

**RADIO LICENSE HOLDING CBC, LLC**  
**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHZ - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B**

**Interference Study for New FM Translator**  
**Using Proposed Site as Reference**

The proposed new FM translator on Channel 255, operating with an effective radiated power of 0.05 kilowatt, will not cause interference to any existing, applied for, or proposed facility. As noted on Exhibit B1, the proposed new translator on Channel 255 is within the predicted 54 dBu contour of third adjacent station WDCX-FM, Channel 258B, Buffalo, New York and second adjacent station WKSE, Channel 253B, Niagara Falls, New York<sup>1</sup>. Due to the relationship between the proposed new translator and both WDCX-FM and WKSE, a 40 db ratio of the protected and interfering contours applies.

**Proposed New Translator vs WDCX-FM**

The WDCX-FM contour at the new translator's antenna site is in excess of 86.8 dBu (50/50). The corresponding interfering contour for the new translator is 126.8 dBu (50/10) (Exhibit B2). The proposed translator will utilize an ERI 100-A single bay antenna. As shown in the tabulation of desired to undesired contours (Exhibit B3), the new translator's interfering contour (126.8 dBu, FCC 50/10) will not reach ground level. Since the new translator's antenna will be mounted 78.0 meters (256 feet) above ground and there are no structures of comparable height in the vicinity of the proposed new translator antenna, this contour never reaches any

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1) WKSE has a license (BMLH-20080910ABV) and Construction Permit (BPH-20131030AHQ). Both of these facilities are studied for contour clearance.

potentially occupied space. As such, WDCX-FM will not receive interference from the proposed translator.

#### **Proposed New Translator vs WKSE (License)**

The licensed WKSE contour at the new translator's antenna site is in excess of 73.4 dBu (50/50). The corresponding interfering contour for the new translator is 113.4 dBu (50/10) (Exhibit B4). The proposed translator will utilize an ERI 100-A single bay antenna. As shown in the tabulation of desired to undesired contours (Exhibit B5), the new translator's interfering contour (113.4 dBu, FCC 50/10) will not reach ground level. Since the new translator's antenna will be mounted 78.0 meters (156 feet) above ground and there are no structures of comparable height in the vicinity of the proposed new translator antenna, this contour never reaches any potentially occupied space. As such, WKSE (License) will not receive interference from the proposed translator.

#### **Proposed New Translator vs WKSE (Construction Permit)**

The WKSE Construction Permit contour at the new translator's antenna site is in excess of 74.8 dBu (50/50). The corresponding interfering contour for the new translator is 114.8 dBu (50/10) (Exhibit B6). The proposed translator will utilize an ERI 100-A single bay antenna. As shown in the tabulation of desired to undesired contours (Exhibit B7), the new translator's interfering contour (114.8 dBu, FCC 50/10) will not reach ground level. Since the new translator's antenna will be mounted 78.0 meters (156 feet) above ground and there are no structures of comparable height in the vicinity of the proposed new translator antenna, this contour never reaches any potentially occupied space. As such, the WKSE Construction Permit will not receive interference from the proposed translator.

Based on the foregoing, it is believed that the proposed new FM translator on Channel 255 is in compliance with §74.1204(d) of the Commission's rules. If a waiver of the rule is needed to address WDCX-FM, WKSE (License) and WKSE (Construction Permit), one is respectfully requested.

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**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHZ - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B1**

