

## CONSOLIDATED ENGINEERING EXHIBIT

W298CH, Rochester NY (FID 138910)

WEPL-LP, Rochester NY (FID 193382)

August 2023

Ibero-American Action League, Inc. (“Ibero”), licensee of WEPL-LP, Rochester NY and proposed assignee of W298CH, Rochester NY (LMS file no. 0000219152) and WXXI Public Broadcasting Council (“WXXI”), licensee and proposed assignor of W298CH, are filing simultaneous applications for minor modifications to both facilities and requesting contingent processing for both applications.

The purpose of these paired applications is to improve the service that Ibero is able to provide to the Hispanic community of greater Rochester, a population that is poorly served by local English-language broadcast services. That population has expanded geographically beyond the limited reach of the current WEPL-LP signal. As the only locally-owned and locally-programmed Spanish-language broadcaster in the Rochester market (and in all of western and central New York), Ibero has identified a unique opportunity, aided by grant support from community institutions, to relocate W298CH to a more favorable centrally-located broadcast site, reduce existing interference with a non-adjacent channel change to channel 246, and simultaneously retain WEPL-LP’s existing service with a displacement from channel 246 to channel 253.

### W298CH Narrative

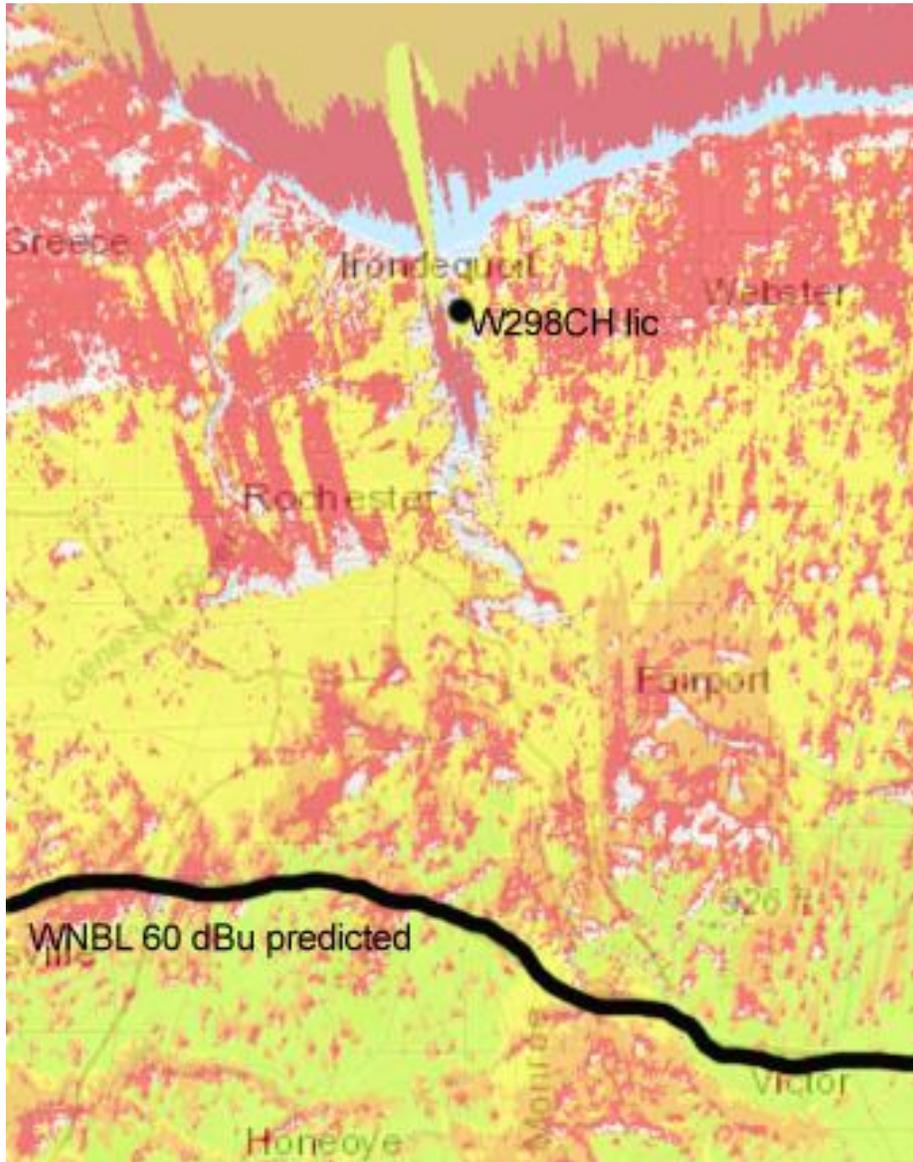
Ibero and WXXI are requesting handling under 74.1233(A)(i)(a)(2), requiring a showing of “interference to or from any other broadcast station.” In this situation, the licensed W298CH facility both causes and receives real-world interference from two other broadcast stations. While the W298CH 54 and 60 dBu contours are clear on paper against adjacent-channel WNBL, South Bristol (channel 297), the WNBL facility on Bristol Mountain sits at an elevation 532 meters higher than that of W298CH.

