

# COMPREHENSIVE TECHNICAL EXHIBIT

## DISCUSSION

Applicant seeks modification of its current Construction Permit (BMPH-20090121ACC) to relocate full-service KXCD(FM), Fairfield, ID, FID # 164259, to a different tower location with a corresponding change in the CORAMSL, ERP, and antenna pattern.

## ANTENNA SITE CITY GRADE COVERAGE

Figures 1&2 below reveals continued 100% 70 dBu city-grade coverage of the City of License (Fairfield, ID).

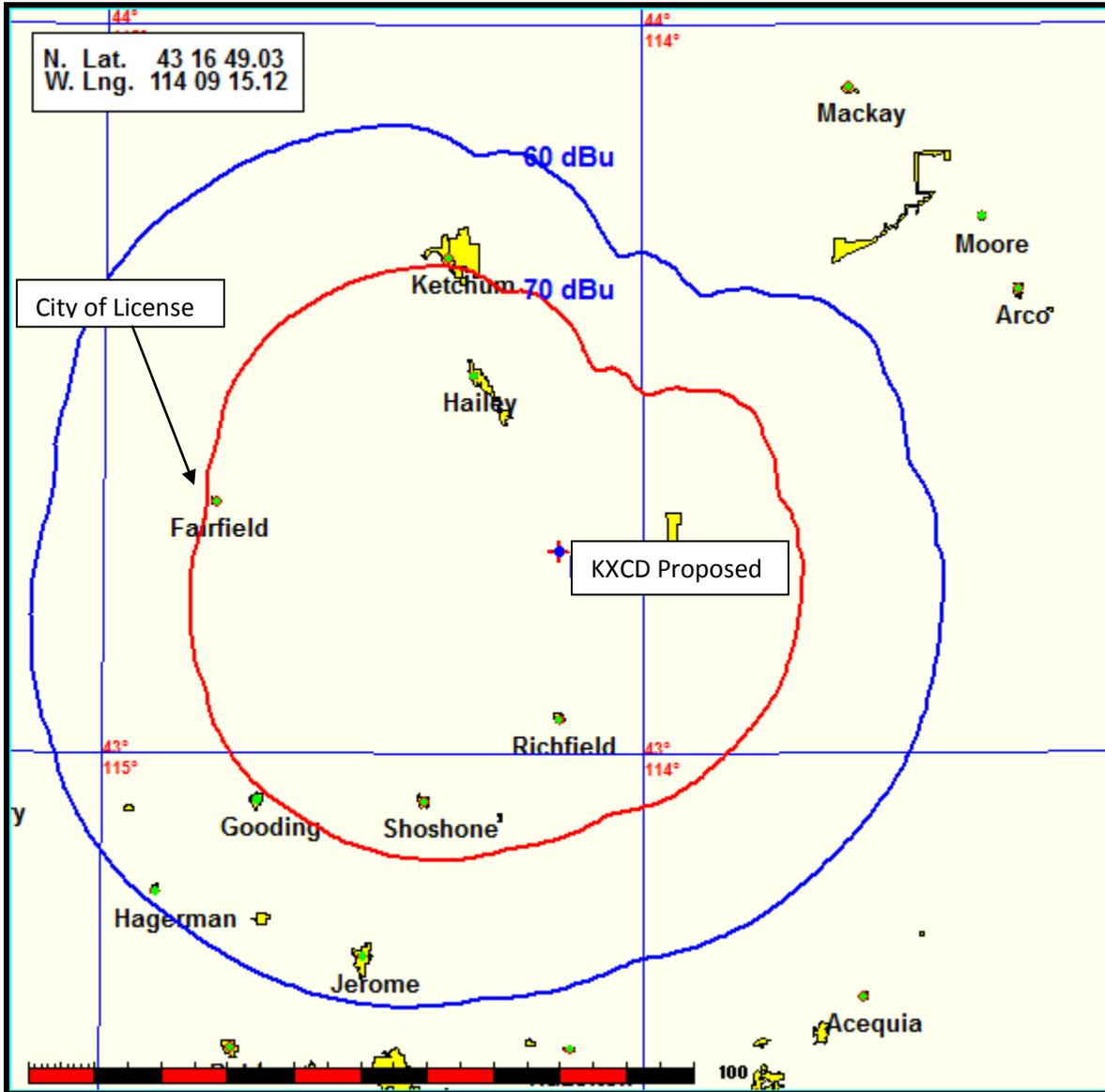


Figure 1

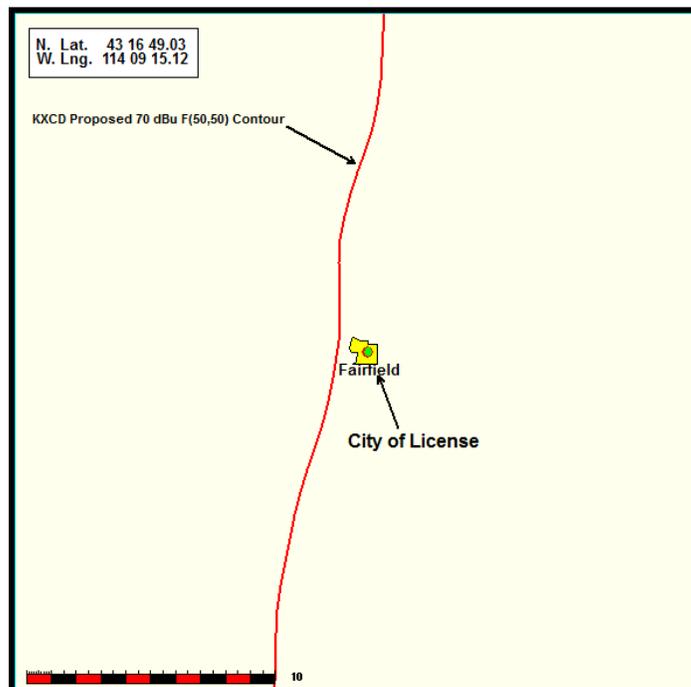


Figure 2

**INTERFERENCE STUDY (Requesting Section 73.215 Contour Protection):**

Figure 3 is a 73.207 channel spacing study from the proposed KXCD(FM) antenna site noting that the proposed KXCD(FM) antenna site would be short-spaced 5.5 km to co-channel Class C3 KUPY(FM) Sugar City, ID, FID #190386.

KXCD Move to New Site  
Lee Family Braodcasting, Inc.

|                                    |  |  |  |                              |  |                 |
|------------------------------------|--|--|--|------------------------------|--|-----------------|
| REFERENCE                          |  |  |  |                              |  | DISPLAY DATES   |
| 43 16 49.03 N.                     |  |  |  | CLASS = C                    |  | DATA 08-19-20   |
| 114 09 15.12 W.                    |  |  |  | Current Spacings to 3rd Adj. |  | SEARCH 08-20-20 |
