

**New FM**  
**Greybull, WY**  
Proposed Minor Amendment  
Of Proposed Facility

**Application Overview:**

New FM (FCC Facility ID# 176113) proposes to amend its currently pending application using the following parameters:

**Tech Box:**

Channel:	203
Class:	C3
Antenna Coordinates:	N44-24-51, W107-59-52 (NAD 27)
ASRN:	n/a
Tower Height AMSL:	30 m
COR AMSL:	1404 m
COR AGL:	20 m
COR HAAT:	151 m
ERP:	5 kW
Directional Antenna:	No

**Antenna Site City-Grade Coverage:**

Exhibit 1 demonstrates that the proposed facility's antenna site provides city grade coverage of New FM's proposed community of license – Greybull, WY. As can be seen in the Exhibit, 100% of Greybull'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 New FM antenna site. It notes that the proposed New FM facility's contours would not overlap any other facilities in a manner that would violate 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 Shively 6800 Series antenna with 4 sections and 0.5 wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 12.4% of the Uncontrolled Standard with a Power Density of 24.8 microwatts per square centimeter 70 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.

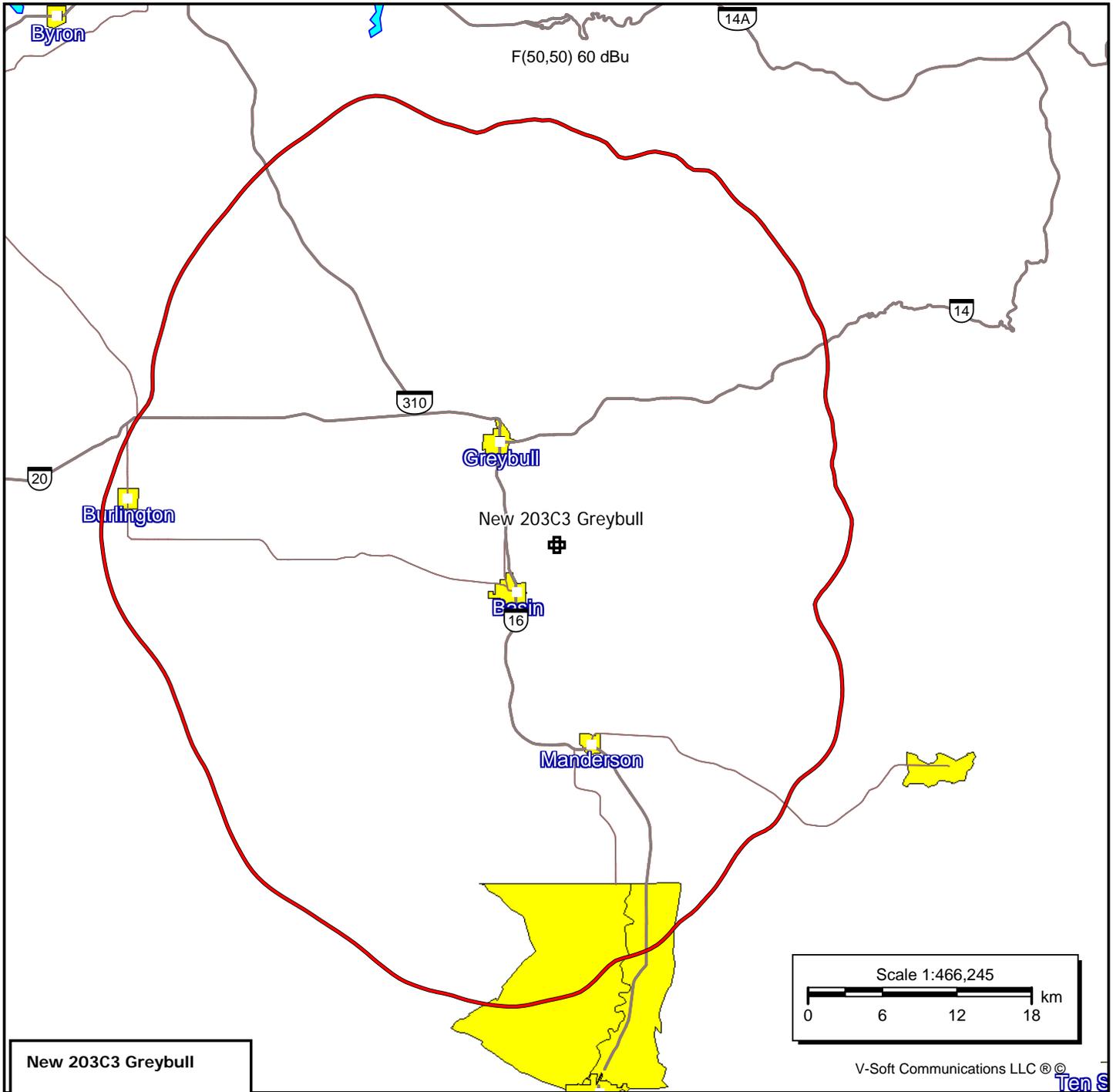
**Existing Tower:**

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 new tower proposed is located on an existing tower.

