

Protection to WZZK-FM from Interference By W288BX

The site for the proposed facility is located within the protected contour of third-adjacent channel station WZZK-FM, in Birmingham, AL. Using 3-Second terrain data, we predict the WZZK-FM contour at the proposed site to be 62.4 dBu F[50,50]. According to established second-adjacent channel contour Undesired-to-Desired (U/D) protection ratios, the contour from the interfering station should be 40 dB higher than the protected contour. Therefore the respective interfering contour for this proposed amendment is 102.4 dBu F[50,10].

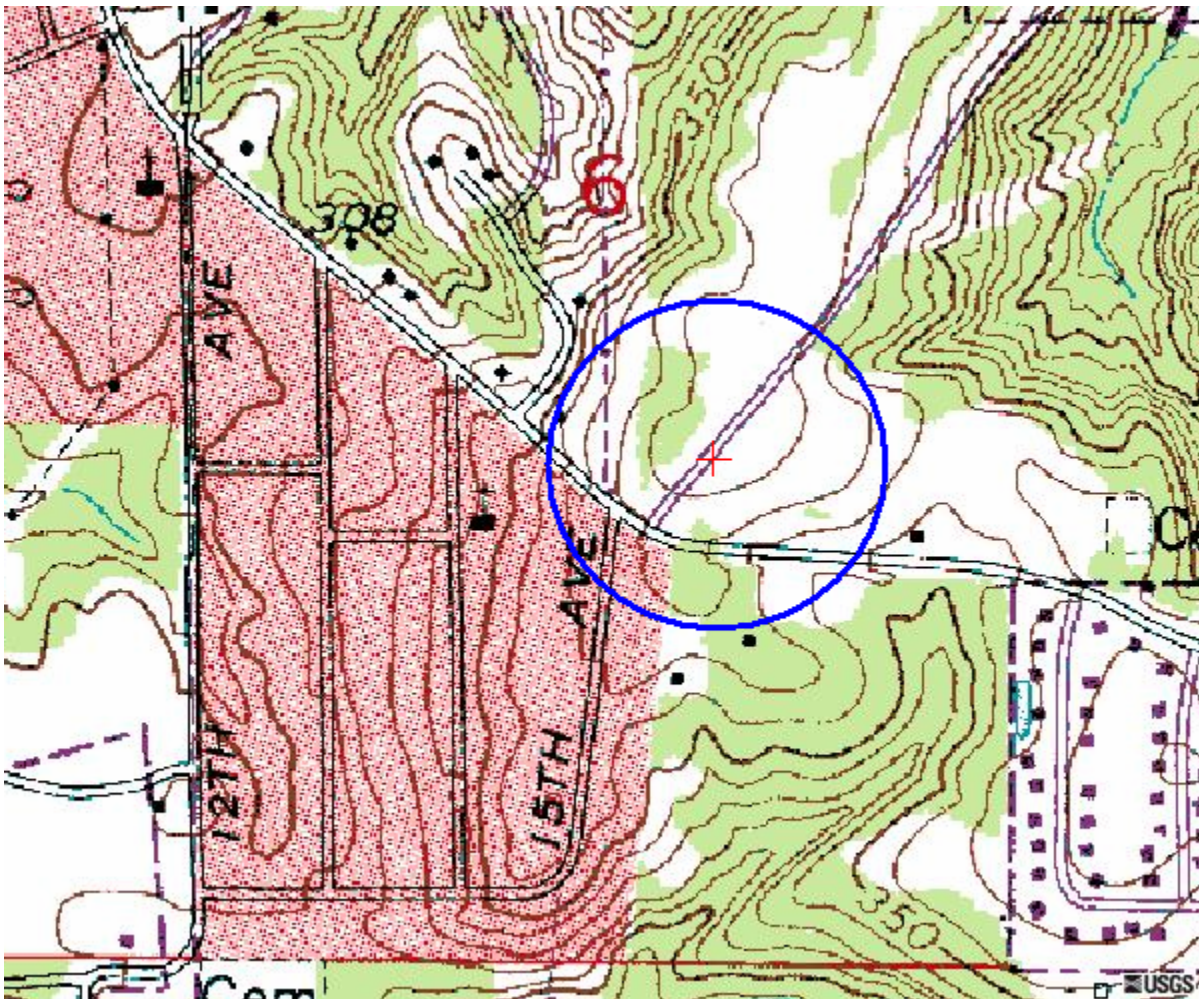


Figure 1

The antenna is proposed to be located with radiation center 134 meters AGL transmitting 0.010 KW ERP. The predicted interfering contour at maximum radiation outward from the antenna RC is a 168.2 meter radius. That potentially affected area that is indicated by a blue circle in **Figure 1** on a USGS topographic map and in **Figure 2** on a USGS aerial photograph, each to confirm proper location of the potentially affected area.



