

**KAYF(FM)**  
**Bayfield, CO**

Proposed Minor Modification  
Of Licensed Facility

**CONTINGENT Application Overview:**

KAYF(FM) Bayfield, CO, proposes a one-step upgrade from Channel 223A to Channel 225C2 at Bayfield, CO. In order to be fully spaced under Section 73.207, the instant application is contingent upon the contingently and contemporaneously proposed application KRWN(FM) Farmington, NM, to voluntarily substitute Channel 223C1 for Channel 225C1. Since KRWN(FM)'s change to Channel 223C1 is, itself, contingent on KAYF(FM) vacating Channel 223A at Bayfield, the contingent applications for both stations are bi-directional in nature and, therefore, both stations must implement the channel changes simultaneously.

KAYF(FM) (FCC Facility ID# 164121) proposes to modify its currently Licensed Facilities using the following parameters:

**Tech Box:**

Channel:	225
Class:	C2
Antenna Coordinates:	N37-20-21, W107-49-25 (NAD 27)
Allotment Ref. Coordinates:	N37-13-51, W107-35-11 (NAD 27)
ASRN:	N/A
Tower Height AGL:	32 m
COR AMSL:	2757 m
COR AGL:	24 m

COR HAAT:	344 m
ERP:	9.2 kW
Directional Antenna:	No

**Allotment Modifications:**

KAYF(FM) proposes a one-step upgrade from Channel 223A to Channel 225C2. Therefore, Exhibit 1 is an allotment reference site channel spacings study for KAYF(FM) on Channel 225C2 at Bayfield, CO, demonstrating that the proposed facility is fully spaced pursuant to Section 73.207 towards all other authorizations, allotments, and proposals from the following location:

Allotment Reference Coordinates: N37-13-51, W107-35-11 (NAD 27)

**Allotment Site City-Grade Coverage:**

In accordance with the city grade coverage requirements of Section 73.315, Exhibit 2 demonstrates that the proposed allotment site provides requisite coverage of KAYF(FM)'s community of license – Bayfield, CO. As can be seen in the Exhibit, 100% of Bayfield's community boundaries are encompassed by the theoretical 70 dBu, circle contour. Also, no terrain obstructions are located between the antenna site and the community.

**Suitable Allotment Reference Site:**

In accordance with Note 1 to Section 73.3573, the allotment site is co-located with the currently licensed KAYF(FM) 223A antenna site.

**Antenna Site City-Grade Coverage:**

Exhibit 4 demonstrates that the proposed facility's antenna site provides city grade coverage of KAYF(FM)'s community of license – Bayfield, CO. As can be seen in the Exhibit, 100% of Bayfield's community boundaries are encompassed by the F(50,50) 70 dBu contour of the proposed facility.

**Interference Study (Fully Spaced):**

Exhibit 5 is a channel spacings study demonstrating that, once the contingently proposed voluntary channel substitution of Channel 223C1 for Channel 225C1 for KRWN(FM) at Farmington is granted and implemented, the proposed antenna site is fully spaced towards all applications, authorizations, and permits pursuant to Section 73.207.

**Downward Radiation Study (FM Model):**

The proposed FM Facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET Bulletin 65, Second Edition 97-01, August, 1997). The Commission's FM Model Power Density Prediction program was employed to determine the Field.

The instantly proposed facilities for KAYF(FM) are to be combined into a shared antenna with the licensed facilities of KPTE(FM) Durango, CO (see BLH-19950921GI). Therefore, using the ERI or Jampro "Rototiller" antenna with 4 sections and 0.5 wavelength spacing, and

the AGL height and ERP proposed in this application summed with the ERP of KPTE (9.2 kW) from the shared antenna, the highest predicted power density 2 meters above ground is less than 88.3% of the Uncontrolled Standard with a Power Density of 31.85 microwatts per square centimeter 86 meters from the base of the tower with both stations operating simultaneously.

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.

# **Exhibit 1**

## **Allotment Reference Site Channel Spacings Study**

ADD 225C2 Bayfield, CO  
Section 73.207 Allotment Site Channel Study

REFERENCE		CLASS = C2	DISPLAY DATES
37 13 51.0 N.		Current Spacings	DATA 09-09-08
107 35 11.0 W.			SEARCH 09-27-08

----- Channel 225 - 92.9 MHz -----

Call	Channel	Location		Azi	Dist	FCC	Margin
KAYF	LIC-N 223A	Bayfield	CO	0.0	0.00	54.5	-54.50

Of Note:  
Mutually Exclusive current authorization for KAYF(FM).

