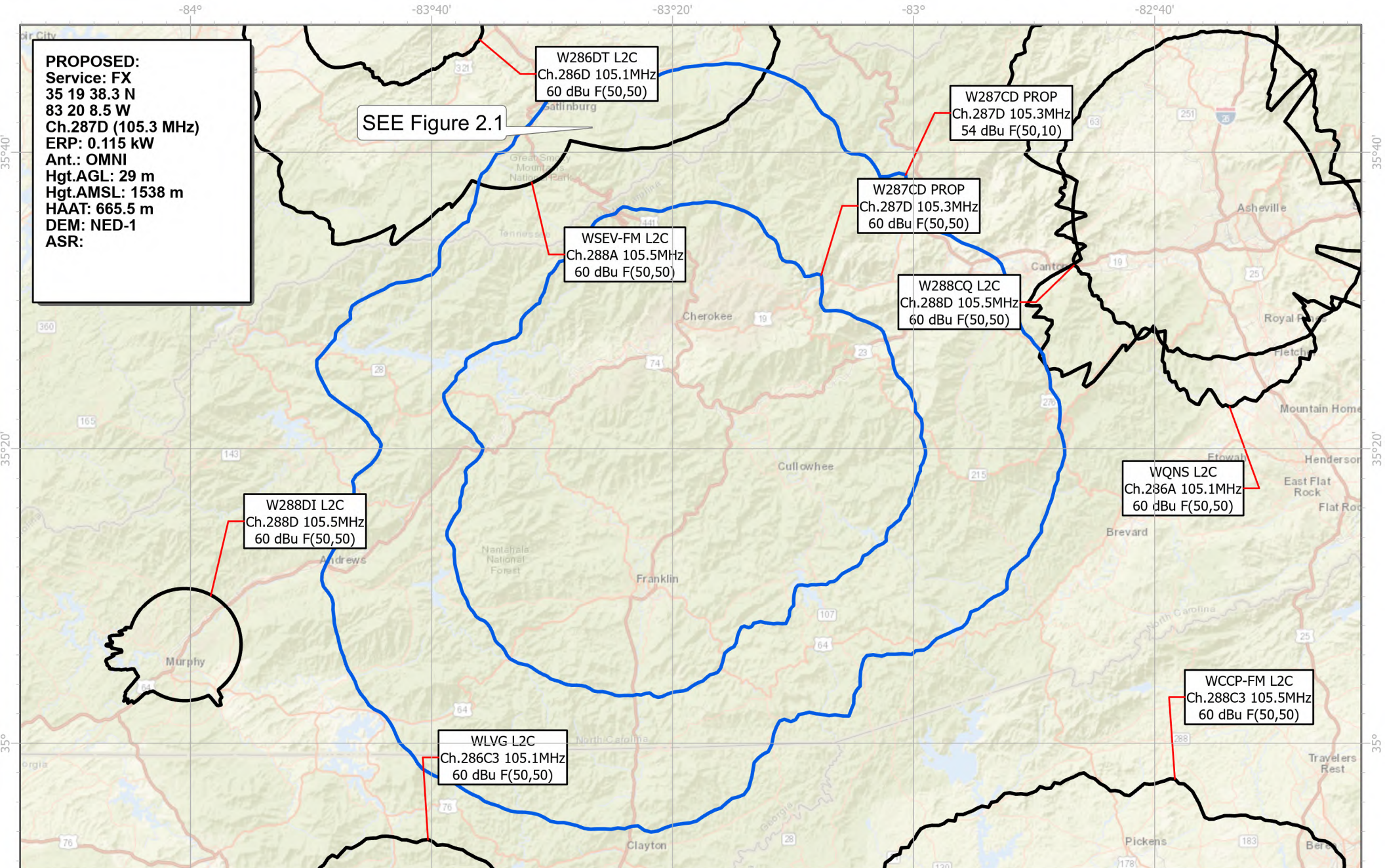
