

Exhibit 13 - Statement B  
**DAYTIME COVERAGE AND ALLOCATION CONSIDERATIONS**  
prepared for  
WNSH Beverly, Massachusetts  
Facility Id 22798  
1570 kHz 50 kW DA-D U

Willow Farm, Inc. (“*Willow Farm*”), licensee of Standard Broadcast Radio Station WNSH, 1570 kHz, Beverly, Massachusetts proposes herein to increase its daytime operating power to 50 kW using the existing WNSH towers with different directional antenna parameters. The proposed coverage contours are shown in **Exhibit 13-Figures 2 and 2A**. These contours utilize ground conductivities obtained from FCC Figure M3 and, where available, the most recent WNSH proof of performance (File Number BL-20021217ACH). Distances to contours and associated ground conductivity data for the proposed WNSH facility are summarized in **Exhibit 13-Table II**.

The locations of the protected and interfering contours of pertinent nearby stations operating on the same channel, and within three channels above and below the proposed frequency of use, were predicted using the same methodology and M-3 conductivity data<sup>1</sup>. The locations of the contours for each of these stations are shown on **Exhibit 13-Figures 3A, 3B, and 3C**, the radiation and conductivity assumptions, along with the resulting distances to the identified contours, are tabulated in **Exhibit 13-Table III, Sheets A-K**. Where appropriate, notations are included in the data tabulations as to facility status or operational considerations. With the exception of a small area of contour overlap from WFTU discussed below, no new areas of interference or prohibited contour overlap are predicted to be created by the instant proposal.

### **Section 73.37 Waiver Request**

As shown in **Exhibit 13-Figure 4**, there is existing interference to WNSH in the form of contour overlap of the licensed WNSH 0.5 mV/m contour with the WFTU 0.025 mV/m contour over Cape Cod, Massachusetts. Both the WNSH protected contour and the WFTU interfering contour in this area are the result of long salt water paths. The land area of this existing overlap is 48.2 square kilometers. The instant proposal will increase this area of overlap to 657.5 square kilometers,

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<sup>1</sup> Protected and interfering contours for WPEP (1570 kHz, Taunton, MA) are not included in the above referenced allocations study since the WPEP license will be surrendered in accordance with an interference reduction agreement. See the *Interference Reduction* portion of this exhibit that follows.

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**DAYTIME COVERAGE AND ALLOCATION CONSIDERATIONS**  
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an increase of 609.3 square kilometers. This area is 5% of the total land area (12,030 square kilometers) encompassed by the proposed WNSH 0.5 mV/m contour.

In actual practice, the proposed overlap area will increase interference-free service to the Cape Cod area due to increased radiation from the proposed facilities in that direction. However, the Cape Cod area is well outside the primary service area of WNSH. Further, no prohibited overlap is predicted to occur to the WFTU 0.5 mV/m protected contour from the 0.025 mV/m interfering contour of the proposed facility.

Similar waivers of 73.37 have been granted in cases of contour overlap created by long salt water paths<sup>2</sup>. To the extent a waiver of Section 73.37 of the Rules is required with respect to the WFTU contour overlap, one is hereby respectfully requested on behalf of the applicant.

### **Interference Reduction**

*Willow Farm* has entered into an interference reduction arrangement with the licensee of WPEP, 1570 kHz, Taunton, MA (Facility Id 31601) wherein the license of WPEP will be surrendered prior to the commencement of the proposed WNSH operation. The requisite showings as established in MM Docket No. 89-46 are demonstrated herein.

The licensed facilities of WPEP are predicted to cause interference to co-channel stations WFTU and the existing WNSH. As shown in **Exhibit 13-Figure 5**, the WPEP 0.025 mV/m interfering contour overlaps a 506.8 square kilometer area of the WFTU 0.5 mV/m coverage contour. This area of overlap encompasses 53,512 persons. The WPEP interfering contour also overlaps 100% of the existing WNSH 0.5 mV/m coverage contour. Removal of WPEP will permit interference free service to the 506.8 square kilometer area from WFTU and the entire licensed WNSH 0.5 mV/m coverage area (709.8 square kilometer and 384,979 persons, excluding the small area of interference from WFTU discussed above).

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<sup>2</sup> See Spann Communications, 4 FCC Rcd 617 (1989) and affirmed in letter of December 5, 1996 from Dennis Williams to Steven Stone regarding WWRL(AM) New York, NY, BP-960611AB.

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**Increased Service**

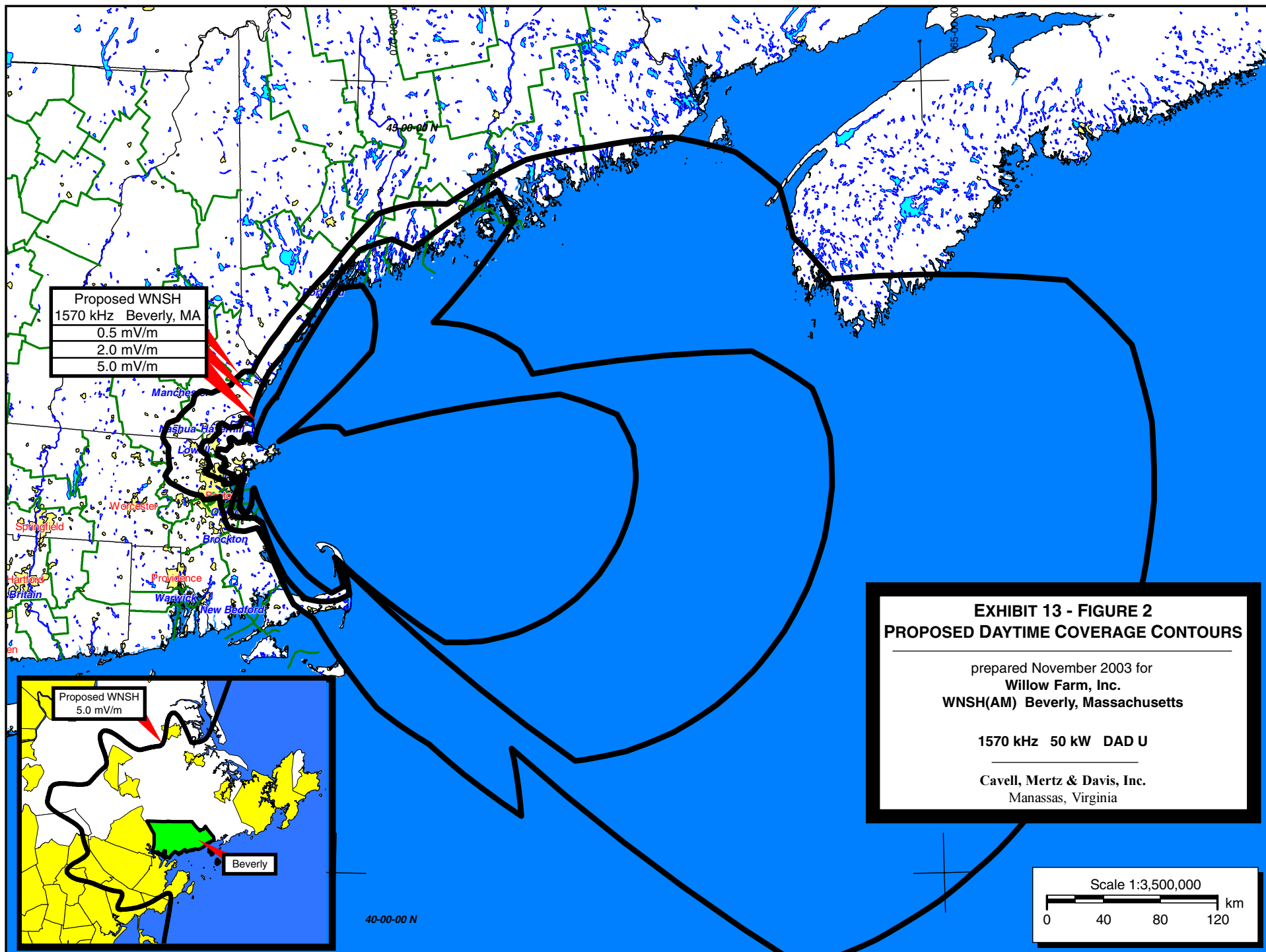
A grant of the proposed power increase for WNSH will result in the coverage of 3,486,107 people over an area of 12,030 square kilometers, which is an increase of 3,095,312 persons and 11,272 square kilometers to the WNSH 0.5 mV/m interference-free service area. No additional interference is predicted to occur to any other station as a result of this proposal (with the noted exception above).

**Local Service Floor**

Due to its close proximity to the Boston area, the entire WPEP 0.5 mV/m coverage area will remain well served with no fewer than 25 audio services remaining. Consequently, no “white” or “gray” areas will be created by the removal of WPEP. Further, WSNE-FM, Channel 227B allocated to Taunton, Massachusetts will continue to provide aural service to that community. Additional Exhibits showing the remaining aural services in the WPEP coverage area can be provided upon request of the Commission.

**Conclusion**

Based upon these tables and figures, it is believed that the facility is compliant with the appropriate allocation requirements of the Commission’s Rules and policies. Further, the reduction of interference by the removal of WPEP and the increased area and population served by the proposed WNSH facility is clearly in the public interest.





0.5 0 0.5 1 1.5  
Kilometers

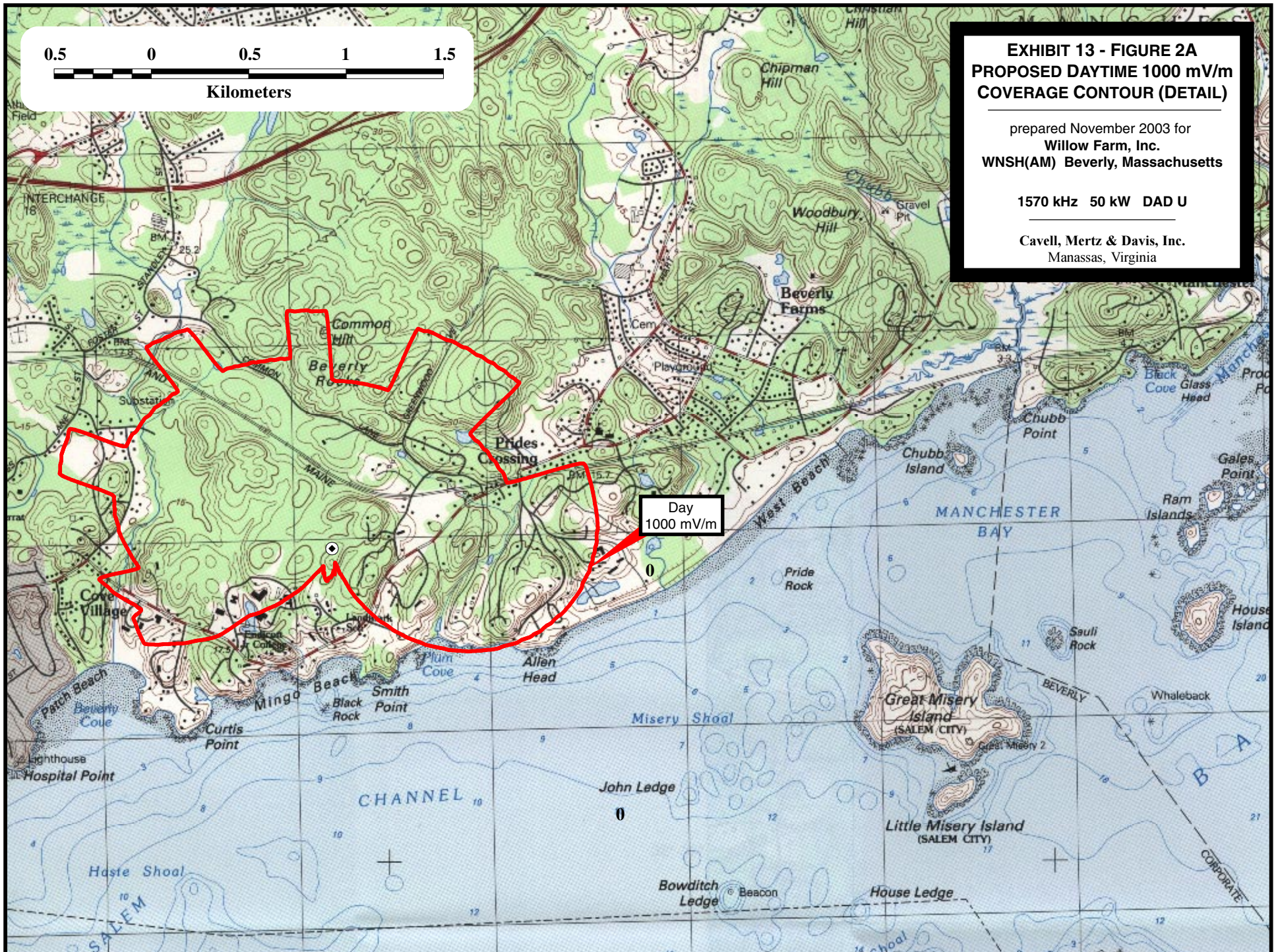
**EXHIBIT 13 - FIGURE 2A**  
**PROPOSED DAYTIME 1000 mV/m**  
**COVERAGE CONTOUR (DETAIL)**

prepared November 2003 for  
**Willow Farm, Inc.**  
**WNSH(AM) Beverly, Massachusetts**

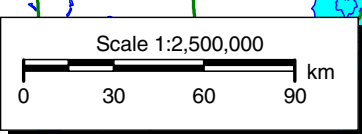
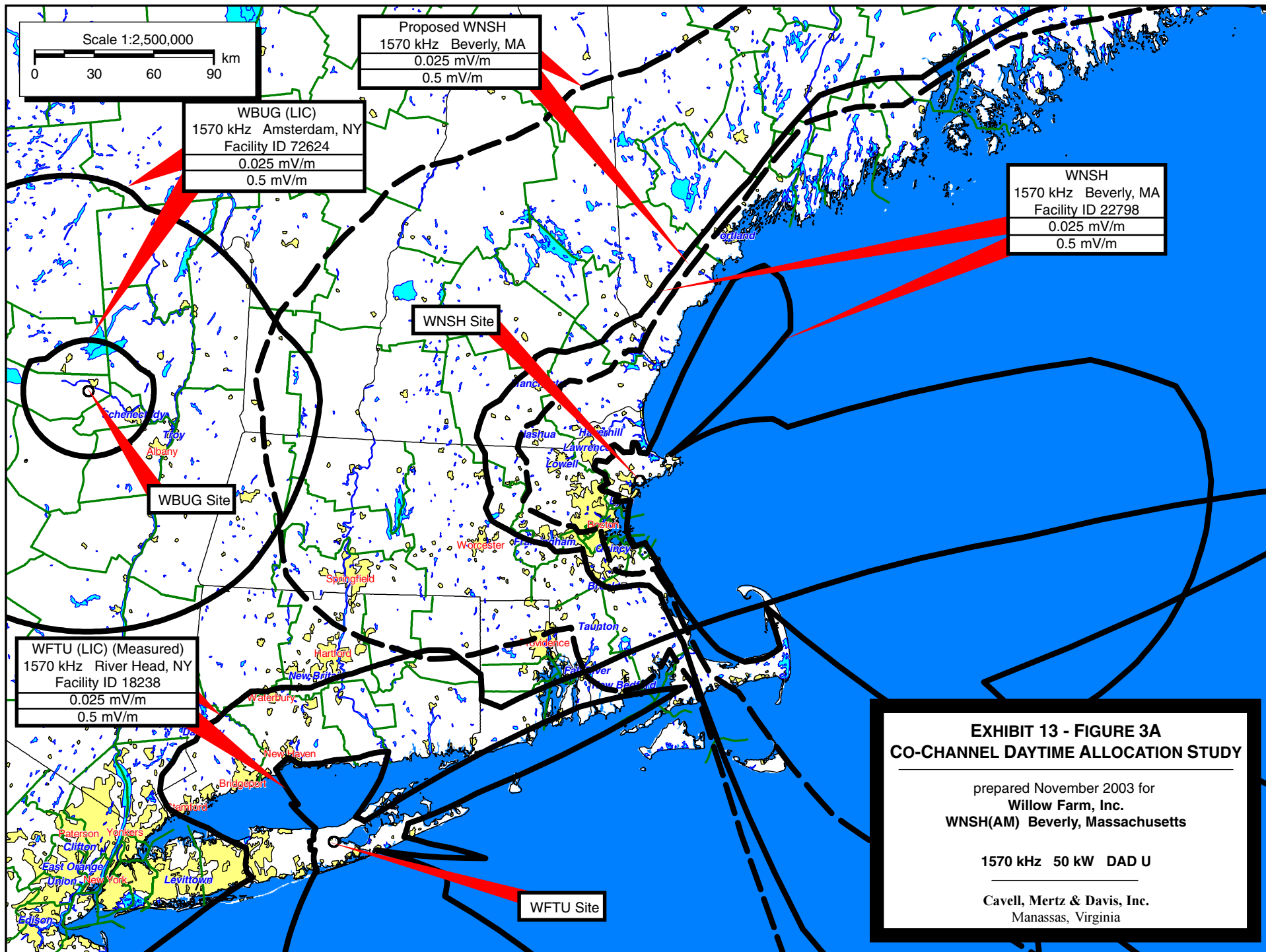
**1570 kHz 50 kW DAD U**

