

**GREG BEST  
CONSULTING, INC.**

16100 Outlook Ave.  
Stilwell, KS 66085  
816-792-2913

January 26, 2016

Dear Sir,

This Exhibit supports a minor modification application for the construction permit of FM translator K289BT, on Channel 289, with proposed location in Redding, CA. K289BT has authorized facilities, file number BNPFT-20130328AUA. This proposal complies fully with the requirements of 74 C.F.R. §74.1204(a) & (c), with the exception of facilities protected under 47 C.F.R. §74.1204(d) (KRRX & KRDG) by the Undesired to Desired (U/D) method described below. The proposed modified facilities create no mutual exclusivities with any licensed facilities, construction permits, or applications.

This application proposes a move from its authorized location in Anderson, CA, to Redding, CA. In addition to the move, the proposed facility seeks to change its primary station. The new primary station is KQMS-AM and the permittee has a retransmission agreement executed with the licensee of KQMS-AM.

Exhibit 1 shows the authorized 60 dBu F(50,50) coverage area, and the proposed 60 dBu F(50,50) coverage area. Exhibit 1 shows confirmation that the Proposed Facility 60 dBu contour is contained within the KQMS –AM 2 mV contour. As shown on Exhibit 1, the proposed modification is a minor modification of the permitted facilities indicated by the 60 dBu contour overlap of the proposed and authorized facilities.

In summary, the permittee proposes to change location, receive a new primary station, and utilize an omnidirectional antenna at the power level of 250 W ERP.

#### Television Channel 6 Protection

There are no television channel 6 stations requiring protection. This application proposes a channel which is not subject to television channel 6 separation requirements.

## Undesired to Desired Method

Protection to some facilities is provided through the use of Undesired to Desired Signal Strength Ratio (U/D) calculations. Specifically, stations KRRX and KRDG are analyzed. While the proposed location is farther away from KRDG, examining KRRX results in some distance decrease from the proposed facility to KRRX, (58 km versus 63 km from its presently authorized location) but not “significant” and is thus compliant with 74.1204 (c) (1), (2), (3), & (4). Calculations performed relative to 74.1204 (d) indicate no interference is predicted to occur. The proposed antenna is a Shively 6812, 2 bay full wave spaced antenna mounted at 219 feet RCAGL. The elevation pattern is shown in Exhibit 2. The height of the interference signal contours above ground are shown for KRRX and KRDG respectively in Exhibit 3 and 4.

The KRRX field strength calculated at ground level at the proposed site is 77.9 dBu, as shown on the map of Exhibit 1. The KRDG field strength calculated at ground level at the proposed site is 78.5 dBu, also shown on the map of Exhibit 1. For the translator interference contours, free space calculations are used along with the elevation pattern of the proposed antenna. The corresponding 117.9 dBu field strength contour and 118.5 dBu field strength contour were calculated and plotted in Exhibits 3 & 4. The proposed antenna location is 219 ft (66.7 meters) above ground. As Exhibit 3 and 4 show, the interfering 117.9 and 118.5 dBu field strength levels do not reach ground level.

The applicant recognizes that the U/D method is only a tool for predicting likely interference. Should any actual interference be experienced, the applicant will cooperate fully in correcting the interference. Corrective steps may require changes in the transmitting antenna or other steps which would require Commission authorization, may require that the translator cease operation except for brief equipment tests, or may require filtering at the receivers which report interference.