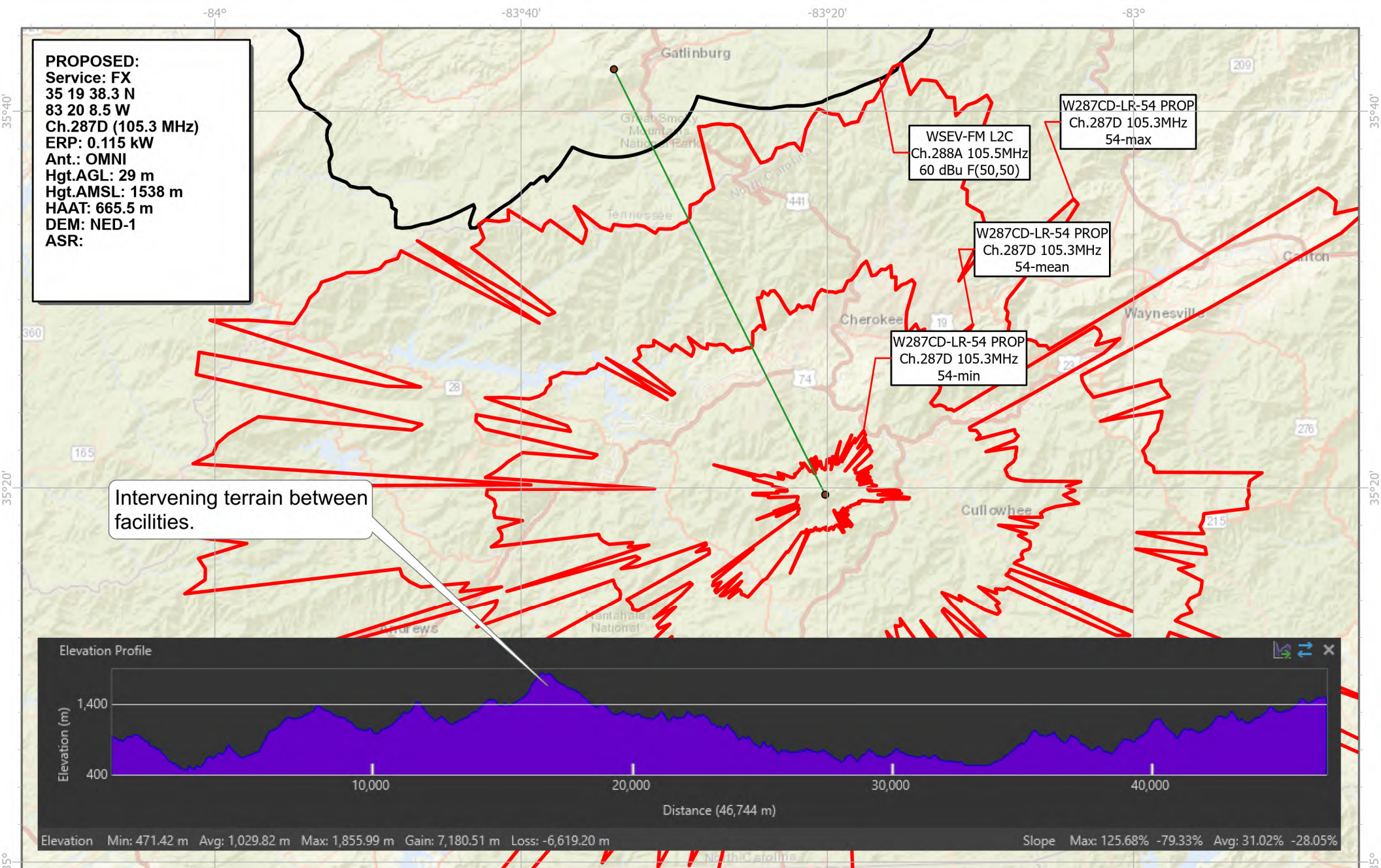