**Cavell, Mertz & Davis, Inc.**  
Manassas, Virginia

Day  
1000 mV/m







Proposed WNSH  
1570 kHz Beverly, MA  
0.025 mV/m  
0.5 mV/m

WBUG (LIC)  
1570 kHz Amsterdam, NY  
Facility ID 72624  
0.025 mV/m  
0.5 mV/m

WNSH  
1570 kHz Beverly, MA  
Facility ID 22798  
0.025 mV/m  
0.5 mV/m

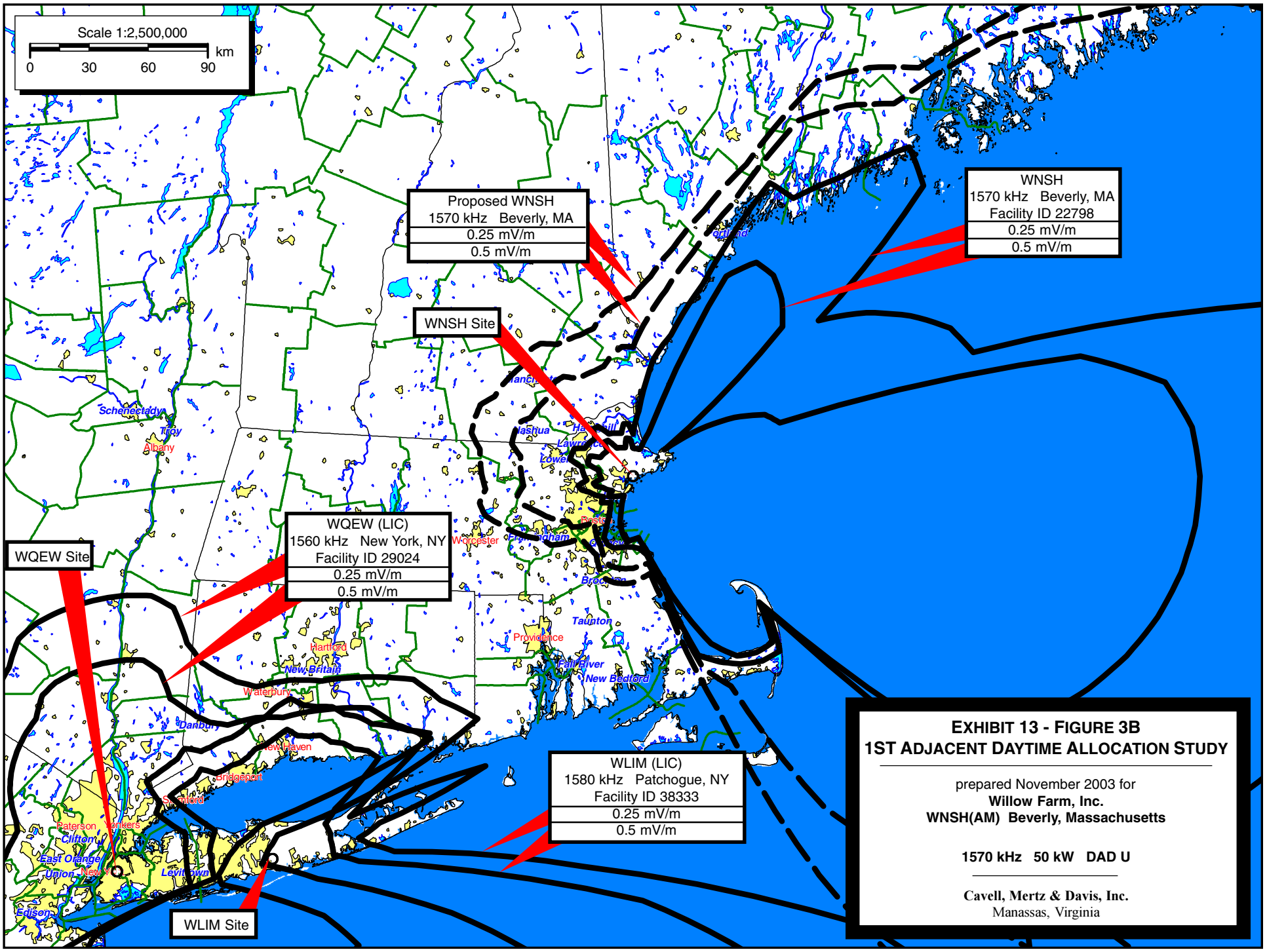
WFTU (LIC) (Measured)  
1570 kHz River Head, NY  
Facility ID 18238  
0.025 mV/m  
0.5 mV/m

**EXHIBIT 13 - FIGURE 3A**  
**CO-CHANNEL DAYTIME ALLOCATION STUDY**

prepared November 2003 for  
**Willow Farm, Inc.**  
**WNSH(AM) Beverly, Massachusetts**

**1570 kHz 50 kW DAD U**

**Cavell, Mertz & Davis, Inc.**  
Manassas, Virginia



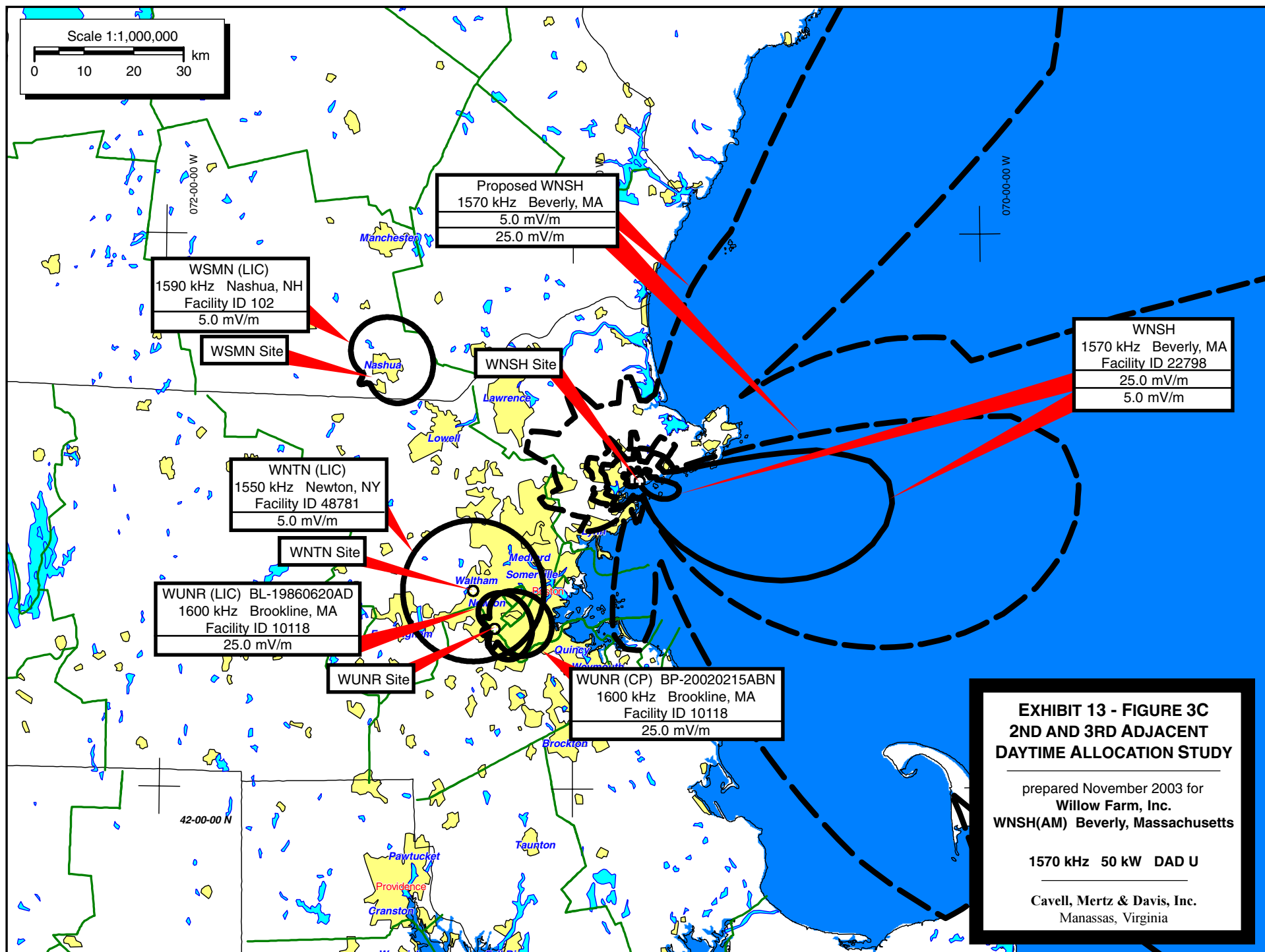




Exhibit 13 - Table II  
**PROPOSED DAYTIME DISTANCE TO CONTOURS**

prepared for  
**Willow Farm, Inc.**  
WNSH(AM) Beverly, Massachusetts  
Facility ID 22798  
1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measurement Data	Distances To Contours						
			1000 mV/m (km)	25.0 mV/m (km)	5.0 mV/m (km)	2.0 mV/m (km)	0.5 mV/m (km)	0.25 mV/m (km)	0.025 mV/m (km)
0	2337	6*-0.4, 0.5*-0.9, 0.1*-11.2, 2-25.6, 5000-30.2, 2-59.6, 5000-69.6, 2-199.1, 1-304.8, 4-483.5, 5000-501.8, 4-570.1, 2-667.8, 2-1000	0.87	6.7	16.3	31.7	16.3	90.8	205.9
5	2322	6*-0.4, 0.5*-0.9, 0.1*-11.2, 2-20.1, 5000-42.6, 2-59.2, 5000-61.8, 2-216.9, 1-353.7, 4-521.4, 5000-554.3, 4-612.6, 2-718.6, 2-1000	0.86	6.6	16.2	48.1	16.2	101.1	216.4
10	2316	6*-0.4, 0.5*-0.9, 0.1*-11.2, 2-16.1, 5000-55.4, 2-57.1, 5000-59.8, 2-234.6, 1-505.9, 4-617.8, 5000-667.3, 2-776.6, 2-1000	0.86	6.6	17.8	66.4	17.8	117.0	232.3
15	2318	6*-0.4, 0.5*-0.9, 0.1*-11.2, 2-14.4, 5000-71, 2-81.6, 5000-90.7, 2-253.2, 1-538.5, 2-690.7, 5000-760.4, 2-761.1, 5000-773, 2-832.7, 2-1000	0.86	6.6	40.2	79.9	40.2	138.7	254.0
20	2329	6*-0.4, 0.5*-0.9, 0.1*-11.2, 2-13.5, 5000-101.5, 2-109.1, 5000-117.7, 2-276, 1-572.3, 2-762.5, 5000-903.1, 2-908.3, 5000-912.1, 2-1000	0.86	6.7	53.3	109.1	53.3	167.6	282.6
25	2347	2-12.8, 5000-159.4, 2-310.2, 1-548.5, 2-833.4, 5000-961.7, 2-1000	1.22	9.8	138.7	169.2	138.7	220.1	334.1
30	2373	2-12.3, 5000-156.7, 2-163.9, 5000-185.5, 2-354.8, 1-469.3, 2-705.9, 5000-734.3, 2-871.6, 5000-945.9, 2-967.6, 5000-1000	1.23	9.9	148.4	187.0	148.4	238.1	354.0
35	2406	2-12.7, 5000-181.3, 2-193.5, 5000-205.1, 2-253.5, 5000-255.6, 2-339.9, 1-426.2, 2-737.1, 5000-815.3, 2-842.9, 5000-851.7, 2-854.2, 5000-947.5, 2-1000	1.24	9.9	143.3	189.9	143.3	251.6	367.7
40	2446	2-13.6, 5000-258.5, 2-329.7, 1-410.1, 2-676, 5000-988.4, 2-1000	1.25	10.0	131.9	259.5	131.9	311.2	420.5
45	2493	2-14.8, 5000-303.6, 2-341.2, 1-410.8, 2-659.5, 5000-705.1, 4-734.3, 5000-1000	1.27	10.1	117.1	253.4	117.1	349.3	459.7
50	2546	2*-0.5, 0.5*-2.2, 0.1*-13.2, 2-15.7, 5000-373.1, 1-379.5, 5000-457.7, 2-575.3, 4-663.5, 5000-696.6, 4-725.9, 5000-1000	0.92	7.0	26.6	163.2	26.6	460.3	578.3
55	2601	2*-0.5, 0.5*-2.2, 0.1*-13.2, 2-14.7, 5000-568.6, 4-676.4, 5000-747.8, 4-816.5, 5000-940.6, 1-956.5, 5000-1000	0.93	7.0	43.2	180.1	43.2	523.2	713.0

Exhibit 13 - Table II

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**PROPOSED DAYTIME DISTANCE TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measurement Data	Distances To Contours						
			1000 mV/m (km)	25.0 mV/m (km)	5.0 mV/m (km)	2.0 mV/m (km)	0.5 mV/m (km)	0.25 mV/m (km)	0.025 mV/m (km)
60	2657	2*-0.5, 0.5*-2.2, 0.1*-13.2, 2-13.9, 5000-438.4, 2-603.5, 5000-608, 2-652.8, 4-794.3, 5000-829.7, 1-898.5, 4-936, 5000-1000	0.94	7.1	57.0	194.2	57.0	458.1	577.2
65	2709	2*-0.5, 0.5*-2.2, 0.1*-13.2, 2-13.3, 5000-409.9, 2-570.9, 5000-583.6, 2-592.2, 5000-603.9, 2-776.6, 4-785.8, 5000-791.8, 4-838.6, 5000-1000	0.95	7.2	68.2	205.7	68.2	436.7	556.3
70	2752	2*-0.5, 0.5*-2.2, 0.1*-13.2, 5000-426.8, 2-518.9, 5000-1000	0.96	7.3	70.8	208.6	70.8	451.4	672.9
75	2780	2-8.6, 5000-1000	1.37	38.9	223.5	361.5	223.5	705.2	1593.3
80	2789	2-5.3, 5000-1000	1.37	75.6	260.4	398.5	260.4	742.2	1593.3
85	2773	2-3.8, 5000-1000	1.37	85.3	269.8	407.7	269.8	751.4	1593.3
90	2728	2-3, 5000-1000	1.35	88.1	271.5	409.1	271.5	752.7	1593.3
95	2651	2-2.5, 5000-1000	1.33	87.9	269.5	406.6	269.5	749.9	1593.3
100	2542	2-2.1, 5000-1000	1.29	85.8	264.6	401.2	264.6	744.0	1593.3
105	2401	2-1.9, 5000-1000	1.24	82.3	257.4	393.2	257.4	734.7	1593.3
110	2231	2-1.7, 5000-1000	1.17	77.6	247.8	382.1	247.8	722.6	1593.3
115	2036	2-1.6, 5000-1000	1.10	71.9	235.8	368.5	235.8	707.6	1593.3
120	1822	2-1.4, 5000-1000	1.01	65.4	221.5	351.8	221.5	689.0	1593.3
125	1596	2-1.3, 5000-1000	0.92	58.1	204.6	332.1	204.6	666.8	1593.3
130	1363	2-1.2, 5000-1000	0.82	50.3	185.3	309.1	185.3	640.4	1593.3
135	1132	2-1.1, 5000-74.5, 2-77.7, 5000-86.6, 2-99.7, 5000-1000	0.71	42.3	88.4	96.4	88.4	385.2	781.4
140	907	2-1, 5000-106, 2-116.2, 5000-1000	0.60	34.3	108.0	115.2	108.0	424.3	818.4
145	696	2-1, 5000-106.6, 2-119.8, 5000-1000	0.48	26.4	107.0	113.4	107.0	344.3	735.4
150	502	2-0.9, 5000-104, 2-116.3, 5000-1000	0.37	19.1	87.5	108.5	87.5	301.7	689.2
155	331	2-0.9, 5000-99.8, 2-113.1, 5000-1000	0.26	12.5	60.6	101.7	60.6	222.1	603.4
160	187	2-0.9, 5000-94.3, 2-108.3, 5000-1000	0.16	6.8	35.5	82.4	35.5	125.7	496.9
165	88	2-0.9, 5000-51.4, 2-59, 5000-68.8, 2-113.4, 5000-1000	0.09	2.9	16.7	41.4	16.7	71.2	106.5
170	92	1*-1.2, 5000*-15.8, 5000-37.6, 2-92.1, 5000-96.3, 2-113.8, 5000-1000	0.09	3.7	18.2	38.2	18.2	49.9	86.0
175	148	1*-1.2, 5000*-15.8, 5000-34.6, 2-91, 5000-91.8, 2-97.1, 5000-1000	0.11	5.9	28.8	37.2	28.8	51.8	96.9