**Clearance Study for New Translator**  
**Using Proposed Site as Reference**

REFERENCE		Radio License Holding Cbc, Llc								DISPLAY DATES	
42 49 50.7 N.		CH# 255D - 98.9 MHz, Pwr= 0.05 kW, HAAT= 55.5 M, COR= 262.4 M								DATA 12-01-17	
78 48 00.6 W.		Average Protected F(50-50)= 6.4 km								SEARCH 12-01-17	
		Omni-directional									
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
258B Buffalo	WDCX-FM	LIC	CN NY	173.1 353.1	21.89 BLH6741	42 38 07.0 78 46 05.0	110.000 195	10.3 551	87.0 Kimtron, Inc.	6.4	-66.1*
255B Simcoe	CHCD-FM	APP	?HN ON	266.2 85.2	124.56	42 44 48.0 80 19 07.0	50.000 150	175.9 355	68.5	-59.7*	19.5
255B Simcoe	R69514		ON	266.2 85.2	124.56	42 44 48.0 80 19 07.0	50.000 150	175.4 351	65.0	-59.1*	19.5
253B Niagara Falls	WKSE	LIC	CX NY	321.1 140.9	24.92 BMLH20080910ABV	43 00 18.0 78 59 34.0	46.000 128	5.4 304	61.3 Entercom Buffalo License,	11.6	-37.4*
253B Niagara Falls	WKSE	CP	ZCX NY	322.2 142.1	20.79 BPH20131030AHQ	42 58 42.2 78 57 24.9	41.000 129	4.8 307	56.9 Entercom Buffalo License,	8.1	-37.1*
255B Rochester	WBZA	LIC	CN NY	67.2 248.0	99.12 BLH19880506KB	43 10 14.0 77 40 23.0	37.000 172	129.7 317	60.7 Entercom Rochester License	-37.0*	8.1
255D Wbbf	1762297!	APP	C NY	0.0 23.3	0.00 BNPFT20170731ABL	42 49 50.0 78 48 01.0	0.050	23.4 262	7.0 Radio License Holding Cbc,	-30.5	-30.7
256C1 Toronto	CBLA	OPE	CN ON	332.8 152.4	102.42	43 38 56.0 79 22 55.0	98.000 304	113.9 437	90.8	-19.1*	1.0
256C1 Toronto	8541	OPE	?HN ON	332.8 152.4	102.42	43 38 56.0 79 22 55.0	98.000 304	111.4 421	89.8	-16.6*	1.0
256C1 Toronto	AL9127	USE	ON	332.8 152.4	102.42	43 38 56.0 79 22 55.0	100.000 299	108.6 401	86.0	-13.8*	1.0
255A Simcoe	R29472	ADD	ON	272.6 91.5	123.80	42 52 13.0 80 18 51.0	6.000 100	89.3 325	38.0	26.2	45.8

Terrain database is FCC NGDC 30 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 3<sup>rd</sup> adjacent.

All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.  
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: Canada- AM tower

**New TX - Buffalo, NY - Proposed**

Latitude: 42-49-50.70 N - Longitude: 078-48-00.60 W

Channel: 255 - Frequency: 98.9 MHz

ERP: 0.05 kW - AMSL Height: 262.4 m

**WDCX-FM - Buffalo, NY - BLH6741**

Latitude: 42-38-07 N - Longitude: 078-46-05 W

Channel: 258 - Frequency: 99.5 MHz

ERP: 110.00 kW - AMSL Height: 551.0 m

**GRAHAM BROCK, INC.**

BROADCAST TECHNICAL CONSULTANTS

**EXHIBIT B2**

**RADIO LICENSE HOLDING CBC, LLC**

**NEW FM TRANSLATOR STATION**

**CH 255D - 98.9 MHz - 0.05 KW**

**BUFFALO, NEW YORK**

**December 2017**

Proposed New Translator 126.8 dBu (50/10)

WDCX-FM 86.8 dBu (50/50)

Scale 1:24,000

0 0.33 0.67 1.0 km

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**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHZ - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B3**

New Tx Buffalo, NY  
Showing Protection to WDCX-FM  
74.1204(d) Study - Using FCC 30 SEC Terrain Database  
Translator or LPFM Maximum Licensed ERP = 0.05  
Translator or LPFM Antenna Height AG = 78 Meters  
New Tx Antenna Model = SHPX1F

Protected Station's Contour = 86.8 dBu  
Translator's or LPFM's full Interference contour 126.8