KRWN	LIC 225C1	Farmington	NM	223.7	82.09	223.5	-141.41
------	-----------	------------	----	-------	-------	-------	---------

Of No Concern:  
KRWN(FM), by a contemporaneous and contingently proposed filing, proposes a voluntary channel substitution of Channel 223C1 in lieu of Channel 225C1 at Farmington, NM. This contingent change will eliminate the shortspacing to KRWN(FM).

KRWN	PRO 223C1	Farmington	NM	223.7	82.09	78.5	3.59
------	-----------	------------	----	-------	-------	------	------

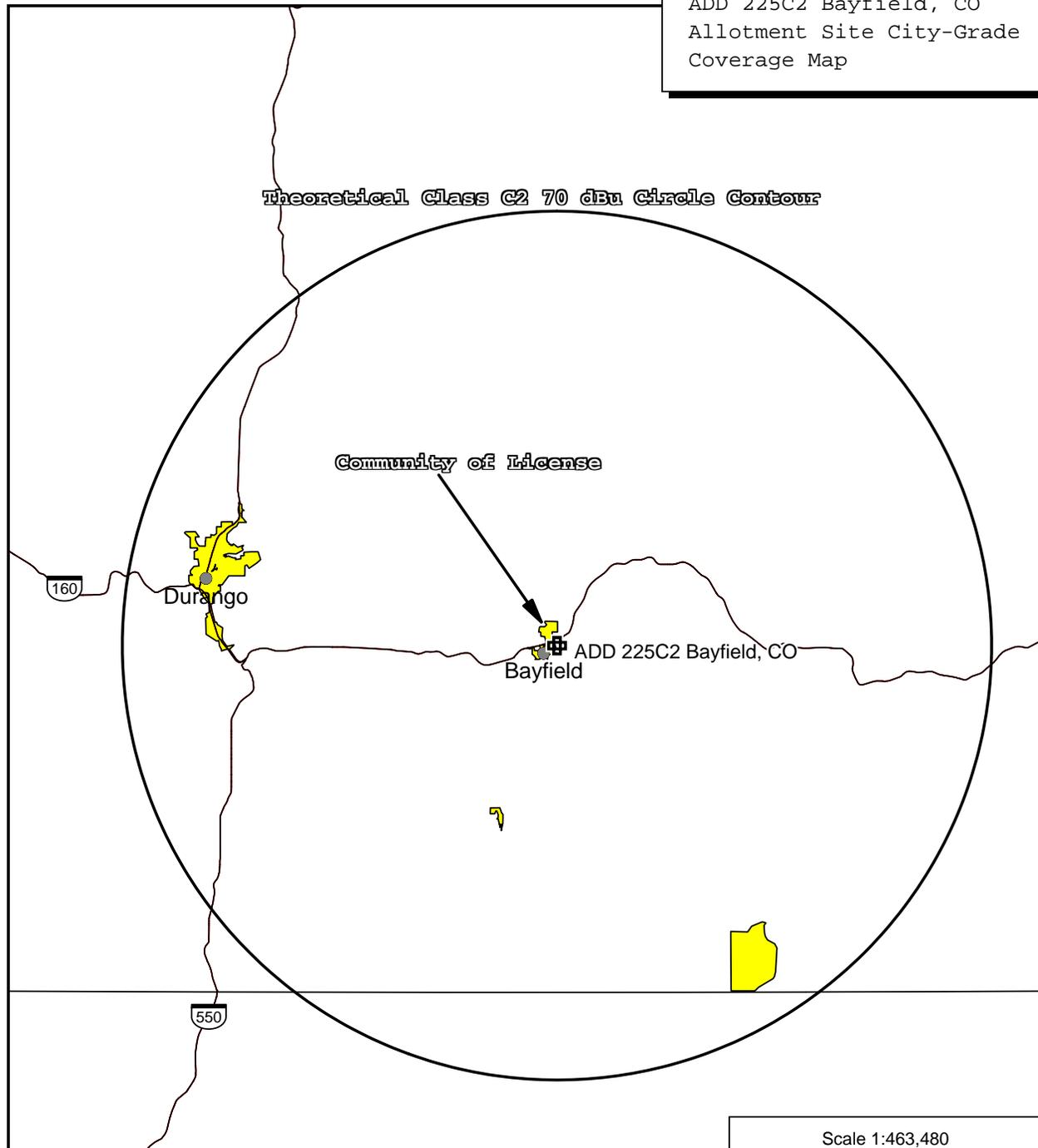
Of Note:  
Contingently Proposed antenna site for KRWN(FM) on Channel 223C1 at Farmington

