TECHNICAL EXHIBIT

APPLICATION FOR CONSTRUCTION PERMIT
FOR RESERVED CHANNEL
TRANSLATOR STATION

HEBER CITY, UTAH
CH 220 250 WATTS -315 M

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Technical Narrative

This engineering report has been prepared on behalf of Community Wireless of Park City, in support of an application for a construction permit to relocate existing non-commercial translator station K220AY.

The proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms to all applicable rules and regulations of the FCC.

Proposed Station Data

Frequency: 91.9 MHz.
Channel: 220
ERP: 250 watts
Primary Station: KPCW (91.9 MHz.)

Proposed Antenna Location

The geographic coordinates (NAD 27) of the proposed site are as follows:

North Latitude: 40-31-38
West Longitude: 111-23-59

Transmitting Antenna

ANTENNA: Scala FMV, 1-bay, non-directional.

Contour Overlap

Prohibited overlap of the pertinent contours of any first, second, third adjacent channel stations, are shown in Table 1.

Regarding predicted interference with second-adjacent channel K218EM, FCC 02-244, Section II.A.5 states that "*when demonstrating that 'no actual interference will occur due to…other factors,' pursuant to Section 74.1204 (d), an applicant may use the undesired-to-desired signal ratio method.*" In addition, FCC 02-244, Section II.A.6 states that USGS quadrangles "*have been recognized as acceptable to demonstrate lack of population.*"

The desired-to-undesired ratio for second adjacent stations required by 47 CFR § 74.1204 (a) (3) is 40 dB. Calculated interference contours between the proposed station and pertinent stations are shown in Table 3 and Figure 2. The proposed station predicted interference contour field strength with second-adjacent channel K218EM is 113 dBu.

47 CFR § 74.1204 (c) allows for a "*change (other than a change in channel) in the authorized facilities of an FM translator station will be accepted even though overlap of field strength contours would occur with another station in an area where such overlap does not already exist, if:*

(1) The total area of overlap with that station would not be increased:

(2) The area of overlap with any other station would not increase;

(3) The area of overlap does not move significantly closer to the station receiving the overlap; and,

(4) No area of overlap would be created with any station with which the overlap does not now exist."

The area of the proposed translator 113 F(50, 10) interference contour is calculated to be 0.6 square kilometers, a smaller area than the current K220AY 100 dBu F(50,10) interference contour area of 1.5 square kilometers. In addition, the area of overlap moves away from K218EM.

International Borders

The proposed antenna location is 916 kilometers from the common border between the United States and Mexico, and is in compliance with international agreements.

Environmental Considerations

The station will operate with an effective radiated power of 250 watts into a non-directional, circularly polarized antenna. The Scala FMV non-directional antenna has a center of radiation 6 meters above ground level.

Figure 3 shows the predicted power density versus distance emitted by the proposed facility. This figure is based on the parameters of the proposed translator station, using the FCC FM Model computer program.

The proposed maximum power density at the base of the tower is calculated to be 0.101 mW/cm^2, which is 51 percent of the recommended general population limit of 0.2 mW/cm^2 for all FM channels applicable to general population/uncontrolled exposure areas.

Access to the transmitting site is restricted and appropriately marked with warning signs. When it becomes necessary, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radio-frequency radiation will not exceed the FCC guidelines.