Figure 2

Applicant proposes to use a BEXT antenna model TFC2K, which is a one-bay antenna. A graphical representation of radiation in the vertical plane is displayed in **Figure 3**.

Field strength at various elevation angles were provided by the antenna manufacturer and displayed in **Table 1** at the end of this exhibit. Columns with calculated field dB and the

contour distance in meters were also calculated both in elevation radial form and for plotting in plane coordinates. It can be seen from this data that the actual interference area does not exceed 84.1 meters below the 134 m AGL center of radiation. Therefore, the actual interference area does not extend below 49.9 meters AGL. There are no areas or structures 10 m above the tower reference elevation within affected area.

All areas that can be occupied by the public are below the interference to W288BX. Therefore, the interference area is limited to an area where there are no public places.

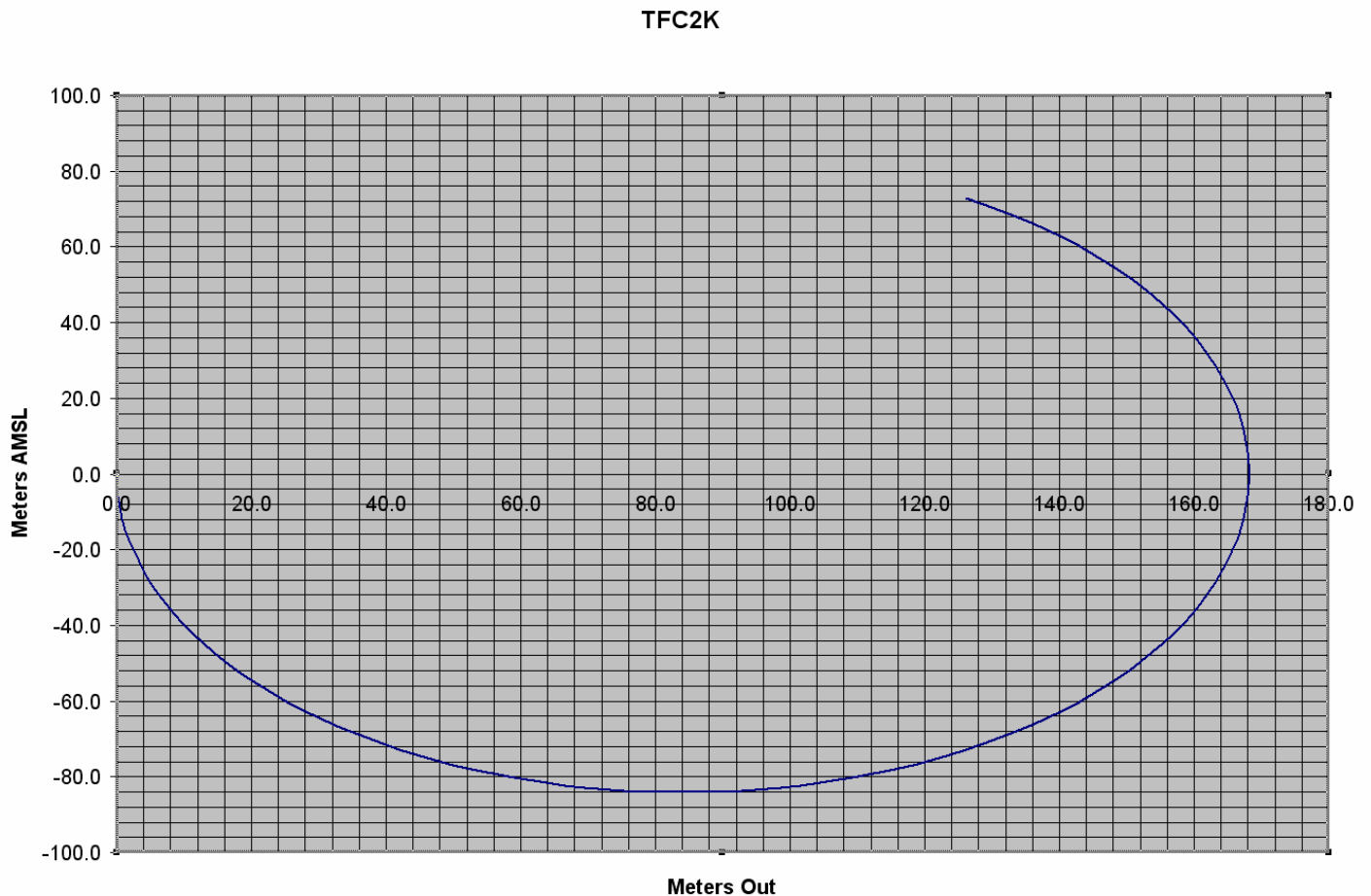


Figure 3

Protection to WRTR from Interference By W288BX

The site for the proposed facility is located within the protected contour of third-adjacent channel station WRTR, in Brookwood, AL. We predict the WRTR contour at the proposed site to be 85 dBu F[50,50]. According to established second-adjacent channel contour Undesired-to-Desired (U/D) protection ratios, the contour from the interfering station should be 40 dB higher than the protected contour. Therefore the respective interfering contour for this proposed amendment is 125 dBu F[50,10].

The predicted interfering contour at maximum radiation outward is 12.5 meters. All areas that can be occupied by the public are outside the area of interference to WRTR. Therefore, the interference area is limited to an area where there are no public places.

Request for Waiver

Since this proposal complies with 47CFR74.1204(d) based upon the fact that no actual interference will occur due to no population and no public locations within the areas of interference, we hereby request waiver of 47CFR74.1204(a)(3) for separation between this proposed facility and facilities of WZZK-FM and WRTR.

[Table 1 is contained in the following pages]