As a result, the Longley-Rice plot of the WNBL signal shown here as **Figure 1** demonstrates that WNBL’s real-world 60+ dBu signal (shown here in yellow) extends into much of eastern Monroe County, impinging on much of the 60 dBu contour of the licensed W298CH facility including at the actual W298CH transmitter site. Because WNBL broadcasts using HD Radio technology, the upper sidebands of its signal on channel 297 are particularly destructive to the W298CH signal; conversely, W298CH limits usable HD Radio reception of WNBL in areas such as Pittsford and Penfield where it would otherwise be useful. An additional factor unique to the area along Lake Ontario is the presence of intense summertime tropospheric ducting, which routinely causes co-channel CBCK (Channel 298) from Kingston, Ontario to wipe out W298CH reception

along the lakeshore.

The grant of a remedial move to non-adjacent channel 246 would eliminate these interference situations, while the displacement of WEPL-LP to channel 253 would preserve that facility's existing coverage while creating no new interference.

**W298CH Figure 1**



The yellow areas on this Longley-Rice map indicate areas of 60 dBu or higher, while green areas indicate 70 dBu or higher. It is immediately obvious that WNBL's real-world 60 dBu signal extends far north of its predicted contour, extending all the way to the existing W298CH licensed site.

Based on FCC "FM Model" calculations assuming an EPA Type 2 one-bay antenna, the maximum radiofrequency power density attributable to the proposed station at two meters above rooftop level will not exceed 57 percent of the General Population / Uncontrolled exposure guideline; therefore, the proposed facility should not have a significant environmental impact.

The proposed W298CH facility will be mounted on a pole on a mechanical penthouse of the Innovation Square skyscraper. Access to the rooftop is through a locked hatchway accessible only to authorized, trained personnel. The highest occupied level of the Innovation Square building, floor 29, is located more than 15 meters below the rooftop and several unoccupied mechanical floors. Assuming no attenuation through the rooftop and concrete floors, the maximum RF power density attributed to the proposed station will not exceed 5 percent of the General Population / Uncontrolled exposure guideline.