| ----- Channel 260 - 99.9 MHz ----- |  |  |  |                              |  |                 |

| Call   | Channel     | Location     |    | Azi   | Dist   | FCC   | Margin |
|--|-------------|--------------|----|-------|--------|-------|--------|
| KXCD   | CP 260C     | Fairfield    | ID | 268.6 | 103.96 | 289.5 | -185.5 |
| <b>NOTE:</b> Reference   |             |              |    |       |        |       |        |
| KZDX%  | LIC 260C    | Burley       | ID | 156.7 | 114.22 | 289.5 | -175.3 |
| <b>NOTE:</b> Reallocated to Channel 228C at Burley per Report and Order in MB Docket No. 05-243 (see text) |             |              |    |       |        |       |        |
| AL1673%  | RSV-A 260C1 | Salmon       | ID | 3.1   | 207.50 | 269.5 | -62.0  |
| <b>NOTE:</b> Reserved for KXCD per Docket 05-243   |             |              |    |       |        |       |        |
| KXCD   | LIC 260A    | Salmon       | ID | 6.0   | 210.87 | 225.5 | -14.6  |
| <b>NOTE:</b> Reference   |             |              |    |       |        |       |        |
| KUPY   | LIC 260C3   | Sugar City   | ID | 76.5  | 231.05 | 236.5 | -5.5   |
| KQPI   | LIC-N 258C2 | Aberdeen     | ID | 110.6 | 145.61 | 104.5 | 41.1   |
| KCHQ   | LIC 261A    | Soda Springs | ID | 108.1 | 219.23 | 164.5 | 54.7   |
| KQXR   | LIC 262C1   | Payette      | ID | 288.5 | 199.68 | 104.5 | 95.2   |
| KLXI   | LIC 258C1   | Fruitland    | ID | 287.3 | 202.74 | 104.5 | 98.2   |

