

TECHNICAL EXHIBIT  
DIGITAL FLASH-CUT APPLICATION FOR  
LPTV STATION KWBP-LP (FACILITY ID 35151)  
PORTLAND, OREGON  
CH 5 0.3 KW-ND

Technical Narrative

This Technical Exhibit supports a flash-cut digital television (DTV) application for low power television (LPTV) station KWBP-LP at Portland, Oregon (Facility ID 35151). Station KWBP-LP is authorized (BLTVL-20050414ABQ) to operate on analog channel 5(-) with a non-directional (ND) antenna system. The visual effective radiated power (ERP) is 2.7 kilowatts (kW). The antenna radiation center height above mean sea level (RCAMSL) is 506 meters. The FCC antenna structure registration number is 1207367 and the site coordinates are 45-30-58, 122-43-59 (NAD-27).

Proposed Facilities

This application proposes digital operation on the current channel (5), at the current transmitter site, at the same antenna height, and with the same antenna system. The antenna is a Dielectric model DCBR-O3-2M/6L-1 non-directional (ND) antenna system. The proposed DTV ERP is 0.3 kW-ND and the antenna RCAMSL remains 506 meters AMSL.

Figure 1 is a map showing the licensed 62 dBu (analog) and proposed 43 dBu (digital) coverage contours. As can be seen on the map, there is common area where both contours overlap.

Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations. Using the procedures outlined in the FCC's OET-69 Bulletin, a 1 kilometer grid, and 1990 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent assignments, less than 2% to LPTV analog and DTV assignments). If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin.

The applicant recognizes the proposal is secondary to authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

The KWBP-LP site is 306 kilometers from the closest point of the US-Canada border. Figure 2 is a map showing the predicted co-channel analog (NTSC) and DTV interfering contours for the proposed KWBP-LP operation. The predicted 13.2 dBu F(50,10) contour is for interference to co-channel Canadian analog allotments. The predicted 9.4 dBu F(50,10) contour is for interference to co-channel Canadian DTV allotments. As shown, the predicted interfering contours do not overlap Canadian land area.

Radiofrequency Electromagnetic Field Exposure

The proposed KWBP-LP facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the antenna is located 183 meters above ground level. The proposed maximum ERP is 0.3 kW. Based on a downward relative field of 0.5, the calculated power density at a point 2 meters (6.6 feet) above ground level will not exceed 1% of the FCC's recommended limit of 0.2 mW/cm<sup>2</sup> for channel 5 for an "uncontrolled" environment.

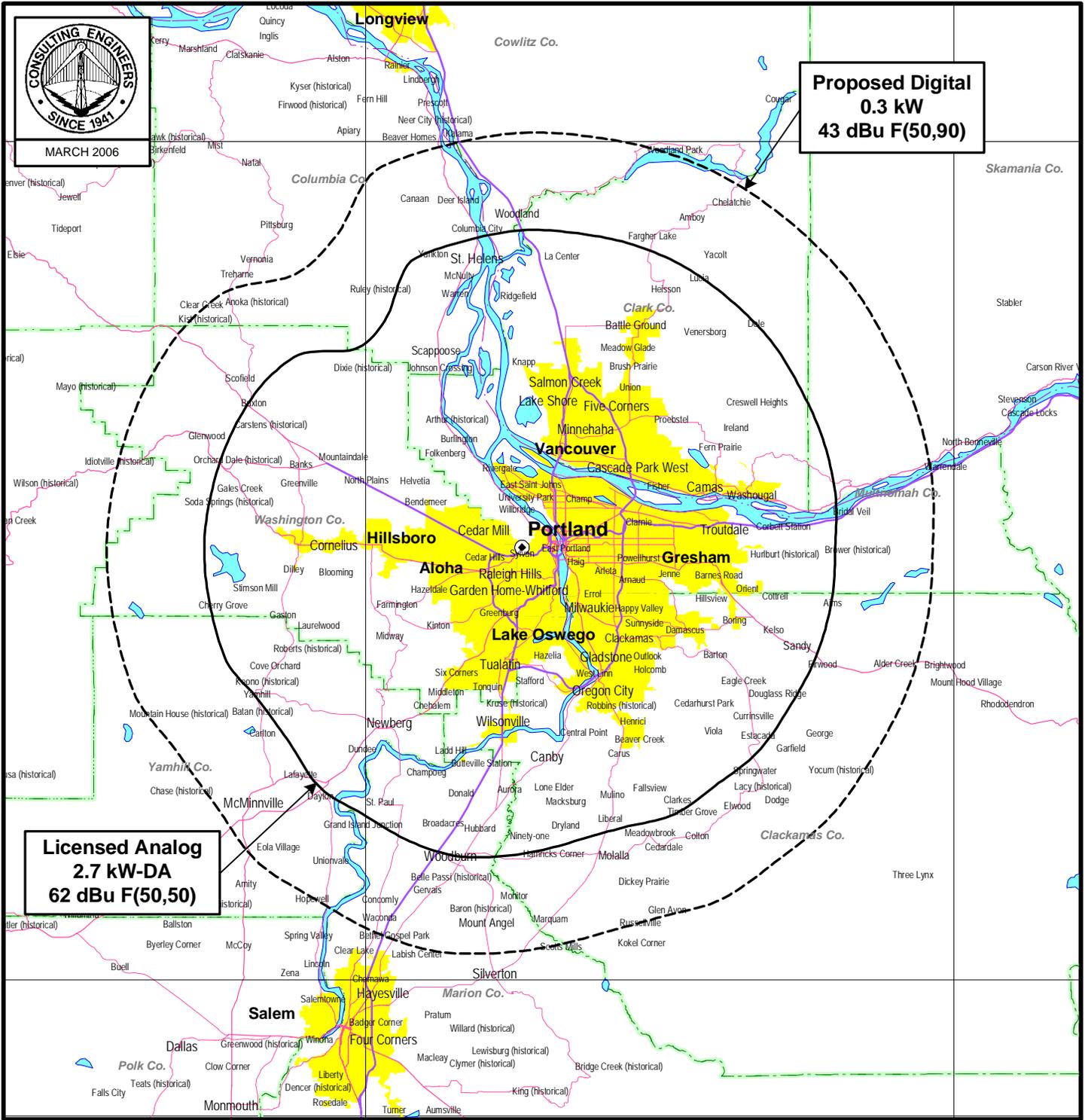
Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