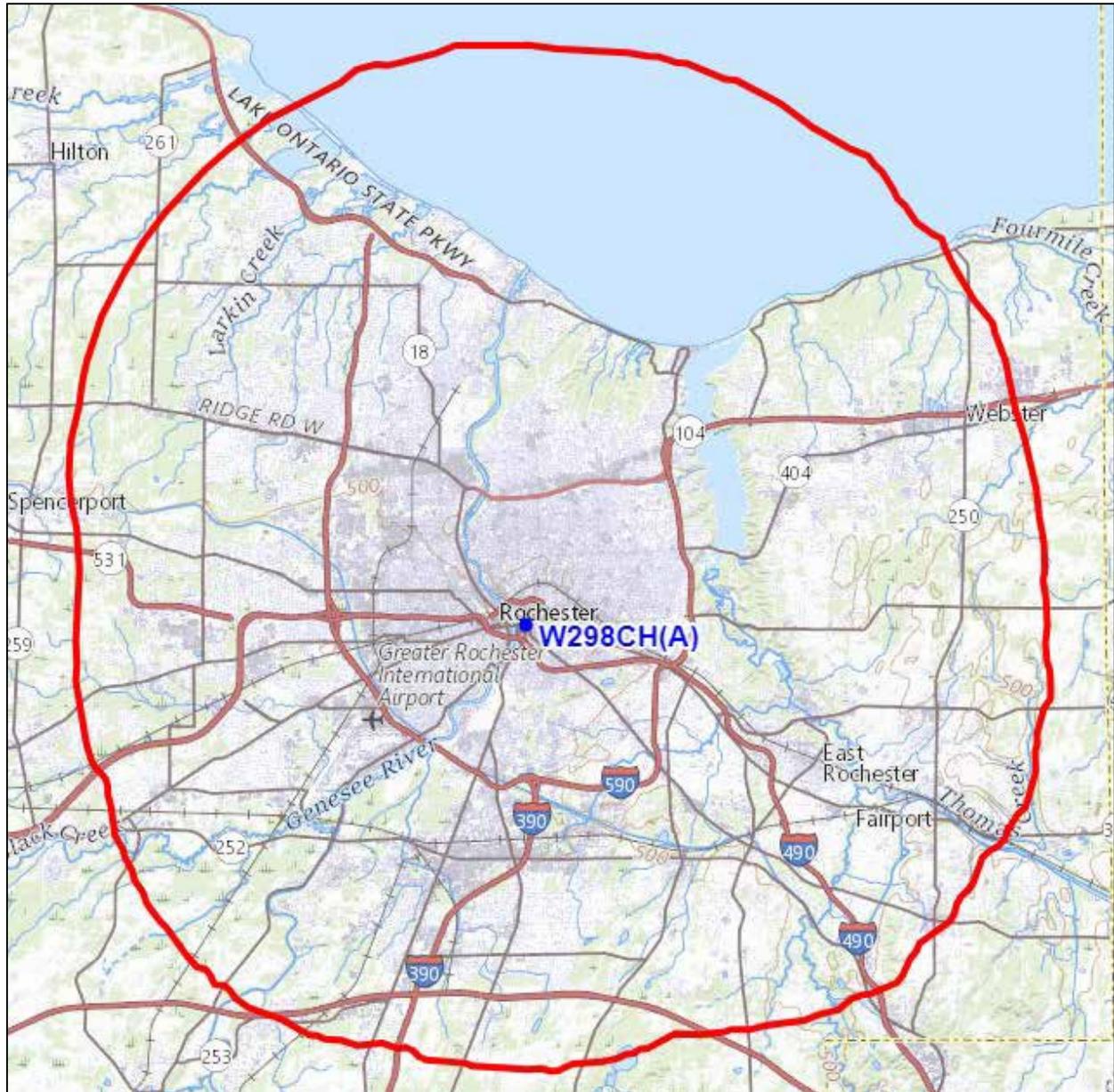
In coordination with other users, applicant will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.



REC Networks/Michelle Bradley CBT  
11541 Riverton Wharf Rd.  
Mardela Springs, MD 21837  
844.REC.LPFM/202.621.2355  
recnet.com