TTI, Inc. – W288BX
FCC Form 349 - Exhibit No. 12B
Waiver Request 47CFR74.1204

Table 1

TFC2K.DAT

ELEV ANGLE	FIELD STRENGTH	FIELD DB	ELEV ERP(KW)	ELEV DBK	102.40DBU CNTR(M)	DISTANCE OUT (M)	DISTANCE UP(DOWN)	ELEVATION AMSL (M)
=====	=====	=====	=====	=====	=====	=====	=====	=====
-90	0.001	-60.00	0.0000	-80.00	0.2	0.0	-0.2	252.8
-88	0.035	-29.16	0.0000	-49.16	5.9	0.2	-5.9	247.1
-86	0.070	-23.14	0.0000	-43.14	11.7	0.8	-11.7	241.3
-84	0.104	-19.63	0.0001	-39.63	17.6	1.8	-17.5	235.5
-82	0.139	-17.13	0.0002	-37.13	23.4	3.3	-23.2	229.8
-80	0.174	-15.21	0.0003	-35.21	29.2	5.1	-28.8	224.2
-78	0.208	-13.64	0.0004	-33.64	35.0	7.3	-34.2	218.8
-76	0.242	-12.33	0.0006	-32.33	40.7	9.8	-39.5	213.5
-74	0.276	-11.19	0.0008	-31.19	46.4	12.8	-44.6	208.4
-72	0.309	-10.20	0.0010	-30.20	52.0	16.1	-49.4	203.6
-70	0.342	-9.32	0.0012	-29.32	57.5	19.7	-54.1	198.9
-68	0.375	-8.53	0.0014	-28.53	63.0	23.6	-58.4	194.6
-66	0.407	-7.82	0.0017	-27.82	68.4	27.8	-62.5	190.5
-64	0.438	-7.16	0.0019	-27.16	73.7	32.3	-66.3	186.7
-62	0.469	-6.57	0.0022	-26.57	79.0	37.1	-69.7	183.3
-60	0.500	-6.02	0.0025	-26.02	84.1	42.0	-72.8	180.2
-58	0.530	-5.52	0.0028	-25.52	89.1	47.2	-75.6	177.4
-56	0.559	-5.05	0.0031	-25.05	94.1	52.6	-78.0	175.0
-54	0.588	-4.62	0.0035	-24.62	98.9	58.1	-80.0	173.0
-52	0.616	-4.21	0.0038	-24.21	103.6	63.8	-81.6	171.4
-50	0.643	-3.84	0.0041	-23.84	108.1	69.5	-82.8	170.2
-48	0.669	-3.49	0.0045	-23.49	112.6	75.3	-83.6	169.4
-46	0.695	-3.17	0.0048	-23.17	116.8	81.2	-84.0	169.0
-44	0.719	-2.86	0.0052	-22.86	121.0	87.0	-84.1	168.9
-42	0.743	-2.58	0.0055	-22.58	125.0	92.9	-83.6	169.4
-40	0.766	-2.32	0.0059	-22.32	128.8	98.7	-82.8	170.2
-38	0.788	-2.07	0.0062	-22.07	132.5	104.4	-81.6	171.4
-36	0.809	-1.84	0.0065	-21.84	136.1	110.1	-80.0	173.0
-34	0.829	-1.63	0.0069	-21.63	139.4	115.6	-78.0	175.0