Exhibit 13 - Table II

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**PROPOSED DAYTIME DISTANCE TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measurement Data	Distances To Contours						
			1000 mV/m (km)	25.0 mV/m (km)	5.0 mV/m (km)	2.0 mV/m (km)	0.5 mV/m (km)	0.25 mV/m (km)	0.025 mV/m (km)
180	189	1*-1.2, 5000*-15.8, 5000-33.6, 2-103.6, 5000-1000	0.14	7.5	33.9	37.5	33.9	53.8	103.3
185	208	1*-1.2, 5000*-15.8, 5000-33.1, 2-114.8, 5000-1000	0.15	8.3	33.7	37.4	33.7	54.5	106.0
190	204	2-0.9, 5000-6.7, 2-8.2, 5000-34.3, 2-112.6, 5000-1000	0.17	6.8	31.0	37.7	31.0	54.6	105.6
195	176	2-0.9, 5000-6.4, 2-8.9, 5000-35.9, 2-117.6, 5000-1000	0.15	6.3	19.0	37.9	19.0	53.7	101.7
200	133	2-1, 5000-6.1, 2-9.9, 5000-35.6, 2-105.5, 5000-1000	0.13	4.6	8.9	35.6	8.9	49.5	91.9
205	99	2-1, 5000-6, 2-11.1, 5000-33.8, 2-99.2, 5000-104.9, 2-107, 5000-114, 2-118.2, 5000-119.5, 2-144.3, 5000-1000	0.10	3.2	8.0	10.7	8.0	43.9	81.2
210	144	2-1.1, 5000-5.9, 2-12.9, 5000-23.3, 2-25.6, 5000-32.3, 2-156.8, 5000-191.3, 0.5-199.1, 5000-1000	0.14	4.9	8.9	12.1	8.9	42.6	86.6
215	259	2-1.2, 5000-5.8, 2-15.4, 5000-22, 2-27.8, 5000-29.7, 2-163.5, 5000-203.4, 0.5-206.5, 5000-208.5, 0.5-226, 5000-797.9, 4-803, 5000-809.9, 4-832.9, 5000-833.9, 4-848.2, 5000-848.9, 4-854.1, 5000-859.1, 4-859.7, 5000-873, 4-942, 5000-947.5, 4-984.1, 5000-985.8, 4-1000	0.21	6.5	10.7	14.8	10.7	41.6	97.9
220	409	2-1.3, 5000-5.8, 2-174.4, 5000-177.5, 2-180.6, 5000-215.2, 0.5-255.5, 5000-569.8, 2-653.7, 5000-656, 2-661.2, 5000-674.3, 2-675.1, 5000-763, 4-780.8, 5000-788.2, 4-817.8, 2-1001	0.31	7.3	12.5	17.5	12.5	40.9	108.2
225	587	2-1.4, 5000-5.8, 2-201.4, 5000-247.3, 0.5-286.6, 5000-389.3, 4-513.5, 5000-546.1, 4-604.4, 2-650.7, 5000-680, 4-683.6, 5000-695.9, 4-723.5, 5000-727.8, 2-1000	0.42	8.2	14.1	20.0	14.1	47.7	124.5
230	786	2-1.6, 5000-5.8, 2-224.1, 5000-275.4, 4-281, 0.5-324.9, 5000-357.7, 4-520.7, 5000-528, 4-600.2, 40-600.7, 4-606.3, 40-643.3, 4-699.6, 5000-703, 4-723.6, 2-942.3, 4-1000	0.53	8.9	15.7	22.5	15.7	54.1	139.0
235	1005	5*-1.1, 1.5*-1.4, 2*-3.5, 3*-10.8, 1.5*-13.4, 2-220.9, 1-292.4, 4-607.6, 40-610, 4-627.1, 2-1000	0.82	7.9	12.7	20.2	12.7	55.5	147.3
240	1238	5*-1.1, 1.5*-1.4, 2*-3.5, 3*-10.8, 1.5*-13.4, 2-209.8, 1-283.2, 4-334.3, 2-377.3, 4-611.1, 2-1000	0.98	8.8	14.1	22.4	14.1	61.2	158.8
245	1480	5*-1.1, 1.5*-1.4, 2*-3.5, 3*-10.8, 1.5*-13.4, 2-198.5, 1-258.8, 4-317, 2-394, 4-421, 2-500.6, 4-559.7, 2-686.6, 4-838.9, 2-1000	1.08	9.6	15.4	24.5	15.4	66.4	169.2



Exhibit 13 - Table II

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**PROPOSED DAYTIME DISTANCE TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measurement Data	Distances To Contours						
			1000 mV/m (km)	25.0 mV/m (km)	5.0 mV/m (km)	2.0 mV/m (km)	0.5 mV/m (km)	0.25 mV/m (km)	0.025 mV/m (km)
250	1726	5*-1.1, 1.5*-1.4, 2*-3.5, 3*-10.8, 1.5*-13.4, 2-153.5, 1-225.1, 4-459.2, 2-616.8, 4-838.3, 2-1000	1.08	10.3	16.7	26.4	16.7	71.2	176.5
255	1970	2-6.8, 5000-7, 2-126.7, 1-207.7, 4-494.3, 2-731, 4-1000	1.07	9.3	19.5	29.9	19.5	77.2	183.2
260	2204	2-63.6, 1-195.2, 4-586.6, 2-761.6, 4-800.6, 8-1000	1.16	9.5	20.3	31.3	20.3	78.6	182.2
265	2422	1*-2.7, 1.5*-12.9, 0.5*-18.6, 2-51.4, 1-188.1, 4-684, 2-746.3, 8-1005.4	1.00	8.9	16.0	26.7	16.0	74.7	181.0
270	2616	1*-2.7, 1.5*-12.9, 0.5*-18.6, 2-43.7, 1-182.8, 4-750.4, 8-878.1, 10-960.6, 20-962.6, 10-1000	1.05	9.3	16.6	27.9	16.6	76.1	184.8
275	2782	1*-2.7, 1.5*-12.9, 0.5*-18.6, 2-38.3, 1-179.2, 4-555.9, 8-603.5, 4-632.8, 8-674.1, 10-765.5, 20-767.4, 4-825.3, 20-952.1, 15-999.1, 8-1000	1.10	9.6	17.1	28.9	17.1	77.4	188.7
280	2915	1*-2.7, 1.5*-12.9, 0.5*-18.6, 2-34.8, 1-176.9, 4-550.3, 8-677.3, 15-730.3, 20-751.1, 4-808.5, 6-888.9, 10-926.3, 8-956.3, 15-1000	1.13	9.8	17.5	29.7	17.5	78.5	191.7
285	3012	2-32.9, 1-176, 2-181.1, 4-209, 2-299.2, 4-467.4, 8-518.9, 15-672.2, 6-730.8, 4-804.1, 6-893.2, 10-936.7, 8-1000	1.45	11.1	23.5	35.7	23.5	84.4	199.2
290	3073	2-31.4, 1-175.7, 2-287.7, 4-465.8, 8-487.1, 15-523.2, 4-533.4, 15-534.1, 4-597.4, 6-727.8, 4-770.2, 10-821.3, 4-833.9, 10-842.6, 4-860.2, 10-862.2, 4-874.6, 10-960.1, 8-1000	1.47	11.2	23.8	35.8	23.8	84.9	199.0
295	3097	2-30.3, 1-176.8, 2-282.7, 4-469.1, 15-484.7, 10-516.5, 4-619, 1-801.4, 10-802.7, 1-805.4, 10-931.4, 4-1000	1.48	11.2	23.9	35.7	23.9	85.0	199.3
300	3090	2*-0.4, 1*-11.6, 0.5*-14.8, 2-29.8, 1-179.3, 2-281.7, 4-452.8, 10-487.7, 4-555.2, 1-771.7, 2-1000	1.18	9.0	18.9	31.4	18.9	80.6	194.5
305	3054	2*-0.4, 1*-11.6, 0.5*-14.8, 2-30.1, 1-183.3, 2-284.8, 4-442.2, 10-483.5, 4-602.9, 1-735.7, 2-1000	1.17	8.9	18.7	31.3	18.7	80.2	193.4
310	2995	2*-0.4, 1*-11.6, 0.5*-14.8, 2-30.6, 1-188, 2-291.4, 4-429.2, 10-497.9, 4-627.3, 2-1000	1.15	8.8	18.5	31.1	18.5	79.6	192.0
315	2920	2*-0.4, 1*-11.6, 0.5*-14.8, 2-31.4, 1-194.4, 2-299.8, 4-392.7, 10-487, 4-520.5, 2-1003.9	1.13	8.7	18.2	30.7	18.2	78.9	190.3
320	2836	2-32.9, 1-200.4, 0.5-217.2, 2-307.8, 4-360.1, 10-451.6, 4-480.3, 2-902.1, 6-1000	1.39	10.8	22.9	34.8	22.9	82.3	192.9

Exhibit 13 - Table II

(Page 5 of 5)

**PROPOSED DAYTIME DISTANCE TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measurement Data	Distances To Contours						
			1000 mV/m (km)	25.0 mV/m (km)	5.0 mV/m (km)	2.0 mV/m (km)	0.5 mV/m (km)	0.25 mV/m (km)	0.025 mV/m (km)
325	2747	2-35.2, 1-190.6, 0.5-239.4, 2-322.1, 4-342.3, 10-406.1, 4-437.5, 2-830.3, 6-929.5, 2-935.8, 2-1000	1.36	10.6	22.6	34.7	22.6	81.6	191.3
330	2661	1*-1.7, 0.5*-5, 0.1*-12.4, 2-38.3, 1-191.2, 0.5-257.5, 2-316.3, 4-357.5, 10-411.1, 4-442.7, 2-640.5, 2-1047.9	1.07	7.1	17.2	29.1	17.2	76.7	185.6
335	2580	1*-1.7, 0.5*-5, 0.1*-12.4, 2-42.3, 1-193.3, 0.5-281, 2-302, 4-365.6, 6-381.4, 10-427.4, 4-456.8, 2-600.9, 2-1000	1.04	7.0	16.9	28.6	16.9	76.3	184.3
340	2508	1*-1.7, 0.5*-5, 0.1*-12.4, 2-47.6, 1-196.9, 0.5-291.3, 4-367.4, 6-427.9, 10-433.7, 4-470.8, 2-586.8, 2-1000	1.02	6.9	16.6	28.2	16.6	76.2	183.4
345	2448	1*-1.7, 0.5*-5, 0.1*-12.4, 2-60.5, 1-107.1, 2-132.8, 1-203.1, 0.5-283.5, 4-373.4, 6-445.2, 4-486.1, 2-585.7, 2-1000	1.01	6.8	16.3	27.8	16.3	77.1	186.1
350	2399	2-162.3, 1-215, 0.5-285.3, 4-392, 6-463.1, 4-504.2, 2-601.1, 2-1000	1.24	9.9	21.2	32.5	21.2	83.9	197.6
355	2363	2-29.2, 5000-29.5, 2-57.1, 5000-61.8, 2-181.2, 1-237, 0.5-302.3, 4-529, 2-627.5, 2-1000	1.22	9.9	21.0	32.5	21.0	87.5	201.9

Exhibit 13 - Table III-A

(Page 1 of 3)

**WBUG(AM) - DISTANCES TO CONTOURS**

WBUG(AM) ND1 U 1170 kHz Amsterdam, NY Facility ID: 72624

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
0	318.7	4-4.7, 2-50.2, 4-232.4, 10-290.6, 4-312.4, 2-499.9, 2-1000	25.5	106.4
5	318.7	4-4.8, 2-57.3, 4-233.3, 10-289, 4-329.3, 2-509.1, 2-1000	25.5	104.6
10	318.7	4-4.9, 2-69.1, 4-236.1, 10-315.9, 4-375.9, 2-529, 2-1000	25.6	101.7
15	318.7	4-5, 2-95.7, 4-240.7, 10-372.4, 4-427.5, 2-573.4, 2-1000	25.6	96.1
20	318.7	4-5.2, 2-223.1, 4-307.7, 6-414.3, 4-486.2, 2-649.9, 2-1000	25.7	96.1
25	318.7	4-5.4, 2-257.7, 4-342.3, 6-466, 4-585.3, 2-767.1, 2-1000	25.7	96.2
30	318.7	4-5.7, 2-270.7, 4-521.9, 5000-597.1, 4-606.9, 5000-626.8, 4-650.5, 5000-695, 2-742.1, 5000-748, 2-895.5, 2-1000	25.8	96.3
35	318.7	4-6.1, 2-253.9, 0.5-287.7, 4-633.8, 2-815.4, 5000-1000	25.9	96.4
40	318.7	4-6.6, 2-204.6, 0.5-309.6, 4-340.3, 0.5-348.4, 4-472, 1-647.7, 2-962.5, 5000-1000	26.1	96.6
45	318.7	4-7.3, 2-183.6, 0.5-369.2, 1-683.5, 2-842, 5000-872.6, 2-1000	26.3	96.8
50	318.7	4-8.1, 2-179, 0.5-325.9, 1-642.5, 2-911.4, 5000-1000	26.6	97.0
55	318.7	4-9.3, 2-160.8, 1-605.5, 2-864.4, 5000-1000	26.9	97.4
60	318.7	4-11, 2-143.9, 1-293.5, 2-526.7, 1-606, 2-826.5, 4-850.1, 5000-889, 4-909.5, 5000-1000	27.4	97.9
65	318.7	4-15, 2-132, 1-263.4, 2-470.9, 5000-472, 2-531.6, 1-616.2, 5000-637.1, 2-774.5, 4-796.5, 5000-834.3, 4-893.5, 5000-955.5, 4-994.8, 5000-1000	28.5	99.0
70	318.7	4-24, 2-123.1, 1-252.9, 2-366.4, 5000-374.9, 2-387.6, 5000-388.8, 2-434.6, 5000-477.9, 2-478.7, 5000-518.4, 2-519, 5000-725.1, 2-839.6, 5000-841.9, 2-936.6, 4-1000	30.7	101.2
75	318.7	4-47.6, 2-116.2, 1-254.5, 2-333.9, 5000-660.8, 2-815.3, 5000-865.2, 2-868.2, 5000-1000	32.7	106.5
80	318.7	4-71.8, 2-110.8, 1-258.1, 2-299.2, 5000-687.7, 2-723.1, 5000-1000	32.7	111.5
85	318.7	4-94.7, 2-106.7, 1-259.7, 2-269.1, 5000-274.8, 2-281.8, 5000-287.9, 2-289, 5000-1000	32.7	114.9
90	318.7	4-103.8, 1-256.5, 2-276.5, 5000-1000	32.7	116.0
95	318.7	4-102, 1-250, 2-289.4, 5000-1000	32.7	115.5
100	318.7	4-101, 1-229.8, 2-271.9, 5000-1000	30.7	115.3
105	318.7	4-100.9, 1-208.8, 2-298.8, 5000-340.2, 2-342.6, 5000-352, 2-356.7, 5000-1000	32.7	115.2
110	318.7	4-101.6, 1-180.8, 2-323.8, 5000-354.6, 2-376.5, 5000-1000	32.7	115.4
115	318.7	4-103, 1-171, 2-316.2, 5000-327.1, 2-338.7, 5000-1000	32.7	115.8
120	318.7	4-105.3, 1-167.2, 2-267.5, 5000-289.2, 2-300.6, 5000-1000	32.7	116.4
125	318.7	4-108.6, 1-162.6, 2-280.9, 5000-1000	32.7	117.3
130	318.7	4-112.9, 1-157.1, 2-267.6, 5000-1000	32.7	118.5
135	318.7	4-118, 1-153.8, 2-247.9, 5000-1000	32.7	119.9
140	318.7	4-122.8, 1-157.6, 2-233.4, 5000-251.4, 0.5-254.5, 5000-268.3, 0.5-278.3, 5000-1000	32.7	120.5
145	318.7	4-129.1, 1-172.6, 2-221.4, 5000-250.5, 0.5-255.9, 5000-264, 0.5-272.4, 5000-1000	32.7	120.5