# **Exhibit 1**

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

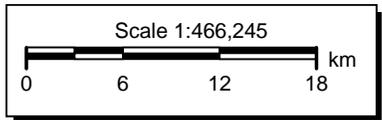
### **F(50,50) City-Grade Contour**



F(50,50) 60 dBu

**New 203C3 Greybull**

Channel: 203C3  
 Frequency: 88.5 MHz  
 Latitude: 44-24-51 N  
 Longitude: 107-59-52 W  
 COR AGL Height: 20.0 m  
 COR AMSL Height: 1404.0 m  
 Base Elevation: 1384.0 m  
 COR HAAT: 151.42 m  
 ERP: 5.00 kW  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Prop Model: None



# **Exhibit 2**

## **Section 73.509 Contour Overlap Tabulations**

New 203C3 Greybull, WY

Section 73.509 Contour Overlap Study

REFERENCE  
44 24 51.0 N.  
107 59 52.0 W.

CH# 203C3 - 88.5 MHz, Pwr= 5 kW, HAAT= 151.4 M, COR= 1404 M  
Average Protected F(50-50)= 32.77 km

DISPLAY DATES  
DATA 01-14-10  
SEARCH 02-05-10

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
203C2 Greybull	1214010	APP WY	_CX	8.1 188.1	44.59 BNPED20071019BDW	44 48 41.0 107 55 06.0	0.250 755	116.8 2970	46.7 Hi-line Radio Fellowship,	-104.28*	-92.94*
204C2 Shoshoni	1351293	APP WY	_CX	180.0 0.0	108.52 BNPED20071022ATC	43 26 15.0 107 59 52.0	1.900 598	68.7 2513	45.1 Wren Communications, Inc.	3.30	9.19
203A Story	1211516	APP WY	_CX	93.8 274.6	101.82 BNPED20071022AJS	44 20 50.0 106 43 25.0	6.000 -68	68.3 1520	15.8 Bethesda Christian Broadca	10.53	8.03
206C1 Cody	KNWT	CP WY	DCX	276.1 95.3	92.36 BNPED20071017AKH	44 29 46.0 109 09 09.0	18.500 547	7.9 2333	79.1 Northwest Community Colleg	47.90	9.89
203C3 Billings	1212208	APP MT	DVX	355.8 175.7	147.79 BNPED20071022ALN	45 44 25.0 108 08 18.0	5.300 272	102.8 1375	40.6 Family Stations, Inc.	10.70	13.59
204A Billings	1214642	APP MT	_CX	345.4 165.1	157.15 BNPED20071019AXP	45 46 53.0 108 30 26.0	1.000 -100	95.9 3127	64.3 Double Edge Producti ons	26.21	40.72
203C3 Hardin	1227488	APP MT	_CX	3.6 183.7	158.63 BNPED20071019BEP	45 50 19.0 107 52 08.0	3.000 199	92.5 1225	34.5 Hi-line Radio Fellowship,	33.00	31.94
201C3 Powell	KFGR	LIC WY	_CX	286.0 105.4	70.42 BLED20091207AAV	44 35 07.0 108 51 01.0	0.600 481	1.6 2011	34.4 Trinity Bible Church	33.42	32.71
204A Shoshoni	1215611	APP WY	_CX	179.9 359.9	108.52 BNPED20071022BKN	43 26 15.0 107 59 47.0	0.080 606	32.7 2518	21.5 Pearl Communications Group	39.27	32.83
201A Sheridan	KPRQ	LIC WY	_CX	71.2 251.8	73.79 BLED20051214ACV	44 37 26.0 107 07 02.0	0.450 341	1.5 2347	8.3 Montana State University -	48.72	63.20
202A Pryor	KPGB	LIC MT	_V_	339.7 159.3	121.14 BLED20000605A0G	45 26 06.0 108 32 09.0	0.100 -99	8.0 1265	5.6 Faith Baptist Church	74.82	58.65
06ZT Gillette	K06JM	LI WY	D_N	94.7 276.3	184.54 BLTVA20031223ACO	44 15 24.0 105 41 40.0	3.000 150	1525	8.5 Duhamel Broadcasting Enter	29.0R	155.5M

Terrain database is NGDC 30 SEC Distance + R = FCC Required Spacings in KM, Distance + M = Margin in KM  
ERP and HAAT are on direct line to and from reference station.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beam tilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.