Review Azimuth = 0 Degrees True  
Relative Field on the horizon at Review Azimuth = 1.000  
Translator/LPFM ERP on the horizon at Review Azimuth = 0.05 kW  
Distance between stations = 21.9 km  
Protected Station= WDCX-FM, 110 kW, 551 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	1.0	1.0	0.0500	022.6717	022.6717	078.000
05.00	0.993	1.0	0.0493	022.5130	022.4274	076.038
10.00	0.974	1.0	0.0474	022.0823	021.7468	074.165
15.00	0.941	1.0	0.0443	021.3341	020.6072	072.478
20.00	0.897	1.0	0.0402	020.3366	019.1101	071.044
25.00	0.843	1.0	0.0355	019.1123	017.3216	069.923
30.00	0.78	1.0	0.0304	017.6840	015.3148	069.158
35.00	0.709	1.0	0.0251	016.0743	013.1673	068.780
40.00	0.633	1.0	0.0200	014.3512	010.9937	068.775
45.00	0.554	1.0	0.0153	012.5601	008.8814	069.119
50.00	0.473	1.0	0.0112	010.7237	006.8931	069.785
55.00	0.394	1.0	0.0078	008.9327	005.1236	070.683
60.00	0.317	1.0	0.0050	007.1869	003.5935	071.776
65.00	0.245	1.0	0.0030	005.5546	002.3475	072.966
70.00	0.181	1.0	0.0016	004.1036	001.4035	074.144
75.00	0.124	1.0	0.0008	002.8113	000.7276	075.284
80.00	0.077	1.0	0.0003	001.7457	000.3031	076.281
85.00	0.041	1.0	0.0001	000.9295	000.0810	077.074
90.00	0.016	1.0	0.0000	000.3627	000.0000	077.637

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# GRAHAM BROCK, INC.

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## New TX - Buffalo, NY - Proposed

Latitude: 42-49-50.70 N - Longitude: 078-48-00.60 W

Channel: 255 - Frequency: 98.9 MHz

ERP: 0.05 kW - AMSL Height: 262.4 m

## WKSE - Niagara Falls, NY - BMLH20080910ABV

Latitude: 43-00-18 N - Longitude: 078-59-34 W

Channel: 253 - Frequency: 98.5 MHz

ERP: 46.00 kW - AMSL Height: 304.0 m

WKSE - License

**EXHIBIT B4**  
**RADIO LICENSE HOLDING CBC, LLC**  
**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHz - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

Proposed New Translator 113.4 dBu (50/10)

WKSE (License) 73.4 dBu (50/50)

Scale 1:24,000

0 0.33 0.67 1.0 km

**RADIO LICENSE HOLDING CBC, LLC**  
**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHZ - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B5**

New Tx Buffalo, NY  
 Showing Protection to WKSE  
 74.1204(d) Study - Using FCC 30 SEC Terrain Database  
 Translator or LPFM Maximum Licensed ERP = 0.05  
 Translator or LPFM Antenna Height AG = 78 Meters  
 New Tx Antenna Model = SHPX1F

Protected Station's Contour = 73.4 dBu  
 Translator's or LPFM's full Interference contour 113.4

Review Azimuth = 0 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizon at Review Azimuth = 0.05 kW  
 Distance between stations = 24.9 km  
 Protected Station= WKSE, 46 kW, 304 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	1.0	1.0	0.0500	106.0437	106.0437	078.000
05.00	0.993	1.0	0.0493	105.3014	104.9007	068.822
10.00	0.974	1.0	0.0474	103.2866	101.7174	060.064
15.00	0.941	1.0	0.0443	099.7871	096.3870	052.173
20.00	0.897	1.0	0.0402	095.1212	089.3847	045.467
25.00	0.843	1.0	0.0355	089.3949	081.0193	040.220
30.00	0.78	1.0	0.0304	082.7141	071.6325	036.643
35.00	0.709	1.0	0.0251	075.1850	061.5880	034.876
40.00	0.633	1.0	0.0200	067.1257	051.4213	034.852
45.00	0.554	1.0	0.0153	058.7482	041.5413	036.459
50.00	0.473	1.0	0.0112	050.1587	032.2414	039.576
55.00	0.394	1.0	0.0078	041.7812	023.9647	043.775
60.00	0.317	1.0	0.0050	033.6159	016.8079	048.888
65.00	0.245	1.0	0.0030	025.9807	010.9799	054.453
70.00	0.181	1.0	0.0016	019.1939	006.5647	059.964
75.00	0.124	1.0	0.0008	013.1494	003.4033	065.299
80.00	0.077	1.0	0.0003	008.1654	001.4179	069.959
85.00	0.041	1.0	0.0001	004.3478	000.3789	073.669
90.00	0.016	1.0	0.0000	001.6967	000.0000	076.303