Exhibit 13 - Table III-A

(Page 2 of 3)

**WBUG(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
150	318.7	4-137.1, 1-203.3, 2-211.2, 5000-247.3, 0.5-268.5, 5000-1000	32.7	120.5
155	318.7	4-145.3, 1-213.6, 5000-238, 0.5-263.1, 5000-1000	32.7	120.5
160	318.7	4-153.2, 1-212.1, 5000-237.1, 0.5-259.1, 5000-1000	30.7	120.5
165	318.7	4-164.9, 1-216, 5000-228.8, 4-233.4, 0.5-258.1, 5000-1000	32.7	120.5
170	318.7	4-225.8, 5000-232, 4-242.2, 0.5-261.3, 5000-1000	32.7	120.5
175	318.7	4-240.4, 5000-244.2, 4-246.9, 0.5-259.4, 5000-1000	32.7	120.5
180	318.7	4-265.3, 5000-273.4, 4-362.7, 5000-1000	32.7	120.5
185	318.7	4-168.9, 2-240.9, 4-399.5, 5000-402.5, 4-413.6, 5000-1000	32.7	120.5
190	318.7	4-165.3, 2-239.4, 4-417.2, 5000-462.4, 4-479.8, 2-538.1, 5000-792.8, 4-827.5, 5000-1000	30.7	120.5
195	318.7	4-175, 2-231.2, 4-349.4, 5000-352.7, 4-402.6, 5000-410.9, 4-494.4, 2-546.6, 5000-550.8, 2-556.3, 5000-685.4, 4-771.7, 5000-772.6, 4-791, 5000-798.7, 4-844.7, 5000-847.8, 4-859.7, 5000-866.5, 4-910.4, 5000-914.6, 4-938.4, 5000-1000	32.7	120.5
200	318.7	4-190.2, 2-226.8, 4-473.9, 40-475.2, 4-483.1, 40-485, 4-492.3, 40-504.9, 4-509.3, 40-512.2, 5000-515.8, 2-529.3, 5000-552.5, 4-563.5, 5000-578.6, 4-606.6, 5000-613.3, 2-643.2, 5000-646.7, 2-669.3, 5000-673, 2-889.6, 4-1000	32.7	120.5
205	318.7	4-209.5, 2-260.5, 4-430.6, 40-460.4, 4-466.5, 40-468.4, 4-473.3, 40-475.3, 4-482.4, 40-483.1, 4-559.7, 5000-567.1, 4-587.9, 2-885.6, 4-931.7, 2-1009.6	32.7	120.5
210	318.7	4-230.5, 2-295.7, 4-421.5, 2-812, 4-934.4, 2-1000	32.7	120.5
215	318.7	4-254.2, 2-324.5, 4-436.8, 2-778.9, 4-879.6, 2-912.2, 4-1000	32.7	120.5
220	318.7	4-261.1, 2-1000	30.7	120.5
225	318.7	4-263, 2-438.5, 4-580.2, 2-900.5, 4-945.7, 2-1000	32.7	120.5
230	318.7	4-273.4, 2-383, 4-649.5, 2-982.4, 4-1000	32.7	120.5
235	318.7	4-299.9, 2-395.2, 4-409.5, 2-485.8, 4-600.4, 2-1000	32.7	120.5
240	318.7	4-326.5, 2-491.2, 4-681.9, 2-952.5, 8-1000	32.7	120.5
245	318.7	4-355.5, 2-500.4, 4-687.8, 8-844.5, 2-865.2, 8-1000	32.7	120.5
250	318.7	4-393.5, 2-512.9, 8-1000	30.7	120.5
255	318.7	4-434.1, 2-478.6, 8-753.7, 15-953.3, 8-1000	32.7	120.5
260	318.7	4-544.8, 8-721.1, 15-733.1, 8-738.2, 15-798.2, 8-920.4, 15-960.8, 8-1000	32.7	120.5
265	318.7	4-392.1, 8-486.7, 10-679.5, 20-723.9, 10-736.5, 8-945.4, 2-960.9, 8-1000	32.7	120.5
270	318.7	4-275.7, 8-392.2, 10-492, 4-548.2, 20-699.2, 15-717.8, 8-867.8, 2-994.4, 8-1000	32.7	120.5
275	318.7	4-273, 8-394.1, 20-491.8, 4-553.9, 6-567.5, 20-637.8, 10-660.6, 8-671.7, 15-734.4, 8-938.6, 2-976.6, 8-1000	32.7	120.5
280	318.7	4-263.9, 8-405.2, 15-443.1, 10-468.9, 4-520.9, 6-611.1, 10-646.3, 8-682.5, 15-750.5, 8-927.2, 2-989.9, 8-1000	30.7	120.5
285	318.7	4-206.7, 8-323, 15-410, 6-463.5, 4-523, 6-618.3, 10-659.6, 8-902.9, 2-980.5, 8-1000	32.7	120.5
290	318.7	4-194.9, 8-234.1, 15-354, 6-448.6, 4-598.6, 10-678.7, 8-1000	32.7	120.5
295	318.7	4-179, 8-220.9, 15-257, 4-260.6, 15-261.8, 4-265.2, 15-280.5, 4-296.9, 15-303.4, 4-317.6, 6-455.9, 4-502.2, 10-585.4, 4-591.2, 10-605, 4-605.9, 10-610.3, 4-630.1, 10-743.4, 8-1000	32.7	120.5

Exhibit 13 - Table III-A

(Page 3 of 3)

**WBUG(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
300	318.7	4-11.3, 2-20.6, 4-186.4, 8-219.6, 15-253, 4-257.7, 15-261.1, 10-261.6, 15-265.6, 4-350 6-422.1, 1-523.9, 10-665.7, 4-707.8, 10-708.7, 4-734.1, 10-735.3, 4-737, 10-824.3, 2-875.4, 8-893.2, 2-913.6, 8-1000	29.6	117.4
305	318.7	4-8.8, 2-27.2, 4-191.3, 8-219.9, 15-250.2, 10-264.9, 4-357.7, 1-537.6, 2-615, 10-618 2-620.6, 10-622.4, 2-976.4, 8-1000	26.8	114.5
310	318.7	4-7.3, 2-29.6, 4-201, 8-203.9, 4-220.4, 15-232.3, 10-259, 4-330.7, 1-515.4, 2-1000	26.3	113.1
315	318.7	4-6.3, 2-31.6, 4-218.4, 15-222.4, 10-252.6, 4-312.5, 1-502.2, 2-1000	26.0	112.1
320	318.7	4-5.8, 2-32.8, 4-212.2, 10-248, 4-313.1, 1-495.4, 2-1006.1	25.8	111.6
325	318.7	4-5.5, 2-33.8, 4-216.2, 10-249.7, 4-417.5, 1-443.8, 2-783.5, 6-1000	25.7	111.2
330	318.7	4-5.2, 2-34.5, 4-220.5, 10-261.4, 4-403.3, 2-733.3, 6-876.4, 2-1000	25.7	110.9
335	318.7	4-5, 2-35.5, 4-226.2, 10-284.4, 4-359.5, 2-699.1, 6-800.4, 2-1000	25.6	110.5
340	318.7	4-4.9, 2-36.9, 4-233, 10-304.6, 4-338.8, 2-666.4, 6-724.7, 2-836.9, 2-1000	25.6	110.1
345	318.7	4-4.8, 2-38.7, 4-237.7, 10-308, 4-333.9, 2-560.1, 2-1000	25.5	109.5
350	318.7	4-4.7, 2-41, 4-236, 10-307, 4-327.9, 2-521.2, 2-1000	25.5	108.8
355	318.7	4-4.7, 2-45, 4-233.3, 10-300.8, 4-319.4, 2-505.2, 2-1000	25.5	107.8

Exhibit 13 - Table III-B

(Page 1 of 3)

**WFTU(AM) - DISTANCES TO CONTOURS**

WFTU(AM) DA2 U 1570 kHz Riverhead, NY Facility ID: 18238

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
0	92.7	2*-4, 0.5*-6, 0.5-7.2, 5000-39.5, 2-124.7, 1-296.2, 2-454.8, 4-518.7, 6-593.8, 4-640.9 2-754.2, 2-1000	41.0	82.4
5	102.3	0.5-7.3, 5000-39.3, 2-133.8, 1-336.9, 0.5-457.3, 4-547.3, 6-639.3, 4-688.5, 2-803.8, 2-1000	41.4	84.7
10	118.3	0.5-7.4, 5000-39.5, 2-149.8, 1-362.8, 0.5-463.7, 4-667.8, 5000-677.8, 4-762.1, 2-880.7, 2-1000	42.4	88.6
15	138.3	0.5-7.6, 5000-40, 2-164, 1-406.7, 0.5-509.3, 4-742.4, 5000-807.4, 4-837.8, 2-974.7, 2-1000	43.8	93.3
20	160.2	0.5-7.9, 5000-42.3, 2-173.5, 1-327.2, 2-396.1, 1-777.6, 2-907.2, 5000-999.7, 2-1000	46.8	99.6
25	183.4	0.5-9, 5000-45.8, 2-53.7, 5000-55, 2-184.4, 1-297.4, 2-467.4, 1-797.3, 2-1000	49.9	107.0
30	207.4	0.5-11, 5000-46.6, 2-48.3, 5000-52.2, 2-212.3, 1-262.6, 2-280.4, 5000-282.5, 2-535.3, 1-744.2, 2-938.5, 5000-945.8, 2-1000	52.9	111.8
35	231.6	0.5-14.3, 5000-50, 2-63.2, 5000-63.5, 2-257.2, 5000-391.2, 2-397.3, 5000-417.4, 2-582.6, 1-661.2, 2-972.7, 5000-1000	39.1	111.2
40	255.7	2*-6.1, 0.5*-24.1, 5000-57.1, 2-58.7, 5000-62.1, 2-205.3, 5000-210.8, 2-213.9, 5000-230, 2-230.9, 5000-242.9, 2-249.9, 5000-497.2, 2-504.1, 5000-521.5 2-539.1, 5000-539.4, 2-569, 1-637.9, 2-918.8, 5000-1000	16.4	111.5
45	279.4	*-6.1, 0.5*-24.1, 0.5-37.3, 5000-61.5, 2-64.7, 5000-68.1, 2-212.5, 5000-608.4, 1-614.7, 5000-685.2, 2-826.6, 4-881.2, 5000-921.5, 4-944.5, 5000-1000	17.1	102.4
50	302.4	2*-6.1, 0.5*-24.1, 0.5-34.2, 5000-35.9, 0.5-44.1, 5000-70.7, 2-71.8, 5000-75.1, 2-132.9, 5000-134.8, 2-138.8, 5000-143.2, 2-211.9, 5000-806.2, 4-907.6 5000-976.1, 4-1000	17.8	107.4
55	324.4	2*-6.1, 0.5*-24.1, 5000-79.6, 2-124.5, 5000-146.4, 2-205.5, 5000-631.6, 2-915.4, 4-1000	18.4	155.0
60	345.3	0.5-6.3, 5000-103.5, 2-107.4, 5000-112, 2-115.3, 5000-139.4, 2-184.1, 5000-187.3, 2-202.7, 5000-244.3, 2-248.8, 5000-643.3, 2-678.9, 5000-688.2, 2-724.7, 5000-1000	140.3	247.9
65	364.8	0.5-3.3, 5000-183.7, 2-229.4, 5000-239.8, 2-247.2, 5000-1000	192.3	378.4
70	382.9	0.5-2.2, 5000-24.6, 0.5-31.6, 5000-36.1, 0.5-42.6, 5000-1000	75.9	566.3
75	399.4	0.5-2.5, 5000-22.1, 0.5-46.7, 5000-55.7, 0.5-66.4, 5000-1000	38.3	335.1
80	414.4	0.5-2.8, 5000-20.1, 0.5-53.1, 5000-1000	36.7	355.2
85	427.7	0.5-3.4, 5000-18.6, 0.5-40.4, 5000-1000	35.2	463.9
90	439.4	0.5-4.3, 5000-16.7, 0.5-31.9, 5000-1000	47.7	541.0
95	449.4	0.5-5.9, 5000-14.5, 0.5-26.5, 5000-1000	76.3	570.1
100	457.9	4*-1.5, 0.5*-19.3, 0.5-22.8, 5000-1000	21.8	502.7
105	464.7	4*-1.5, 0.5*-19.3, 5000-1000	59.0	553.5
110	470.0	4*-1.5, 0.5*-19.3, 5000-1000	60.7	555.5
115	473.7	4*-1.5, 0.5*-19.3, 5000-1000	61.9	556.9
120	476.0	0.5-14.5, 5000-1000	140.4	635.4



Exhibit 13 - Table III-B

(Page 2 of 3)

**WFTU(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
125	476.7	0.5-15.1, 5000-1000	130.0	625.1
130	476.0	0.5-15.9, 5000-1000	116.2	611.2
135	473.7	0.5-15, 5000-1000	130.3	625.3
140	470.0	0.5-14.2, 5000-1000	143.7	638.4
145	464.7	0.5-13.5, 5000-1000	153.6	648.2
150	457.9	0.5-13, 5000-1000	160.5	654.6
155	449.4	0.5-12.7, 5000-1000	164.6	658.3
160	439.4	2*-2.2, 0.5*-12.9, 5000-1000	157.0	650.2
165	427.7	2*-2.2, 0.5*-12.9, 5000-1000	153.0	645.5
170	414.4	2*-2.2, 0.5*-12.9, 5000-1000	148.2	640.1
175	399.4	2*-2.2, 0.5*-12.9, 5000-1000	142.6	633.8
180	382.9	2*-2.2, 0.5*-12.9, 5000-1000	136.2	626.7
185	364.8	0.5-12.6, 5000-1000	134.7	624.0
190	345.3	0.5-13, 5000-1000	118.6	606.2
195	324.4	0.5-13.6, 5000-1000	98.8	584.6
200	302.4	0.5-14.4, 5000-1000	75.2	559.0
205	279.4	0.5-15.3, 5000-1000	47.1	528.9
210	255.7	0.5-16.6, 5000-582.6, 4-590.3, 5000-592.6, 4-601.5, 5000-625.1, 4-698.3, 5000-709.4, 4-727.1, 5000-730.5, 4-753.7, 5000-757.9, 4-785.1, 5000-1000	16.4	493.5
215	231.6	0.5-18.2, 5000-505.7, 2-508.7, 5000-536.2, 4-638.4, 5000-642.3, 4-650.8, 2-701.1, 4-934.9, 5000-1000	15.6	451.0
220	207.4	1.5*-1.9, 0.5*-19.3, 0.5-20.3, 5000-324.6, 2-421, 5000-493.8, 2-506.3, 5000-515, 2-520.5, 5000-526.7, 2-542.5, 4-543.8, 5000-551.5, 2-766.7, 4-818.1 2-898.6, 4-1000	14.8	338.9
225	183.4	1.5*-1.9, 0.5*-19.3, 0.5-23.1, 5000-181.3, 4-244.8, 5000-245.3, 4-271.8, 5000-315.4, 4-356.5, 2-393.8, 5000-404, 2-409.7, 5000-456.7, 4-486.8, 5000-491.6 2-778.9, 4-818.4, 2-1000	13.9	214.1
230	160.2	1.5*-1.9, 0.5*-19.3, 0.5-27.2, 5000-159, 4-284.1, 5000-310.2, 4-388.5, 40-390.7, 4-393.5, 2-399.9, 5000-403.4, 2-416, 5000-425.1, 4-432.6, 5000-436.7 4-454.2, 5000-465.9, 4-485.4, 5000-488.7, 4-490.7, 2-715.4, 4-1000	13.0	182.0
235	138.3	1.5*-1.9, 0.5*-19.3, 0.5-33.5, 5000-140.9, 4-289, 5000-296.2, 4-369.4, 40-370.3, 4-375.2, 40-410.8, 4-463.9, 5000-475.8, 4-490.7, 2-712.5, 4-795.1 2-1000	12.1	149.9
240	118.3	0.5-43, 5000-129.7, 4-284.4, 5000-290.2, 4-327.9, 40-332, 4-355.3, 40-380.5, 4-393.2, 40-393.9, 4-437.2, 5000-438, 4-444.9, 2-1000	11.2	82.0
245	101.3	0.5-53, 5000-124.5, 4-372.7, 2-891.6, 4-1000	10.4	44.6
250	96.4	2*-8, 1.5*-14.8, 0.5-100.6, 5000-142.5, 4-390.5, 2-1000	12.4	46.3
255	93.4	2*-8, 1.5*-14.8, 0.5-106, 5000-106.2, 0.5-118.9, 5000-122.5, 4-394.9, 2-490.4, 4-687.3, 2-997.9, 8-1000	12.2	45.6

