

**KMXH 93.9 FM Comprehensive Technical Exhibit**

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## **SUMMARY**

JWBP Broadcasting, LLC ("Applicant"), licensee of station KMXH 93.9 FM (Facility ID #21854) at Alexandria, Louisiana, hereby submits this application in furtherance of upgrading the broadcast facility of KMXH from a FM Class A authorization to a FM Class C3 authorization. Applicant currently holds Commission Authorization BPH-20140714AAT, which is set to expire on August 15, 2017. Through its application herein, Applicant respectfully requests modification of its existing Construction Permit to facilities specified herein, using its present antenna structure location and elevation, while seeking an increase in Effective Radiated Power level from 6,000 Watts to 7,300 Watts.

**EXHIBIT 28 – COMMUNITY COVERAGE / SECTION 73.315 EXHIBIT**

The current KMXH transmitter site lies within the licensed community of Alexandria, Louisiana, and as such, the community is easily encompassed by the F(50,50) 70 dBu (3.16 mV/m) signal using the Commission's curves propagation methodology. The present KMXH facility is already licensed to Alexandria at a lower effective radiated power level that what is contemplated herein, from the same tower location and antenna elevation. Therefore, it is concluded that the proposed facility complies with the Commission's Rules pertaining to requisite community coverage.

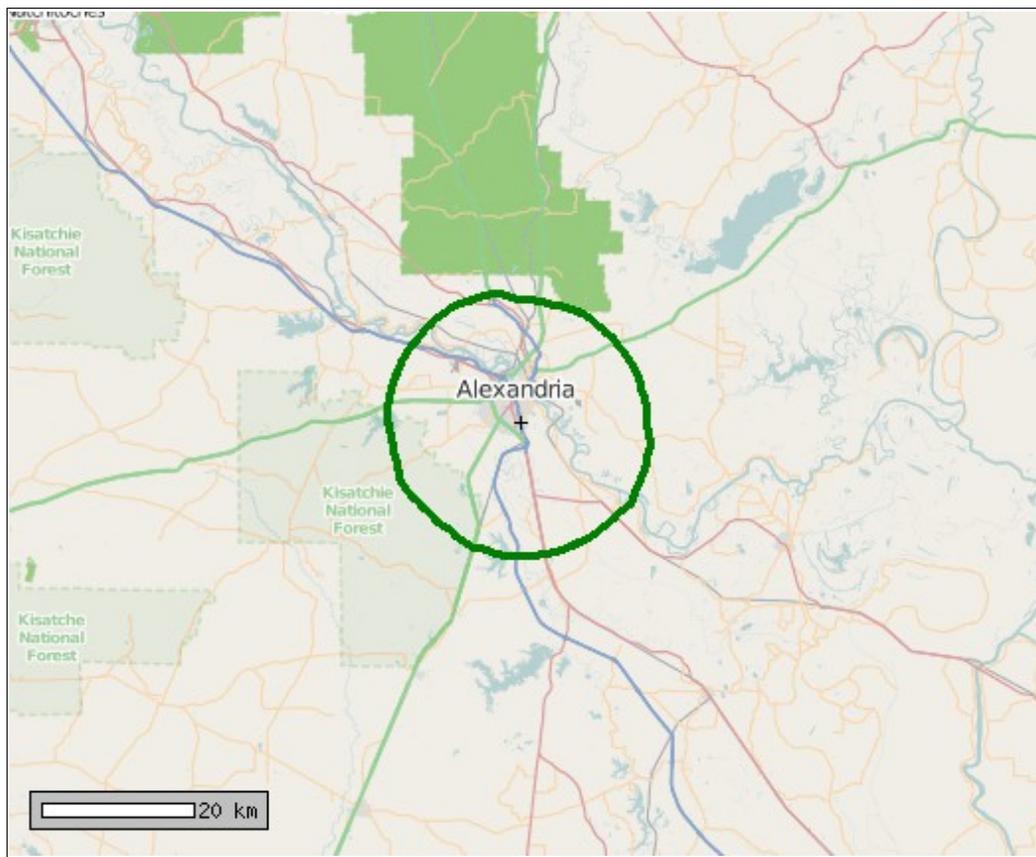


FIGURE 1: Predicted F(50,50) 70 dBu contour in Alexandria, Louisiana.