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## New TX - Buffalo, NY - Proposed

Latitude: 42-49-50.70 N - Longitude: 078-48-00.60 W

Channel: 255 - Frequency: 98.9 MHz

ERP: 0.05 kW - AMSL Height: 262.4 m

## WKSE.C - Niagara Falls, NY - BPH20131030AHQ

Latitude: 42-58-42.20 N - Longitude: 078-57-24.90 W

Channel: 253 - Frequency: 98.5 MHz

ERP: 41.00 kW - AMSL Height: 307.0 m

WKSE - Construction Permit

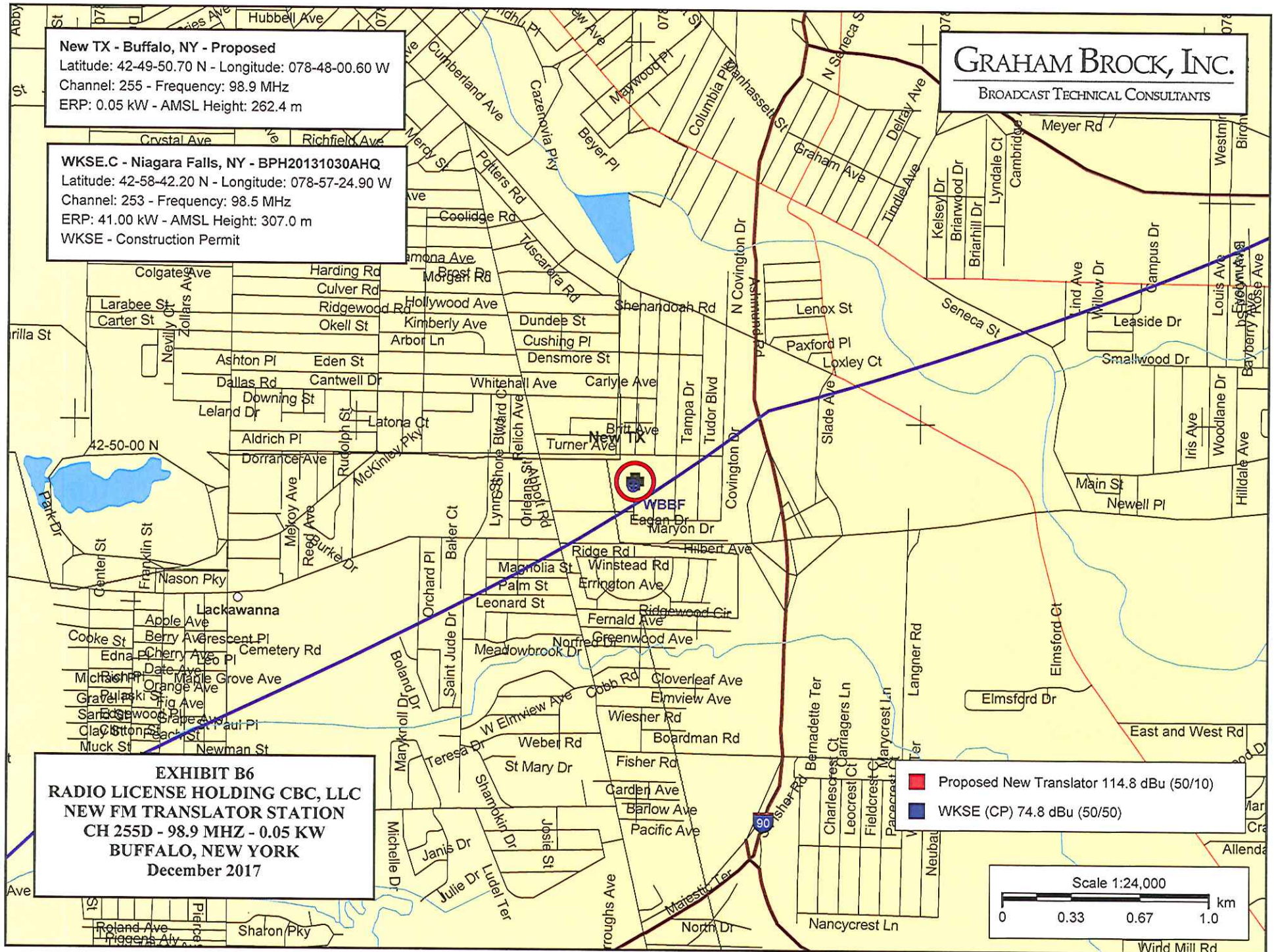
**EXHIBIT B6**  
**RADIO LICENSE HOLDING CBC, LLC**  
**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHz - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