Figure 2

W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

1st adjacent-channel showing.

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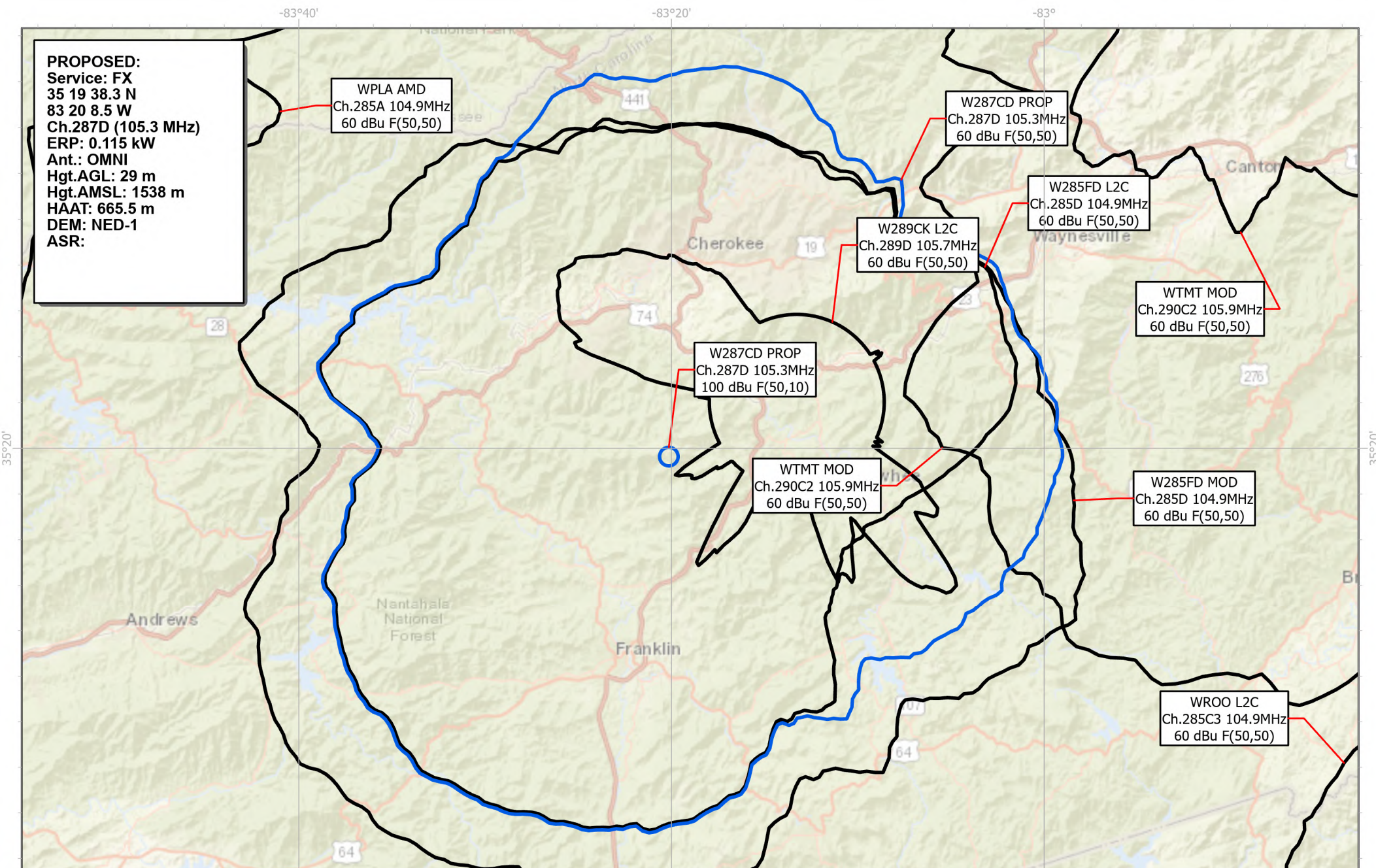
W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

0 5 10 20 Kilometers

Figure 2.1

Demonstration that no actual interference will occur to WSEV-FM due to intervening terrain per 73.1204(d). Longley-Rice coverage shows mean and maximum occurrence of proposed 54 dBu field strength. No occurrence of a field strength exceeding 54 dBu is predicted to occur within the 60 dBu F(50,50) "FCC propagation Model" predicted contours of WSEV-FM. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).