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Clr
K220AY	UT	HEBER CITY, ETC.	91.9	220	42	D	LIC	-69.16 dB
KPCW	UT	PARK CITY	91.9	220	250	A	LIC	-43.94 dB
KPCW	UT	PARK CITY	91.9	220	6000	A	CP	-37.60 dB
K220AY	UT	HEBER CITY, ETC.	91.9	220	250	D	APP	-30.42 dB
KPCW	UT	PARK CITY	91.9	220	105	A	LIC	-24.29 dB
K218EM	UT	HEBER CITY	91.5	218	36	D	LIC	-14.43 dB
KOHS	UT	OREM	91.7	219	1750	A	LIC	1.36 dB
NEW	UT	OREM	91.7	219	100	A	APP	3.55 dB
KAWA	UT	SPANISH FORK	91.3	217	2000	C2	CP	7.75 dB
KUUU	UT	SOUTH JORDAN	92.5	223	500	C2	LIC	7.20 dB
KTCE	UT	PAYSON	92.1	221	125	A	LIC	8.00 dB
KUUU	UT	SOUTH JORDAN	92.5	223	400	C2	LIC	8.27 dB
KUUU	UT	TOOELE	92.1	221	35	C3	LIC	14.91 dB
K220EI	UT	OGDEN	91.9	220	170	D	LIC	15.96 dB
K217CL	UT	PROVO	91.3	217	10	D	LIC	19.30 dB
K220CM	WY	LYMAN	91.9	220	75	D	LIC	20.03 dB
KEYP	UT	PRICE	91.9	220	100	A	LIC	20.03 dB
KUFR	UT	SALT LAKE CITY	91.7	219	220	A	LIC	21.49 dB
K220GE	UT	LEVAN, ETC.	91.9	220	10	D	LIC	22.02 dB
KUSU-FM	UT	LOGAN	91.5	218	90000	C	LIC	28.85 dB
K220HI	UT	CLARKSTON	91.9	220	11	D	LIC	29.58 dB
KFRZ	WY	GREEN RIVER	92.1	221	90000	C	LIC	33.99 dB
KEYV	UT	VERNAL	91.7	219	910	C3	CP MOD	34.03 dB
NEW	UT	OAK CITY	92.1	221	100	D	APP	34.77 dB
K217FQ	UT	CENTERVILLE	91.3	217	215	D	LIC	35.74 dB
K221FA	UT	BRIGHAM CITY	92.1	221	85	D	LIC	36.02 dB
KCUA	WY	DIAMONDVILLE	92.5	223	13500	C2	CP	36.27 dB
NEW	UT	OAK CITY	92.1	221	250	D	APP	38.35 dB
K218CB	UT	PRICE	91.5	218	10	D	LIC	38.47 dB
K220BM	CO	RANGELY	91.9	220	28	D	LIC	38.70 dB
DK221AC	UT	MANTI	92.1	221	10	D	LIC	39.21 dB

TABLE 1: Pertinent first, second, third adjacent, and IF channel stations spaced with proposed station.

Site: PROPOSED
Coordinates: 40-31-38.4 N, 111-23-58.8 W
Freq: 91.90000 MHz
ERP: 250.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	250	-242	510	7.09	40.591149	-111.399667
30	250	-266	610	7.09	40.582592	-111.357653
60	250	-311	1150	7.09	40.559218	-111.326923
90	250	-453	590	7.09	40.527303	-111.31571
120	250	-344	500	7.09	40.495403	-111.326992
150	250	-216	310	7.09	40.47206	-111.357723
180	250	-142	470	7.09	40.463518	-111.399667
210	250	60	1170	10.16	40.448162	-111.459721
240	250	-7	1250	7.09	40.495403	-111.472341
270	250	-292	1810	7.09	40.527303	-111.483624
300	250	-547	1630	7.09	40.559218	-111.47241
330	250	-303	460	7.09	40.582592	-111.44168

TABLE 2: HAAT and ERP for proposed station.

Callsign	ST	City	Freq	Channel	Estimated K218EM signal strength at proposed site (dBu)	Proposed station interference contour (dBu)
K218EM	UT	HEBER CITY	91.5	218	73	113

TABLE 3: Calculation of interference contours at the proposed site.