Proposed New Translator 114.8 dBu (50/10)

WKSE (CP) 74.8 dBu (50/50)

Scale 1:24,000

0 0.33 0.67 1.0 km



**RADIO LICENSE HOLDING CBC, LLC**  
**NEW FM TRANSLATOR STATION**  
**CH 255D - 98.9 MHZ - 0.05 KW**  
**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B7**

New Tx Buffalo, NY  
 Showing Protection to WKSE.C  
 74.1204(d) Study - Using FCC 30 SEC Terrain Database  
 Translator or LPFM Maximum Licensed ERP = 0.05  
 Translator or LPFM Antenna Height AG = 78 Meters  
 New Tx Antenna Model = SHPX1F

Protected Station's Contour = 74.8 dBu  
 Translator's or LPFM's full Interference contour 114.8

Review Azimuth = 0 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizon at Review Azimuth = 0.05 kW  
 Distance between stations = 20.8 km  
 Protected Station= WKSE.C, 41 kW, 307 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	1.0	1.0	0.0500	090.2579	090.2579	078.000
05.00	0.993	1.0	0.0493	089.6260	089.2850	070.189
10.00	0.974	1.0	0.0474	087.9111	086.5756	062.734
15.00	0.941	1.0	0.0443	084.9326	082.0386	056.018
20.00	0.897	1.0	0.0402	080.9613	076.0787	050.310
25.00	0.843	1.0	0.0355	076.0874	068.9586	045.844
30.00	0.78	1.0	0.0304	070.4011	060.9692	042.799
35.00	0.709	1.0	0.0251	063.9928	052.4198	041.295
40.00	0.633	1.0	0.0200	057.1332	043.7666	041.275
45.00	0.554	1.0	0.0153	050.0029	035.3574	042.643
50.00	0.473	1.0	0.0112	042.6920	027.4419	045.296
55.00	0.394	1.0	0.0078	035.5616	020.3973	048.870
60.00	0.317	1.0	0.0050	028.6117	014.3059	053.222
65.00	0.245	1.0	0.0030	022.1132	009.3454	057.959
70.00	0.181	1.0	0.0016	016.3367	005.5875	062.649
75.00	0.124	1.0	0.0008	011.1920	002.8967	067.189
80.00	0.077	1.0	0.0003	006.9499	001.2068	071.156
85.00	0.041	1.0	0.0001	003.7006	000.3225	074.314
90.00	0.016	1.0	0.0000	001.4441	000.0000	076.556

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**BUFFALO, NEW YORK**  
**December 2017**

**EXHIBIT B8**

N. Lat. = 42° 49' 50.7" - Protected and Interfering Contour Data  
W. Lng. = 78° 48' 00.6" - New FM Translator, Buffalo, New York