Exhibit 13 - Table III-B

(Page 3 of 3)

**WFTU(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.025 mV/m (km)
260	86.9	2*-8, 1.5*-14.8, 0.5-89.7, 4-111.3, 5000-114.5, 4-115, 5000-117.9, 4-358, 2-447.7, 4-635.6, 2-955.1, 8-1000	11.8	44.2
265	86.8	2*-8, 1.5*-14.8, 0.5-75.3, 4-83.5, 5000-86.2, 4-92.2, 5000-97.5, 4-144.5, 2-166.8, 4-263.4, 2-427.3, 4-494.2, 2-534.1, 4-773.8, 8-1000	11.8	44.1
270	92.1	2*-8, 1.5*-14.8, 0.5-42.7, 5000-52, 0.5-57.8, 4-63.4, 5000-65.5, 4-75.5, 5000-92.1, 4-139, 2-190.1, 4-226.2, 2-437.8, 4-461, 2-568.3, 4-676, 8-865.8, 15-1000	12.2	53.5
275	96.8	0.5-40.9, 5000-83.7, 1-86.2, 4-137.4, 2-256.2, 4-299.9, 2-615.8, 8-853.8, 15-921.9, 8-1000	10.2	63.5
280	101.9	0.5-33, 5000-76.6, 1-89.9, 4-136.1, 2-215.7, 4-468.8, 2-601.7, 8-798.9, 10-862, 8-989.8, 4-1000	10.4	84.4
285	106.8	0.5-21.8, 5000-68.8, 1-94.5, 4-137, 2-192.8, 4-629.8, 8-633.3, 4-636.1, 8-693.2, 10-777.2, 20-864.1, 15-872.6, 8-1000	10.7	90.7
290	112.6	0.5-17.5, 5000-64.1, 1-98.9, 4-150.9, 2-175.2, 4-557.9, 8-602.6, 10-664.2, 4-717.9, 20-821.5, 10-837.8, 8-845.9, 15-914.6, 8-1000	10.9	92.4
295	117.0	2*-4.8, 0.5*-10.4, 0.5-14.7, 5000-57.2, 1-103.7, 4-532.8, 8-561.9, 10-562.8, 20-675.8, 4-720, 6-802.4, 10-840.5, 8-882.4, 15-929.6, 8-1000	11.2	90.0
300	119.6	2*-4.8, 0.5*-10.4, 0.5-12.8, 5000-54.3, 1-106.8, 4-464.2, 8-603, 15-638.6, 6-652.1, 10-673.8, 4-726.6, 6-820.7, 10-879, 8-1000	11.3	90.0
305	120.6	2*-4.8, 0.5*-10.4, 0.5-11.3, 5000-48.1, 1-107.7, 4-475.1, 8-545.6, 15-602.4, 6-666.7, 4-785.5, 10-792.8, 4-807.4, 10-810.2, 4-836.2, 10-983.6, 8-1000	11.3	85.8
310	119.6	2*-4.8, 0.5*-10.4, 5000-48.2, 1-108.8, 4-431, 8-478.9, 15-548.4, 6-692, 4-694.6, 1-752.5, 10-754.7, 1-758.5, 10-909.3, 4-914.8, 10-930, 4-938.7, 10-979.3, 2-1000	28.5	86.7
315	117.0	2*-4.8, 0.5*-10.4, 5000-46.5, 1-110, 4-417.2, 8-457.6, 15-484.2, 4-487.8, 15-492.9, 4-503.3, 15-504.4, 4-611.5, 1-772.6, 2-1000	25.9	84.6
320	112.6	2*-4.4, 1*-8, 0.5-8.8, 5000-45.3, 1-111.7, 4-438.3, 8-451.8, 4-452.5, 8-468.4, 15-488.3, 10-508.9, 4-576.5, 1-755.1, 2-1000	46.6	85.0
325	106.8	2*-4.4, 1*-8, 0.5-8.3, 5000-45.4, 2-49.6, 1-114.4, 4-470.1, 15-471.5, 10-503.4, 4-566.9, 1-746.3, 2-1000	47.1	85.1
330	99.9	2*-4.4, 1*-8, 5000-46.3, 2-58.4, 1-120.6, 4-262.7, 2-290.8, 4-476.1, 10-513.5, 4-665.8, 2-998.3, 6-1000	47.9	86.0
335	94.3	2*-4.4, 1*-8, 5000-40.7, 2-71.7, 1-129.3, 4-254.1, 2-300.5, 4-487.4, 10-560.6, 4-600, 2-949.4, 6-1000	42.3	82.3
340	89.4	2*-4, 0.5*-6, 0.5-7.5, 5000-40, 2-90.7, 1-140.5, 4-249.6, 2-319, 4-485.5, 10-556.1, 4-583.4, 4-842.4, 2-1000	40.9	81.6
345	82.0	2*-4, 0.5*-6, 0.5-7.3, 5000-39.5, 2-106, 1-158.4, 4-242.6, 2-348.8, 4-471.5, 10-538.3, 4-560, 2-760.8, 2-1000	40.1	79.3
350	77.5	2*-4, 0.5*-6, 0.5-7.2, 5000-39.4, 2-114.5, 1-188.3, 4-234.8, 2-395.9, 4-461.7, 10-519.7, 4-554.8, 2-734.9, 2-1000,	39.8	78.0
355	83.2	2*-4, 0.5*-6, 0.5-7.2, 5000-39.5, 2-119.4, 1-232.9, 2-451.3, 4-482.3, 10-558.7, 4-597.5, 2-733.9, 2-1000	40.4	79.8

Exhibit 13 - Table III-C

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**WLIM(AM) - DISTANCES TO CONTOURS**

WLIM(AM) DA-N U 1580 kHz Patchogue, NY Facility ID: 38333

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
0	1002.6	0.1*-18.6, 5000-48.1, 1-50.6, 2-114.2, 1-218.6, 4-240.4, 2-467.3, 4-518.2, 6-522.8, 10-593, 4-632.4, 2-755.3, 2-1000	61.1	76.7
5	1002.6	0.1*-18.6, 5000-52.9, 2-128.4, 1-310, 2-365.6, 0.5-392.3, 2-470, 4-544.7, 6-633.1, 4-682.2, 2-799.2, 2-1000	65.8	81.4
10	1002.6	0.1*-18.6, 0.5-18.6, 5000-50.3, 2-137.7, 1-355.9, 0.5-476.5, 4-597.6, 6-664.6, 4-748.4, 2-872.5, 2-1000	63.4	79.0
15	1002.6	0.1*-18.6, 0.5-19.1, 5000-52.2, 2-151.3, 1-392.4, 0.5-518.4, 4-721.4, 5000-771.6, 4-840.4, 2-970.2, 2-1000	64.5	80.1
20	1002.6	0.5-19.8, 5000-54.7, 2-177.6, 1-601.7, 4-614.1, 1-754.8, 4-795.2, 2-902.3, 5000-991.4, 2-1000	66.9	82.5
25	1002.6	0.1*-21.9, 5000-57.9, 2-193.7, 1-339.1, 2-461.2, 1-807.5, 2-1025	66.0	81.5
30	1002.6	0.1*-21.9, 5000-60.5, 2-207.2, 1-313.4, 2-531.4, 1-792.6, 2-951.2, 5000-960, 2-1000	68.3	83.9
35	1002.6	0.1*-21.9, 0.5-23.4, 5000-63.4, 2-248.6, 1-267.7, 2-313.6, 5000-316, 2-341, 5000-352, 2-367.9, 5000-379, 2-389.6, 5000-420.1, 2-432.1, 5000-447.4, 2-616.9, 1-701.4, 2-965.6, 5000-1000	69.1	84.6
40	1002.6	0.1*-21.9, 0.5-25.3, 5000-70.2, 2-79.5, 5000-81, 2-278.3, 5000-464.5, 2-473, 5000-481.1, 2-487.1, 5000-523, 2-594.5, 1-669.8, 2-948.8, 5000-1000	72.7	89.5
45	1002.6	0.5-27.8, 5000-79, 2-91.3, 5000-91.6, 2-232.8, 5000-620.4, 1-626, 5000-634.6, 1-659.2, 5000-696.7, 2-868.2, 4-912.6, 5000-959.5, 4-974.1, 5000-1000	73.8	94.2
50	1002.6	0.5-31, 5000-91.3, 2-97.1, 5000-98.6, 2-174.5, 5000-175.4, 2-243.4, 5000-832, 4-934.3, 5000-1002.3	40.3	101.7
55	1002.6	0.5-35.5, 5000-52.3, 0.5-70.5, 5000-106.5, 2-160, 5000-171.6, 2-177.4, 5000-182.9, 2-234, 5000-663.4, 2-942.8, 4-1000	31.9	59.4
60	1002.6	0.5-54.2, 5000-125, 2-143.9, 5000-144.5, 2-150.3, 5000-171.7, 2-234.4, 5000-276.1, 2-279.7, 5000-674.4, 2-710.2, 5000-719, 2-755.8, 5000-1000	31.9	44.4
65	1002.6	0.5-35, 5000-214.6, 2-266.1, 5000-270.2, 2-278.3, 5000-1000	31.9	117.2
70	1002.6	0.1*-29.5, 0.5-36.7, 5000-52.1, 0.5-77.1, 5000-93.7, 0.5-93.9, 5000-1000	30.9	57.0
75	1002.6	0.1*-29.5, 0.5-41.4, 5000-42.9, 0.5-81.1, 5000-1000	30.9	44.6
80	1002.6	0.1*-29.5, 0.5-41.7, 5000-49, 0.5-50.6, 5000-1000	30.9	49.7
85	1002.6	0.1*-29.5, 0.5-40.8, 5000-1000	30.9	61.6
90	1002.6	0.1*-29.5, 5000-1000	43.8	157.1
95	1002.6	0.5-18.7, 5000-1000	187.9	301.2
100	1002.6	0.5-15, 5000-1000	247.3	360.6
105	1002.6	0.5-12.6, 5000-1000	290.7	404.0
110	1002.6	0.5-11, 5000-1000	322.8	436.1
115	1002.6	0.5-9.8, 5000-1000	346.8	460.1
120	1002.6	0.1*-6.5, 0.5-8.9, 5000-1000	357.0	470.3

Exhibit 13 - Table III-C

(Page 2 of 3)

**WLIM(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region:* Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
125	1002.6	0.1*-6.5, 0.5-8.2, 5000-1000	370.7	484.0
130	1002.6	0.1*-6.5, 0.5-7.7, 5000-1000	381.3	494.6
135	1002.6	0.1*-6.5, 0.5-7.2, 5000-1000	389.5	502.8
140	1002.6	0.1*-6.5, 0.5-6.9, 5000-1000	395.8	509.0
145	1002.6	0.5-6.7, 5000-1000	407.8	521.0
150	1002.6	0.5-6.5, 5000-1000	411.1	524.4
155	1002.6	0.5-6.4, 5000-1000	413.4	526.7
160	1002.6	0.1*-5.2, 0.5-6.3, 5000-1000	408.6	521.9
165	1002.6	0.1*-5.2, 0.5-6.3, 5000-1000	409.1	522.4
170	1002.6	0.1*-5.2, 0.5-6.3, 5000-1000	408.7	522.0
175	1002.6	0.1*-5.2, 0.5-6.3, 5000-1000	407.4	520.7
180	1002.6	0.1*-5.2, 0.5-6.5, 5000-1000	405.2	518.4
185	1002.6	0.5-6.6, 5000-1000	408.1	521.4
190	1002.6	0.5-6.9, 5000-1000	403.6	516.9
195	1002.6	0.5-7.2, 5000-1000	397.6	510.9
200	1002.6	0.5*-3.5, 1*-5, 1.5*-7.9, 5000-1000	415.9	529.2
205	1002.6	0.5*-3.5, 1*-5, 1.5*-7.9, 0.5-8.1, 5000-593.4, 4-653.5, 5000-709.4, 4-711.1, 5000-1000	411.5	524.8
210	1002.6	0.5*-3.5, 1*-5, 1.5*-7.9, 0.5-8.8, 5000-532.6, 4-539.8, 5000-541.7, 4-543.3, 5000-546.9, 4-586.8, 5000-587.2, 4-593, 5000-597.9, 4-598.7, 5000-611.5, 4-680.4, 5000-686, 4-725.2, 5000-729.5, 4-790.2, 5000-1000	398.9	512.2
215	1002.6	0.5*-3.5, 1*-5, 1.5*-7.9, 0.5-9.7, 5000-311.2, 2-316.9, 5000-320, 2-321.7, 5000-324, 2-455.4, 5000-516.9, 4-518.3, 5000-523.6, 4-588.8, 2-728.7, 4-935.2, 5000-1005, 4-1005.3	322.0	339.3
220	1002.6	0.5*-3.5, 1*-5, 1.5*-7.9, 0.5-10.8, 5000-152.8, 4-174.3, 5000-175.5, 4-180.8, 5000-185.8, 4-192.6, 5000-194.3, 4-212.6, 5000-216.6, 4-263.1, 5000-286, 4-309.6, 2-391.4, 5000-460.3, 2-495.7, 5000-499.2, 2-512.6, 5000-519.7, 2-740.7, 4-786.4, 2-900.3, 4-1000	178.8	204.1
225	1002.6	0.5-12, 5000-133.4, 4-247.8, 5000-282.5, 4-339.7, 2-385.8, 5000-413.4, 4-418.5, 5000-431.7, 4-459.4, 5000-463.3, 2-730.8, 4-798.5, 2-1000	154.7	174.4
230	1002.6	0.5-13.5, 5000-114.7, 4-124.5, 5000-124.9, 4-256.5, 5000-269.9, 4-353, 40-353.9, 4-359, 40-366.8, 4-372.8, 40-378, 5000-394.7, 4-401.7, 5000-407.1, 4-425.2, 5000-427.7, 4-431.3, 5000-441.4, 4-461, 2-682.4, 4-1000	135.4	155.1
235	1002.6	0.5-15.5, 5000-103.9, 4-259.2, 5000-266.4, 4-334.5, 40-371.5, 4-451.3, 5000-458.4, 4-458.9, 2-683.1, 4-752.3, 2-1000	121.7	141.3
240	1002.6	0.5-18.3, 5000-96.8, 4-251.5, 5000-259.5, 4-302.8, 40-307.5, 4-312.8, 40-354.9, 4-403, 2-1000	110.2	129.8
245	1002.6	0.5-23.7, 5000-93, 4-96.2, 5000-97.2, 4-339.8, 2-878.8, 4-1000	98.0	117.6
250	1002.6	1*-3.1, 0.1*-29.1, 0.5-46.6, 5000-47.7, 0.5-64.6, 5000-110.2, 4-357.1, 2-1000	30.9	43.4
255	1002.6	1*-3.1, 0.1*-29.1, 0.5-68.3, 5000-77.9, 0.5-88.2, 5000-98.2, 4-369.1, 2-464.7, 4-653.6, 2-967.8, 8-1000	30.9	43.4
260	1002.6	1*-3.1, 0.1*-29.1, 0.5-87.2, 5000-92.1, 4-334.1, 2-421.9, 4-609.3, 2-927.5, 8-1000	30.9	43.4
265	1002.6	1*-3.1, 0.1*-29.1, 0.5-67.3, 4-81.8, 5000-84.8, 4-85.2, 5000-87.9, 4-263.1, 2-400.8, 4-472.6, 2-498.2, 4-758, 8-1000	30.9	43.4