**EXHIBIT 30 – SEPARATION STUDY / SECTION 73.207 EXHIBIT**

Table 1 shows the spacing study performed for the proposed KMXH facility. All minimum distance requirements of 47 C.F.R. §73.207 are met with the exceptions of the licensed facility of station KYFJ 93.7 FM at New Iberia, Louisiana on FM Channel 229C1, as well as the licensed facility of station KGGM 93.9 FM at Delhi, Louisiana on FM Channel 230C3. §73.215 processing is requested to resolve these short-spacings (see Exhibit 34).

**TABLE 1: Section 73.207 Separation Study**

Proposed Station: KMXH, Alexandria, Louisiana  
Channel: 230C3  
Coordinates: 31-16-04.3 N 92-26-23.5 W

| FAC ID | CDBS    | CALL    | TYPE | CHANNEL | COMMUNITY    | STATE | DISTANCE | MINIMUM | DIFFERENCE |
|--------|---------|---------|------|---------|--------------|-------|----------|---------|------------|
| 8167   | 1638758 | KYFJ    | LIC  | 229C1   | NEW IBERIA   | LA    | 135.32   | 144.00  | -8.68      |
| 35646  | 1660288 | KGGM    | LIC  | 230C3   | DELHI        | LA    | 152.24   | 153.00  | -0.76      |
| 41057  | 564136  | KSMB    | LIC  | 233C    | LAFAYETTE    | LA    | 102.68   | 96.00   | 6.68       |
| 58931  | 187333  | WEMX    | LIC  | 231C1   | KENTWOOD     | LA    | 151.32   | 144.00  | 7.32       |
| 166024 | 1243564 | KRLQ    | LIC  | 231C2   | HODGE        | LA    | 133.80   | 117.00  | 16.80      |
| 52140  | 492263  | KJAE    | LIC  | 228C3   | LEESVILLE    | LA    | 82.74    | 43.00   | 39.74      |
| 191529 | 1739208 | WETH    | LIC  | 232C3   | HARRISONBURG | LA    | 87.32    | 43.00   | 44.32      |
| 46982  | 70125   | KXKS-FM | LIC  | 229C0   | SHREVEPORT   | LA    | 210.28   | 163.00  | 47.28      |
| 46982  | 1738103 | KXKS-FM | LIC  | 229C0   | SHREVEPORT   | LA    | 210.33   | 163.00  | 47.33      |
| 48918  | 21268   | KQXY-FM | LIC  | 231C1   | BEAUMONT     | TX    | 196.61   | 144.00  | 52.61      |
| 190004 | 1738589 | KFON    | CP   | 230C2   | GROVETON     | TX    | 240.09   | 177.00  | 63.09      |
| 16370  | 220812  | KNEK-FM | LIC  | 284C3   | WASHINGTON   | LA    | 98.88    | 14.00   | 84.88      |
| 70355  | 243578  | KWTG    | LIC  | 284A    | VIDALIA      | LA    | 105.99   | 12.00   | 93.99      |
| 198781 | 1687134 | KPDJ    | CP   | 228A    | CALHOUN      | LA    | 139.32   | 42.00   | 97.32      |

73.215 processing is requested to resolve the short-spacings to KYFJ and KGGM.