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W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
 SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

2nd and 3rd adjacent-channel showing.

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Table 1 - 74.1204(a) Channel Study**W287CD FRANKLIN, NC - SUTTON RADIOCASTING CORPORATION****MINOR MODIFICATION August 2023 (Ch.287D proposed)**

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Bearing TO (deg)	Distance (km)	Req. Dist. (km)	Clearance (km)	Field Strength (dBu)	
285	D	W285FD	FX	C-MOD	FRANKLIN	NC	US	SUTTON RADIOCASTIN	0.0		37.6	-37.6		(See NOTE 1)
285	D	W285FD	FX	L-L2C	FRANKLIN	NC	US	SUTTON RADIOCASTIN	0.0		30.6	-30.6		(See NOTE 1)
285	A	WPLA	FM	C-AMD	GREENBACK	TN	US	LOUD MEDIA LLC	302.6	64.2	21.5	42.7	35.8	
286	D	W286DT	FX	L-L2C	Knoxville	TN	US	MID-CENTURY RADIO I	331.2	61.9	48.2	13.6	13.9	
286	A	WQNS	FM	L-L2C	WOODFIN	NC	US	IHM LICENSES, LLC	65.4	72.6	69.6	3.0	34.1	
286	C3	WLVG	FM	L-L2C	CLERMONT	GA	US	EDUCATIONAL MEDIA	205.6	93.7	86.6	7.1	34.1	
286	D	W286AG	FX	L-L2C	MORRISTOWN	TN	US	BIBLE BROADCASTING	2.2	94.9	56.0	38.9	5.6	
287	D	W287CD	FX	L-L2C	Franklin	NC	US	SUTTON RADIOCASTIN	0.0		120.7	-120.7		(applicant)
287	L1	WRJH-LP	FL	L-L2C	GREENEVILLE	TN	US	CENTRAL BAPTIST CHL	24.8	99.0	95.7	3.4	2.4	
287	A	WFIV-FM	FM	L-L2C	LOUDON	TN	US	HORNE RADIO, LLC	302.8	99.9	107.2	-7.3	27.1	(See NOTE 2)
287	D	W287DF	FX	L-L2C	GREER	SC	US	MEDIATRIX SC, INC.	114.2	107.3	93.5	13.8	4.7	
287	C1	WOSF	FM	L-L2C	GAFFNEY	SC	US	GAFFNEY BROADCAST	88.2	194.9	162.6	32.3	23.5	
288	A	WSEV-FM	FM	L-L2C	GATLINBURG	TN	US	EAST TENNESSEE RADI	333.6	46.7	52.7	-6.0	28.7	(See NOTE 3)
288	D	W288DI	FX	L-L2C	MURPHY	NC	US	RADFORD COMMUNIC	248.8	65.6	53.7	11.9	18.8	
288	D	W288CQ	FX	L-L2C	ASHEVILLE	NC	US	SAGA COMMUNICATC	63.6	69.0	59.7	9.3	25.0	
288	C3	WCCP-FM	FM	L-L2C	CLEMSON	SC	US	BYRNE ACQUISITION G	143.1	95.7	75.9	19.8	34.2	
289	D	W289CK	FX	L-L2C	SYLVA	NC	US	FIVE FORTY BROADCA	66.9	11.3	7.8	3.4	52.1	
290	C2	WTMT	FM	L-MOD	WEAVERVILLE	NC	US	SAGA COMMUNICATC	63.6	69.0	45.4	23.6	48.6	

Terrain data DEM: NED-1

NOTE 1: Second adjacent-channel waiver showing with respect to W285FD.