% = Station fails 73.215.  
RSV-R = reserved - needs protection, RSV-A = allocation.  
All separation margins include rounding

**73.215 processing requested**

Figure 3

The spacing study indicates an apparent short-spacing to the licensed operation of station KZDX on Channel 260C at Burley, Idaho. However, per the Report and Order in MB Docket No. 05-243<sup>1</sup> that station was reallocated to Channel 228C at Burley. That action is now effective and final, and KZDX holds a construction permit for operation on Channel 228C at Burley (BPH-20110616ACJ granted on 08/30/2011). Per the policy enunciated in Auburn, Alabama,<sup>2</sup> no further protection of the KZDX licensed facility on Channel 260C is required. It is understood that the resulting KXCD construction permit (if issued prior to licensing of KZDX on Channel 228C) will bear a condition requiring activation of the new KZDX facility prior to or simultaneous with activation of the proposed KXCD facility.

The applicant requests Section 73.215 contour protection processing. KXCD(FM) is eligible to request 73.215 Contour Protection towards KUPY(FM) as it complies with the minimum separation requirements on its Co-channel at its proposed antenna site. In order to be eligible for 73.215 Contour Protection, the minimum “C to C3” spacing for Co-channel stations must be at least 225.5 kilometers. The proposed KXCD(FM) 260C antenna site satisfies this requirement by 5.55 kilometers (rounded).

Using the facilities proposed herein, KXCD(FM) 260C complies with the contour protection requirements of Section 73.215 towards KUPY(FM) 260C3, see **Figures 4&5**. The overlap map in **Figure 5** demonstrates that this application complies with the contour protection requirements of Section 73.215. **Figure 5** demonstrates that the proposed KXCD(FM) F(50,50) 60 dBu Protected Contour does not overlap the F(50,10) 40 dBu Interfering Contour of KUPY(FM) operations on Channel 260C3. Likewise, **Figure 5** demonstrates that the F(50,50) 60 dBu Protected Contour for KUPY(FM) does not overlap the proposed F(50,10) 40 dBu Interfering Contour of the instant KXCD(FM) application on 260C. Therefore, it appears as though the instant application meets the requirements of Section 73.215 towards KUPY(FM).

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<sup>1</sup> See Meeteetse, Wyoming, Fruita, Colorado, Ashton, Burley, Dubois, Idaho Falls, Pocatello, Rexburg, Shelley, Soda Springs, and Weston, Idaho, Lima, Montana, American Fork, Ballard, Brigham City, Centerville, Delta, Huntington, Kaysville, Logan, Manti, Milford, Naples, Oakley, Orem, Price, Randolph, Roosevelt, Roy, Salina, South Jordan, Spanish Fork, Vernal, Wellington, and Woodruff, Utah, Diamondville, Evanston, Kemmerer, Marbleton, Superior, Thayne, and Wilson, Wyoming, Report and Order in MB Docket No. 05-243, 23 FCC Rcd 447, January 18, 2008.

<sup>2</sup> See Auburn, Alabama, et al., Memorandum Opinion and Order, 18 FCC Rcd 10333 (MB 2003) (stating that parties may rely on actions taken in earlier rule making proceedings that are effective but not yet final) (“Auburn”).

73.215 Contour Protection Study

Lee Family Braodcasting, Inc.

REFERENCE  
43 16 49.0 N.  
114 09 15.1 W.