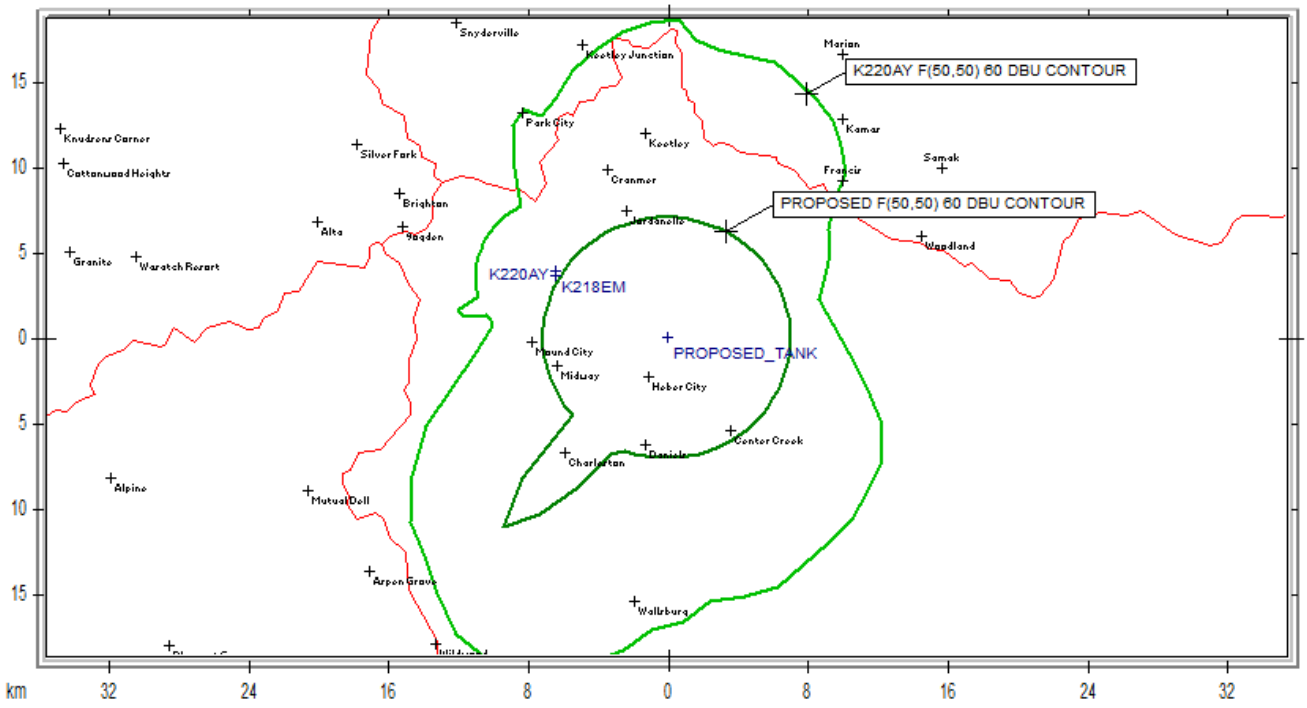

FIGURE 1: K220AY and the proposed translator station.