Second adjacent W285FD is co-located at the proposed site. Therefore the proposed translator's field strength will never be more than 40 dB greater than the W285FD's field strength anywhere. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).

NOTE 2: Intervening terrain73.1204(d) waiver showing with respect to WFIV-FM.

Demonstration that no actual interference will occur to co-channel WFIV-FM due to intervening terrain per 73.1204(d). Longley-Rice coverage shows mean occurrence of proposed 40 dBu field strength. No occurrence of a field strength exceeding 40 dBu is predicted to occur within the 60 dBu F(50,50) "FCC propagation Model" predicted contours of WFIV-FM. Therefore this proposal is compliant with the allowance of Rule 74.1204(d). SEE Figure 1.1.

NOTE 3: Intervening terrain73.1204(d) waiver showing with respect to WSEV-FM.

Demonstration that no actual interference will occur to first adjacent WSEV-FM due to intervening terrain per 73.1204(d). Longley-Rice coverage shows mean occurrence of proposed 54 dBu field strength. No occurrence of a field strength exceeding 54 dBu is predicted to occur within the 60 dBu F(50,50) "FCC propagation Model" predicted contours of WSEV-FM. Therefore this proposal is compliant with the allowance of Rule 74.1204(d). SEE Figure 2.1.

Table 2 - 74.1204(g) Channel Study
W287CD FRANKLIN, NC - SUTTON RADIOCASTING CORPORATION
MINOR MODIFICATION August 2023 (Ch.287D proposed)

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Bearing TO (deg)	FCC Dist.(km)	Req. Dist. (km)	Clearance (km)
234	D	W234AS	FX	L-L2C	BRYSON CITY	NC	US	WESTERN NORTH CAR	302.6	17.7	10	7.7

Distance separations determined per §73.208(c)

The proposed antenna location is not within 320 kilometers of the common border between the United States and Canada or Mexico.

PROPOSED:
Service: FX
35 19 38.3 N
83 20 8.5 W
Ch.287D (105.3 MHz)
ERP: 0.115 kW
Ant.: OMNI
Hgt.AGL: 29 m
Hgt.AMSL: 1538 m
HAAT: 665.5 m
DEM: NED-1
ASR:

W287CD PROP
Ch.287D 105.3MHz
60 dBu F(50,50)

WNCC L2C
Ch.281A 104.1MHz
60 dBu F(50,50)

W287CD coverage will match the coverage of primary station WNCC since the ERP and other parameters, other than channel, are identical.

W287CD FRANKLIN, NC Proposed Channel 287D (105.3 MHz)
SUTTON RADIOCASTING CORPORATION - MINOR MODIFICATION

Fill-in translator with respect to primary station WNCC (FM).

0 5 10 20 Kilometers

Figure 5

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Radiofrequency Electromagnetic Exposure Analysis

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	Power Density $\mu\text{W}/\text{cm}^2$ at 2 meters AGL				
						within 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$)	Max. PD	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$)	Distance to maximum PD (m)
W255CR	29	SHI 6813 (EPA Type 1)	1	0.115	0.115	6.3	0.63%	6.3	3.2%	7.4
W287CD	29	SHI 6813 (EPA Type 1)	1	0.115	0.115	6.3	0.63%	6.3	3.2%	7.4
WNCC-FM	29	SHI 6813 (EPA Type 1)	1	0.115	0.115	6.3	0.63%	6.3	3.2%	7.4
W285FD (APP)	26	(EPA Type 1)	1	0.250	0.250	17.45	1.75%	17.45	8.7%	6.4
W267AD	31	(EPA Type 1)	1	0.114	0.114	5.5	0.55%	5.5	2.8%	7.8
						41.85	4.2%	41.85	20.9%	7.8

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 radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using FCC FMModel (Revised version)