

**W279CZ  
FACILITY # 85730  
MINOR MODIFICATION**

A change in antenna and pattern is proposed based on the fact the WJEU-LP construction permit appears to have expired without construction. It is requested that this application be held in a queue until action is taken on a separately filed petition for reconsideration of the grant of the WJEU-LP form 319.

The proposed translator will continue to rebroadcast WIFN(AM) at Atlanta, GA (facility ID # 1098). The proposed facility is a "250 mile waiver" translator and remains at the same site as originally granted 231.5 miles from the previously licensed W256CE facility.

**Distance between**  
**N Latitude 37 6 10.00, W Longitude 84 35 45.00 (Point 1)**  
**and N Latitude 33 44 56.00, W Longitude 84 24 26.00 (Point 2)**  
  
**372.492 kilometers; 231.456 miles**

**Allocation discussion:**

All exhibits utilize the USGS 3 second terrain database.

- E1 Channel study
- E1A Plot to WRUX-LP CP
- E1B Interference analysis to WVEE
- E1C Interference analysis to WALR
- E1D Aerial photograph of interference area
- E1E DA pattern
- E2 60 dBu and 2 mV/m contours
- E3 ASR

A channel study is included as E1 demonstrating compliance with §74.1204 with the exception of 2nd adjacent stations WVEE and WALR. A plot of the proposed 60 dBu contour is provided as E2

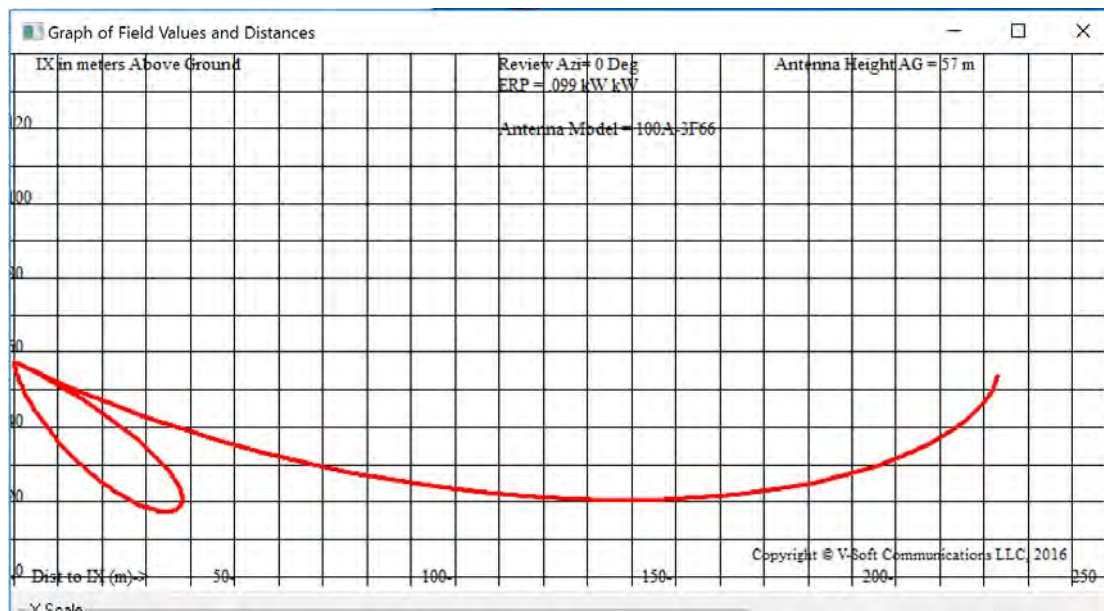
showing that it is entirely contained within primary station WIFN(AM)'s 2 mV/m and 40 km radius.

**WVEE and WALR analyses:**

The proposed facility will be located inside the protected contour of WVEE on 277C0 and WALR on 281C0. An interference analysis has been conducted based on the U/D ratio of +40 dB at the proposed site and ERI 100A three bay 0.66 wave spaced antenna elevation pattern.