Minor change for W298CH  
ROCHESTER, NY  
WXXI PUBLIC BROADCASTING COUNCIL, INC.  
BLFT-20181107AAD

## PROPOSED 60dBu F(50,50) SERVICE CONTOUR

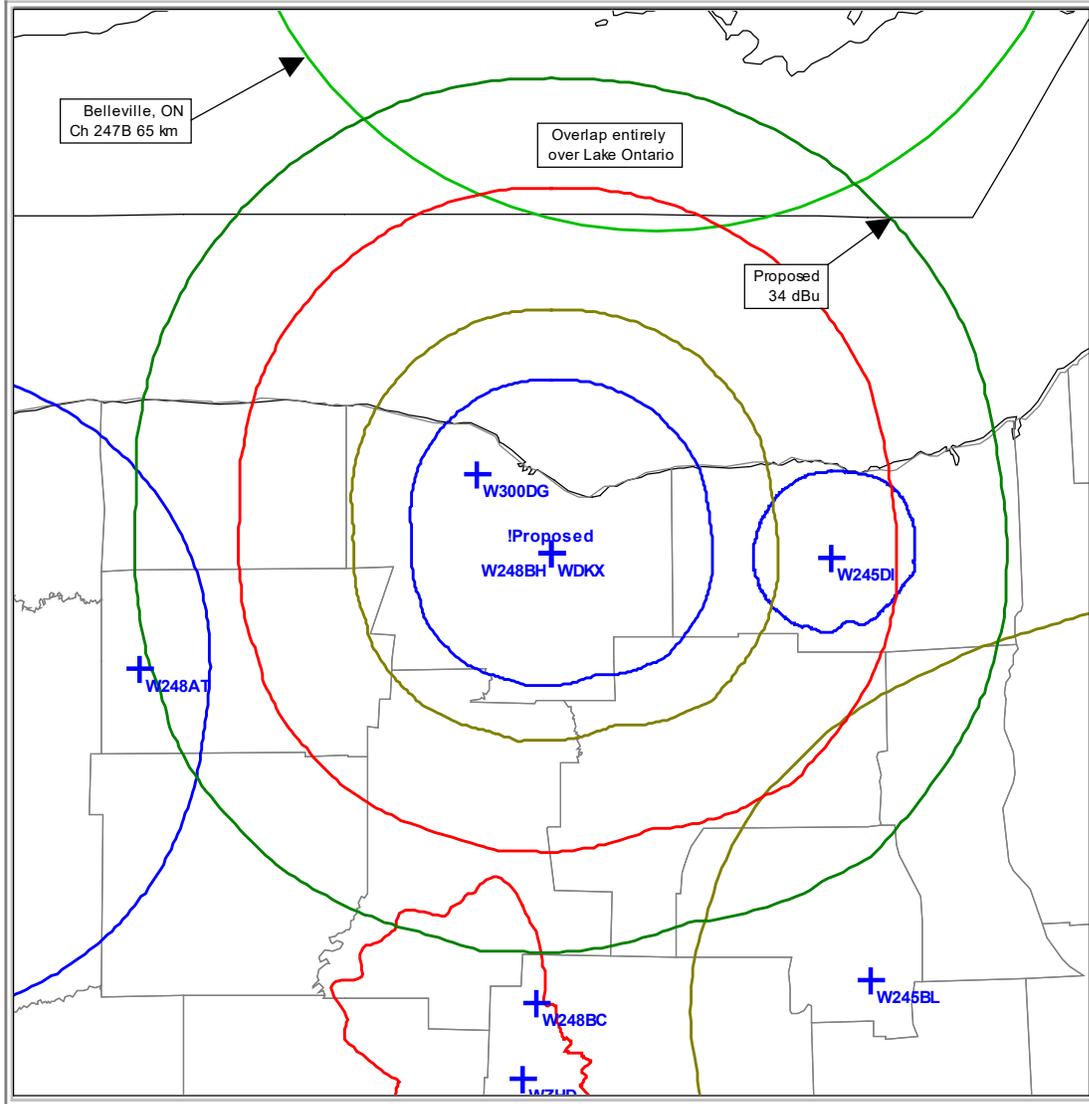


ROCHESTER, NY ~ Channel 246D (97.1 MHz) ~ ERP 0.250 kW  
Elev: 154 meters ~ RCAGL: 135 meters ~ RCAMSL: 289 meters  
Overall tower height: 144.2 meters AGL ~ ASR: 1007809  
NAD83 Latitude: 43° 09' 17.2" NL ~ Longitude: 77° 36' 15.0" WL  
No nearby AM stations within 3km of proposed site.  
Existing tower.

