

MINOR CHANGE APPLICATION  
W236CF, Homewood, IL

February, 2016 (Amendment to correct ASR Coordinates)

**TECHNICAL STATEMENT**

This technical statement and attached exhibits have been prepared on behalf of Windy City Broadcasting, LLC (“Windy City”), Permittee of translator station W236CF, Facility ID number 140658. The applicant proposes to modify W236CF to relocate, modify the antenna pattern and decrease power to 99 watts ERP. This translator will rebroadcast Facility ID 6377, WTMX (FM), Skokie, IL as a fill-in translator in compliance with 47 CFR 74.1203. The translator community of license will change to Chicago, IL. The proposed operation is MX to the existing W236CF and the 60dBu contours intersect. Windy City has received permission from the licensee of WTMX (FM) to rebroadcast that station’s programming.

**Facilities Proposed**

Location (NAD27)	41° 52’ 44” N Latitude, 87° 38’ 08” W Longitude
Channel	236D (95.1MHz)
Tower Overall AGL Height-	525m
Tower ASR	1032960
Proposed Antenna	Jampro Dual CL-FM-V
Antenna AGL Height-	432m
Site AMSL Height-	181m
COR AMSL Height	309m
HAAT	613m
ERP	80w DIRECTIONAL (SEE EXHIBIT A)

## Interference Study

ComStudy 2.2 search of channel 236 (95.1 MHz Class D) at 41-52-44.0 N, 87-38-08.0 W.

WLS-FM	CHICAGO	IL 234 B	0.00	0.00	90.0	-79.35 dB *
WEBG	CHICAGO	IL 238 B	0.00	0.00	90.0	-77.69 dB *
W236CF	HOMEWOOD	IL 236 D	28.92	0.00	187.7	-27.74 dB MX to Current
WCFS-FM	ELMWOOD PARK	IL 290 B	0.00	15.00	90.0	-15.0 km IF 99w limit
WIIL	UNION GROVE	WI 236 B	77.83	0.00	344.2	2.03 dB
W236CG	BOWLINGBROOK	IL 236 D	37.28	0.00	238.2	4.90 dB
WFAV	KANKAKEE	IL 236 A	89.57	0.00	186.5	1.89 dB
WVUR-FM	VALPARAISO	IN 236 D	67.48	0.00	132.7	3.29 dB
880421MY	KANKAKEE	IL 236 A	89.92	0.00	192.4	7.70 dB
W236BD	MICHIGAN CITY	IN 236 D	72.83	0.00	108.5	10.79 dB
WJHV-LP	FAIRBURY	IL 236 LP100	145.69	24.00	210.6	23.70 dB
WRIT-FM	MILWAUKEE	WI 239 B	136.48	0.00	350.4	24.69 dB
WKTJ	MILWAUKEE	WI 233 B	136.46	0.00	350.9	25.74 dB
WAJI	FORT WAYNE	IN 236 B	221.55	0.00	112.1	27.50 dB
WKTJ	MILWAUKEE	WI 233 B	136.46	0.00	350.9	27.02 dB
WDZQ	DECATUR	IL 236 B	278.19	0.00	206.4	31.66 dB

CDBS Data as of 1/27/2016

\*- Because the proposed translator will be transmitting from the same site there is no location where the translator will be more than 40dB above either WLS-FM or WEBG

### COMPLIANCE, 74.1201(g), 74.1203(d), 74.1233(a)(1), and 74.1204(d)

Exhibit B demonstrates compliance with 74.1201(g) governing the use of a translator as a fill-in for an FM station. The 60dBu contour of the proposed W236CF will be completely contained within the 1mV/m contour of WTMX (FM).

Because the proposed W236CF will be co-located with WLS-FM and WEBG, there will be no location where the signal of W236CF will be in excess of 40dBu above the WLS-FM or WEBG 2<sup>nd</sup> adjacent signals.

As demonstrated in Exhibit B, this application is compliant with FCC rule 74.1233(a)(1) requiring any minor change of a translator's facilities to continue to provide 1mV/m service to some portion of its previously authorized service area.

Exhibits C demonstrates compliance with 74.1204(a). There are no impermissible contour overlaps to any other facilities.

### **Environmental Exhibit**

The proposed W236CF facility as proposed on channel 236D will utilize a directional antenna located on an existing ASR registered building, (ASR 1032960). The ASR for the tower is attached as Exhibit E. The RF density near the tower was calculated using a 2-level half-wave spaced antenna setting at 80 watts horizontal and vertical and 9m above the roof of the building.

