

Exhibit to Application

FCC 301

WSVO, Staunton, VA

Facility ID: 11665

The proposed WSVO city grade contour (3.16 mV/m, 70 dBu) does not completely encompass the city of Staunton, VA when utilizing the standard FCC method of calculating the contour.¹ We have determined that a supplemental method of depicting city grade coverage, as noted in §73.313(e) of the Commission's rules, is appropriate. As shown below, the contour distance predicted using the alternative methodology exceeds that predicted by the standard method by more than 10%.

The city of Staunton, VA falls in an arc between 193° and 236° from the proposed WSVO transmitter site. Analyzing individual radials from the proposed WSVO site toward Staunton we have determined the location of the city grade 70 dBu (3.16 mV/m) contour based on the standard utilization of the Commission's 50/50 curves.

We have alternatively determined the location of the city grade 70 dBu (3.16 mV/m) contour using the Longley-Rice coverage model, based on NBS Technical Note #101 methodology as implemented in the V-Soft microcomputer program "Probe 4". This alternative method provides a more representative prediction of field strength than the standard methodology. A summary of the data and a tabulation of the results of this report, at 1° intervals is attached.

The supplemental depiction distances in the direction of concern are in excess of 10% higher than the distances using the Commission's standard methodology². Based on the Staff's policy³, we find that the contour on these pertinent radials varies widely from the standard methodology, therefore, pursuant to §73.313(e), a supplemental method of depicting the city grade coverage is acceptable.

Using this supplemental method, as visually demonstrated and documented in the tabulation, we find that the city grade contour, in the direction of Staunton, VA⁴, extends well beyond the city of Staunton. Therefore, based on the supplemental depiction, we find that the city of Staunton is completely encompassed by the city grade contour of the proposed WSVO facility in compliance with §73.315 of the Commission's rules.