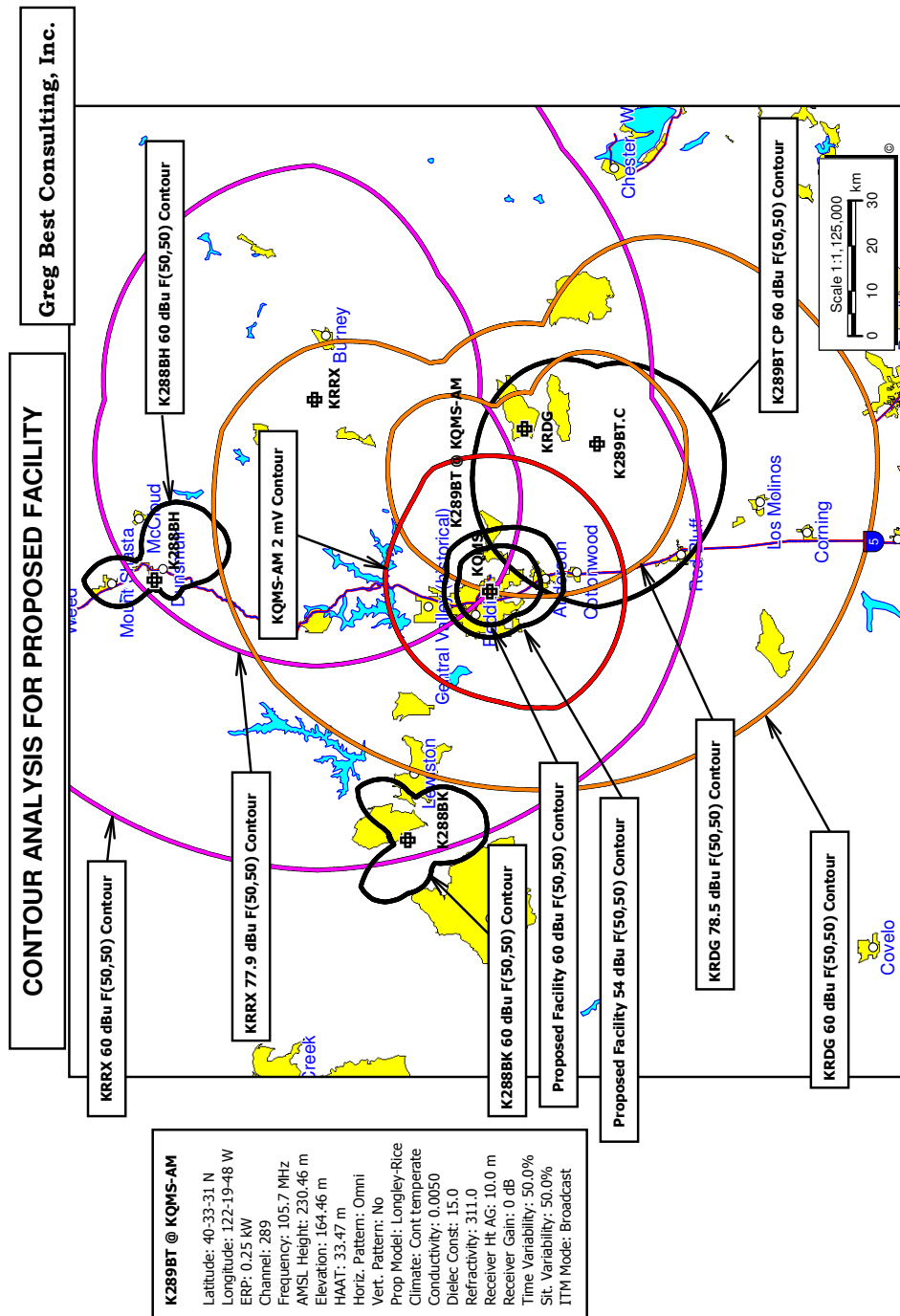
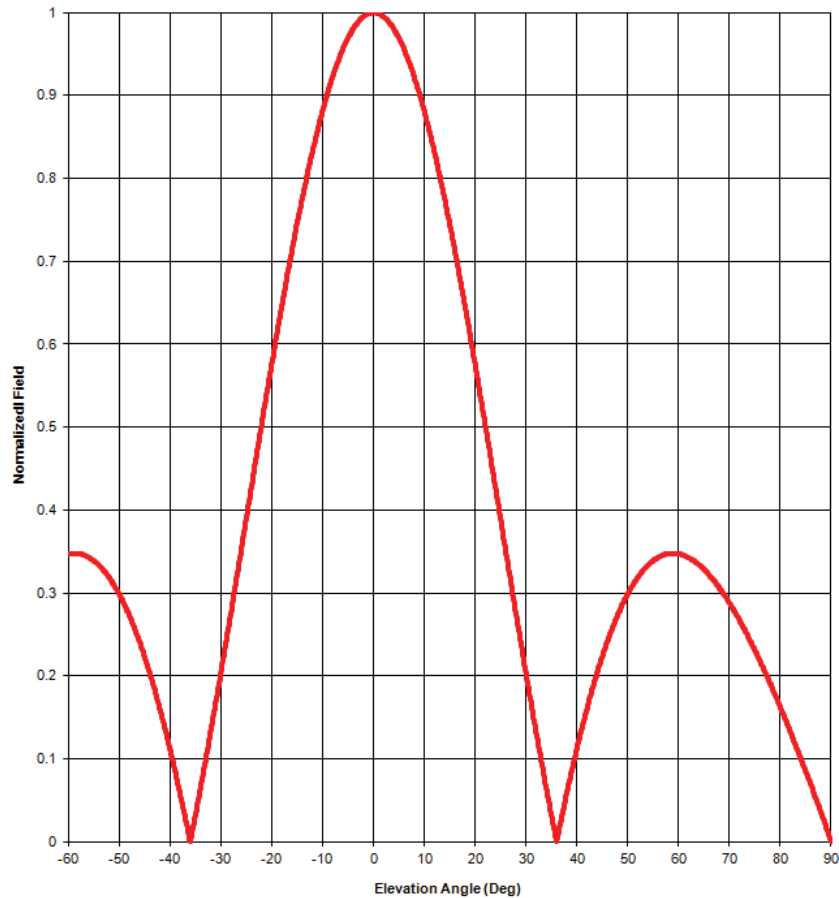