WVEE places a 106 dBu (50:50) contour at the site (E1B). The corresponding interference contour is 146 dBu **or 3.5 meters** which will clearly not reach any building or major highway from 57 meters AGL (see E1D aerial and street level photographs) .

WALR places a 69.8 dBu (50:50) contour at the site (see E1C) yielding an interference contour of 109.7 **dBu at a minimum of 19.9 meters above ground**. A graph of the worst case clearance is included below.



The tallest nearby building within the lowest (109.7 dBu) interfering contour is a 15 meter building at a distance of 86-135 meters from the tower and all others are 3 stories based on an analysis utilizing Google Street View. Therefore, it is clear from E1B, E1C and E1D that the interference contours will not reach any populated area or major highways.

Based on this showing, a waiver of Section 74.1204 is requested in accordance with Living Way Ministries, Inc. (FCC 08-242).

**RF Exposure Calculation:**

The proposed facility will utilize a Scala CA2-CP bay three bay, circularly polarized antenna with a center of radiation at 57 meters AGL on the WIFN tower - ASR#1042485. The RF contribution of the proposed translator was calculated using a worst case F factor of 1.0 and the formula included below to be 2.19  $\mu\text{Watts}/\text{cm}^2$  or 1.1% of the maximum permissible 200 microwatts/cm<sup>2</sup> exposure for general population/uncontrolled exposure, and well below the 5% of that limit which requires consideration. The proposed translator clearly complies with Commission RF radiation limits.

$$S \text{ (RF in } \mu\text{Watts}/\text{cm}^2) = \frac{33.4 (F^2 \text{ Vertical Factor}) X (H\text{-ERP} + V\text{-ERP in Watts})}{R^2 \text{ (distance to radiation center AGL in meters} - 2 \text{ m)}}$$



Charles M. Anderson 02-08-2017  
1519 Euclid Avenue  
Bowling Green, KY 42103  
270-782-0246

# EXHIBIT 1

REFERENCE 33 44 56.0 N. 84 24 27.0 W.		CH# 279D - 103.7 MHz, Pwr= 0.099 kw DA, HAAT= 92.5 M, COR= 373 M Average Protected F(50-50)= 9.91 km Standard Directional								DISPLAY DATES DATA 02-07-17 SEARCH 02-07-17	
CH CITY	CALL	TYPE STATE	ANT AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
277C0 Atlanta	WVEE	LIC _C_ GA	80.3 260.4	6.83 BMLH20080222ADZ	33 45 33.0 84 20 05.0	100.000 310	10.1 594	72.3 Cbs Radio East Inc.	-11.6*	-66.2*	(1)
281C2 Palmetto	WALR-FM	RSV-A _ GA	239.5 59.4	28.26	33 37 11.0 84 40 13.0	50.000 150	6.3 421	54.5 Cox Radio, Inc.	11.9	-27.0*	
281C2 Palmetto	WALR-FM	CPX _CX GA	239.5 59.4	28.26 BPH20160630ABI	33 37 11.0 84 40 13.0	50.000 145	6.2 416	54.0 Cox Radio, Inc.	12.0	-26.4*	
279L1 Decatur	WJEU-LP	APP _ GA	105.1 285.2	17.01 BMPL20170126ABH	33 42 32.0 84 13 49.0	0.100 30	292	Able Solution Counseling M	-14.9*	-25.1*	(2)
279L1 Decatur	WJEU-LP	LIC _ GA	105.1 285.2	17.01 BLL20170203AAH	33 42 32.0 84 13 49.0	0.019 67	326	Able Solution Counseling M	-12.1*	-24.3*	(3)
281C0 Greenville	WALR-FM	LIC NCX GA	226.6 46.4	54.45 BLH20070314ABH	33 24 43.0 84 50 03.0	100.000 371	11.0 618	76.7 Cox Radio, Inc.	33.5	-22.9*	(4)
281C1 Palmetto	WALR-FM	RSV-A _ GA	226.6 46.4	54.45	33 24 43.0 84 50 03.0	100.000 299	9.9 545	71.2 Cox Radio, Inc.	34.6	-17.4*	(4)
279D Atlanta	w279CZ	LIC DC_ GA	0.0 0.0	0.00 BLFT20160930ADM	33 44 56.0 84 24 27.0	0.099	5.1 373	1.6 Dickey Broadcasting Compan	-8.8*	-13.5*	
279C3 Maysville	WXKT	LIC NCX GA	44.4 224.8	98.11 BLH20090918ACK	34 22 39.0 83 39 35.0	4.100 250	100.6 570	39.3 Cox Radio, Inc.	-11.6*	31.2	
279L1 Atlanta	WRUX-LP	CP _ GA	7.2 187.2	19.50 BNPL20131028AAG	33 55 24.0 84 22 51.0	0.100 30	370	The Church In Atlanta	-8.8*	0.4	
279L1 Atlanta	WRUX-LP	APP _ GA	7.4 187.4	18.20 BMPL20170103AAQ	33 54 42.0 84 22 55.0	0.022 64	353	The Church In Atlanta	-7.5*	0.0	
279L1 Powder Springs	WJXK-LP	CP _ GA	295.8 115.7	31.12 BNPL20131115ACP	33 52 13.0 84 42 38.0	0.036 50	344	Trinity Chapel, Inc.	2.0	2.4	
280D Lawrenceville	w280EZ	LIC _C_ GA	60.5 240.8	46.31 BLFT20160418ABV	33 57 10.6 83 58 15.3	0.250	18.0 371	12.2 Clifton G. Moor DbA B&grs	18.7	20.8	