John A. Lundin  
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
(941) 329-6000

March 23, 2006

Figure 1



**Proposed Digital  
0.3 kW  
43 dBu F(50,90)**

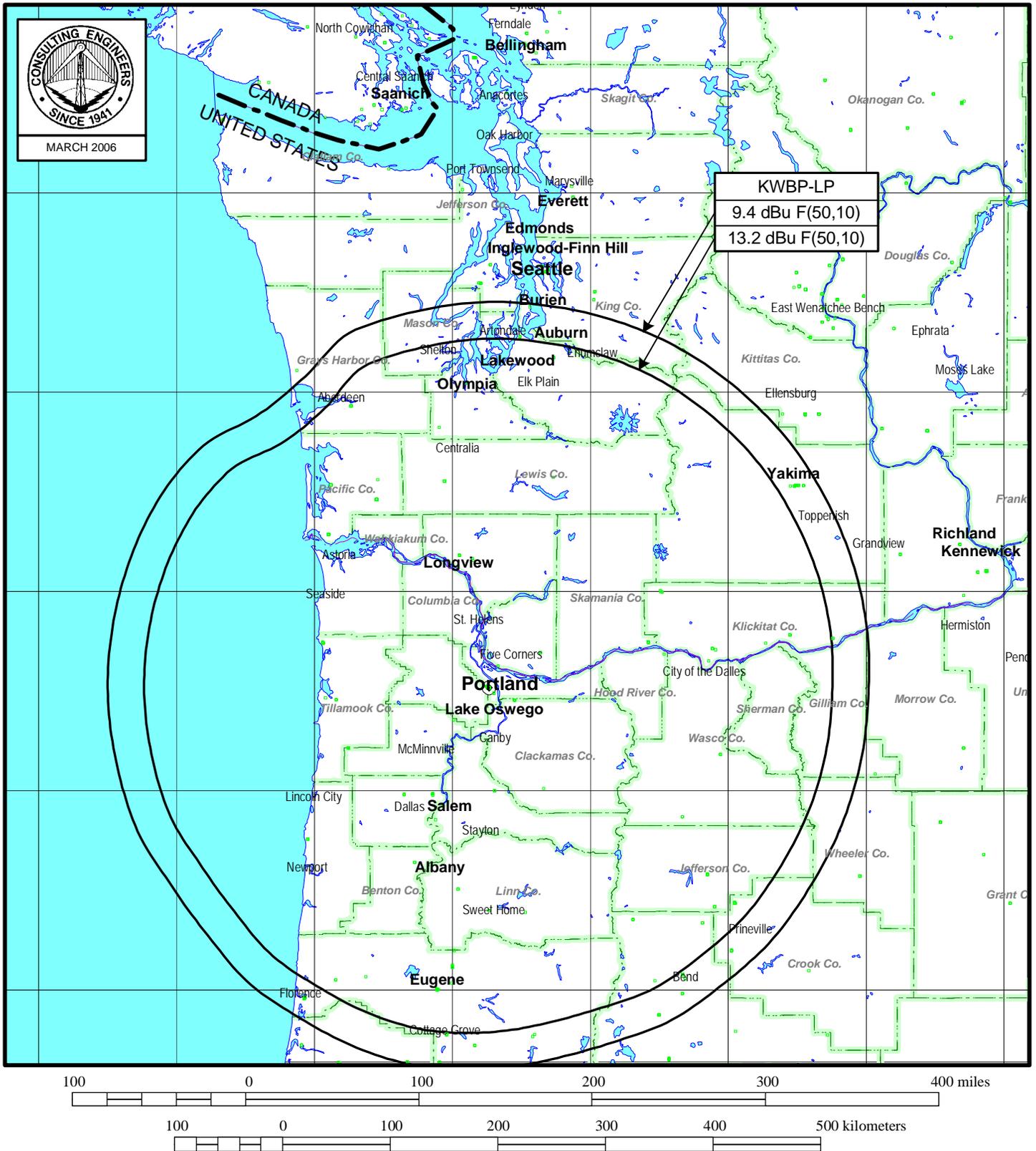
**Licensed Analog  
2.7 kW-DA  
62 dBu F(50,50)**



**PREDICTED COVERAGE CONTOURS**  
**STATION KWBP-LP**  
**PORTLAND, OREGON**

du Treil, Lundin & Rackley, Inc Sarasota, Florida

Figure 2



**PREDICTED CANADA INTERFERING CONTOUR MAP**

STATION KWBP-LP  
PORTLAND, OREGON  
CH 5 0.3 KW

du Treil, Lundin & Rackley, Inc Sarasota, Florida