

Minor Change to WPUT(FM) at North Salem, New York

Facility ID 175564 ♦ Channel 211 (90.1 mHz.) ♦ July 1, 2020

TECHNICAL STATEMENT

Section 73.509 Allocation Study

Figures 1 through 4 depict the applicable service and interfering contours of all pertinent stations. (Key: same colors may not overlap.)

Where 40 dBu F(50,10) interfering contours from co-channels WGSK, WRXC, and WMFU most closely approach the proposed 60 dBu F(50,50) service contour, HAAT and distances to pertinent contours were determined in 1 degree increments, as detailed in Figures 7A and 7B.

HAAT along each radial was determined using the NOAA Globe Terrain Data option in the Commission's online HAAT Calculator. The distances to pertinent contours were then determined by employing the Commission's online FM and TV Propagation Curves program. HAAT determinations over 360 degrees of azimuth are provided for each station in separate exhibits to this application. No prohibited overlap is created.

TV Channel 6 Protection

There are two full power TV or Class A LPTV stations on Channel 6 within 196 km. of WPUT. These are WRGB at Schenectady, NY, and WNYZ-LP at New York, NY. The proposed WPUT interfering contour on Channel 211 as determined from Section 73.599 Figure 1 is 47 dBu + 20.3 dB, or 67.3 dBu F(50,10).

As shown in Figure 5, the interfering contour from the proposed facility falls well outside the 47 dBu service contour of both of these TV Channel 6 facilities.

Environmental Considerations

The applicant proposes to employ its licensed antenna rotated 9 degrees clockwise at the licensed WPUT antenna site. Therefore, this proposal will have no environmental impact other than RFR exposure.

RFR field strength measurements were conducted on the premises of the antenna site, and inside the building where the antenna is located, with the facility operating with the licensed 440 Watts ERP. As stated in the letter in Figure 5 (submitted with License Application File No. BLED-20120628AAJ), at no point did RFR exceed 4.74% of the General Population Limit. The maximum RFR produced by the proposed facility will be greater by $\text{SQRT}(1000/440) = 1.508$ times, a maximum of 7.15% of the General Population Limit.

The applicant will reduce power or cease operation as to protect persons having access to the site, pole, or antenna from RFR exposure in excess of FCC guidelines.