Using the FCC program "FM Model for Windows", it was calculated that the proposed antenna contributes approximately 9.7  $\mu\text{W}/\text{cm}^2$  or 4.9% of the total allowable 200  $\mu\text{W}/\text{cm}^2$ . The maximum was found to be 14 meters from the base of the tower. Since the maximum contribution of W236CF Proposed in the uncontrolled environment is predicted to be less than the 10  $\mu\text{W}/\text{cm}^2$  (5.0%) limit as set forth by §1.1307(b)(3), the facility is in compliance with FCC guidelines.

There are multiple non-excluded RF sources on the tower (building-top).

Since this application meets the five percent exclusion test at all rooftop level areas, the impact of the proposed facility may be considered independently from other facilities operating at or nearby this site. It is believed the impact of the proposed operation should not be

considered to be a factor at rooftop level as defined under §1.1307(b)(3), therefore the proposed W236CF operation is categorically excluded from further environmental review under §1.1306 of the FCC rules and regulations.

Respectfully Submitted

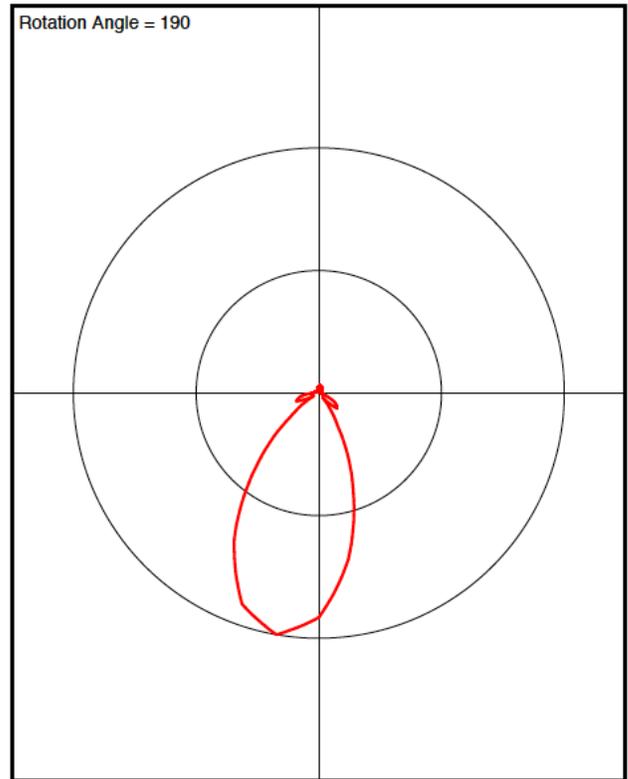
A handwritten signature in black ink that reads "Bert Goldman". The signature is written in a cursive style with a long, sweeping underline.

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# EXHIBIT A: Dual CL-FM-V Antenna

W236CF PROP Pattern  
Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
5.0	0.9575
10.0	0.915
15.0	0.802
20.0	0.689
25.0	0.547
30.0	0.405
35.0	0.277
40.0	0.149
45.0	0.086
50.0	0.023
55.0	0.06
60.0	0.097
65.0	0.086
70.0	0.075
75.0	0.0495
80.0	0.024
85.0	0.0195
90.0	0.015
95.0	0.0145
100.0	0.014
105.0	0.013
110.0	0.012
115.0	0.011
120.0	0.01
125.0	0.01
130.0	0.01
135.0	0.01
140.0	0.01
145.0	0.0105
150.0	0.011
155.0	0.017
160.0	0.023
165.0	0.0255
170.0	0.028
175.0	0.029
180.0	0.03
185.0	0.029
190.0	0.028
195.0	0.0255
200.0	0.023
205.0	0.019
210.0	0.015
215.0	0.0125
220.0	0.01
225.0	0.01
230.0	0.01
235.0	0.01
240.0	0.01
245.0	0.011
250.0	0.012
255.0	0.013
260.0	0.014
265.0	0.0145
270.0	0.015
275.0	0.0195
280.0	0.024
285.0	0.0495
290.0	0.075
295.0	0.086
300.0	0.097
305.0	0.06
310.0	0.023
315.0	0.086