Exhibit 2

Shively Labs®

Elevation pattern



Antenna model: 6812b, 2-bay full-wave-spaced

Test frequency: 98.1 MHz

Gain (maximum):

Power	dB
1.00	0.02 dB

Document No. 6812b 2-bay fw (130701)

A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA  
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 An Employee-Owned Company

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 sales@shively.com  
 Certified to ISO-9001

Exhibit 2 (Cont.)

Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field
1	0.999	19	0.612	37	0.029	55	0.339	73	0.256
2	0.995	20	0.576	38	0.058	56	0.343	74	0.244
3	0.989	21	0.539	39	0.086	57	0.346	75	0.231
4	0.980	22	0.502	40	0.112	58	0.348	76	0.218
5	0.969	23	0.465	41	0.137	59	0.348	77	0.205
6	0.956	24	0.427	42	0.161	60	0.347	78	0.191
7	0.941	25	0.389	43	0.183	61	0.345	79	0.177
8	0.923	26	0.352	44	0.204	62	0.343	80	0.162
9	0.903	27	0.314	45	0.224	63	0.339	81	0.148
10	0.881	28	0.277	46	0.242	64	0.334	82	0.132
11	0.858	29	0.240	47	0.258	65	0.328	83	0.117
12	0.832	30	0.203	48	0.273	66	0.322	84	0.101
13	0.805	31	0.168	49	0.287	67	0.315	85	0.085
14	0.776	32	0.132	50	0.299	68	0.306	86	0.069
15	0.745	33	0.098	51	0.310	69	0.298	87	0.052
16	0.714	34	0.065	52	0.319	70	0.288	88	0.036
17	0.681	35	0.032	53	0.327	71	0.278	89	0.018
18	0.647	36	0.001	54	0.334	72	0.267	90	0.000