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
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 restricted contour.  
Reference station has protected zone issue: AM tower

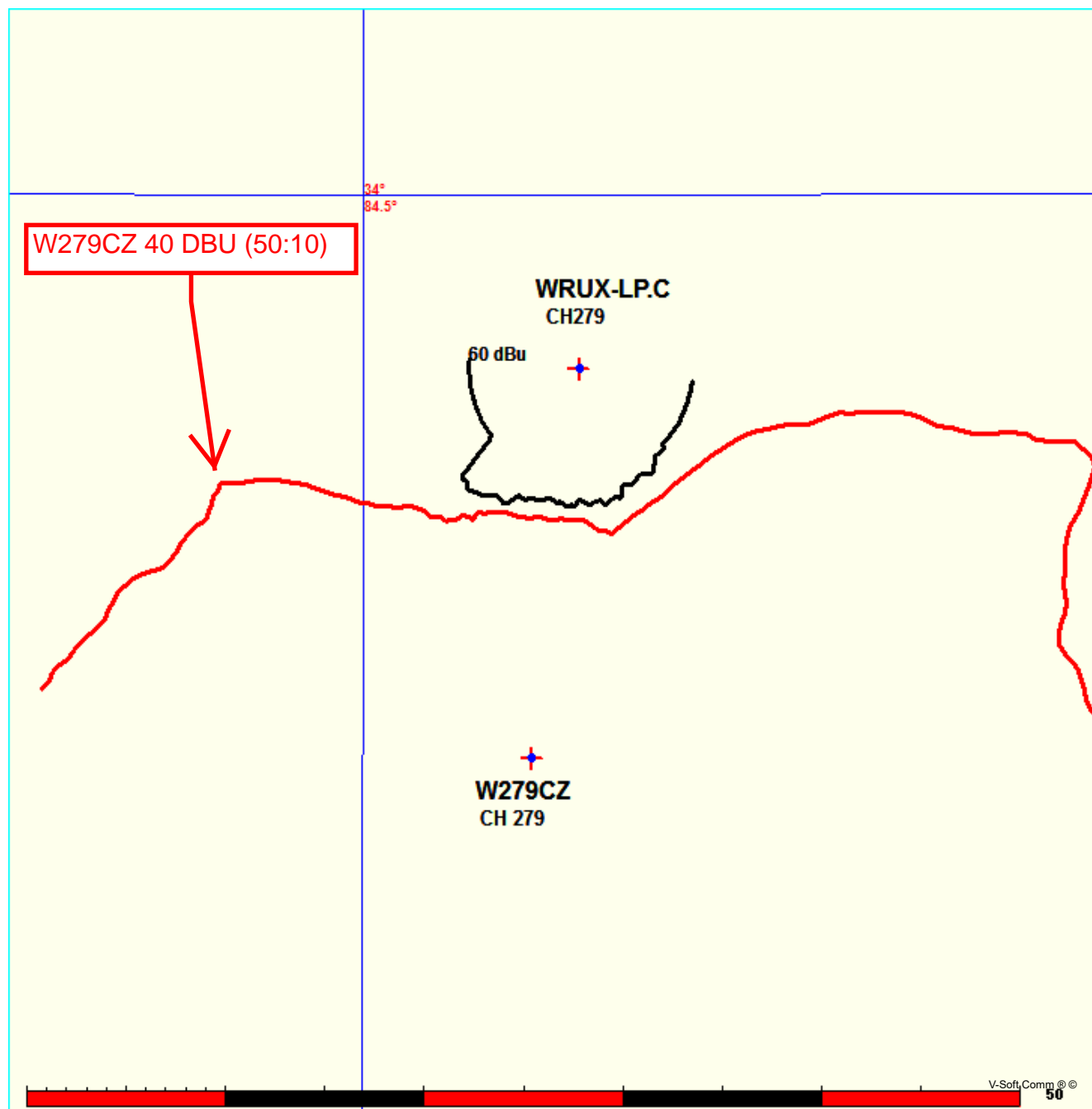
- (1) See exhibit E1B for disproof of interference per Living Way.
- (2) Application dismissed.
- (3) No apparent construction of 53 meters tower proposed at CP site. It is presumed that the CP expired. A Petition for reconsideration of the form 319 is filed separately.
- (4) See E1C and E1D for disproof of interference per Living Way.

