

KAGJ(FM)
Ephraim, UT
Proposed Minor Modification
Of Licensed Facility

Application Overview:

KAGJ(FM) (FCC Facility ID# 60705) proposes to modify its currently Licensed Facilities using the following parameters:

Tech Box:

Channel:	205
Class:	C3
Antenna Coordinates:	N39-19-18, W111-46-11 (NAD 27)
ASRN:	N/A
Tower Height AMSL:	37 m
COR AMSL:	2602 m
COR AGL:	24 m
COR HAAT:	708 m
ERP:	0.38 kW
Directional Antenna:	No

Antenna Site City-Grade Coverage:

Exhibit 1 demonstrates that the proposed facility's antenna site provides city grade coverage of KAGJ(FM)'s proposed community of license – Ephraim, UT. As can be seen in the Exhibit, 100% of Ephraim's community boundaries are encompassed by the F(50,50) 60 dBu

contour of the proposed facility. Also, no major terrain obstructions are located between the antenna site and the community.

Interference Study:

Exhibit 2 is a contour overlap study from the proposed KAGJ(FM) antenna site. It notes that the proposed KAGJ(FM) facility's contours would come near to, but do not prohibitively overlap the following facility:

- KBYU(FM) Provo, UT

Using the facilities proposed herein, KAGJ(FM) 205C3 complies with the contour protection requirements of Section 73.509 towards KBYU(FM). The attached contour overlap map in Exhibit 3 demonstrates that this application complies with the contour protection requirements of Section 73.509.

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. Using the Phelps-Dodge "Ring Stub" Worst Case antenna with 2 sections and 0.88 wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 13% of the Uncontrolled Standard

with a Power Density of 25.9 microwatts per square centimeter 4 meters from the base of the tower.

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.

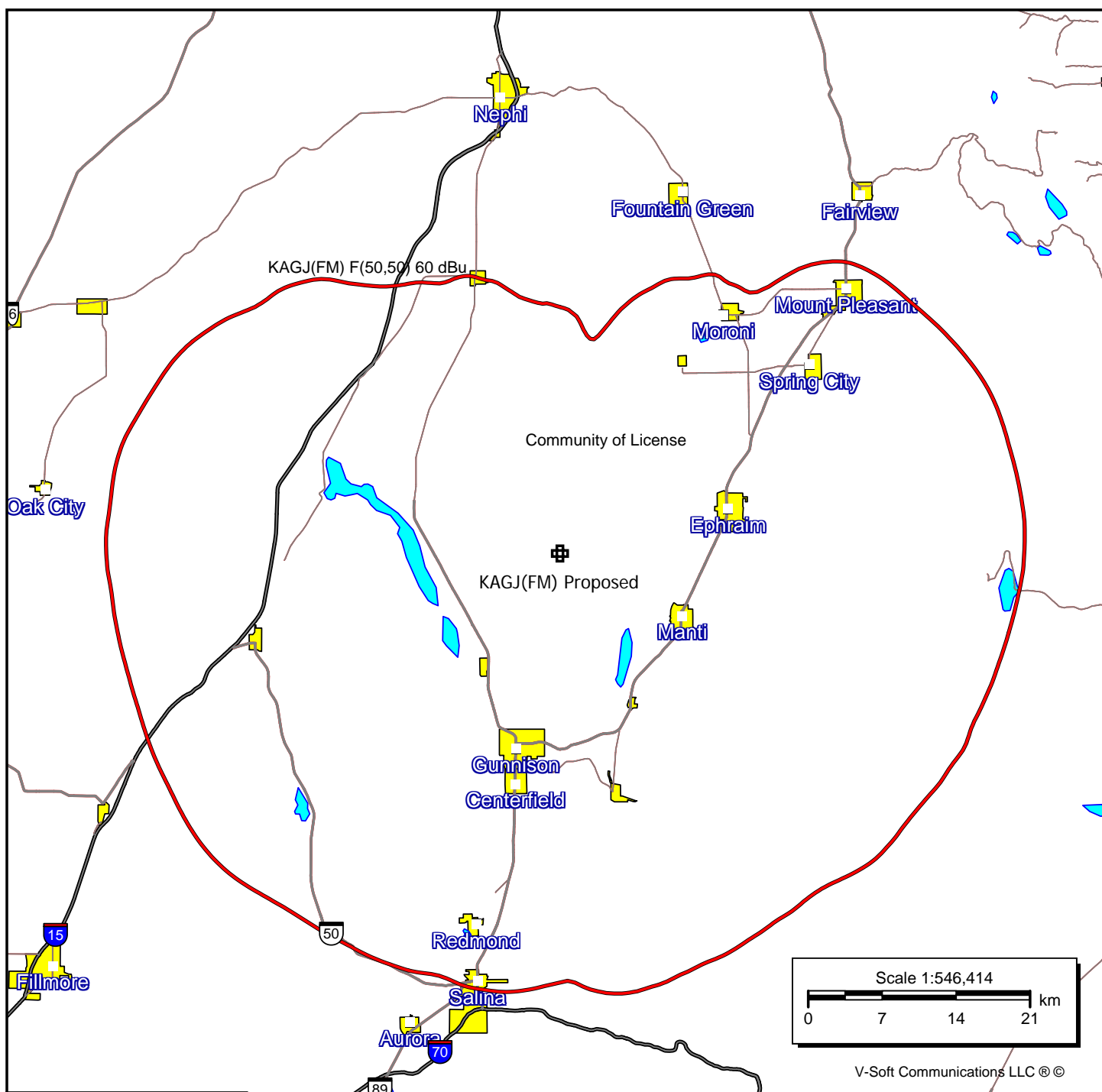
Existing Tower:

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

Proposed Antenna Site Contour Map:

F(50,50) City-Grade Contour



KAGJ(FM) Proposed

Channel: 205C3
Frequency: 88.9 MHz
Latitude: 39-19-18 N
Longitude: 111-46-11 W
COR AGL Height: 24.0 m
COR AMSL Height: 2602.0 m
Base Elevation: 2578.0 m
COR HAAT: 707.97 m
ERP: 0.38 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 2

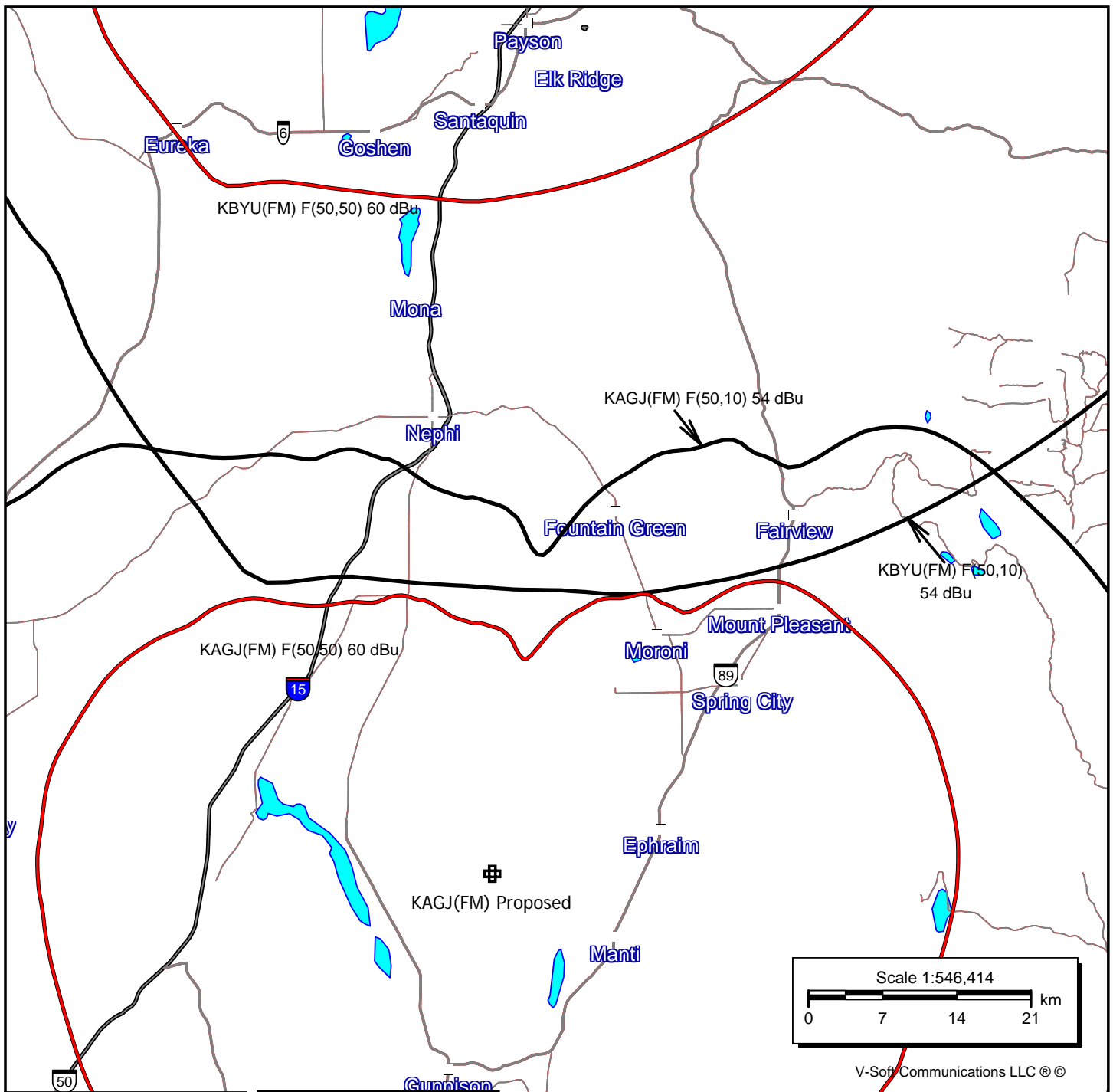
Section 73.509 Contour Overlap Tabulations