Exhibit 13 - Table III-C

(Page 3 of 3)

**WLIM(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region:* Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
270	1002.6	1*-3.1, 0.1*-29.1, 0.5-54.8, 4-55.3, 5000-55.5, 4-64.4, 5000-69.5, 4-72.2, 5000-79.3, 4-115.4, 2-143.2, 4-214.8, 2-399.4, 4-442.4, 2-531.8, 4-662.4, 8-845.4, 15-1000	30.9	43.4
275	1002.6	0.5-49.3, 4-55.1, 5000-57.6, 4-63.4, 5000-69, 4-111.5, 2-164.7, 4-192.3, 2-575.8, 4-595.9, 8-829, 15-895.5, 8-1000	31.9	44.4
280	1002.6	0.5-45.2, 4-55.3, 5000-66.2, 4-111.2, 2-219.7, 4-290.6, 2-578.1, 8-994.8, 4-1000	31.9	44.4
285	1002.6	0.5-41.5, 4-49.2, 5000-61.9, 4-111.3, 2-191.3, 4-629.2, 8-705.1, 10-774.7, 20-848, 8-1000	31.9	46.0
290	1002.6	0.5-35.3, 4-37.3, 5000-42.5, 4-45.6, 5000-58.6, 1-61.5, 4-112, 2-174.2, 4-547, 8-602.3, 10-656.6, 4-668, 10-693.6, 20-817.3, 15-882.9, 8-1000	31.9	63.2
295	1002.6	0.5-31.1, 4-38.7, 5000-56.1, 1-66.4, 4-115, 2-160.9, 4-521.4, 8-557.2, 10-586.8, 20-650.6, 4-707.5, 6-775.6, 10-811.4, 8-849.9, 15-916.9, 8-1000	32.4	63.2
300	1002.6	0.1*-21.1, 0.5-21.9, 5000-53.3, 1-72.5, 4-134.6, 2-147.2, 4-444.3, 8-566.1, 20-578.6, 15-624.2, 10-647.2, 4-697.7, 6-804.2, 10-848.3, 8-1000, 05	60.6	74.6
305	1002.6	0.1*-21.1, 5000-50.6, 1-78.8, 4-454, 8-561.9, 15-604.4, 6-647.4, 4-798.3, 10-908.7, 8-1000	59.0	72.4
310	1002.6	0.1*-21.1, 5000-48.6, 1-85.9, 4-444.9, 8-499.8, 15-562.1, 6-669.5, 4-731, 10-885, 4-952.8, 10-1000.5	57.3	70.6
315	1002.6	0.1*-21.1, 5000-47.6, 1-91.7, 4-417.7, 8-450.8, 15-505.6, 4-516.4, 15-522.1, 4-554.1, 6-636.7, 1-771.8, 2-1000	56.3	69.6
320	1002.6	0.5-19.3, 5000-46.3, 1-95, 4-407, 8-451.1, 15-483.4, 4-486, 15-488.4, 10-501.1, 15-503.1, 4-584, 1-752, 2-1000	57.9	71.2
325	1002.6	0.1*-22.7, 5000-44.6, 1-98.5, 4-434.3, 8-437.2, 4-441.5, 8-449.1, 4-464.4, 15-474.4, 10-500.8, 4-559.9, 1-745, 2-1000	51.8	65.1
330	1002.6	0.1*-22.7, 5000-43.9, 1-102.4, 4-462.6, 10-499.4, 4-670.2, 1-693.9, 2-1000	51.1	64.5
335	1002.6	0.1*-22.7, 5000-44.3, 1-106.7, 4-267.4, 2-286.6, 4-477.9, 10-526.3, 4-637.7, 2-962, 6-1000	51.5	64.8
340	1002.6	0.1*-22.7, 5000-44, 1-112.3, 4-257, 2-299.4, 4-490, 10-561.6, 4-591.8, 2-920.6, 6-976.3, 2-1000	51.2	64.5
345	1002.6	0.1*-18.9, 0.5-19.4, 5000-41.9, 1-122.8, 4-254.4, 2-321.2, 4-485, 10-557.7, 4-578.7, 2-784.9, 2-1000	52.8	66.2
350	1002.6	0.1*-18.9, 0.5-18.9, 5000-45.1, 1-138.3, 4-251.1, 2-357.9, 4-475.1, 10-533.3, 4-556.4, 2-749.8, 2-1000	56.3	69.6
355	1002.6	0.1*-18.9, 5000-46.4, 1-162.8, 4-246.7, 2-414.7, 4-469.1, 10-541.1, 4-582.3, 2-741.9, 2-1000	57.5	70.9

Exhibit 13 - Table III-D

(Page 1 of 3)

**WQEW(AM) - DISTANCES TO CONTOURS**

WQEW(AM) DA2 N U 1560 kHz New York, NY Facility ID: 29024

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
0	4407.5	4-7.1, 5000-10.5, 4-252.3, 2-334.8, 4-476.2, 10-531.1, 4-565.8, 2-746.9, 2-1000	106.8	139.4
5	4481.9	4-8.2, 5000-11.5, 4-256.9, 2-422.8, 4-477.9, 10-583, 4-628.6, 2-766.4, 2-1000	107.5	140.3
10	4532.3	4-7.9, 5000-11.7, 4-66.2, 1-77.1, 4-260, 2-484.2, 4-547.9, 6-636, 4-692.7, 2-821.4 2-1000	103.3	136.1
15	4559.0	4-7.8, 5000-11.9, 4-52, 1-101.5, 4-261.1, 2-492.4, 0.5-495.1, 4-595.7, 6-690.6, 4-775 2-915.9, 2-1000	91.3	120.6
20	4562.7	4-7.7, 5000-12.2, 4-45, 1-162.1, 4-178.9, 1-381.7, 0.5-511, 4-754.7, 5000-808.4, 4-889.5, 2-1038.8	89.2	113.7
25	4543.6	4-7.7, 5000-12.7, 4-40.8, 1-437.4, 0.5-561.8, 4-571.1, 1-580.5, 4-590.9, 1-607.1, 4-662.1, 1-837, 2-984.1, 5000-1000	87.9	112.4
30	4502.2	4-7.8, 5000-13.3, 4-18.1, 5000-21.2, 4-37.6, 1-865.6, 2-1000	88.7	113.1
35	4438.7	4-7.9, 5000-9.9, 4-11.1, 5000-14, 4-15.8, 5000-28.3, 4-35.2, 1-128.9, 2-178.6, 1-383 2-568.4, 1-817.2, 2-1000	92.6	116.8
40	4353.5	4-8, 5000-8.9, 4-11.5, 5000-44.1, 1-116.2, 2-241.3, 1-362.5, 2-668.4, 1-744, 2-1000	104.4	130.1
45	4247.3	4-12, 5000-21.2, 4-23.5, 5000-56.2, 1-107.3, 2-290.2, 1-322.7, 2-362.9, 5000-529.5, 2-538.3, 5000-538.7, 2-545.4, 5000-582.9, 2-597.3, 5000-598.4, 2-612.8, 5000-615, 2-656.6, 1-724.6, 2-986.6, 5000-1000	114.3	141.3
50	4120.8	4-12.6, 5000-18.2, 4-24.2, 5000-75.8, 1-100.4, 2-321.1, 5000-322.1, 2-341.7, 5000-824.1, 2-886.8, 4-942.5, 5000-946.9, 4-1006.4	133.0	159.8
55	3975.1	4-13.4, 5000-16.7, 4-24.7, 5000-28.2, 4-37.7, 5000-42.6, 4-43.1, 5000-103.6, 2-306.4, 5000-751.9, 2-927.8, 5000-935.7, 2-965.6, 4-979, 5000-985.8, 4-1000	151.8	178.2
60	3811.3	4-14.5, 5000-15.4, 4-24.3, 5000-26.4, 4-45.1, 5000-49.2, 4-51.1, 5000-123.9, 2-147.4, 5000-147.7, 2-243, 5000-244.3, 2-311.3, 5000-745.2, 2-872.8, 5000-931, 2-945.8, 5000-1000	158.6	184.7
65	3631.2	4-24, 5000-25, 4-32.9, 0.5-49.9, 4-55.6, 5000-162.4, 2-167.3, 5000-169.3, 2-228, 5000-248.3, 2-308.4, 5000-348.6, 2-353.5, 5000-1000	172.0	197.6
70	3436.7	4-24, 5000-24.1, 4-24.2, 0.5-59.9, 5000-69.5, 0.5-81, 5000-137.5, 0.5-148.9, 5000-288.5, 2-307.5, 5000-316.5, 2-346.8, 5000-1000	76.5	144.0
75	3229.7	4-14.9, 0.5-124.4, 5000-144.7, 0.5-147.3, 5000-1000	62.7	83.1
80	3012.6	4-6.3, 0.5-118.7, 5000-121.6, 0.5-144.9, 5000-1000	56.9	76.8
85	2787.2	4-3.9, 0.5-100.7, 5000-1000	53.8	73.0
90	2555.8	4-2.9, 0.5-63.2, 5000-1000	51.2	101.2
95	2320.0	4-2.3, 0.5-47.9, 5000-1000	53.1	170.0
100	2081.5	4-1.9, 0.5-37.9, 5000-1000	106.6	223.4
105	1842.0	4-1.6, 0.5-33.1, 5000-1000	127.6	243.8
110	1603.4	4-1.5, 0.5-31.2, 5000-1000	121.8	237.4



Exhibit 13 - Table III-D

(Page 2 of 3)

**WQEW(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
115	1368.5	4-1.3, 0.5-29.7, 5000-1000	110.1	224.7
120	1142.3	4-1.2, 0.5-27.9, 5000-1000	99.0	213.1
125	934.0	4-1.1, 0.5-23.8, 5000-1000	114.1	227.0
130	761.9	4-1.1, 0.5-13.2, 5000-16.1, 0.5-20.9, 5000-1000	164.2	276.0
135	657.6	4-1, 0.5-10.7, 5000-15.9, 0.5-18.7, 5000-1000	216.2	327.2
140	655.5	4-1, 0.5-9.1, 5000-15.8, 0.5-17.1, 5000-1000	276.6	387.5
145	755.0	4-0.9, 0.5-7.9, 5000-1000	346.6	458.4
150	920.5	4-0.9, 0.5-7.8, 5000-1000	379.3	492.1
155	1118.6	4-0.9, 0.5-8.7, 5000-1000	393.6	507.6
160	1329.1	4-0.9, 0.5-9.9, 5000-1000	398.0	512.6
165	1540.9	4-0.9, 0.5-11.5, 5000-1000	389.5	505.0
170	1746.9	4-0.9, 0.5-13.9, 5000-1000	364.5	480.2
175	1942.5	4-0.9, 0.5-14.3, 5000-1000	376.0	492.7
180	2124.2	4-0.9, 0.5-14.4, 5000-1000	389.5	506.2
185	2289.2	4-1, 0.5-14.6, 5000-1000	398.7	515.5
190	2434.8	4-1, 0.5-14.9, 5000-33.9, 4-72.9, 5000-77, 4-83.7, 5000-91.6, 4-98, 5000-110.1, 4-110.9, 5000-1000	96.5	205.2
195	2559.0	4-1.1, 0.5-15.4, 5000-33.2, 4-136.2, 5000-100	87.2	114.8
200	2659.5	4-1.1, 0.5-16, 5000-33.8, 4-165.2, 5000-168.9, 4-177.4, 5000-519, 4-527.4, 5000-532.6, 4-536.2, 5000-559.5, 4-562.9, 5000-563.9, 4-631.1, 5000-672 4-704.5, 5000-1000	88.2	116.2
205	2734.3	4-1.2, 0.5-16.5, 5000-33.5, 4-202.6, 5000-237.4, 4-251.5, 2-432.3, 5000-464.1, 4-570.7, 5000-583.4, 4-639.5, 5000-643.6, 4-677.4, 5000-678, 4-746 5000-749.2, 4-753.7, 5000-1000	88.0	116.3
210	2781.4	4-1.4, 0.5-15, 5000-34.2, 4-193.3, 5000-231.9, 4-268.6, 2-327.4, 5000-328.7, 2-338, 5000-414.6, 2-427.3, 5000-436.6, 2-438, 5000-447.3, 2-457.7, 4-464.4, 5000-472.5, 4-500.4, 2-683.5, 4-871.9, 5000-1000	91.9	120.3
215	2798.8	4-1.5, 0.5-13.8, 5000-36.1, 4-196.2, 5000-222.1, 4-285.1, 2-315.6, 5000-320.3, 2-329.7, 5000-371.7, 4-403.3, 5000-409.4, 2-434.3, 5000-437.1, 2-465.5 5000-468.6, 2-686.4, 4-732.5, 2-829, 4-1000	95.9	124.4
220	2784.7	4-1.7, 0.5-12.9, 5000-38.6, 4-195.2, 5000-202.9, 4-297.6, 40-302.1, 4-306.4, 40-309.5, 5000-313.9, 2-325, 5000-334.4, 4-342.1, 5000-345.2, 4-362.3, 5000-368.8, 4-397.2, 5000-400.4, 2-676.8, 4-734.1, 2-945.8, 4-1000	99.7	128.2
225	2737.7	4-2, 0.5-12.2, 5000-16.3, 4-26.6, 5000-39, 4-192.5, 5000-201.2, 4-273.6, 40-274.7, 4-280.1, 40-318.9, 4-342.9, 5000-344.5, 4-363.3, 5000-365.3, 4-371.5, 5000-378.8, 4-397.2, 2-620.2, 4-1000	91.3	119.6
230	2656.5	4-2.4, 0.5-10, 5000-15.6, 4-33.6, 5000-39.2, 4-143.7, 5000-148.1, 4-176.7, 5000-189.4, 4-226.7, 40-229.6, 4-264, 40-285.6, 4-291.6, 40-293.5, 4-299.9, 40-300.5, 4-379.3, 5000-382.9, 4-386.4, 2-614.7, 4-699.3, 2-995.9, 4-1000	87.2	115.2
235	2540.4	4-3.1, 0.5-8.5, 5000-15.1, 4-219.4, 40-231.5, 4-244.3, 40-247.5, 4-253.6, 40-254.7, 4-268.5, 40-269.1, 4-277, 40-282.9, 4-314.1, 2-1000	83.3	110.9

Exhibit 13 - Table III-D

(Page 3 of 3)