# EXHIBIT 1A WRUX-LP CP PLOT

FMCommander Single Allocation Study - 02-07-2017 - USGS 03 SEC  
W279CZ's Overlaps (In= -8.83 km, Out= 0.42 km)

W279CZ CH 279 D DA  
Lat= 33 44 56.0, Lng= 84 24 27.0  
0.099 kW 92.5 m HAAT, 373 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

WRUX-LP CH 279 L1 BNPL20131028AAG  
Lat= 33 55 24.0, Lng= 84 22 51.0  
0.1 kW 30 m HAAT, 321 m COR  
Prot.= 60 dBu, Intef.= 40 dBu



# E1B WVEE ANALYSIS

NEW 279 ATLANTA, GA  
 74.1204(d) Showing  
 Translator or LPFM Maximum Licensed ERP = 0.099  
 Translator or LPFM Antenna Height AG = 57 Meters  
 NEW 279 Antenna Model = 100A-3F 66% spacing.

Protected Station's Contour = 105.9897 dBu  
 Translator's or LPFM's full Interference contour 145.9897

Review Azimuth = 0 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizon at Review Azimuth = 0.099 kW  
 Distance between stations = 6.8 km  
 Protected Station= WVEE, 100 kW, 594 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.00	1.0	0.0990	003.5021	003.5021	057.000
05.00	0.953	1.0	0.0899	003.3375	003.3248	056.709
10.00	0.822	1.0	0.0669	002.8788	002.8350	056.500
15.00	0.628	1.0	0.0390	002.1993	002.1244	056.431
20.00	0.406	1.0	0.0163	001.4219	001.3361	056.514
25.00	0.189	1.0	0.0035	000.6619	000.5999	056.720
30.00	0.004	1.0	0.0000	000.0140	000.0121	056.993
35.00	0.131	1.0	0.0017	000.4588	000.3758	056.737
40.00	0.21	1.0	0.0044	000.7354	000.5634	056.527
45.00	0.239	1.0	0.0057	000.8370	000.5919	056.408
50.00	0.229	1.0	0.0052	000.8020	000.5155	056.386
55.00	0.193	1.0	0.0037	000.6759	000.3877	056.446
60.00	0.147	1.0	0.0021	000.5148	000.2574	056.554
65.00	0.1	1.0	0.0010	000.3502	000.1480	056.683
70.00	0.06	1.0	0.0004	000.2101	000.0719	056.803
75.00	0.031	1.0	0.0001	000.1086	000.0281	056.895
80.00	0.013	1.0	0.0000	000.0455	000.0079	056.955
85.00	0.004	1.0	0.0000	000.0140	000.0012	056.986
90.00	0.001	1.0	0.0000	000.0035	000.0000	056.996