KAGJ(FM) Ephraim, UT Section 73.509 Overlap Study											
REFERENCE		CH# 205C3 - 88.9 MHz, Pwr= 0.38 kW, HAAT= 703.9 M, COR= 2602 M								DISPLAY DATES	
39 19 18.0 N.		Average Protected F(50-50)= 39.11 km								DATA 01-19-11	
111 46 11.0 W.		Omni-directional								SEARCH 01-19-11	
CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
208A Ephraim	KAGJ	LIC_CN UT	75.1 255.2	16.8 BLED19940509KB	39 21 37.0 111 34 54.0	0.100 -354	0.7 1722	5.6 Snow College	-27.5*	9.8	
206C Provo	KBYU-FM	LIC_CY UT	347.1 166.8	146.6 BLED19920706KB	40 36 28.0 112 09 33.0	32.000 907	118.4 2618	80.2 Brigham Young University	2.2	27.0	
06-T Kanarraville, Etc.	K06KO	LI_D_N UT	212.0 31.1	239.1 BLTTV20061219ABF	37 29 16.0 113 12 18.0	0.150 463	48.6 1935	1.2 Iron County	49.9R	189.2M	
205C1 Cedar City	KCHG	CP_CX UT	210.1 29.3	227.8 BNPED20071022BEV	37 32 29.0 113 04 04.0	6.700 794	145.5 3123	63.5 Calvary Chapel Cedar City,	40.4	55.8	
207C1 Richfield	KUSL	LIC_CX UT	205.3 24.9	114.8 BLED20101210ALL	38 23 08.0 112 19 57.0	2.000 973	3.1 3577	68.6 Utah State University Of A	69.8	44.8	
203C2 Monroe	KUXU	LIC_CX UT	205.3 24.9	114.8 BLED20101108AEG	38 23 08.0 112 19 57.0	0.600 973	1.7 3577	56.3 University Of Utah	71.2	57.1	
06 D Cedar Canyon	K06JA-D	LI_D_N UT	206.6 26.0	213.4 BLDTV20090728ABI	37 35 56.9 112 51 23.2	0.015 -401	48.6 3246	1.2 Cedar Canyon Tv	49.9R	163.6M	

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone = , Co to 3rd adjacent.
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 protected contour.
« = Station meets FCC minimum distance spacing for its class.

Exhibit 3

Section 73.509 Contour Overlap Map Vs KBYU(FM)



KAGJ(FM) Proposed

Channel: 205C2
Frequency: 88.9 MHz
Latitude: 39-19-18 N
Longitude: 111-46-11 W
COR AGL Height: 24.0 m
COR AMSL Height: 2602.0 m
Base Elevation: 2578.0 m
COR HAAT: 707.97 m
ERP: 0.38 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KBYU-FM

BLED19920706KB
Channel: 206C
Frequency: 89.1 MHz
Latitude: 40-36-28 N
Longitude: 112-09-33 W
COR AGL Height: 37.0 m
COR AMSL Height: 2618.0 m
Base Elevation: 2581.0 m
COR HAAT: 907.0 m
ERP: 32.00 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None