**WQEW(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contours	
			0.5 mV/m (km)	0.25 mV/m (km)
240	2389.5	4-4.4, 0.5-7.4, 5000-14.7, 4-260.8, 2-769.2, 4-941.3, 2-1000	83.8	110.9
245	2204.7	4-6.6, 5000-14.4, 4-276.9, 2-1000	84.2	110.5
250	1987.7	4-5.9, 5000-14.3, 4-303.7, 2-418.3, 4-505.3, 2-1000	81.1	106.5
255	1741.8	4-5.3, 5000-13.7, 4-272, 2-364.5, 4-586.6, 2-879.7, 8-957.7, 4-1000	76.8	101.0
260	1472.3	4-4.9, 5000-12.2, 4-248.3, 2-337.4, 4-530.9, 2-840.7, 8-1000	70.8	93.6
265	1187.7	4-4.5, 5000-11, 4-183.6, 2-321.8, 4-391.4, 2-422.1, 4-669.7, 8-1000	64.1	85.2
270	1091.4	4-4.3, 5000-10.1, 4-148.8, 2-319.3, 4-367.5, 2-451.1, 4-587.6, 8-767.8, 15-1000	61.4	81.7
275	1093.0	4-4.1, 5000-6.8, 4-7.1, 5000-9.5, 4-44.1, 2-58.4, 4-131.3, 2-488.5, 4-527.6, 8-752.9 15-820.1, 8-928.2, 15-965.6, 8-1000	57.1	77.2
280	1107.7	4-3.9, 5000-6.5, 4-7, 5000-8.9, 4-39.8, 2-75.5, 4-119.9, 2-506.1, 8-767.4, 15-808.2 8-976.9, 2-1000	56.1	72.3
285	1090.9	4-3.8, 5000-6.3, 4-7.2, 5000-8.5, 4-37.7, 2-91.8, 4-110.6, 2-156.7, 4-215, 2-279.9 4-333.7, 2-498.9, 8-548.9, 4-574, 8-661.1, 10-724.6, 20-782.8, 8-865.7, 4-922.4, 2-1000	54.9	71.0
290	1078.9	4-3.7, 5000-6.1, 4-7.4, 5000-8.2, 4-37.2, 2-139.8, 4-529.9, 8-572.9, 10-667.9, 20-744.4 15-797.6, 8-1000	54.2	70.2
295	1276.5	4-3.7, 5000-6, 4-7.6, 5000-8, 4-37.2, 2-127, 4-472.2, 8-516.5, 10-573.3, 4-633 20-723.6, 10-746, 8-767.1, 15-840.1, 8-1000	57.3	74.5
300	1616.5	4-3.7, 5000-5.9, 4-38.3, 2-118.3, 4-454.4, 8-486.1, 10-507.8, 20-591.6, 4-635.6, 6-722.8, 10-763.3, 8-1000	62.7	81.6
305	1956.4	4-3.7, 5000-5.9, 4-39.8, 2-112.2, 4-391.4, 8-507.7, 20-514.5, 15-562, 10-592.7, 4-644 6-745, 10-807.8, 8-1000	67.7	88.1
310	2287.4	4-3.7, 5000-6, 4-41.7, 2-107.5, 4-390.3, 8-507.2, 15-547.2, 6-590.2, 4-714.8, 10-720.5 4-737.6, 10-740, 4-765.1, 10-965.3, 8-998.9, 2-1000	72.3	94.0
315	2603.7	4-3.8, 5000-6, 4-44.2, 2-103.8, 4-408.4, 8-463.4, 15-514.5, 6-618.5, 4-659.3, 10-663.7 4-665.1, 10-668.5, 4-674.2, 10-847.1, 4-850.7, 10-870.2, 2-876.6, 10-889.6, 2-1000	76.5	99.3
320	2901.3	4-3.9, 5000-6.2, 4-47, 2-101.1, 4-379, 8-424.5, 15-485.5, 6-594, 1-722.2, 2-1000	80.3	104.6
325	3177.2	4-4, 5000-6.3, 4-50.5, 2-98.6, 4-374.2, 8-401.1, 15-436, 4-549.5, 1-710.8, 2-1000	83.9	110.3
330	3429.6	4-4.2, 5000-6.6, 4-55, 2-92.5, 4-371.5, 8-418.5, 15-450.3, 10-465.3, 4-531.2, 1-710.5 2-1000	87.3	116.5
335	3657.0	4-4.4, 5000-6.9, 4-65.4, 2-71.1, 4-430.4, 15-442.3, 10-469.3, 4-533.3, 1-585.5, 4-637.2 1-676.5, 2-970.3, 6-1000	96.6	127.5
340	3858.8	4-4.7, 5000-7.3, 4-442.3, 10-481.1, 4-629.3, 2-934.9, 6-1000	100.4	131.8
345	4034.5	4-5.1, 5000-7.8, 4-464.2, 10-539.8, 4-581.9, 2-899.1, 2-922.5, 6-926.2, 2-1000	102.4	134.2
350	4184.3	4-5.6, 5000-8.5, 4-261.2, 2-269.9, 4-482, 10-549.5, 4-576.5, 4-777.5, 2-1000	104.1	136.2
355	4308.5	4-6.2, 5000-9.4, 4-249.7, 2-293.3, 4-478.1, 10-544.9, 4-563.9, 2-749.8, 2-1000	105.5	137.9

Exhibit 13 - Table III-E

(Page 1 of 3)

**WNTN(AM) - DISTANCES TO CONTOURS**

WNTN(AM) ND U 1550 kHz Newton, MA Facility ID: 48781

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 5.0 mV/m (km)
0	1017.8	2-29.2, 1-138.6, 2-167.1, 1-240.7, 0.5-324.2, 4-493.8, 5000-494.3, 4-564.1, 2-666.2, 2-1000	14.2
5	1017.8	2-32.1, 1-112.8, 2-205, 1-316, 0.5-323.6, 4-515.6, 5000-547.2, 4-615.3, 2-718.7, 2-1000	14.2
10	1017.8	2-36, 1-93.1, 2-232.2, 1-393.6, 4-430.6, 1-444.8, 4-591.2, 5000-649.1, 4-654.3, 2-779.8, 2-1000	14.2
15	1017.8	2-258.1, 1-588.3, 2-693.4, 5000-775.1, 2-846.9, 2-1000	14.2
20	1017.8	2-83.9, 5000-98.3, 2-284, 1-585.2, 2-772.7, 5000-830.4, 2-844.4, 5000-914.8, 2-1000	14.2
25	1017.8	2-89.6, 5000-91.9, 2-314.8, 1-594.3, 2-850.5, 5000-985.9, 2-1000	14.2
30	1017.8	2-69.9, 5000-138.1, 2-142.6, 5000-155.1, 2-165, 5000-191.8, 2-373.6, 1-529.5, 2-740.8, 5000-753.9, 2-901.6, 5000-981.1, 2-991.6, 5000-1000	14.2
35	1017.8	2-58, 5000-193.2, 2-199.6, 5000-221.2, 2-386.3, 1-463.2, 2-746.2, 5000-815.2, 2-892.3, 5000-899, 2-899.6, 5000-980.6, 2-1000	14.2
40	1017.8	2-54.3, 5000-240, 2-268.9, 5000-308.7, 2-367.5, 1-456.4, 2-707.3, 5000-1000	14.2
45	1017.8	2-51.6, 5000-301.1, 2-301.7, 5000-343.1, 2-376.9, 1-450.2, 2-700.6, 5000-753.2, 4-758.4, 5000-1000	14.2
50	1017.8	2-51.1, 5000-407.4, 1-439.4, 5000-490.9, 2-616.3, 4-701.8, 5000-735, 4-765, 5000-1000	14.2
55	1017.8	2-33.6, 5000-36.3, 2-55, 5000-610.3, 4-718.8, 5000-780.3, 4-859.2, 5000-971.7, 1-1000	14.2
60	1017.8	2-34.6, 5000-51.5, 2-52.1, 5000-465.9, 2-645.1, 5000-645.8, 2-703.8, 4-832.9, 5000-867.3, 1-931.7, 4-975.3, 5000-981.5, 4-985.1, 5000-1000	14.2
65	1017.8	2-35.8, 5000-447.8, 2-607.9, 5000-623.6, 2-624.8, 5000-638.4, 2-664.4, 5000-672, 2-729.1, 5000-733.5, 2-750.4, 5000-766.5, 2-795.8, 5000-803, 2-826.1, 5000-856.1, 4-884, 5000-1000	14.2
70	1017.8	2-24.3, 5000-467.7, 2-505.5, 5000-512.3, 2-541.1, 5000-1000	14.2
75	1017.8	2-20.8, 5000-1000	14.2
80	1017.8	2-21.1, 5000-1000	14.2
85	1017.8	2-21.7, 5000-1000	14.2
90	1017.8	2-20.7, 5000-1000	14.2
95	1017.8	2-16.5, 5000-1000	14.2
100	1017.8	2-16.3, 5000-1000	14.2
105	1017.8	2-16.4, 5000-1000	14.2
110	1017.8	2-18.5, 5000-31.9, 2-42.1, 5000-88.7, 2-102.3, 5000-1000	14.2
115	1017.8	2-21.4, 5000-28.5, 2-46.9, 5000-105.3, 2-114.9, 5000-1000	14.2
120	1017.8	2-25.6, 5000-26, 2-53.4, 5000-117.3, 2-124.5, 5000-1000	14.2
125	1017.8	2-59.7, 5000-113.8, 2-130.2, 5000-1000	14.2
130	1017.8	2-60.6, 5000-73.9, 2-75.7, 5000-107.6, 2-121.4, 5000-1000	14.2

Exhibit 13 - Table III-E

(Page 2 of 3)

**WNTN(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
135	1017.8	2-82.1, 5000-93.9, 2-113.3, 5000-1000	14.2
140	1017.8	2-105.7, 5000-1000	14.2
145	1017.8	2-83.6, 5000-87.8, 2-107.1, 5000-1000	14.2
150	1017.8	2-85.2, 5000-98.1, 2-104.3, 5000-1000	14.2
155	1017.8	2-89, 5000-1000	14.2
160	1017.8	2-87.5, 5000-1000	14.2
165	1017.8	2-95.3, 5000-1000	14.2
170	1017.8	2-86.7, 5000-1000	14.2
175	1017.8	2-96.1, 5000-1000	14.2
180	1017.8	2-73.4, 5000-1000	14.2
185	1017.8	2-70.5, 5000-1000	14.2
190	1017.8	2-62.3, 5000-64.8, 2-75.9, 5000-83.3, 2-86.6, 5000-90.5, 2-106.2, 5000-1000	14.2
195	1017.8	2-113.4, 5000-1000	14.2
200	1017.8	2-119.8, 5000-1000	14.2
205	1017.8	2-126.5, 5000-164.9, 0.5-169.9, 5000-1000	14.2
210	1017.8	2-132.1, 5000-167.3, 0.5-169, 5000-172.3, 0.5-188.2, 5000-815.7, 4-875.2, 5000-876.9, 4-884.3, 5000-927.1, 4-930.3, 5000-933, 4-949, 5000-1000	14.2
215	1017.8	2-136.7, 5000-139.9, 2-142.2, 5000-166.5, 0.5-185.2, 5000-195.7, 0.5-210.1, 5000-734.2, 4-840.5, 5000-854.7, 4-909.1, 5000-912.5, 4-1000	14.2
220	1017.8	2-145.7, 5000-147.5, 2-154.9, 5000-199.5, 0.5-233.9, 5000-405.7, 4-406.4, 5000-462.3, 4-468.7, 5000-475.7, 4-487.5, 5000-516.3, 4-526.6, 2-630.1, 5000-692.2 2-704.2, 5000-712.4, 2-722, 5000-725.4, 2-741, 5000-749.5, 2-964.8, 4-1000	14.2
225	1017.8	2-169.5, 5000-216.4, 0.5-263.4, 5000-331.7, 4-479.2, 5000-505.6, 4-575.8, 2-610.7, 5000-633.6, 4-642.9, 5000-655.6, 4-684.2, 5000-686.5, 2-952.2, 4-1000	14.2
230	1017.8	2-190.8, 1-194.8, 5000-243.8, 4-264.3, 5000-264.9, 4-269.5, 0.5-288.5, 5000-289.5, 0.5-301.2, 5000-323.2, 4-478.6, 5000-488.6, 4-553.5, 40-598.8, 4-656.1 5000-659, 4-682.8, 2-902.1, 4-1000	14.2
235	1017.8	2-179.8, 1-251.8, 4-570.7, 40-570.9, 4-571.4, 2-1000	14.2
240	1017.8	2-171, 1-244, 4-295.4, 2-337, 4-571.7, 2-1000	14.2
245	1017.8	2-163.6, 1-226.8, 4-277.5, 2-350.7, 4-417.9, 2-429.5, 4-526.2, 2-653.9, 4-795.5, 2-1000	14.2
250	1017.8	2-149.7, 1-196.5, 4-285.7, 2-582.5, 4-814, 2-1000	14.2
255	1017.8	2-112, 1-179.8, 4-447.4, 2-579.7, 4-605.3, 2-689.8, 4-962.8, 2-1000	14.2
260	1017.8	2-95.6, 1-168.2, 4-525.7, 2-718, 4-791.4, 8-1000	14.2
265	1017.8	2-85.3, 1-159.9, 4-622.6, 2-718.4, 8-975.9, 15-1000	14.2
270	1017.8	2-68.2, 1-155.5, 4-761.5, 8-887.2, 10-958.7, 8-1000	14.2
275	1017.8	2-46.6, 1-152.5, 4-623.2, 8-677.3, 10-749.8, 4-768.2, 10-843.6, 20-951, 15-961.7, 8-1000	14.2
280	1017.8	2-38.1, 1-150.7, 4-522.6, 8-643.9, 20-740.9, 4-797.1, 6-869.9, 20-875.3, 10-905.5, 8-924.4, 15-987.8, 8-1000	14.2

Exhibit 13 - Table III-E

(Page 3 of 3)

**WNTN(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
285	1017.8	2-34.3, 1-150, 4-466.3, 8-619.7, 15-673.1, 6-674.4, 15-675.2, 6-703.7, 10-721.3, 4-767.4, 6-866.2, 10-904.3, 8-949.1, 15-972.2, 8-1000	14.2
290	1017.8	2-31.4, 1-150.5, 4-220.1, 2-276.7, 4-427.7, 8-470.7, 15-586, 6-699.8, 4-848.3, 10-927.3, 8-1000	14.2
295	1017.8	2-29.2, 1-152.1, 4-171, 2-267.6, 4-434.2, 8-462.8, 15-493.4, 4-494.5, 15-497.6, 10-510.3, 15-511.5, 4-594.6, 6-696.7, 1-744.9, 10-865.1, 4-871.7, 10-1000	14.2
300	1017.8	2-27.7, 1-154.4, 2-263.9, 4-451.3, 15-456.6, 10-490.1, 4-572.1, 1-777.4, 2-839.1, 10-885.3, 2-886.1, 10-892.2, 2-896.7, 10-897.2, 2-918.8, 10-924.8, 2-931, 10-936, 2-1000	14.2
305	1017.8	2-26.5, 1-157.9, 2-265, 4-436.1, 10-468.7, 4-535.1, 1-736.4, 2-1000	14.2
310	1017.8	2-25.6, 1-162.8, 2-268.7, 4-428.8, 10-472.2, 4-623.5, 1-711.7, 2-1000	14.2
315	1017.8	2-25, 1-169.4, 2-277.4, 4-419.5, 10-492.3, 4-591, 2-1000	14.2
320	1017.8	2-24.5, 1-177.4, 2-288.5, 4-389.9, 10-477.8, 4-507.9, 2-931.9, 6-1000	14.2
325	1017.8	2-24.3, 1-187, 2-300.4, 4-362.8, 10-446.2, 4-472.8, 2-862.1, 6-985.1, 2-1000	14.2
330	1017.8	2-24.3, 1-201.7, 2-204.4, 0.5-213.7, 2-315.9, 4-341.6, 10-407.7, 4-438.3, 2-687, 2-998.2, 2-1000	14.2
335	1017.8	2-24.4, 1-194.3, 0.5-245.3, 2-325.8, 4-357.6, 10-414.7, 4-447.5, 2-628.8, 2-1000	14.2
340	1017.8	2-24.7, 1-196.4, 0.5-272.3, 2-314.2, 4-373, 6-385.3, 10-435.5, 4-465.9, 2-603.7, 2-1000	14.2
345	1017.8	2-25.2, 1-201.8, 0.5-305.7, 4-377.9, 6-443.2., 10-445, 4-484.3, 2-596.3, 2-1000	14.2
350	1017.8	2-26, 1-209.2, 0.5-300.1, 4-386.8, 6-462.9, 4-504, 2-604.2, 2-1000	14.2
355	1017.8	2-27, 1-220.1, 0.5-296.9, 4-410.6, 6-480.5, 4-528.1, 2-629, 2-1000	14.2