Elevation Pattern Tabulation

Antenna model: 6812b, 2-bay full-wave-spaced

Relative Field at 0° Depression = 1.000

Exhibit 3--KRRX

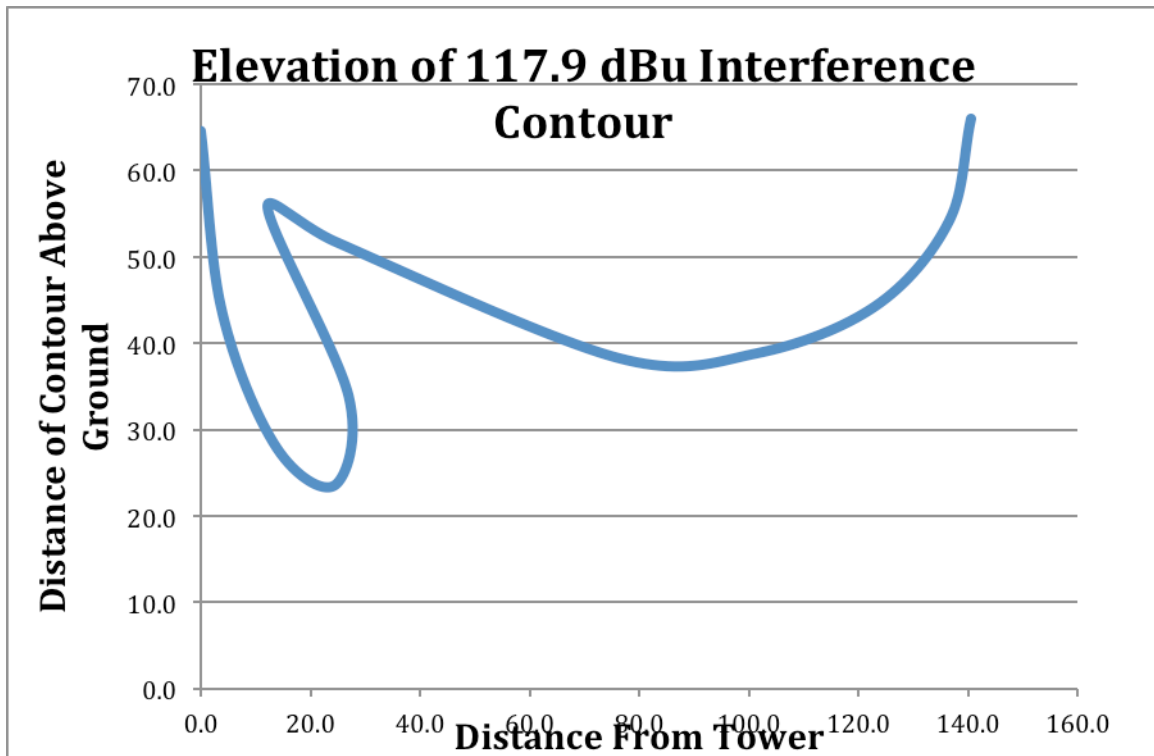
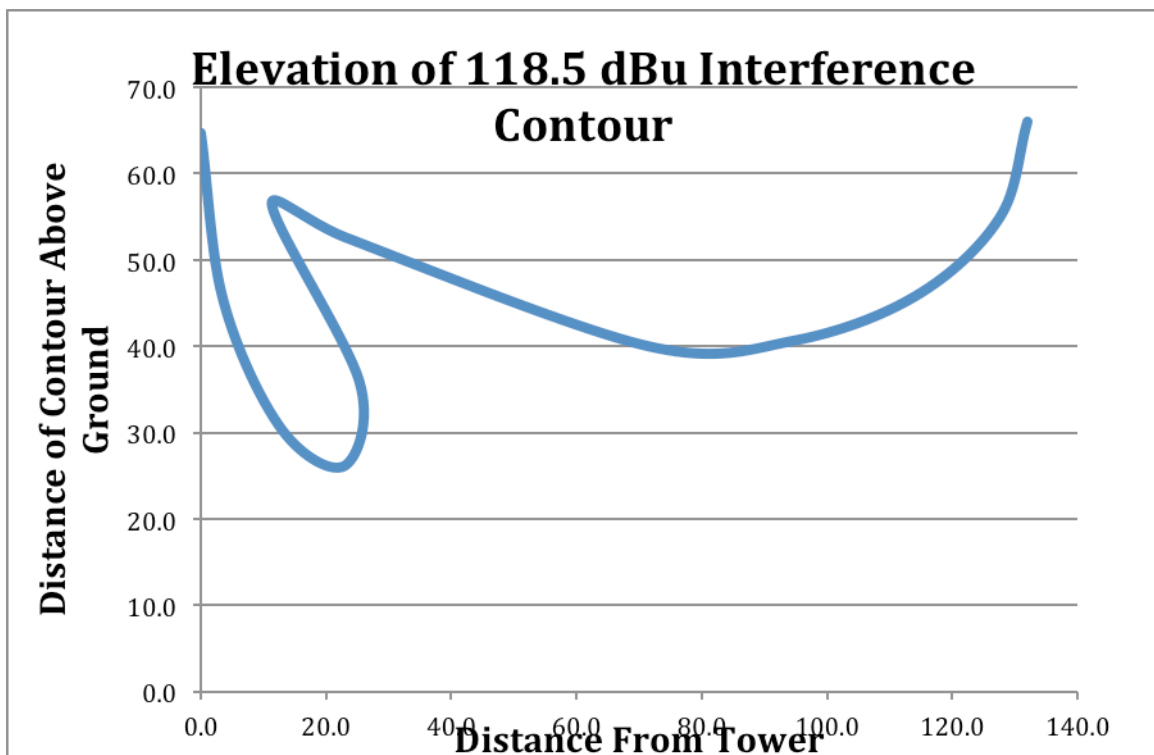


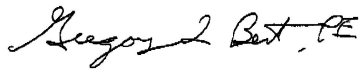
EXHIBIT 4-KRDG



## Source of Data

Transmitter location, effective radiated power, antenna patterns, and elevation data are extracted from the Commission's CDBS. All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments using the FCC broadcast link for FM HAAT.

The contours were evaluated using terrain extracted from the V-Soft Communications provided NGDC 3 arcsecond terrain data, formatted to match the database used for Commission studies.

A handwritten signature in black ink, appearing to read "Gregory L. Best, PE". The signature is fluid and cursive, with the initials "PE" clearly visible at the end.

President