320.0	0.149
325.0	0.277
330.0	0.405
335.0	0.547
340.0	0.689
345.0	0.802
350.0	0.915
355.0	0.9575

EXHIBIT B-

Proposed W236CF, 80 watts, 432m AGL 74.1201(g), 74.1233(a)(1) Compliance

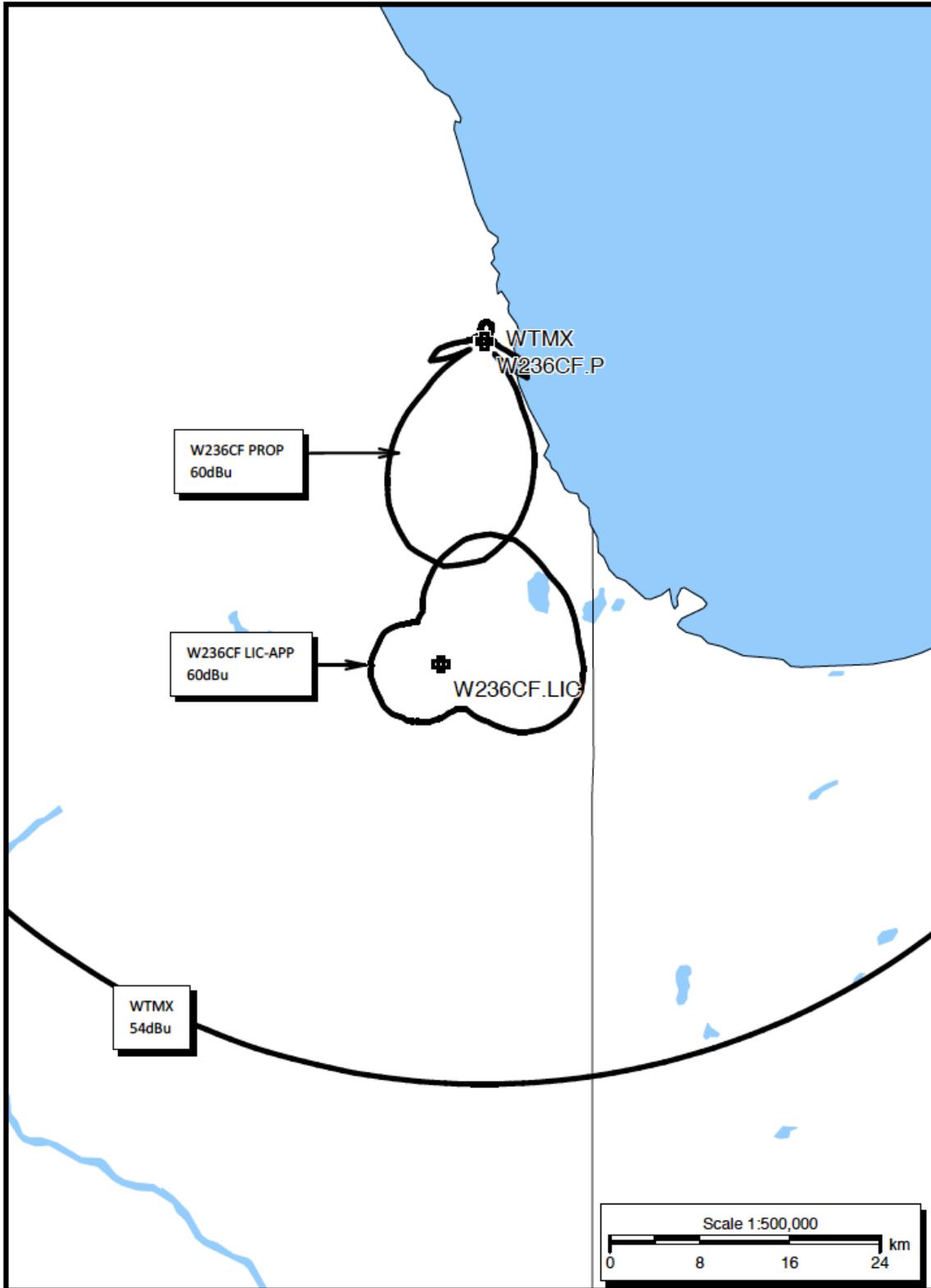


EXHIBIT C- 74.1204(a) Compliance

Proposed W236CF, 80 watts, 432m AGL 74.1204(a) Compliance