ComStudy 2.2 search of channel 246 (97.1 MHz Class D) at 43-09-17.2 N, 77-36-15.0 W.

| CALL                     | CITY          | ST | CHN | CL    | DIST   | SEP   | BRNG  | CLEARANCE |
|--------------------------|---------------|----|-----|-------|--------|-------|-------|-----------|
| WCMF-FM                  | ROCHESTER     | NY | 243 | B     | 2.71   | 0.00  | 145.3 | -71.44 dB |
| >> Waiver requested.     |               |    |     |       |        |       |       |           |
| WEPL-LP                  | ROCHESTER     | NY | 246 | LP100 | 2.55   | 24.00 | 333.2 | -51.51 dB |
| >> See related exhibits. |               |    |     |       |        |       |       |           |
| W248BH                   | ROCHESTER     | NY | 248 | D     | 0.04   | 0.00  | 240.7 | -48.27 dB |
| >> Waiver requested.     |               |    |     |       |        |       |       |           |
| WZHD                     | CANASERAGA    | NY | 246 | A     | 83.79  | 0.00  | 183.1 | 2.33 dB   |
| CIGLFM                   | BELLEVILLE    | ON | 246 | B     | 117.11 | 0.00  | 7.8   | 3.87 dB   |
| W245DI                   | SODUS         | NY | 245 | D     | 43.51  | 0.00  | 90.8  | 4.40 dB   |
| WGRF                     | BUFFALO       | NY | 245 | B     | 106.05 | 0.00  | 258.2 | 5.26 dB   |
| W300DG                   | HILTON        | NY | 300 | D     | 5.72   | 0.00  | 289.3 | 5.7       |
| WYXL                     | ITHACA        | NY | 247 | B     | 126.54 | 0.00  | 127.0 | 6.05 dB   |
| W300DG                   | HILTON        | NY | 300 | D     | 17.00  | 0.00  | 317.0 | 17.0      |
| CIGLFM                   | BELLEVILLE    | ON | 246 | B     | 117.12 | 0.00  | 7.8   | 17.85 dB  |
| W245BL                   | DUNDEE        | NY | 245 | D     | 84.22  | 0.00  | 143.5 | 19.87 dB  |
| WOUR                     | UTICA         | NY | 245 | B     | 197.30 | 0.00  | 89.4  | 28.29 dB  |
| CIEZFM                   | TORONTO       | ON | 247 | B     | 154.30 | 0.00  | 291.2 | 30.36 dB  |
| WFRY-FM                  | WATERTOWN     | NY | 248 | C1    | 167.69 | 0.00  | 57.2  | 31.87 dB  |
| W248AT                   | CORFU         | NY | 248 | D     | 66.74  | 0.00  | 254.3 | 31.55 dB  |
| CHTZFM                   | ST CATHARINES | ON | 249 | B     | 135.11 | 0.00  | 267.9 | 31.08 dB  |
| WREO-FM                  | ASHTABULA     | OH | 246 | B     | 300.57 | 0.00  | 241.3 | 34.79 dB  |
| W248BC                   | DANSVILLE     | NY | 248 | D     | 71.58  | 0.00  | 182.0 | 34.28 dB  |
| WZBF                     | RIDGEBURY     | PA | 245 | A     | 157.36 | 0.00  | 152.3 | 35.05 dB  |
| WCIO                     | OSWEGO        | NY | 244 | A     | 105.32 | 0.00  | 69.2  | 37.08 dB  |
| WDDH                     | ST. MARYS     | PA | 248 | B     | 197.25 | 0.00  | 210.4 | 37.71 dB  |
| WBHT                     | MOUNTAIN TOP  | PA | 246 | A     | 261.69 | 0.00  | 146.4 | 39.58 dB  |

### §74.1204 Contour Protection + Canada Protection



Red=Co Ch., Blue=First Adj, Brown=First Adj (Class B), Green 34 dBu proposed vs. Canada Allotment

**WITH RESPECT TO CANADA**

W298CH  
Rochester, New York  
Ch. 246D ~ 97.1 MHz

The proposed facility has a 34 dBu interfering contour that extends into the territorial boundary of Canada. Canada has an allotment on Channel 247B at Belleville, Ontario (CIGL-FM).