Figure 1 – Allocation Study

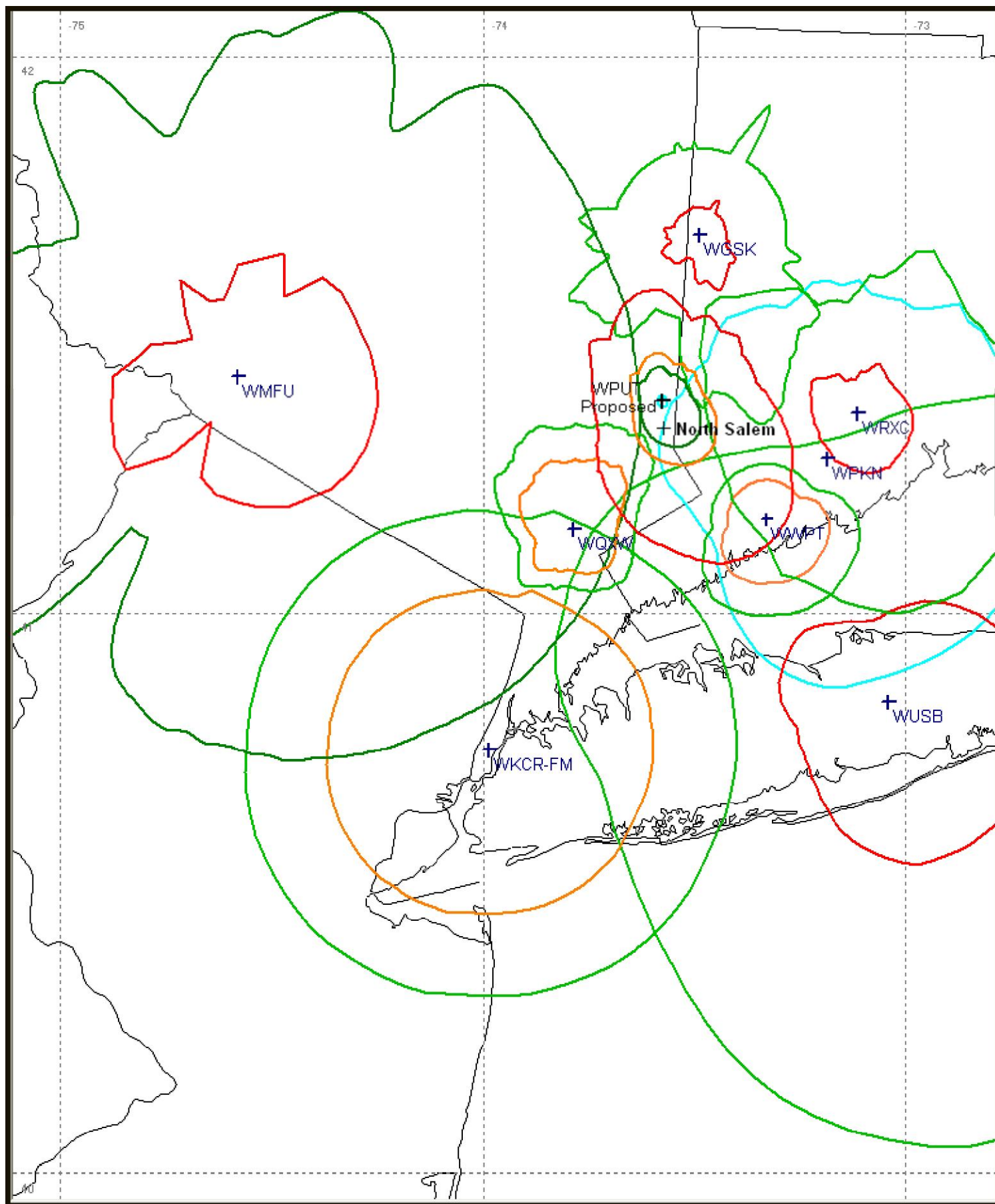


Figure 2 – Closeup Allocation Study



Figure 3 – Closeup Detail to WGSK

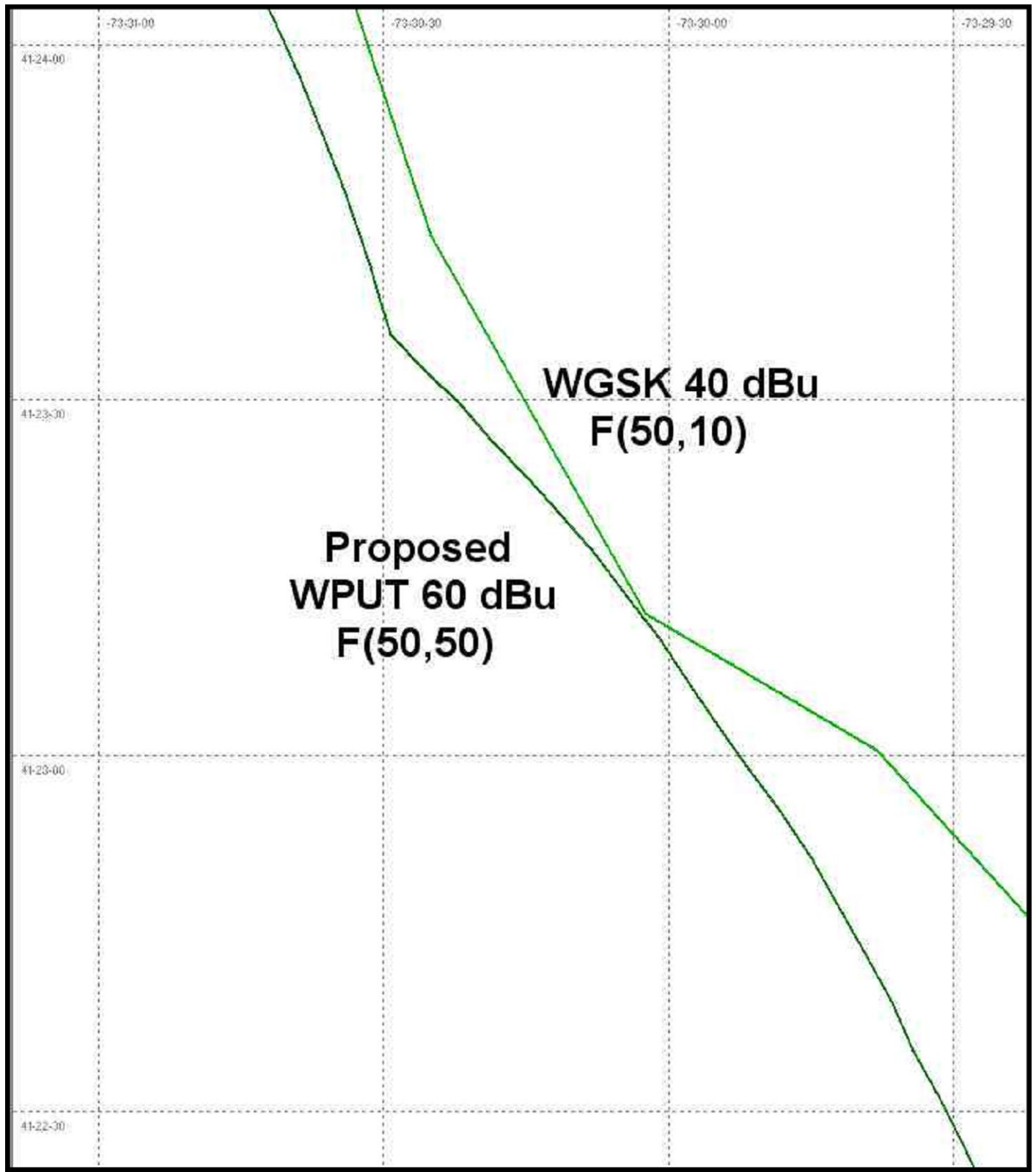


Figure 4 – Closeup Detail to WMFU

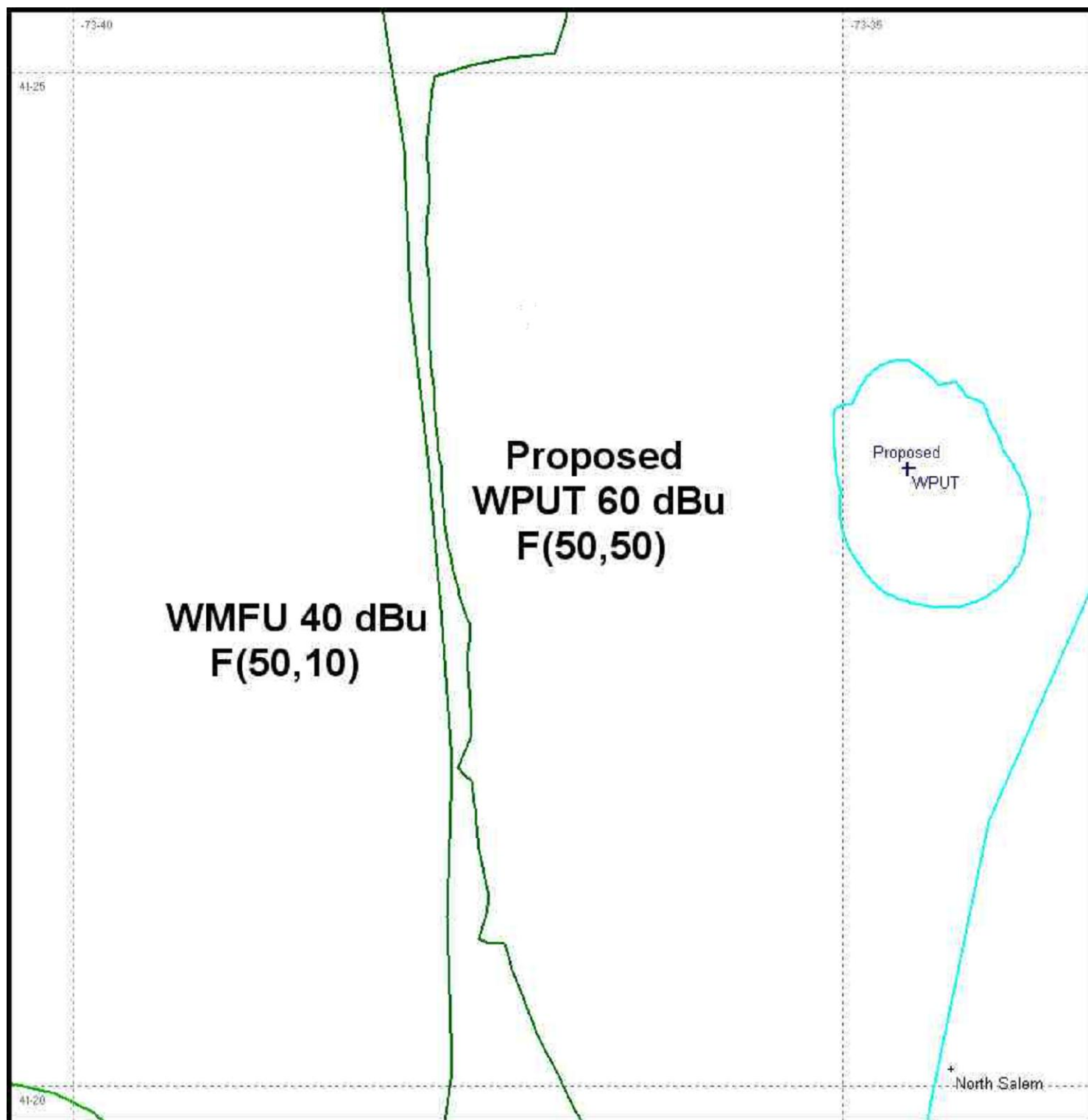


Figure 5 – TV Channel 6 Study

**Proposed 67.3 dBu Interfering Contour
does not cross any TV Channel 6 47 dBu Service Contour**

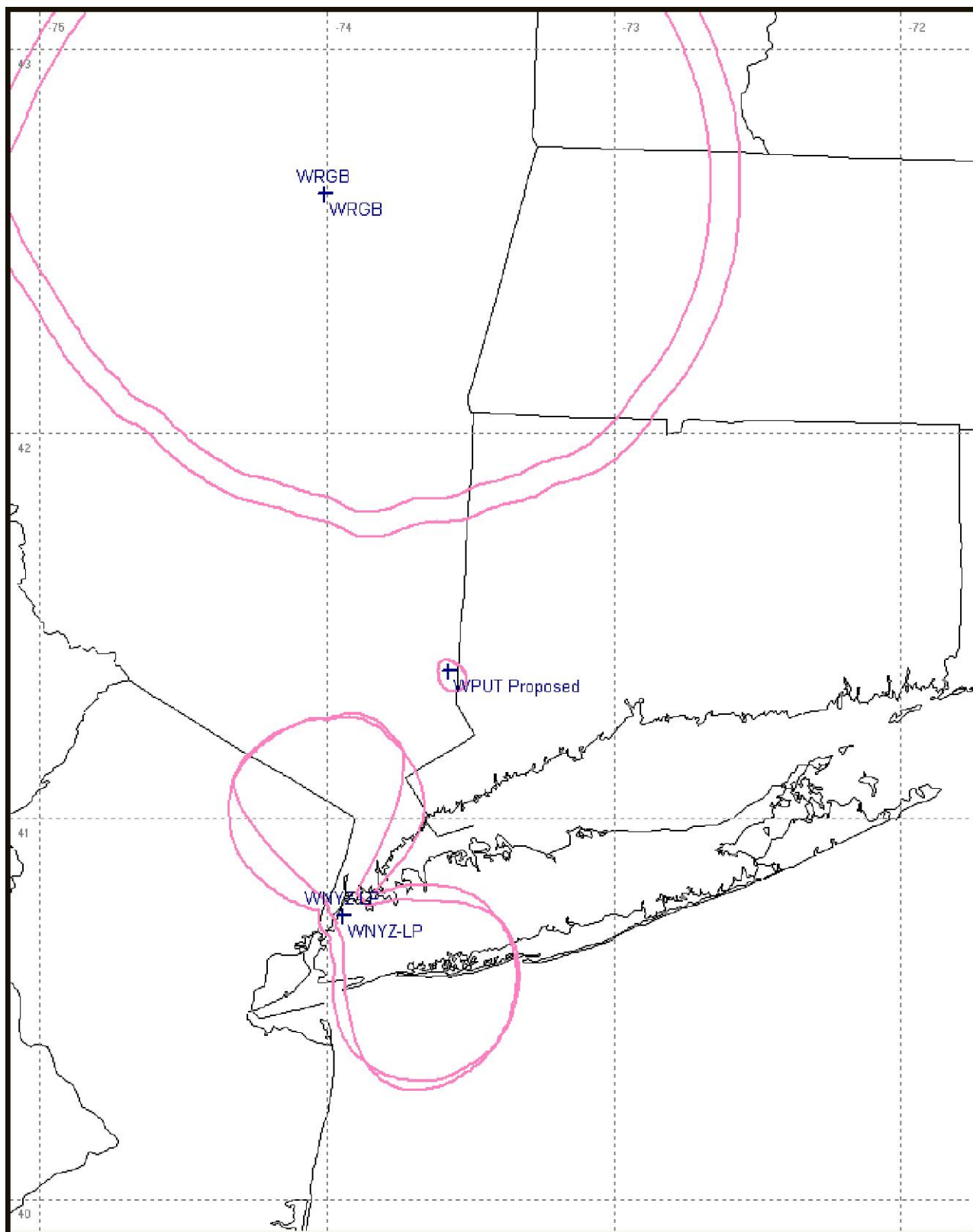


Figure 6 – RFR Study

As stated in the letter below from License Application File No BLED-20120628AAJ, with the licensed facility operating at 440 Watts ERP, at no point did RFR exceed 4.74% of the General Population Limit. The maximum RFR