

**KJND-FM**  
**Williston, ND**  
Proposed Minor Modification  
Of Permitted Facility

**Application Overview:**

KJND-FM (FCC Facility ID# 175935) proposes to modify its currently Permitted Facilities using the following parameters:

**Tech Box:**

Channel:	214
Class:	A
Antenna Coordinates:	N48-08-30, W103-53034 (NAD 27)
ASRN:	1037969
Tower Height AMSL:	251 m
COR AMSL:	837 m
COR AGL:	137 m
COR HAAT:	175 m
ERP:	2 kW
Directional Antenna:	No

**Antenna Site City-Grade Coverage:**

Exhibit 1 demonstrates that the proposed facility's antenna site provides city grade coverage of KJND-FM's proposed community of license – Williston, ND. As can be seen in the Exhibit, 100% of Williston'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 KJND-FM antenna site. It notes that the proposed KJND-FM facility's contours do not prohibitively overlap any facilities. A channel spacings study is also included

### **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 Shively 6810 antenna with 6 sections and Full wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 0.2% of the Uncontrolled Standard with a Power Density of 0.37 microwatts per square centimeter 46.2 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.

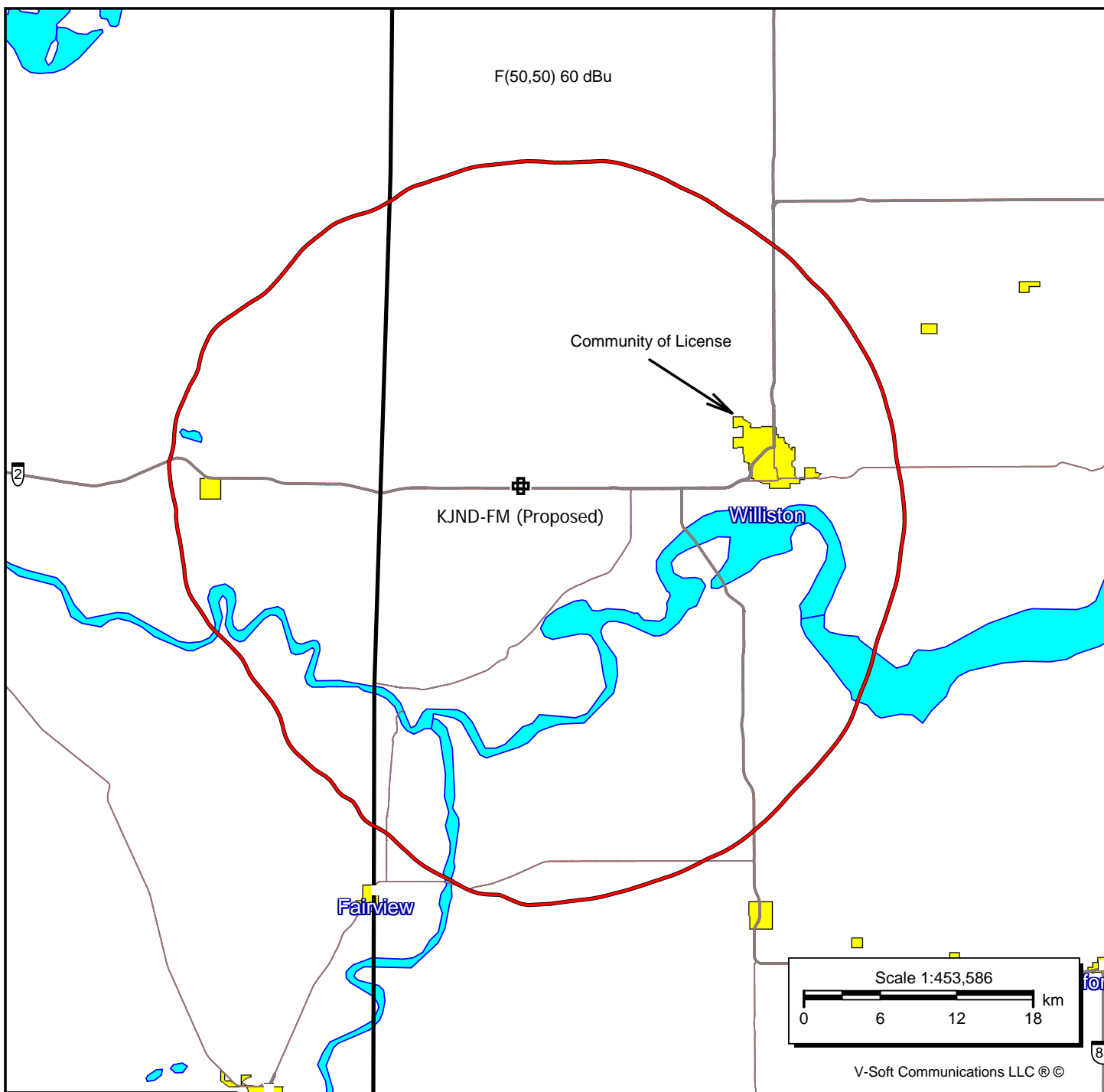
**Existing Tower:**

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**



### KJND-FM (Proposed)

Channel: 214A  
Frequency: 90.7 MHz  
Latitude: 48-08-30 N  
Longitude: 103-53-34 W  
COR AGL Height: 137.0 m  
COR AMSL Height: 837.0 m  
Base Elevation: 700.0 m  
COR HAAT: 175.74 m  
ERP: 2.00 kW  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

## **Exhibit 2**

### **Section 73.509 Contour Overlap Tabulations And Channel Spacing Study**

KJND-FM Williston, ND  