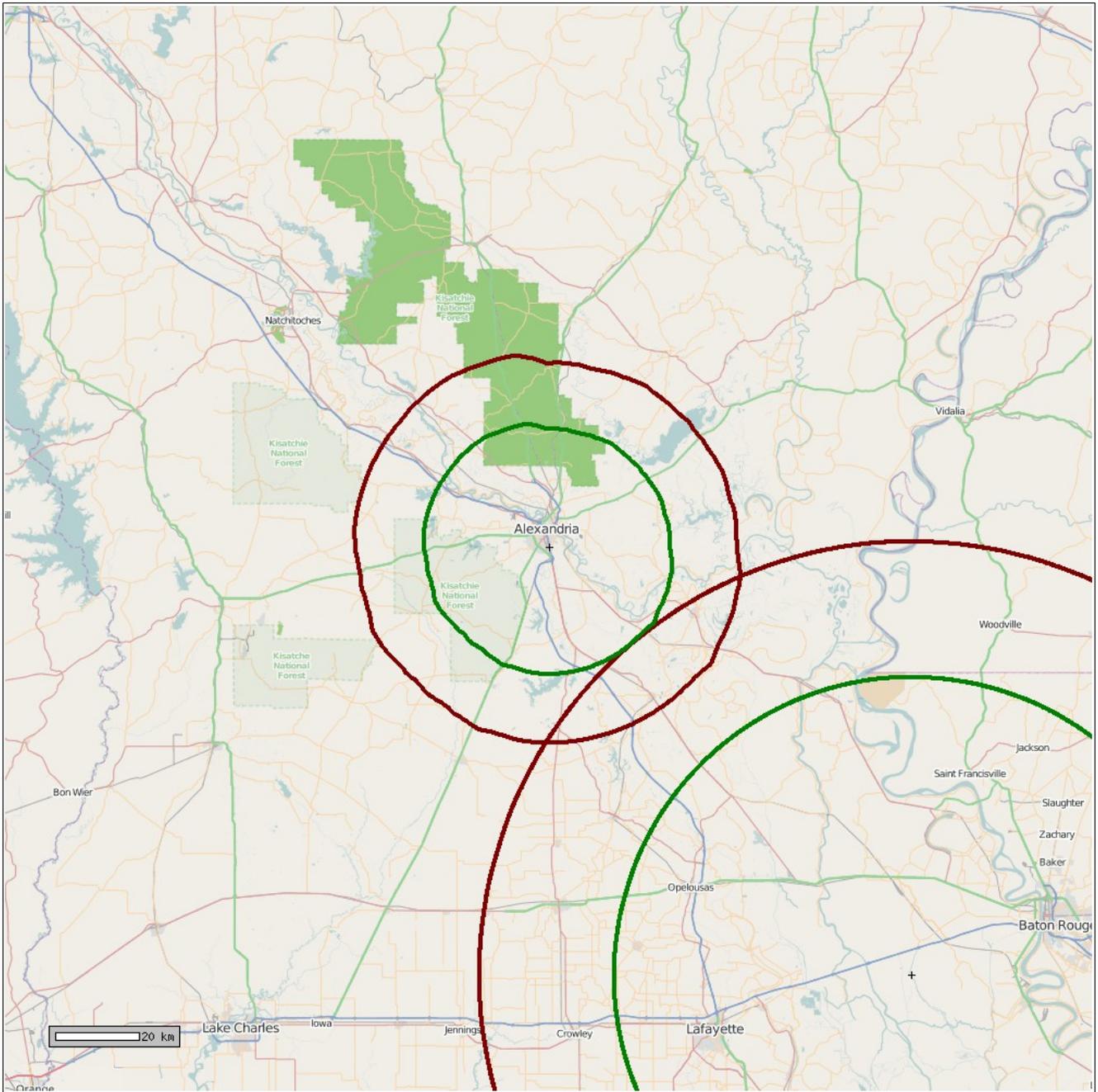
## **EXHIBIT 34 – CONTOUR PROTECTION STUDY / SECTION 73.215 EXHIBIT**

Although the proposed KMXH facilities do not satisfy the minimum spacing requirements of §73.207 with regard to the licensed facilities of station KYFJ, New Iberia, Louisiana or KGGM, Delhi, Louisiana, the contour protection requirements for short-spaced assignments of §73.215 are met towards both.