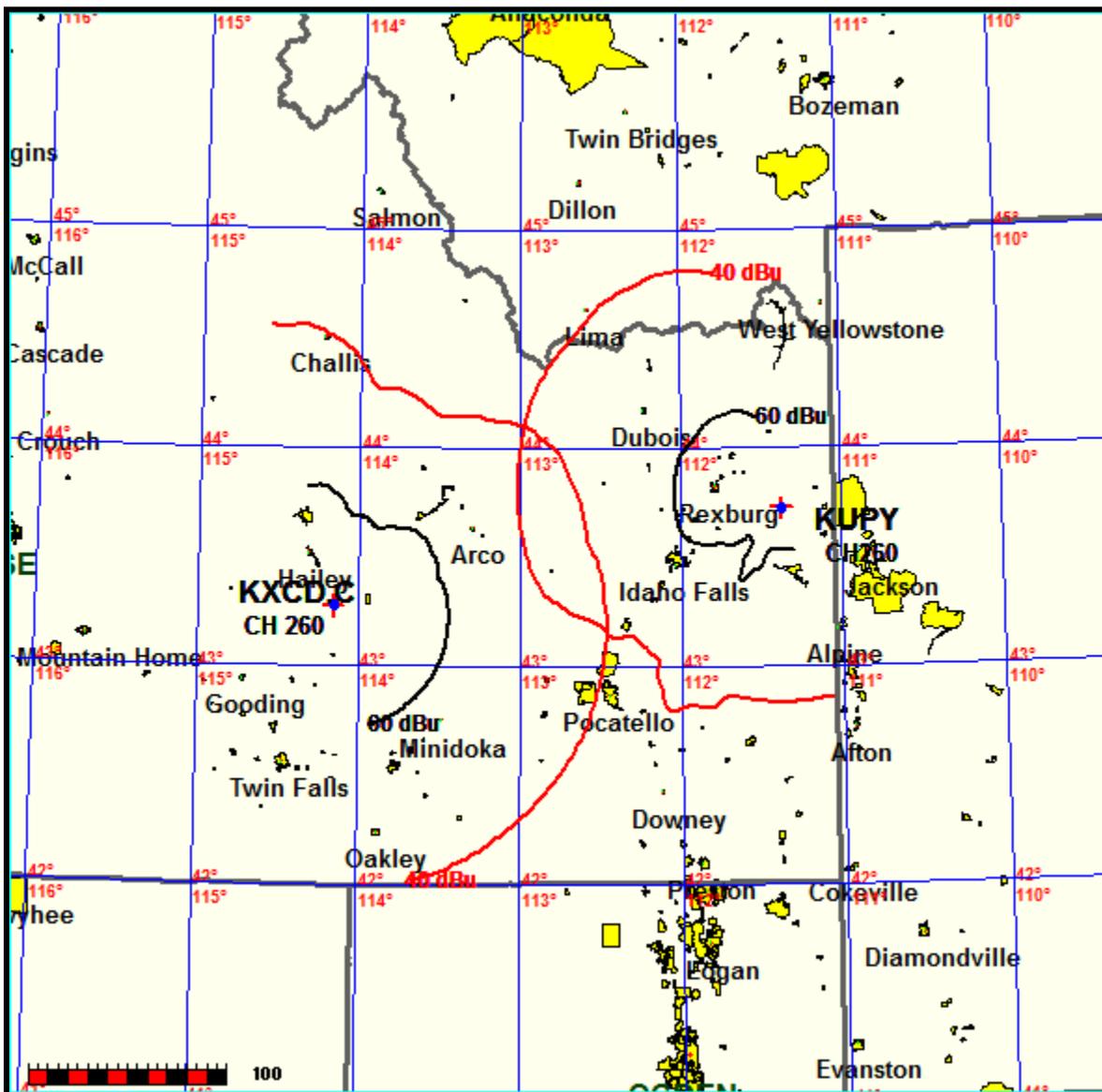
CH# 260C - 99.9 MHZ, Pwr= 74 kW DA, HAAT= 496.7 M, COR= 2018 M  
Average Protected F(50-50)= 83.5 km  
73.215 Directional