# E1C WALR ANALYSIS (LICENSE AND CP)

NEW 279 ATLANTA, GA  
 74.1204(d) Showing  
 Translator or LPFM Maximum Licensed ERP = 0.099  
 Translator or LPFM Antenna Height AG = 57 Meters  
 NEW 279 Antenna Model = 100A-3F 66% spacing.

Protected Station's Contour = 69.71358 dBu  
 Translator's or LPFM's full Interference contour 109.71358

Review Azimuth = 0 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizon at Review Azimuth = 0.099 kW  
 Distance between stations = 54.5 km  
 Protected Station= WALR-F, 100 kW, 618 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.00	1.0	0.0990	228.1070	228.1070	057.000
01.00	0.998	1.0	0.0986	227.6508	227.6161	053.027
02.00	0.992	1.0	0.0974	226.2821	226.1443	049.103
03.00	0.983	1.0	0.0957	224.2292	223.9219	045.265
04.00	0.97	1.0	0.0931	221.2638	220.7248	041.565
05.00	0.953	1.0	0.0899	217.3860	216.5587	038.054
06.00	0.933	1.0	0.0862	212.8238	211.6580	034.754
07.00	0.91	1.0	0.0820	207.5774	206.0301	031.703
08.00	0.883	1.0	0.0772	201.4185	199.4583	028.968
09.00	0.854	1.0	0.0722	194.8034	192.4050	026.526
10.00	0.822	1.0	0.0669	187.5040	184.6553	024.440
11.00	0.787	1.0	0.0613	179.5202	176.2219	022.746
12.00	0.75	1.0	0.0557	171.0802	167.3417	021.430
13.00	0.711	1.0	0.0500	162.1841	158.0273	020.517
14.00	0.67	1.0	0.0444	152.8317	148.2919	020.027
15.00	0.628	1.0	0.0390	143.2512	138.3700	019.924
16.00	0.585	1.0	0.0339	133.4426	128.2732	020.218
17.00	0.541	1.0	0.0290	123.4059	118.0136	020.920
18.00	0.496	1.0	0.0244	113.1411	107.6035	022.037
19.00	0.451	1.0	0.0201	102.8763	097.2714	023.507
20.00	0.406	1.0	0.0163	092.6114	087.0263	025.325
21.00	0.361	1.0	0.0129	082.3466	076.8772	027.490
22.00	0.317	1.0	0.0099	072.3099	067.0446	029.912
23.00	0.273	1.0	0.0074	062.2732	057.3228	032.668
24.00	0.231	1.0	0.0053	052.6927	048.1372	035.568
25.00	0.189	1.0	0.0035	043.1122	039.0729	038.780
26.00	0.149	1.0	0.0022	033.9879	030.5482	042.101
27.00	0.11	1.0	0.0012	025.0918	022.3569	045.609
28.00	0.073	1.0	0.0005	016.6518	014.7027	049.182
29.00	0.038	1.0	0.0001	008.6681	007.5813	052.798
30.00	0.004	1.0	0.0000	000.9124	000.7902	056.544
31.00	0.027	1.0	0.0001	006.1589	005.2792	053.828
32.00	0.056	1.0	0.0003	012.7740	010.8330	050.231
33.00	0.083	1.0	0.0007	018.9329	015.8784	046.688
34.00	0.108	1.0	0.0012	024.6356	020.4238	043.224
35.00	0.131	1.0	0.0017	029.8820	024.4779	039.860
36.00	0.151	1.0	0.0023	034.4442	027.8659	036.754
37.00	0.169	1.0	0.0028	038.5501	030.7875	033.800
38.00	0.185	1.0	0.0034	042.1998	033.2539	031.019
39.00	0.199	1.0	0.0039	045.3933	035.2772	028.433
40.00	0.21	1.0	0.0044	047.9025	036.6954	026.209
41.00	0.22	1.0	0.0048	050.1835	037.8740	024.077