Pursuant to the *Working Arrangement for the Allotment and Assignment of FM Broadcasting Channels under the Agreement between the Government of Canada and the Government of the United States of America relating to the FM Broadcasting Service* ("Canada Agreement"), Low Power FM stations, such as FM Translators must protect Canadian Class B allotments to 65 kilometers from their reference coordinates.<sup>1</sup>

The proposed facility places a 34 dBu interfering contour that overlaps the 65 kilometer allotment over Canadian territory. However, this overlap is entirely over Lake Ontario and therefore there is no land area, including islands within this area.<sup>2</sup>

Applicant requests a waiver of §74.1235(d)(3) as the 34 dBu interfering contour extends beyond 60 kilometers. As previously stated, the 34 dBu contour does cross into Canadian territory, however that encroachment is entirely over water and the 34 dBu interfering contour does not reach any land area in Canada, including islands. The Commission has routinely granted waivers for FM Translator applicants in this situation.<sup>3</sup>

Prepared by  
/S/  
Michelle Bradley, CBT  
REC Networks

August 25, 2023

---

<sup>1</sup> Canada Agreement at §5.2.2.1.

<sup>2</sup> See also Canada Agreement at §5.2.2.4.

<sup>3</sup> See also W248BH (Facility ID No. 150641) File No. BPFT-20160205AAH (*Granted* Apr. 29, 2016); also W234AZ (Facility ID No. 156288) File No. BPFT-20141205CLM (*Granted* Mar. 4, 2015).



The entire 34 dBu contour of the proposed facility in Canada is entirely over water and does not reach any land area, including islands.

**REQUEST FOR WAIVER OF §74.1204(a)**  
**SECOND AND THIRD ADJACENT CHANNEL**

W298CH  
Rochester, New York  
Ch. 246D ~ 97.1 MHz

The proposed facility does not meet the §74.1204(a) contour overlap requirements with third-adjacent full-service FM station WCMF-FM, Rochester, New York and second-adjacent FM translator W248BH, Rochester, New York. We will address these deficiencies as set forth:

WCMF-FM operates on Channel 243B with an effective radiated power (ERP) of 48 kW at 142 meters height above average terrain (HAAT) into a directional antenna. WCMF-FM places a 112 dBu service contour at the proposed site. WCMF-FM is located 2.7 km from the proposed site.

W248BH operates on Channel 248D with an ERP of 0.25 kW into a directional antenna. W248BH is co-located on the same building as the proposed translator facility and therefore places a service contour in excess of 140 dBu at the proposed site.

In the event of multiple overlapped second or third-adjacent stations, we further evaluate the station with the weaker field strength arriving at the proposed site. In this case, that would be WCMF-FM.

Utilizing the U/D method<sup>4</sup>, the proposed translator is predicted to create an undesired interference overlap in respect to WCMF-FM to the proposed translator's 152 dBu interfering contour (overlap zone). At 250 watts ERP, the overlap zone extends to only 3 meters using free-space methodology. The proposed station is on the rooftop tower at Innovation Square, formerly known as Xerox Tower. As the overlap zone only extends about 10 feet from the radiation center, it will not reach any occupied portions of the building.

Based on the information provided, it is demonstrated that the proposed translator facility will not create any interference to listeners or potential listeners WCMF-FM and W248BH. Therefore, applicant is requesting a waiver of §74.1204(a) in respect to WCMF-FM and W248BJ, both Rochester, New York.