produced by the proposed facility at 1.0 kW can be expected to be greater by a factor of $\text{SQRT}(1000/440)$ or 1.508, resulting in RFR exposure of 7.15% of the Limit.



June 28, 2012

Dennis Jackson
Quaboag Hills Public Radio
WJZZ Radio
16 Walker Avenue
Westfield, MA 01085-1751

Dear Dennis,

On June 21, 2012, in accordance with condition 8 of the underlying construction permit, Proper Radiofrequency Electromagnetic (RF) Field Strength Measurements were made on the premises of the transmitter site and inside the building where the antenna is located in order to determine whether any areas exceeded FCC Guidelines for human exposure to RF Fields. The equipment utilized consisted of a NARDA 8718B serial number 2008 with General Population Probe Model A8742D serial number 02207.

The WJZZ transmit antenna is mounted on the roof of a three story home. The highest reading of 4.74% of the General Population Limit was found within the first floor bedroom of the residence. This was the highest measurement of the campaign. Elsewhere on the first, second and third levels of the home, the reading averaged no more than 2%. On the grounds outside of the home, one location in the main lobe of the antenna read 3.2% of the General Population Limit. The remainder of the grounds read no higher than 2% and averaged 0.5%.

I hereby conclude that the entire residence and premises are well below the FCC Limits for General Population. It is therefore believed that WJZZ is in compliance with the requirement contained within Condition 8 of the Construction Permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles (Bud) Williamson", written over a horizontal line.

Charles (Bud) Williamson
President

Figure 7A – Summary of Pertinent HAAT and Distance-To-Contour Calculations

HAAT along each radial was determined using the NOAA Globe Terrain Data option in the Commission's online HAAT Calculator.

Distances to pertinent contours were then determined by employing the Commission's online FM and TV Propagation Curves program.