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## E1C WALR CONTINUED

42.00	0.227	1.0	0.0051	051.7803	038.4803	022.352
43.00	0.233	1.0	0.0054	053.1489	038.8707	020.753
44.00	0.237	1.0	0.0056	054.0614	038.8885	019.446
45.00	0.239	1.0	0.0057	054.5176	038.5497	018.450
46.00	0.24	1.0	0.0057	054.7457	038.0295	017.619
47.00	0.239	1.0	0.0057	054.5176	037.1809	017.128
48.00	0.237	1.0	0.0056	054.0614	036.1741	016.825
49.00	0.233	1.0	0.0054	053.1489	034.8688	016.888
50.00	0.229	1.0	0.0052	052.2365	033.5770	016.985
51.00	0.223	1.0	0.0049	050.8679	032.0122	017.468
52.00	0.217	1.0	0.0047	049.4992	030.4748	017.994
53.00	0.209	1.0	0.0043	047.6744	028.6911	018.926
54.00	0.202	1.0	0.0040	046.0776	027.0837	019.722
55.00	0.193	1.0	0.0037	044.0247	025.2515	020.937
56.00	0.184	1.0	0.0034	041.9717	023.4703	022.204
57.00	0.175	1.0	0.0030	039.9187	021.7413	023.521
58.00	0.166	1.0	0.0027	037.8658	020.0658	024.888
59.00	0.156	1.0	0.0024	035.5847	018.3275	026.498
60.00	0.147	1.0	0.0021	033.5317	016.7659	027.961
61.00	0.137	1.0	0.0019	031.2507	015.1506	029.668
62.00	0.128	1.0	0.0016	029.1977	013.7075	031.220
63.00	0.118	1.0	0.0014	026.9166	012.2199	033.017
64.00	0.109	1.0	0.0012	024.8637	010.8995	034.653
65.00	0.1	1.0	0.0010	022.8107	009.6402	036.326
66.00	0.091	1.0	0.0008	020.7577	008.4429	038.037
67.00	0.083	1.0	0.0007	018.9329	007.3977	039.572
68.00	0.075	1.0	0.0006	017.1080	006.4088	041.138
69.00	0.067	1.0	0.0004	015.2832	005.4770	042.732
70.00	0.06	1.0	0.0004	013.6864	004.6810	044.139
71.00	0.053	1.0	0.0003	012.0897	003.9360	045.569
72.00	0.047	1.0	0.0002	010.7210	003.3130	046.804
73.00	0.041	1.0	0.0002	009.3524	002.7344	048.056
74.00	0.036	1.0	0.0001	008.2119	002.2635	049.106
75.00	0.031	1.0	0.0001	007.0713	001.8302	050.170
76.00	0.026	1.0	0.0001	005.9308	001.4348	051.245
77.00	0.022	1.0	0.0000	005.0184	001.1289	052.110
78.00	0.019	1.0	0.0000	004.3340	000.9011	052.761
79.00	0.015	1.0	0.0000	003.4216	000.6529	053.641
80.00	0.013	1.0	0.0000	002.9654	000.5149	054.080
81.00	0.01	1.0	0.0000	002.2811	000.3568	054.747
82.00	0.008	1.0	0.0000	001.8249	000.2540	055.193
83.00	0.003	1.0	0.0000	000.6843	000.0834	056.321
84.00	0.005	1.0	0.0000	001.1405	000.1192	055.866
85.00	0.004	1.0	0.0000	000.9124	000.0795	056.091
86.00	0.003	1.0	0.0000	000.6843	000.0477	056.317
87.00	0.002	1.0	0.0000	000.4562	000.0239	056.544
88.00	0.002	1.0	0.0000	000.4562	000.0159	056.544
89.00	0.001	1.0	0.0000	000.2281	000.0040	056.772
90.00	0.001	1.0	0.0000	000.2281	000.0000	056.772