KYBR	CP -Z 225C3	Espanola	NM	133.5	181.58	176.5	5.08
KYBR	LIC-Z 225C3	Espanola	NM	130.5	182.90	176.5	6.40
KKDC	LIC 227C2	Dolores	CO	287.8	87.13	57.5	29.63
KKPK	LIC 225C	Colorado Springs	CO	54.0	292.50	248.5	44.00
KBDX	LIC 224C2	Blanding	UT	292.8	178.98	129.5	49.48
KMGJ	LIC 226C0	Grand Junction	CO	334.0	227.63	175.5	52.13
KKCH	LIC-N 224C	Glenwood Springs	CO	4.4	243.59	187.5	56.09

## **Exhibit 2**

### **Allotment Reference Site City-Grade Coverage Map**

ADD 225C2 Bayfield, CO  
Allotment Site City-Grade  
Coverage Map



Theoretical Class C2 70 dBu Circle Contour

Community of License

160

Durango

Bayfield

ADD 225C2 Bayfield, CO

550

Scale 1:463,480



**ADD 225C2 Bayfield, CO**

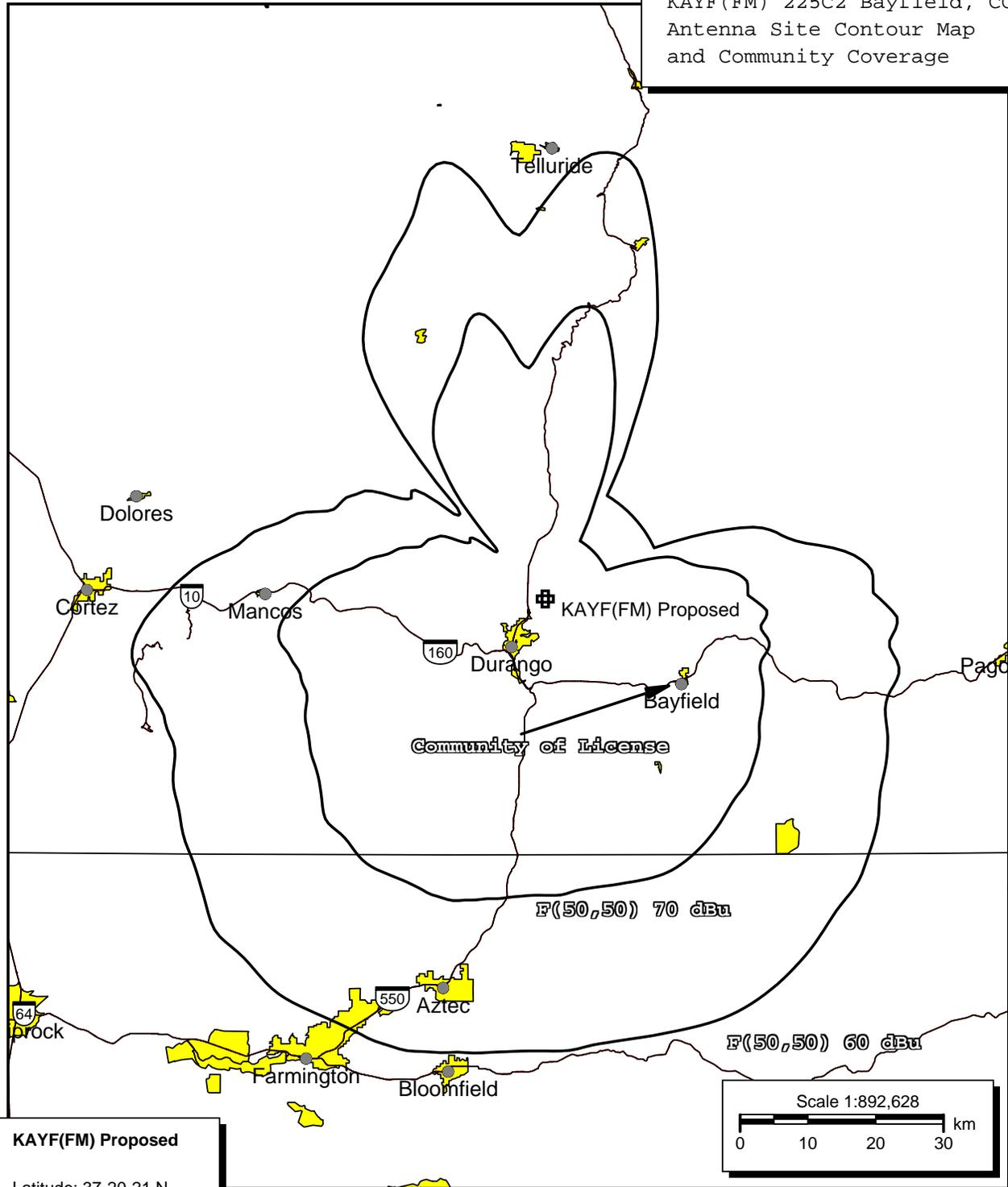
Latitude: 37-13-51 N  
Longitude: 107-35-11 W  
ERP: 50.00 kW  
HAAT: 150.0 m  
Channel: 225 C2  
Frequency: 92.9 MHz  
AMSL Height: 2375.88 m  
Elevation: 2136.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