DISPLAY DATES  
DATA 08-19-20  
SEARCH 08-20-20

| CH<br>CITY   | CALL                 | TYPE  | ANT<br>STATE | AZI.<br><--    | DIST<br>FILE #            | LAT.<br>LNG.                | Pwr(kw)<br>HAAT(M) | INT(km)<br>COR(M) | PRO(km)<br>LICENSEE                 | *IN*<br>(Overlap in km) | *OUT*   |
|--|----------------------|-------|--------------|----------------|---------------------------|-----------------------------|--------------------|-------------------|-------------------------------------|-------------------------|---------|
| 260C<br>Burley   | KZDX% <sup>^</sup>   | LIC   | ID           | 156.7<br>337.1 | 114.22<br>BLH20040817AAG  | 42 20 05.60<br>113 36 18.00 | 100.000<br>600     | 216.3<br>2389     | 101.7<br>Lee Family Broadcasting, I | 269.5R                  | -155.3M |
| <b>NOTE: Reallocated to Channel 228C at Burley per Report and Order in MB Docket No. 05-243 (see text)</b> |                      |       |              |                |                           |                             |                    |                   |                                     |                         |         |
| 260C<br>Fairfield  | KXCD!                | CP    | ID           | 268.6<br>87.7  | 103.96<br>BMPH20090121ACC | 43 14 58.60<br>115 26 02.20 | 40.000<br>708      | 2268              | Lee Family Broadcasting, I          | ---Reference---         |         |
| 260C1<br>Salmon  | AL1673% <sup>^</sup> | RSV-A | ID           | 3.1<br>183.2   | 207.50<br>RM11340         | 45 08 41.72<br>114 00 39.26 | 100.000<br>299     | 167.1<br>2237     | 69.9                                | 248.5R                  | -41.0M  |
| <b>NOTE: Reserved for KXCD per Docket 05-243</b>   |                      |       |              |                |                           |                             |                    |                   |                                     |                         |         |
| 260A<br>Salmon   | KXCD!                | LIC   | ID           | 6.0<br>186.2   | 210.98<br>BLH20080411AHM  | 45 10 01.70<br>113 52 17.20 | 0.200<br>-400      | 1226              | Lee Family Braodcasting, I          | ---Reference---         |         |
| 260C3<br>Sugar City  | KUPY <sup>^</sup>    | LIC   | ID           | 76.5<br>258.4  | 230.41<br>BLH20141113AAY  | 43 43 53.60<br>111 21 54.80 | 25.000<br>100      | 129.8<br>2187     | 52.4<br>Frandsen Media Company, LL  | 35.4                    | 32.3    |
| 258C2<br>Aberdeen  | KQPI«                | LIC N | ID           | 110.6<br>291.7 | 145.61<br>BLH20080317ABD  | 42 48 30.60<br>112 29 12.90 | 2.200<br>597       | 3.1<br>2213       | 56.8<br>Sandhill Media Group, LLC   | 104.5R                  | 41.1M   |
| 261A<br>Soda Springs   | KCHQ«                | LIC   | ID           | 108.1<br>289.8 | 219.23<br>BLH19811229AK   | 42 38 29.70<br>111 36 42.80 | 3.000<br>-84       | 36.4<br>1831      | 21.9<br>Jackson Hole Media LLC      | 164.5R                  | 54.7M   |
| 262C1<br>Payette   | KQXR«                | LIC   | ID           | 288.5<br>106.9 | 199.68<br>BMLH20020715AAX | 43 49 30.60<br>116 30 32.50 | 100.000<br>216     | 6.2<br>1047       | 52.8<br>Lotus Boise Corp.           | 104.5R                  | 95.2M   |
| 258C1<br>Fruitland   | KLXI«                | LIC   | ID           | 287.3<br>105.7 | 202.74<br>BLED20190326AAM | 43 47 49.60<br>116 33 35.50 | 100.000<br>221     | 6.9<br>1008       | 57.2<br>Educational Media Foundati  | 104.5R                  | 98.2M   |

Terrain database is 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= - Zone 2, Co to 3rd 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.  
« = Station meets FCC minimum distance spacing for its class.  
<sup>^</sup> = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements  
% = Station Fails minimum 73.215 spacings. 73.215 spacings are used

Figure 4



KXCD vs KUPY  
Figure 5

**ENVIRONMENTAL COMPLIANCE:**

**Downward Radiation Study (Measure Upon Construction)**

Due to the fact that several existing and proposed emitters are located at or near the site, the applicant agrees to conduct a Radiofrequency Electromagnetic Field survey at the site upon construction of the proposed facility to ensure that any areas at ground level that exceed the Commission’s exposure guideline values are appropriately marked and fenced. The results of the survey will be provided with the application for license. Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

**Existing Tower:**

The proposed facility is exempt from environmental processing because the facility is not located at a location specified in Section 1.1307(a)(1)-(8) of the Commission's Rules and since the tower in question already exists.