

# **GREG BEST CONSULTING, INC.**

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## **COMPREHENSIVE ENGINEERING EXHIBIT**

This Engineering Exhibit supports a minor license modification for FM translator K289BT with proposed location near Redding, CA. This proposal complies fully with the requirements of 74 C.F.R. §74.1204(a) & (c). The proposed modified facilities create no other mutual exclusivities with any licensed facilities, construction permits, or applications.

This application proposes a move from its authorized location in Redding, CA to a different site at the coordinates indicated in the application but still within the KNRO primary station's 2 mv contour. The proposed antenna is a directional off-the-shelf Scala CA5-FM/CP/RM mounted with an RCAGL at 5.5 meters.

Exhibit 1 shows confirmation that the Proposed Facility 60 dBu F(50,50) contour is contained within the KNRO-AM 2 mV contour. As the 2 mV contour is smaller than the 25 mile radius around KNRO, this is the primary constraint for the proposed translator coverage contour. In summary, the licensee proposes to change location, and use a directional antenna at the power level of 250 W ERP.

## **TELEVISION CHANNEL 6 PROTECTION**

The proposed channel of operation is not subject to television channel 6 protection.

## **POTENTIAL INTERFERENCE**

Potential interfering stations 3 channels above and below the channel of operation as identified in 74 C.F.R. §73.1204 were collected and displayed on the map in Exhibit 1. The only concern was contour overlap with both 2<sup>nd</sup> adjacent channel KRDG and KRRX. However, the licensed facility has existing overlap of the licensed facility with these stations already and the proposed location moves farther away from those 2 stations and reduces the amount of overlap area and population. The existing licensed facility contour overlap with each station is 4 sq km and contains a population of 6910 people. The proposed site reduces the amount of overlap to 1 sq km with zero population. Thus, the proposed facility meets criteria set forth in FCC 73.1204 (c).

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. 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.

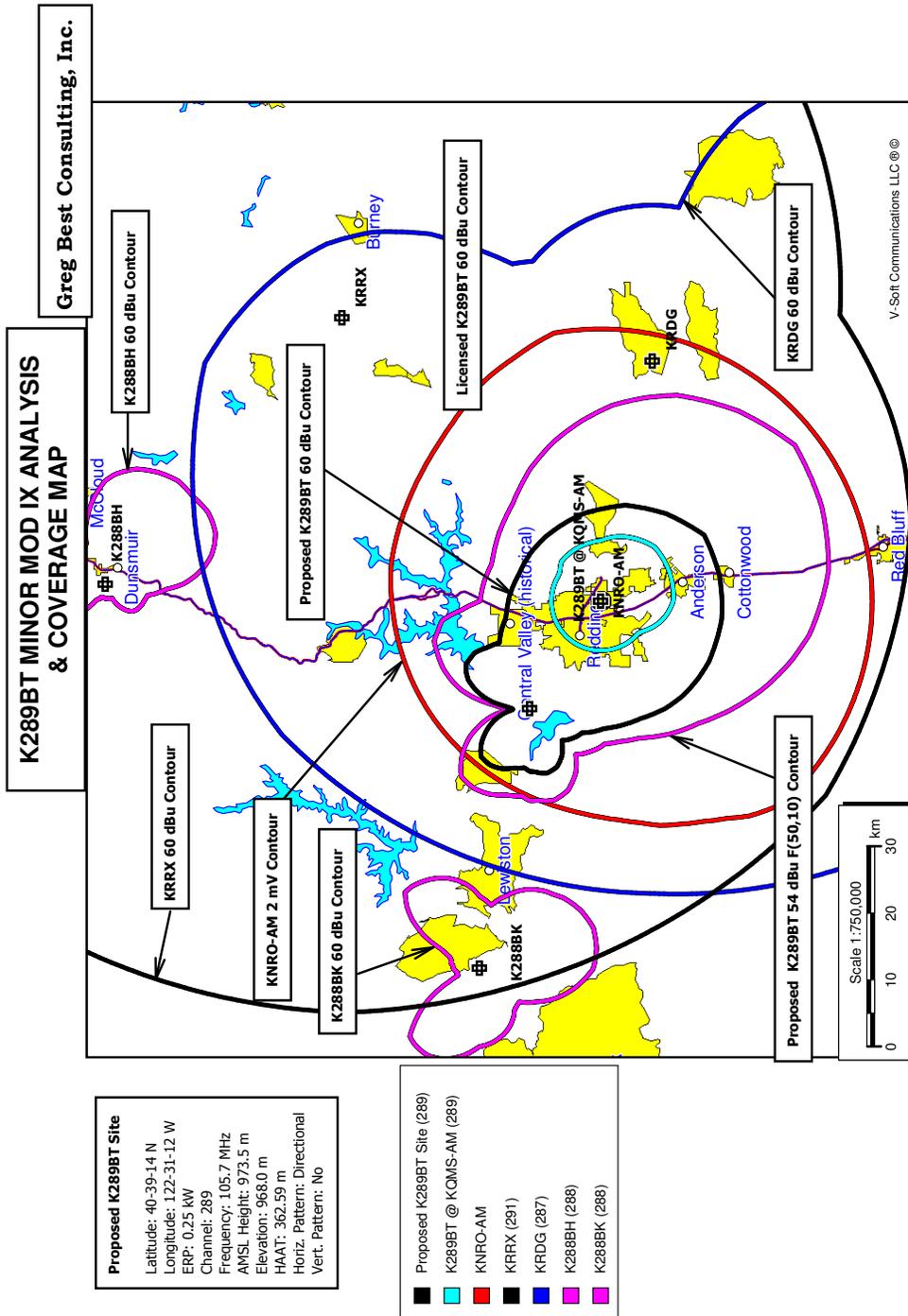


EXHIBIT #1-- PROPOSED TRANSLATOR WITH 60 dBu SERVICE CONTOUR, POTENTIAL INTERFERENCE CONTOURS & 2 MV KNRO-AM FACILITY

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained herein are believed to be true and correct based on my personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

*Gregory L. Bent, PE*