# **Exhibit 4**

## **Proposed Antenna Site Contour Map:**

**F(50,50) Protected Contour  
F(50,50) City-Grade Contour**

KAYF(FM) 225C2 Bayfield, CO  
Antenna Site Contour Map  
and Community Coverage



**KAYF(FM) Proposed**

Latitude: 37-20-21 N  
Longitude: 107-49-25 W  
ERP: 9.20 kW  
HAAT: 344.0 m  
Channel: 225 C2  
Frequency: 92.9 MHz  
AMSL Height: 2757.0 m  
Elevation: 2733.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

# **Exhibit 5**

## **Proposed Antenna Site Channel Spacings Study**

KAYF(FM) 225C1 Bayfield, CO  
Section 73.207 Antenna Site Channel Study

REFERENCE		DISPLAY DATES
37 20 21.0 N.	CLASS = C2	DATA 09-09-08
107 49 25.0 W.	Current Spacings	SEARCH 09-27-08
----- Channel 225 - 92.9 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
-----	-----	-----	-----	-----	-----	-----
KRWN	LIC 225C1	Farmington	NM 206.5	79.75	223.5	-143.75
Of No Concern:						
KRWN(FM), by a contemporaneous and contingently proposed filing, proposes a voluntary channel substitution of Channel 223C1 in lieu of Channel 225C1 at Farmington, NM. This contingent change will eliminate the shortspacing to KRWN(FM).						
KAYF	LIC-N 223A	Bayfield	CO 119.8	24.23	54.5	-30.27
Of Note:						
Mutually Exclusive current authorization for KAYF(FM).						
KRWN	PRO 223C1	Farmington	NM 206.5	79.75	78.5	1.25
Of Note:						
Contingently Proposed antenna site for KRWN(FM) on Channel 223C1 at Farmington						
KKDC	LIC 227C2	Dolores	CO 283.1	63.63	57.5	6.13
KBDX	LIC 224C2	Blanding	UT 291.6	154.96	129.5	25.46
KYBR	CP -Z 225C3	Espanola	NM 131.8	205.21	176.5	28.71
KYBR	LIC-Z 225C3	Espanola	NM 129.2	206.77	176.5	30.27
KMGJ	LIC 226C0	Grand Junction	CO 337.5	208.00	175.5	32.50
KKCH	LIC-N 224C	Glenwood Springs	CO 9.6	234.22	187.5	46.72
KKPK	LIC 225C	Colorado Springs	CO 58.0	303.27	248.5	54.77
-----						