Contour Overlap Study

REFERENCE CH# 214A - 90.7 MHz, Pwr= 2 kw, HAAT= 175.7 M, COR= 837.3 M  
48 08 30.0 N. Average Protected F(50-50)= 28.33 km  
103 53 34.0 W. Omni-directional

DISPLAY DATES  
DATA 01-19-11  
SEARCH 01-19-11

CH CITY	CALL	TYPE STATE	ANT CX	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
214C2 Williston	KJND-FM	CP ND	_CX	212.9 32.8	12.4 BNPED20071019BDP	48 02 52.0 103 59 01.0	10.000 166	99.3 793	35.5 Hi-line Radio Fellowship,	-114.3*	-103.3*
215B Estevan	AL6140«	AL SK	_____	15.5 195.9	145.9	49 24 18.0 103 21 14.0	50.000 150	79.9 732	65.0	136.5R	9.4M
217C1 Four Bears	KMHA	LIC ND	_CN	116.7 297.6	98.1 BLED19840612DO	47 44 23.0 102 43 24.0	97.000 137	6.6 827	55.4 Fort Berthold Communicatio	60.8	40.3
06-2 Willow Bunch	CKCKTV2	LI SK	_HN	317.1 135.8	185.6	49 20 58.0 105 38 08.0	17.500 263	12.8 1061	79.8 Transcanada Comm Ltd	92.6R	93.0M
06 Willow Bunch	CKCK-TV-2	GR SK	_HN	317.1 135.8	185.6 BPFS20090105ACM	49 20 58.0 105 38 08.0	3.272 263	12.8 1061	63.4	76.2R	109.5M

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.  
< = Contour Overlap

KJND-FM Williston, ND  
Channel Spacings Study

REFERENCE		DISPLAY DATES
48 08 30.0 N.	CLASS = A Int = A	DATA 01-19-11
103 53 34.0 W.	Current Spacings to 3rd Adj.	SEARCH 01-19-11
----- Channel 214 - 90.7 MHz -----		

Call	Channel	Location		Azi	Dist	FCC	Margin
KJND-FM	CP 214C2	Williston	ND	212.9	12.4	165.5	-153.1
K06AV	LI -D 06NT	Wolf Point	MT	269.3	134.2	186.5	-52.3
K06KY	LI -D 06NT	Circle, Etc.	MT	230.6	148.9	186.5	-37.6
CKCK-TV-2	GR 06 □□	Willow Bunch	SK	317.1	185.6	186.5	-0.9
CKCKTV2	LI 06-2	Willow Bunch	SK	317.1	185.6	186.5	-0.9
AL6140	AL 215B	Estevan	SK	15.5	145.9	136.5	9.4
KMHA	LIC 217C1	Four Bears	ND	116.7	98.1	74.5	23.6