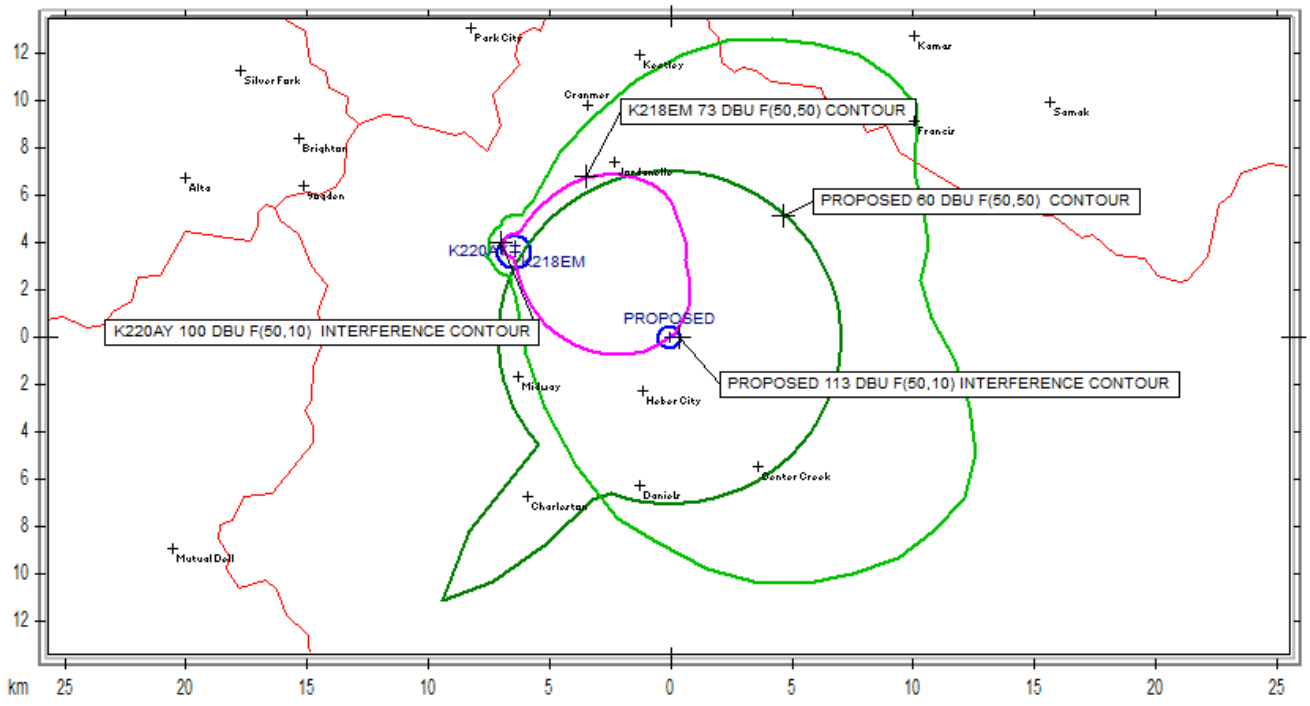

FIGURE 2: K218EM, K220AY and the proposed translator station.

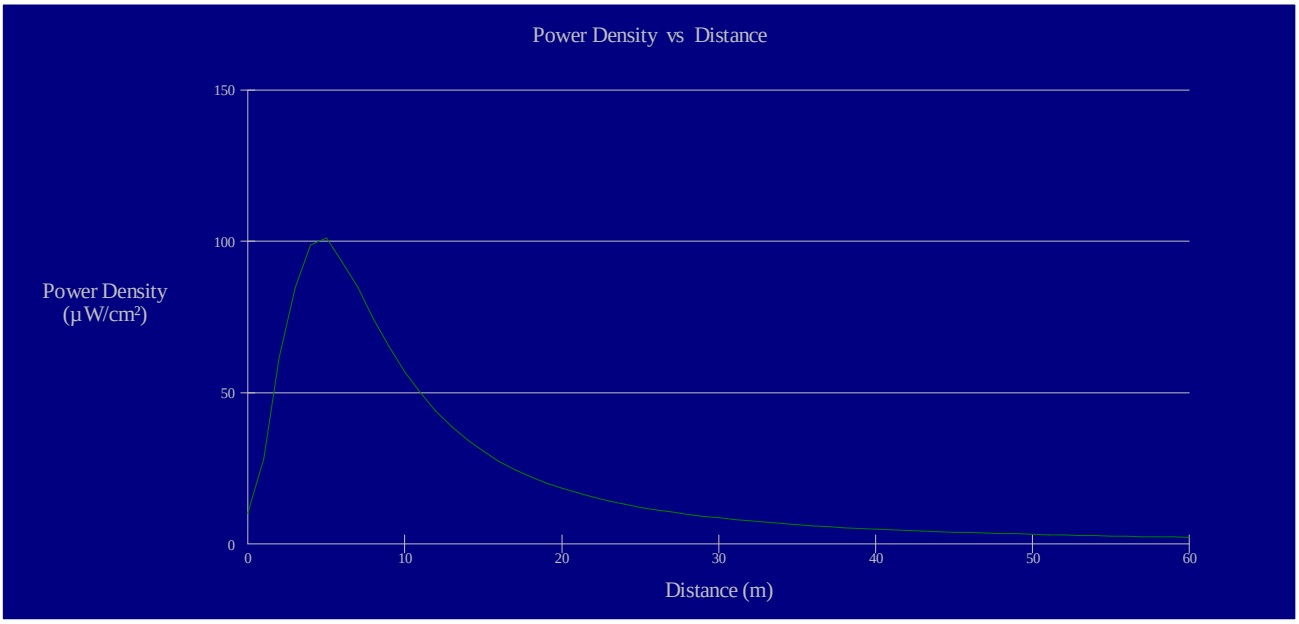

FIGURE 3: Power Density versus distance for the proposed translator station.