-32	0.848	-1.43	0.0072	-21.43	142.7	121.0	-75.6	177.4
-30	0.866	-1.25	0.0075	-21.25	145.7	126.1	-72.8	180.2
-28	0.883	-1.08	0.0078	-21.08	148.5	131.1	-69.7	183.3
-26	0.899	-0.93	0.0081	-20.93	151.2	135.9	-66.3	186.7
-24	0.913	-0.79	0.0083	-20.79	153.7	140.4	-62.5	190.5
-22	0.927	-0.66	0.0086	-20.66	156.0	144.6	-58.4	194.6
-20	0.940	-0.54	0.0088	-20.54	158.0	148.5	-54.1	198.9
-18	0.951	-0.44	0.0090	-20.44	160.0	152.1	-49.4	203.6
-16	0.961	-0.34	0.0092	-20.34	161.7	155.4	-44.6	208.4
-14	0.970	-0.26	0.0094	-20.26	163.2	158.4	-39.5	213.5
-12	0.978	-0.19	0.0096	-20.19	164.5	160.9	-34.2	218.8
-10	0.985	-0.13	0.0097	-20.13	165.6	163.1	-28.8	224.2
-8	0.990	-0.09	0.0098	-20.09	166.6	164.9	-23.2	229.8
-6	0.994	-0.05	0.0099	-20.05	167.3	166.4	-17.5	235.5

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-4	0.997	-0.02	0.0099	-20.02	167.8	167.4	-11.7	241.3
-2	0.999	-0.01	0.0100	-20.01	168.1	168.0	-5.9	247.1
0	1.000	0.00	0.0100	-20.00	168.2	168.2	0.0	253.0
2	0.999	-0.01	0.0100	-20.01	168.1	168.0	5.9	258.9
4	0.997	-0.02	0.0099	-20.02	167.8	167.4	11.7	264.7
6	0.994	-0.05	0.0099	-20.05	167.3	166.4	17.5	270.5
8	0.990	-0.09	0.0098	-20.09	166.6	164.9	23.2	276.2
10	0.985	-0.13	0.0097	-20.13	165.6	163.1	28.8	281.8
12	0.978	-0.19	0.0096	-20.19	164.5	160.9	34.2	287.2
14	0.970	-0.26	0.0094	-20.26	163.2	158.4	39.5	292.5
16	0.961	-0.34	0.0092	-20.34	161.7	155.4	44.6	297.6
18	0.951	-0.44	0.0090	-20.44	160.0	152.2	49.4	302.4
20	0.940	-0.54	0.0088	-20.54	158.1	148.5	54.1	307.1
22	0.927	-0.66	0.0086	-20.66	156.0	144.6	58.4	311.4
24	0.913	-0.79	0.0083	-20.79	153.7	140.4	62.5	315.5
26	0.899	-0.93	0.0081	-20.93	151.2	135.9	66.3	319.3
28	0.883	-1.08	0.0078	-21.08	148.5	131.1	69.7	322.7
30	0.866	-1.25	0.0075	-21.25	145.7	126.1	72.8	325.8

TFC2K.DAT

MAX: 168.2m -84.1m 168.9m