Distance to Contour,  
FCC, FM 2-10 Mi, 51 pts Method - FCC 30 SEC

Azi.	AV EL	HAAT	ERP kW	dBk	Field	126.8-F1	114.8-F1	113.4-F1	60-F5	54-F1	40-F1
000	194.8	67.6	0.0500	-13.01	1.000	0.02	0.09	0.11	7.07	10.15	23.68
010	193.9	68.5	0.0500	-13.01	1.000	0.02	0.09	0.11	7.11	10.21	23.82
020	195.2	67.2	0.0500	-13.01	1.000	0.02	0.09	0.11	7.05	10.12	23.60
030	196.8	65.6	0.0500	-13.01	1.000	0.02	0.09	0.11	6.97	10.01	23.34
040	199.6	62.8	0.0500	-13.01	1.000	0.02	0.09	0.11	6.83	9.81	22.88
050	202.5	59.9	0.0500	-13.01	1.000	0.02	0.09	0.11	6.68	9.60	22.40
060	205.7	56.7	0.0500	-13.01	1.000	0.02	0.09	0.11	6.50	9.35	21.81
070	210.2	52.2	0.0500	-13.01	1.000	0.02	0.09	0.11	6.25	8.94	20.90
080	213.8	48.6	0.0500	-13.01	1.000	0.02	0.09	0.11	6.02	8.58	20.08
090	224.1	38.3	0.0500	-13.01	1.000	0.02	0.09	0.11	5.33	7.49	17.41
100	238.1	24.3	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
110	249.1	13.3	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
120	246.7	15.7	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
130	257.4	5.0	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
140	269.0	-6.6	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
150	282.8	-20.4	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
160	274.5	-12.1	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
170	248.0	14.4	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
180	232.6	29.8	0.0500	-13.01	1.000	0.02	0.09	0.11	4.71	6.70	15.01
190	225.5	36.9	0.0500	-13.01	1.000	0.02	0.09	0.11	5.23	7.37	17.04
200	215.4	47.0	0.0500	-13.01	1.000	0.02	0.09	0.11	5.92	8.42	19.69
210	200.7	61.7	0.0500	-13.01	1.000	0.02	0.09	0.11	6.77	9.74	22.70
220	186.2	76.2	0.0500	-13.01	1.000	0.02	0.09	0.11	7.50	10.72	25.10
230	172.0	90.4	0.0500	-13.01	1.000	0.02	0.09	0.11	8.22	11.60	27.44
240	172.0	90.4	0.0500	-13.01	1.000	0.02	0.09	0.11	8.23	11.61	27.46
250	171.8	90.6	0.0500	-13.01	1.000	0.02	0.09	0.11	8.24	11.62	27.49
260	171.2	91.2	0.0500	-13.01	1.000	0.02	0.09	0.11	8.27	11.65	27.58
270	171.0	91.4	0.0500	-13.01	1.000	0.02	0.09	0.11	8.28	11.66	27.61
280	171.4	91.0	0.0500	-13.01	1.000	0.02	0.09	0.11	8.26	11.64	27.55
290	172.2	90.2	0.0500	-13.01	1.000	0.02	0.09	0.11	8.22	11.59	27.42
300	175.8	86.6	0.0500	-13.01	1.000	0.02	0.09	0.11	8.03	11.37	26.83
310	177.8	84.6	0.0500	-13.01	1.000	0.02	0.09	0.11	7.93	11.25	26.50
320	178.5	83.9	0.0500	-13.01	1.000	0.02	0.09	0.11	7.89	11.21	26.38
330	180.0	82.4	0.0500	-13.01	1.000	0.02	0.09	0.11	7.82	11.11	26.13
340	180.3	82.1	0.0500	-13.01	1.000	0.02	0.09	0.11	7.80	11.09	26.08
350	186.6	75.8	0.0500	-13.01	1.000	0.02	0.09	0.11	7.48	10.69	25.04

AMSL= 262.4