VPUT Globe Data To The East				VPUT Globe Data To The West			
Azimuth	HAAT (m)	ERP (Watts)	Dist to 60 dBu	Azimuth	HAAT (m)	ERP (Watts)	Dist to 60 dBu
			E(50.50) (km)				E(50.50) (km)
75	<30	106.929	5.732	253	<30	31.686	4.190
76	<30	107.584	5.741	254	<30	31.686	4.190
77	<30	108.241	5.750	255	<30	31.686	4.190
78	<30	108.900	5.759	256	<30	31.686	4.190
79	<30	109.561	5.767	257	<30	31.686	4.190
80	<30	110.224	5.776	258	<30	31.686	4.340
81	<30	115.600	5.844	259	<30	31.686	4.362
82	<30	121.801	5.919	260	<30	31.686	4.384
83	<30	127.449	5.984	261	<30	31.686	4.406
84	<30	133.956	6.061	262	<30	31.686	4.427
85	<30	139.876	6.129	263	<30	31.686	4.448
86	<30	146.689	6.204	264	<30	31.686	4.469
87	<30	152.881	6.269	265	<30	31.686	4.490
88	<30	160.000	6.340	266	<30	31.686	4.513
89	<30	166.464	6.403	267	<30	31.686	4.550
90	<30	173.889	6.471	268	<30	31.686	4.586
91	<30	182.329	6.549	269	<30	31.686	4.633
92	<30	191.844	6.635	270	<30	31.686	4.679
93	<30	201.601	6.719	271	<30	32.036	4.724
94	<30	210.681	6.794	272	<30	32.396	4.769
95	<30	220.900	6.874	273	<30	32.757	4.813
				274	<30	33.127	4.856
				275	<30	33.487	4.899
				276	<30	33.857	4.941
				277	<30	34.227	4.982
				278	<30	34.597	5.034
				279	<30	34.967	5.098
				280	<30	35.717	5.160
220	33.9	101.760	5.977	281	<30	36.477	5.220
221	33.1	97.339	5.851	282	<30	37.247	5.280
222	31.4	93.639	5.659	283	<30	38.028	5.338
223	<30	89.998	5.486	284	<30	38.808	5.394
224	<30	86.437	5.431	285	<30	39.598	5.450
225	<30	82.947	5.376	286	<30	40.398	5.505
226	<30	79.526	5.318	287	<30	41.208	5.500
227	<30	76.175	5.260	288	<30	42.028	5.495
228	<30	72.905	5.200	289	<30	42.849	5.441
229	30.5	69.694	5.180	290	<30	44.099	5.385
230	30.9	66.563	5.150	291	<30	45.369	5.318
231	31.4	63.503	5.126	292	<30	47.089	4.633
232	32.2	61.012	5.136	293	<30	48.840	4.679
233	32.7	58.562	5.120	294	<30	50.620	4.724
234	32.0	56.171	5.009	295	<30	52.440	4.769
235	<30	53.821	4.802	296	<30	54.291	4.813
236	<30	51.080	4.736	297	<30	56.171	4.856
237	<30	48.840	4.679	298	<30	58.082	4.899
238	<30	46.659	4.621	299	<30	60.022	4.941
239	<30	44.519	4.562	300	<30	62.002	4.982
240	<30	42.438	4.501	301	<30	64.513	5.034
241	<30	41.208	4.469	302	<30	67.604	5.098
242	<30	39.998	4.438	303	<30	70.754	5.160
243	<30	38.808	4.406	304	<30	73.985	5.220
244	<30	37.638	4.373	305	<30	77.285	5.280
245	<30	36.867	4.351	306	<30	80.656	5.338
246	<30	35.717	4.318	307	<30	84.097	5.394
247	<30	34.597	4.284	308	<30	87.618	5.450
248	<30	33.487	4.249	309	<30	91.208	5.505
249	<30	32.396	4.214	310	<30	94.869	5.500
250	<30	31.686	4.190	311	<30	90.598	5.495
251	<30	31.686	4.190	312	<30	87.027	5.441
252	<30	31.686	4.190	313	<30	83.517	5.385
253	<30	31.686	4.190	314	<30	79.526	5.318

Figure 7B – Summary of Pertinent HAAT and Distance-To-Contour Calculations

HAAT along each radial was determined using the NOAA Globe Terrain Data option in the Commission's online HAAT Calculator.

Distances to pertinent contours were then determined by employing the Commission's online FM and TV Propagation Curves program.

<u>VGSK Globe Data</u>			
			Dist to 40 dBu
Azimuth	HAAT (m)	ERP (Watts)	F(50,10) (km)
180	106.70	77.0	33.728
181	102.00	77.0	32.887
182	97.20	77.0	31.975
183	92.00	77.0	30.968
184	86.30	77.0	29.868
185	78.40	77.0	28.354
<u>VBXC Globe Data</u>			
			Dist to 40 dBu
Azimuth	HAAT (m)	ERP (Watts)	F(50,10) (km)
267	105.00	45	28.978
268	106.70	45	29.228
269	108.40	45	29.471
270	110.20	45	29.727
271	110.20	45	29.727
272	110.10	45	29.713
<u>VMFU Globe Data</u>			
			Dist to 40 dBu
Azimuth	HAAT (m)	ERP (Watts)	FF(50,10) (km)
90	221.5	1100	79.340
91	223.5	1100	79.567
92	225.3	1100	79.770
93	226.7	1100	79.927
94	227.5	1100	80.016
95	229.4	1100	80.226
96	231.0	1100	80.401