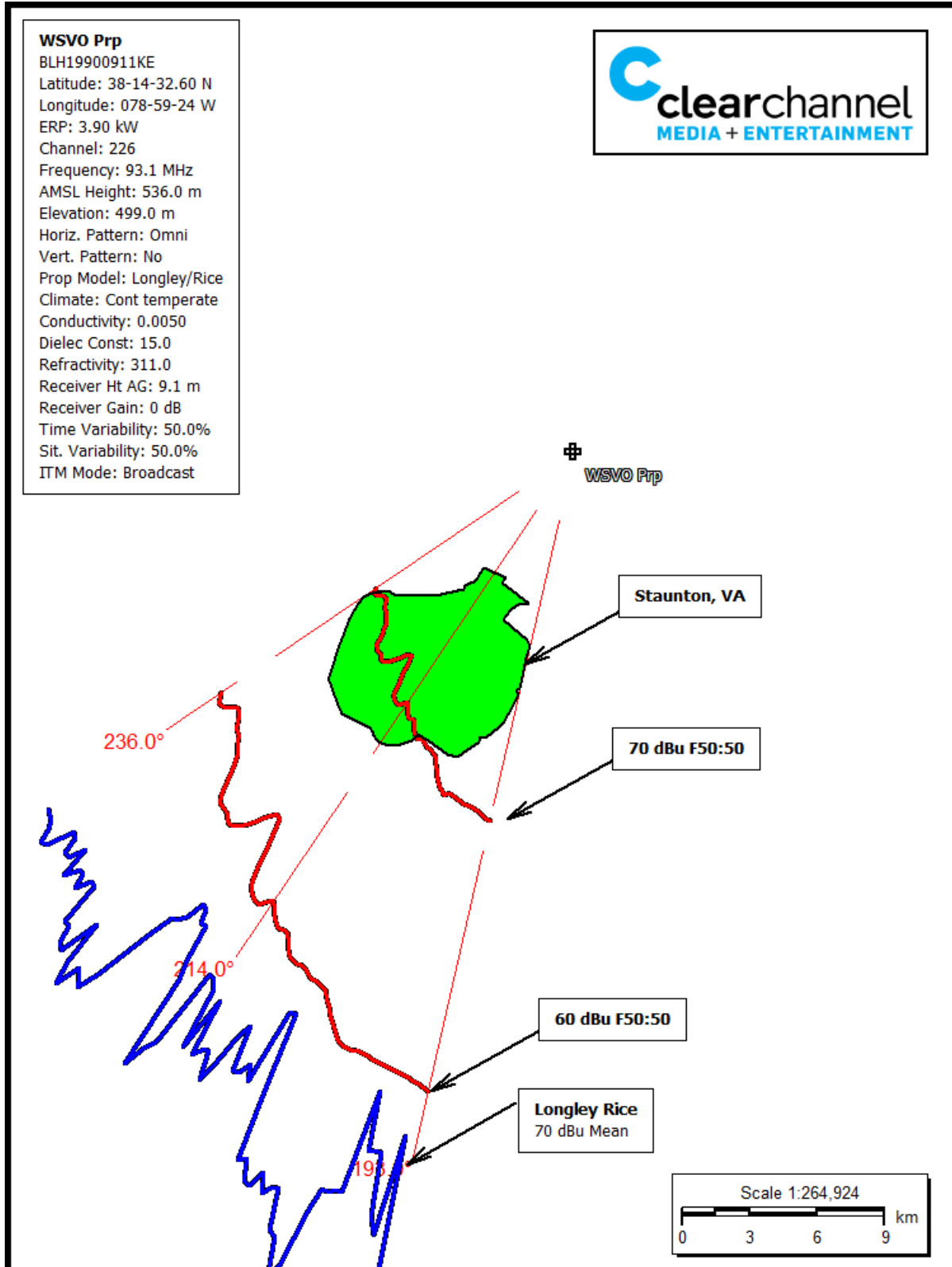
¹ §73.313(c) and §73.333

² On average, 70% further utilizing the supplemental methodology.

³ *Minor Changes R&O*, 12 FCC Rcd at 12402.

⁴ On a bearing of 193° to 236° True from the WSVO transmitting tower site.

Contour Map



WSVO Tabulation of Contour Distances

WSVO Tabulation of Contour Distances, and differences between distances as predicted by the FCC Standard and Alternate (Longley-Rice) Methodologies						
Radial		60 dbu FCC Method	70 dbu FCC Method	70 dbu Longley- Rice Method		
<i>Bearing</i>	<i>HAAT</i>	<i>Distance, km</i>	<i>Distance, km</i>	<i>Distance, km</i>	<i>Change %</i>	<i>Note</i>
193	130.7	28.8	16.6	38.7	133%	
194	128.7	28.7	16.5	31.0	88%	
195	126.5	28.5	16.3	34.8	113%	
196	125.8	28.4	16.3	32.0	97%	
197	125.2	28.3	16.2	29.4	81%	
198	123.9	28.2	16.1	34.2	112%	
199	122.5	28.1	16.1	34.3	114%	
200	121.4	28.0	16.0	38.0	138%	
201	123.5	28.1	16.1	37.1	130%	
202	120.5	27.9	15.9	34.9	119%	
203	114.9	27.4	15.5	35.4	129%	
204	108.7	26.7	15.0	35.3	135%	
205	103.1	26.1	14.6	34.3	135%	
206	102.0	25.9	14.5	31.3	115%	
207	101.4	25.8	14.5	27.7	91%	
208	98.5	25.5	14.3	30.5	114%	
209	100.0	25.6	14.4	31.2	117%	
210	96.8	25.3	14.1	29.7	110%	
211	91.0	24.6	13.7	32.2	135%	
212	92.2	24.7	13.8	31.0	125%	
213	89.1	24.3	13.5	28.8	113%	
214	84.3	23.8	13.2	28.5	116%	
215	89.2	24.3	13.6	28.1	107%	
216	88.1	24.2	13.5	32.4	141%	
217	85.1	23.7	13.2	29.0	119%	
218	72.4	22.1	12.3	26.4	115%	
219	61.1	20.7	11.5	25.8	126%	
220	63.6	20.8	11.6	26.7	129%	
221	68.5	21.5	12.0	27.1	126%	
222	72.7	22.1	12.3	29.6	140%	
223	75.2	22.4	12.5	32.2	157%	
224	72.1	22.0	12.3	31.5	157%	
225	72.5	22.0	12.3	31.7	158%	
226	70.5	21.7	12.1	31.5	160%	
227	63.5	20.8	11.6	30.6	163%	
228	58.5	20.1	11.2	28.6	155%	
229	56.7	19.7	11.1	29.2	164%	
230	54.5	19.4	10.8	28.5	163%	
231	54.1	19.2	10.8	27.8	158%	
232	51.5	18.8	10.5	28.6	171%	
233	50.6	18.6	10.4	27.7	165%	
234	52.7	19.0	10.7	29.2	174%	
235	54.0	19.2	10.8	28.2	162%	
236	51.6	18.8	10.5	28.0	166%	