\*\*\* Tallest building is 15 meters at 75-130 meters where the clearance is at least 20 meters. Tallest buildings beyond this building are 3 stories.



# E1D AERIAL VIEW OF 109.7 DBU INTERFERING CONTOUR





## E1D STREET VIEW OF TALLEST BUILDING INSIDE INTERFERENCE CONTOUR - WEST

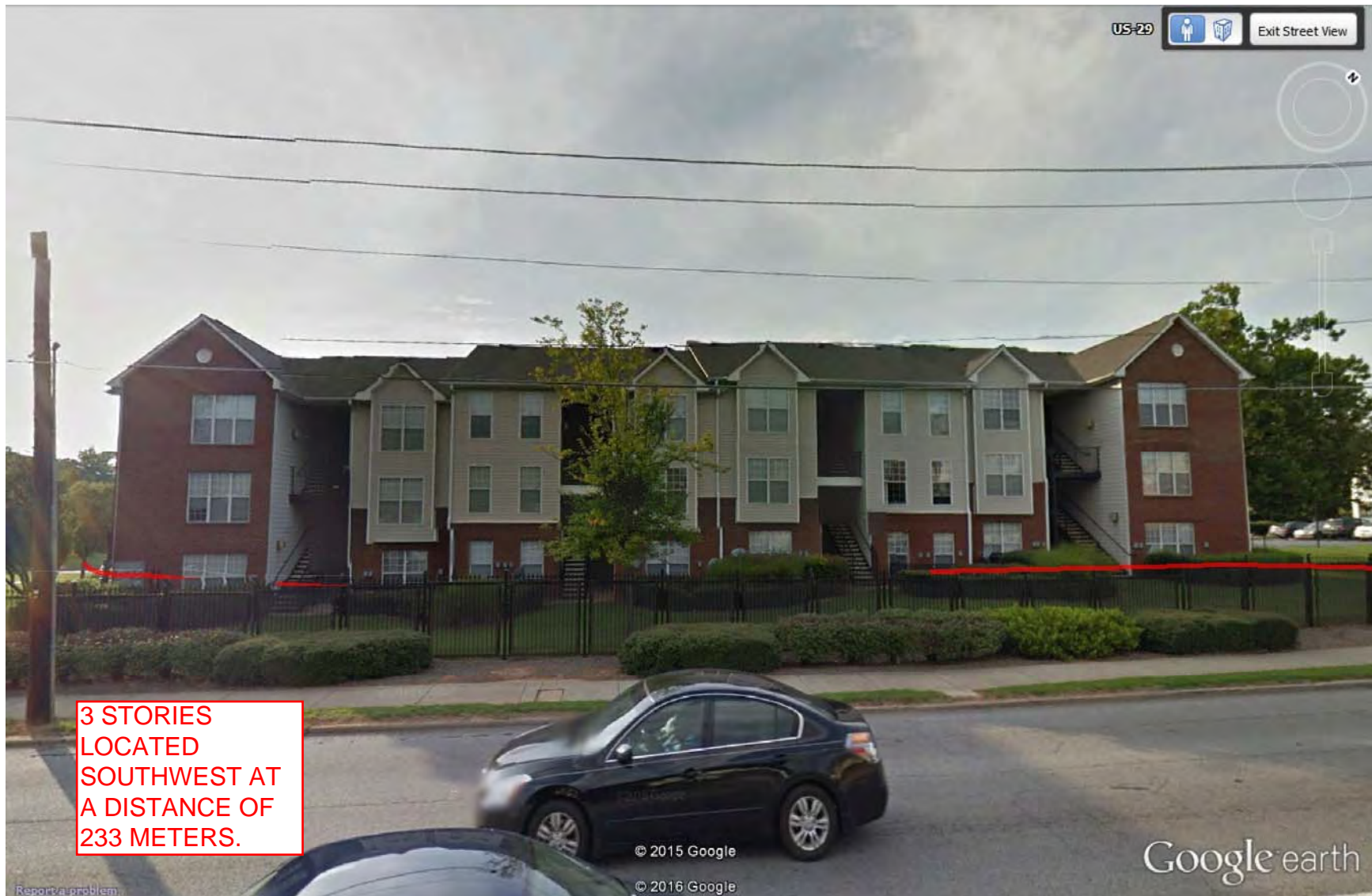


## E1D STREET VIEW OF TALLEST BUILDING IN THE SOUTH OF THE INTERFERENCE CONTOUR





## E1D STREET VIEW OF THE TALLEST BUILDING SW AREA OF THE INTERFERENCE CONTOUR



# EXHIBIT E2 CONTOURS

WIFN 25 MILE RADIUS

**W279CZ**  
BLFT20160930ADM  
Latitude: 33-44-56 N  
Longitude: 084-24-26 W  
ERP: 0.099 kW  
Channel: 279  
Frequency: 103.7 MHz  
AMSL Height: 373.0 m  
Elevation: 316.0 m  
Horiz. Pattern: Directional

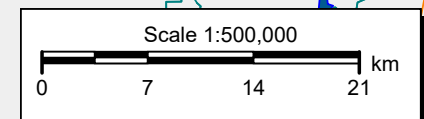
PROPOSED 60 DBU

LIC 60 DBU

WIFN 2MV/M

W279CZ  
WIFN  
Atlanta

Anderson Communications, LLC



V-Soft Communications LLC ©

# E3 Registration 1042485

 [Map Registration](#)

## Registration Detail

Reg Number	1042485	Status	Constructed
File Number	A0357118	Constructed	01/01/1972
EMI	No	Dismantled	
NEPA	No		

## Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

### Location (in NAD83 Coordinates)

Lat/Long	33-44-56.0 N 084-24-27.0 W	Address	620 FAIR ST SW
City, State	ATLANTA , GA		
Zip	30314	County	FULTON
Center of AM Array		Position of Tower in Array	

### Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
315.5	61.0
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
376.4	61.0

### Painting and Lighting Specifications

None

### FAA Notification

FAA Study	97-ASO-5230-OE	FAA Issue Date	02/11/1998
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### Owner & Contact Information

FRN	0004205357	Owner Entity Type
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#### Owner

Dickey Broadcasting Company	P: (404)688-0068
Attention To: Mr. Ted Ronneburger	F:
3535 Piedmont Rd., NE, Building 14	E: tedronneburger@680thefan.com
Atlanta , GA 30305	

#### Contact

Stype , Roy P III	P: (330)659-4440
2324 N. Cleveland-Massillon Rd.	F:
P.O. Box 807	E:
Bath , OH 44210-0807	

### Last Action Status

Status	Constructed	Received	12/05/2003
Purpose	Admin Update	Entered	12/05/2003
Mode	Interactive		

### Related Applications

12/05/2003	A0357118 - Admin Update (AU)
03/04/1998	A0050078 - New (NE)

### Comments

## Output from NADCON for station W279CZ AT WIFN

# North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

Transformation #: 1                      Region: Conus

Latitude

Longitude

NAD 27 datum values:

33 44 55.61616

84 24 26.26080

NAD 83 datum values:

33 44 56.00000

84 24 26.00000

NAD 27 - NAD 83 shift values:

-0.38385

0.26080 (secs.)

-11.826

6.712 (meters)

Magnitude of total shift:

13.599 (meters)



**NGS HOME PAGE**