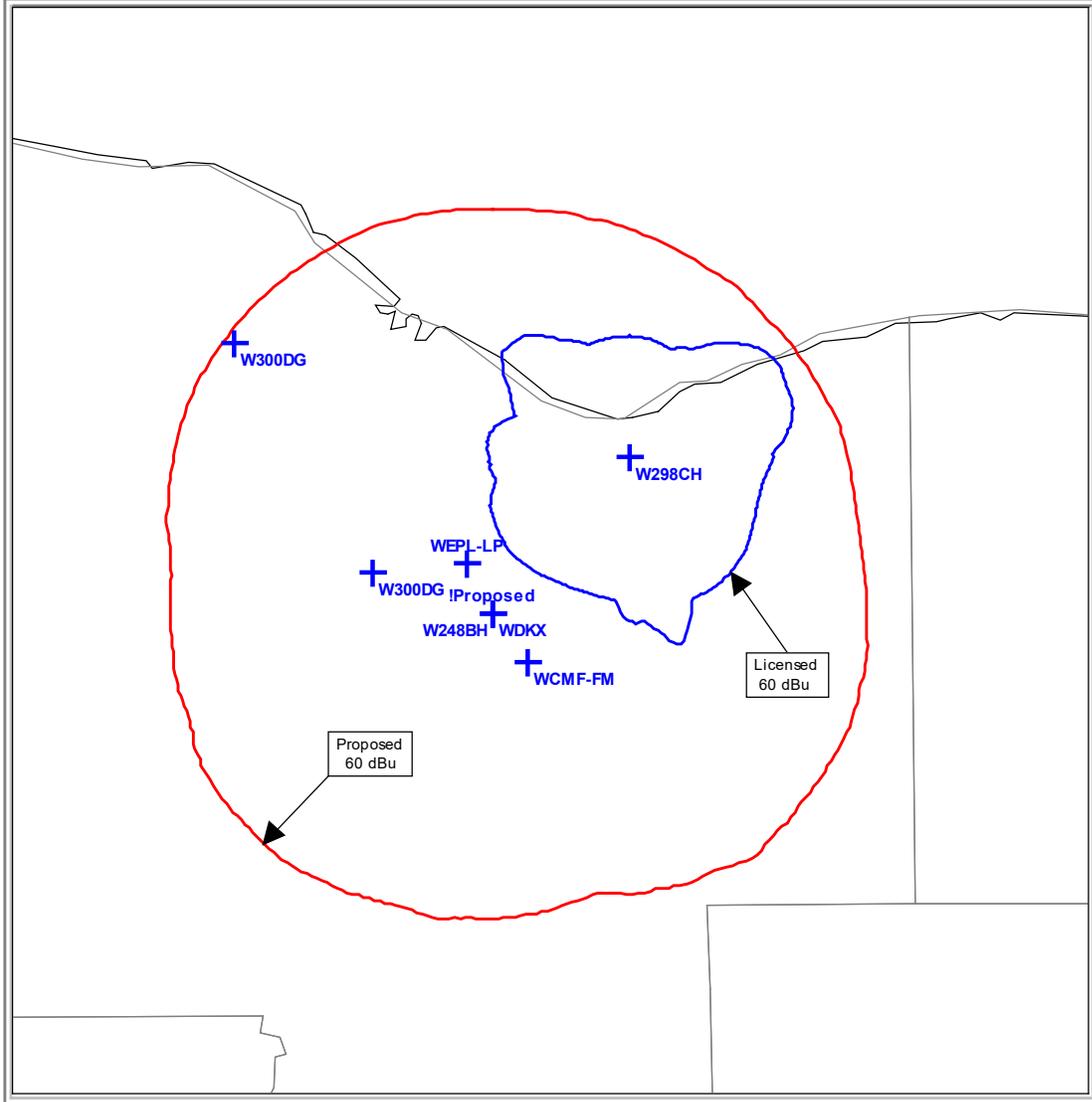
Prepared by  
/S/  
Michelle Bradley, CBT  
REC Networks

August 25, 2023

---

<sup>4</sup> See Living Way Ministries, Inc., *Memorandum Opinion and Order*, 17 FCC Rcd. 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd. 15070 (2008).

### Minor Modification



### Fill In Area: WXXI-FM (HD2) Rochester, NY