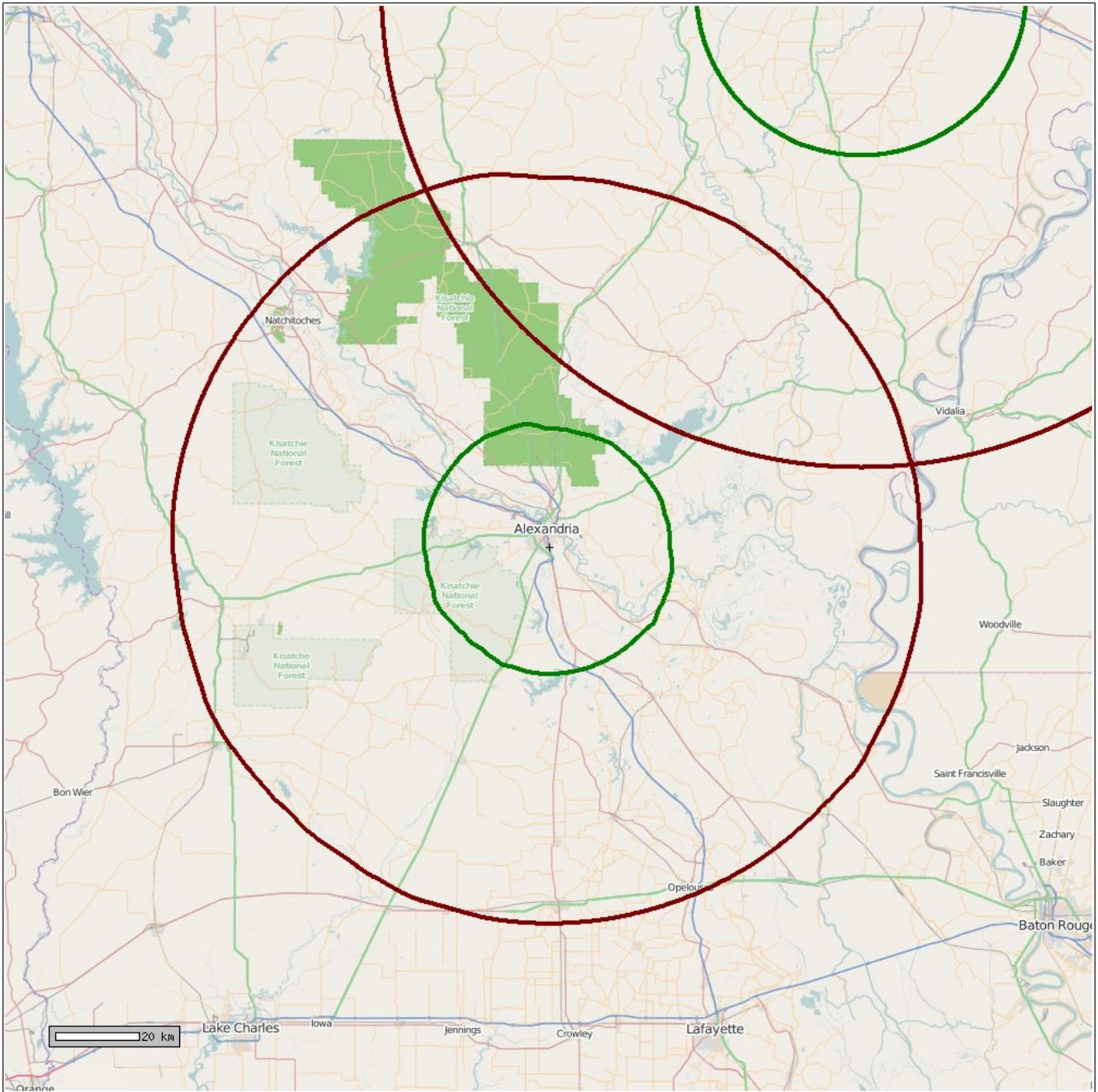
1) The distance between the KYFJ (229C1) transmitter site and the KMXH (230C3) transmitter site is 135.32 km. Although this distance is less than the 144 km spacing required under §73.207, it exceeds the 133 km minimum distance requirement of §73.215(e). The locations of the protected and interfering contours of KYFJ (using its hypothetical maximum facilities of 100 kW at 299 meters above average terrain) and the proposed KMXH facility were determined and are shown in Figure 2. No prohibited overlap is expected between the protected and interfering contours.

2) The distance between the KGGM (230C3) transmitter site and the KMXH (230C3) transmitter site is 152.24 km. Although this distance is less than the 153 km spacing required under §73.207, it exceeds the 142 km minimum distance requirement of §73.215(e). The locations of the protected and interfering contours of KGGM (using hypothetical maximum facilities of 25 kW at 100 meters above average terrain) and the proposed KMXH facility were determined and are shown in Figure 3. No prohibited overlap is expected between the protected and interfering contours.

Relevant contour plots were generated by computer using the methods specified in §73.313. Antenna height above average terrain was computed using the standard eight-radial method specified in §73.313(d). Average terrain along additional azimuths was computed and used in conjunction with the F(50,50) and F(50,10) curves to determine distances to protected and interfering contours respectively. These additional azimuths were not included in the computation of the antenna eight-radial height above average terrain. Elevation data used in the computation of average terrain was determined by linear interpolation of USGS 30-arcsecond digital elevation model files consistent with §73.312.



**FIGURE 2:** The above image depicts the F(50,50) 60 dBu contour of the proposed KMXH facilities (green, center of image), and the licensed KYFJ F(50,50) 60 dBu contour (green, lower right of image), as well as the F(50,10) 54 dBu contours of both stations. As shown above, at no point does the KYFJ F(50,10) 54 dBu interfering contour overlap the KMXH F(50,50) 60 dBu primary service area.



**FIGURE 3:** The above image depicts the F(50,50) 60 dBu contour of the proposed KMXH facilities (green, center of image), and the licensed KGGM F(50,50) 60 dBu contour (green, upper right of image), as well as the F(50,10) 40 dBu contours of both stations. As shown above, at no point does either station's F(50,10) 40 dBu interfering contour intersect with the F(50,50) 60 dBu primary service area of the other.