Exhibit 13 - Table III-F

(Page 1 of 4)

**WSMN(AM) - DISTANCES TO CONTOURS**

WSMN(AM) DA1 U 1590 kHz Nashua, NH Facility ID: 102

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 5.0 mV/m (km)
0	948.4	4.0E-106.0 2.0E-147.1 4.0E-555.8 10.0E-627.8 4.0E-648.8 2.0E-831.2 102.0E-1000.0	11.1
5	1029.9	4.0E-99.5 2.0E-154.4 4.0E-560.4 10.0E-620.7 4.0E-640.9 2.0E-831.2 102.0E-1000.0	11.5
10	1105.7	4.0E-95.4 2.0E-163.8 4.0E-335.4 2.0E-389.8 4.0E-567.4 10.0E-644.1 4.0E-704.7 2.0E-860.7 102.0E-1000.0	11.9
15	1175.0	4.0E-92.7 2.0E-167.4 4.0E-347.2 2.0E-579.3 4.0E-637.6 6.0E-732.8 4.0E-796.8 2.0E-940.8 102.0E-1000.0	12.3
20	1236.9	4.0E-92.5 2.0E-161.1 4.0E-360.7 2.0E-598.0 4.0E-705.9 6.0E-788.1 4.0E-924.7 2.0E-1000.0	12.6
25	1290.8	4.0E-94.6 2.0E-149.6 4.0E-369.8 2.0E-445.5 1.0E-487.0 0.5E-623.4 4.0E-991.4 2.0E-1000.0	12.9
30	1336.4	4.0E-103.4 2.0E-112.2 4.0E-303.6 1.0E-577.3 0.5E-622.4 1.0E-953.2 2.0E-1000.0	13.1
35	1373.2	4.0E-176.0 1.0E-520.4 2.0E-643.8 1.0E-956.1 2.0E-1000.0	13.2
40	1401.2	4.0E-163.2 1.0E-252.6 2.0E-303.7 1.0E-490.8 2.0E-791.8 1.0E-865.5 2.0E-1000.0	13.4
45	1420.2	4.0E-82.9 5000.0E-84.1 4.0E-108.7 5000.0E-117.5 4.0E-118.6 5000.0E-128.1 4.0E-128.3 5000.0E-132.9 4.0E-139.9 5000.0E-148.0 4.0E-156.0 1.0E-232.5 2.0E-402.9 1.0E-448.3 2.0E-487.3 5000.0E-649.0 2.0E-657.2 5000.0E-662.0 2.0E-668.8 5000.0E-705.4 2.0E-718.1 5000.0E-721.4 2.0E-721.9 5000.0E-727.1 2.0E-731.5 5000.0E-735.1 2.0E-779.8 1.0E-856.0 2.0E-1000.0	13.5
50	1430.1	4.0E-83.3 5000.0E-108.0 0.5E-133.2 4.0E-145.5 5000.0E-147.1 4.0E-165.8 5000.0E-226.8 2.0E-428.3 5000.0E-1000.0	13.5
55	1431.0	4.0E-91.7 5000.0E-121.3 0.5E-179.5 5000.0E-189.2 0.5E-194.3 5000.0E-255.1 2.0E-266.1 5000.0E-268.2 2.0E-364.7 5000.0E-365.2 2.0E-432.0 5000.0E-855.4 2.0E-1000.0	13.5
60	1422.9	4.0E-97.6 5000.0E-155.6 0.5E-227.3 5000.0E-232.6 0.5E-253.2 5000.0E-312.8 2.0E-342.3 5000.0E-363.1 2.0E-406.5 5000.0E-408.4 2.0E-425.2 5000.0E-466.8 2.0E-471.7 5000.0E-879.2 2.0E-892.9 5000.0E-1000.0	13.5
65	1405.7	4.0E-94.0 5000.0E-226.5 0.5E-229.9 5000.0E-1000.0	13.4
70	1379.5	4.0E-89.4 5000.0E-1000.0	13.3
75	1344.4	4.0E-85.4 5000.0E-1000.0	13.1
80	1300.6	4.0E-82.4 5000.0E-1000.0	12.9
85	1248.3	4.0E-77.6 5000.0E-1000.0	12.6
90	1188.0	4.0E-76.5 5000.0E-1000.0	12.3
95	1120.1	4.0E-75.6 5000.0E-1000.0	12.0
100	1045.5	4.0E-75.8 5000.0E-1000.0	11.6
105	965.1	4.0E-74.5 5000.0E-1000.0	11.2



Exhibit 13 - Table III-F

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**WSMN(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
110	880.1	4.0E-77.0 5000.0E-1000.0	10.7
115	791.8	4.0E-77.2 5000.0E-1000.0	10.1
120	701.7	4.0E-75.1 5000.0E-1000.0	9.5
125	612.6	4.0E-73.4 5000.0E-1000.0	8.9
130	532.9	4.0E-78.4 5000.0E-1000.0	8.3
135	451.1	4.0E-72.8 5000.0E-1000.0	7.7
140	361.3	4.0E-76.3 5000.0E-1000.0	6.9
145	283.6	4.0E-80.5 5000.0E-1000.0	6.1
150	217.2	4.0E-82.4 5000.0E-1000.0	5.3
155	159.4	4.0E-80.7 5000.0E-85.3 4.0E-86.8 5000.0E-1000.0	4.5
160	110.8	4.0E-90.8 5000.0E-1000.0	3.8
165	72.0	4.0E-99.3 5000.0E-1000.0	3.0
170	43.5	4.0E-105.1 5000.0E-1000.0	2.2
175	26.7	4.0E-90.9 5000.0E-95.3 4.0E-116.4 5000.0E-1000.0	1.7
180	22.1	4.0E-87.7 5000.0E-1000.0	1.5
185	23.3	4.0E-86.4 5000.0E-131.0 4.0E-147.2 2.0E-193.0 5000.0E-1000.0	1.5
190	24.0	4.0E-86.5 5000.0E-124.0 4.0E-151.4 2.0E-235.6 5000.0E-432.4 4.0E-437.9 5000.0E-455.4 4.0E-501.4 5000.0E-1000.0	1.6
195	23.1	4.0E-81.9 5000.0E-110.7 4.0E-157.0 2.0E-231.7 5000.0E-236.2 2.0E-239.1 5000.0E-252.3 2.0E-260.5 5000.0E-260.7 2.0E-301.2 5000.0E-318.2 2.0E-329.1 5000.0E-351.7 4.0E-437.8 5000.0E-438.9 4.0E-443.8 5000.0E-464.9 4.0E-524.6 5000.0E-535.8 4.0E-545.4 5000.0E-547.2 4.0E-549.6 5000.0E-555.3 4.0E-559.6 5000.0E-573.9 4.0E-598.3 5000.0E-1000.0	1.5
200	22.1	4.0E-79.9 5000.0E-106.4 4.0E-162.3 2.0E-216.3 5000.0E-221.0 2.0E-226.2 5000.0E-338.1 4.0E-350.8 5000.0E-364.3 4.0E-455.6 5000.0E-460.3 4.0E-528.0 5000.0E-532.5 4.0E-635.5 5000.0E-638.8 4.0E-642.9 5000.0E-1000.0	1.5
205	23.1	4.0E-76.9 5000.0E-87.5 4.0E-168.9 2.0E-207.8 5000.0E-263.1 4.0E-263.6 5000.0E-273.0 4.0E-278.9 5000.0E-284.8 4.0E-286.9 5000.0E-292.4 2.0E-329.4 5000.0E-332.2 2.0E-343.0 5000.0E-354.1 2.0E-567.1 4.0E-740.1 5000.0E-1000.0	1.5
210	26.8	4.0E-74.7 5000.0E-82.1 4.0E-177.5 2.0E-208.4 5000.0E-236.0 4.0E-242.6 5000.0E-255.2 4.0E-282.4 5000.0E-287.5 2.0E-314.9 5000.0E-317.4 2.0E-348.5 5000.0E-350.6 2.0E-568.2 4.0E-620.8 2.0E-674.4 4.0E-912.8 5000.0E-921.2 4.0E-925.9 5000.0E-1000.0	1.7
215	32.1	4.0E-73.2 5000.0E-80.5 4.0E-171.0 4.0E-172.7 4.0E-176.8 4.0E-183.4 4.0E-188.2 4.0E-191.6 5000.0E-200.4 2.0E-203.8 5000.0E-213.9 4.0E-221.7 5000.0E-225.3 4.0E-242.1 5000.0E-248.9 4.0E-278.0 5000.0E-280.9 2.0E-569.7 4.0E-608.5 2.0E-765.1 4.0E-1000.0	1.9
220	39.1	4.0E-70.1 5000.0E-79.6 4.0E-153.8 4.0E-167.7 4.0E-174.8 4.0E-178.1 4.0E-182.5 4.0E-204.4 5000.0E-205.9 4.0E-220.2 5000.0E-223.9 4.0E-247.7 5000.0E-258.4 4.0E-277.0 2.0E-521.5 4.0E-658.9 2.0E-880.1 4.0E-995.7 2.0E-1000.0	2.1

Exhibit 13 - Table III-F

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**WSMN(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
225	48.2	4.0E-63.7 5000.0E-69.9 4.0E-136.1 40.0E-190.5 4.0E-248.4 5000.0E-251.5 4.0E-274.5 2.0E-493.8 4.0E-1000.0	2.4
230	54.4	4.0E-62.6 5000.0E-68.6 4.0E-143.8 40.0E-163.1 4.0E-165.4 40.0E-166.3 4.0E-169.6 40.0E-171.6 4.0E-177.2 40.0E-178.3 4.0E-257.9 5000.0E-261.7 4.0E-264.9 2.0E-492.9 4.0E-576.4 2.0E-883.1 4.0E-1000.0	2.5
235	55.0	4.0E-18.2 5000.0E-20.8 4.0E-51.1 5000.0E-60.0 4.0E-105.6 40.0E-117.0 4.0E-121.1 40.0E-159.0 4.0E-171.4 40.0E-171.9 4.0E-214.9 5000.0E-216.7 4.0E-228.1 2.0E-1000.0	2.6
240	49.8	4.0E-22.7 5000.0E-34.6 4.0E-42.8 5000.0E-49.2 4.0E-97.9 40.0E-112.1 4.0E-125.2 40.0E-128.2 4.0E-133.5 40.0E-135.7 4.0E-148.1 40.0E-148.6 4.0E-157.5 40.0E-162.3 4.0E-181.6 2.0E-655.1 4.0E-776.6 2.0E-997.8 4.0E-1000.0	2.4
245	40.9	4.0E-30.6 5000.0E-36.2 4.0E-154.7 2.0E-728.0 4.0E-811.9 2.0E-1000.0	2.2
250	33.3	4.0E-143.3 2.0E-944.4 4.0E-1000.0	1.9
255	27.8	4.0E-152.9 2.0E-792.9 8.0E-869.7 4.0E-1000.0	1.7
260	23.6	4.0E-189.6 2.0E-293.6 4.0E-479.7 2.0E-764.1 8.0E-904.6 4.0E-1000.0	1.5
265	22.1	4.0E-191.4 2.0E-267.2 4.0E-444.0 2.0E-733.6 8.0E-1000.0	1.5
270	22.9	4.0E-178.4 2.0E-251.6 4.0E-599.3 8.0E-1000.0	1.5
275	23.9	4.0E-168.5 2.0E-241.9 4.0E-536.5 8.0E-703.4 15.0E-972.2 8.0E-1000.0	1.6
280	23.5	4.0E-161.7 2.0E-235.8 4.0E-298.6 2.0E-354.4 4.0E-491.3 8.0E-674.5 15.0E-745.5 8.0E-839.7 15.0E-886.9 8.0E-1000.0	1.5
285	22.2	4.0E-155.6 2.0E-236.4 4.0E-289.3 2.0E-395.4 4.0E-455.7 8.0E-673.8 15.0E-744.3 8.0E-908.2 2.0E-1010.6	1.5
290	24.9	4.0E-147.0 2.0E-246.8 4.0E-278.8 2.0E-441.8 8.0E-641.9 10.0E-710.9 8.0E-808.6 4.0E-872.3 2.0E-980.8 8.0E-1000.0	1.6
295	39.1	4.0E-137.2 2.0E-443.1 8.0E-593.5 10.0E-649.1 20.0E-713.5 15.0E-719.0 8.0E-962.6 2.0E-1000.0	2.1
300	65.4	4.0E-121.6 2.0E-429.5 4.0E-495.5 8.0E-537.6 10.0E-616.0 20.0E-701.9 15.0E-774.5 8.0E-974.3 2.0E-1000.0	2.8
305	102.2	4.0E-112.4 2.0E-289.7 4.0E-456.0 8.0E-495.7 10.0E-519.1 4.0E-522.3 10.0E-541.1 4.0E-593.6 20.0E-660.9 6.0E-676.1 10.0E-709.5 8.0E-745.3 15.0E-814.3 8.0E-1000.0	3.6
310	148.9	4.0E-107.1 2.0E-235.6 4.0E-437.6 8.0E-472.3 10.0E-511.4 20.0E-559.3 4.0E-608.6 6.0E-703.9 10.0E-752.5 8.0E-1000.0	4.4
315	204.9	4.0E-103.1 2.0E-210.6 4.0E-432.1 8.0E-458.8 10.0E-466.2 20.0E-519.6 15.0E-545.0 20.0E-547.0 10.0E-565.9 4.0E-625.0 6.0E-725.3 10.0E-818.1 8.0E-1000.0	5.2
320	269.7	4.0E-100.7 2.0E-164.8 4.0E-418.1 8.0E-515.5 15.0E-543.5 6.0E-584.7 4.0E-707.2 10.0E-737.6 4.0E-741.9 10.0E-767.5 4.0E-769.9 10.0E-772.8 4.0E-786.4 10.0E-830.1 4.0E-897.2 10.0E-935.9 2.0E-1000.0	5.9
325	342.2	4.0E-99.6 2.0E-142.1 4.0E-379.7 8.0E-496.0 15.0E-535.1 6.0E-621.3 4.0E-659.2 10.0E-828.7 2.0E-832.9 10.0E-834.8 2.0E-1000.0	6.7
330	421.3	4.0E-99.4 2.0E-137.0 4.0E-415.0 8.0E-468.3 15.0E-515.3 6.0E-616.2 1.0E-734.9 2.0E-1000.0	7.4

Exhibit 13 - Table III-F

(Page 4 of 4)

**WSMN(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
335	505.7	4.0E-100.5 2.0E-135.6 4.0E-409.4 8.0E-446.0 15.0E-499.4 4.0E-581.1 1.0E-736.7 2.0E-1000.0	8.1
340	593.7	4.0E-102.8 2.0E-135.2 4.0E-402.0 8.0E-429.7 15.0E-466.7 4.0E-470.3 15.0E-473.9 4.0E-475.9 15.0E-476.5 4.0E-481.3 15.0E-483.4 10.0E-483.6 15.0E-485.8 10.0E-486.6 15.0E-488.5 4.0E-570.1 1.0E-749.9 2.0E-1000.0	8.8
345	683.7	4.0E-106.1 2.0E-135.8 4.0E-408.1 8.0E-464.1 15.0E-488.0 10.0E-511.4 4.0E-572.9 1.0E-630.9 4.0E-690.6 2.0E-691.3 1.0E-700.0 2.0E-988.8 6.0E-1000.0	9.4
350	773.9	4.0E-110.3 2.0E-137.5 4.0E-490.9 15.0E-492.5 10.0E-527.6 4.0E-675.2 2.0E-964.7 6.0E-1004.5	10.0
355	862.6	4.0E-111.6 2.0E-141.3 4.0E-521.8 10.0E-610.8 4.0E-645.7 2.0E-859.9 102.0E-1000.0	10.6

Exhibit 13 - Table III-G

(Page 1 of 3)

**WUNR(AM) - DISTANCES TO CONTOURS**

WUNR(AM) DA1 U 1600 kHz Brookline, MA Facility ID: 10118

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 5.0 mV/m (km)
0	1212.3	2-41.1, 1-135, 2-189.4, 1-253.9, 0.5-330.5, 4-502.5, 5000-506.4, 4-575.5, 2-676.9, 2-1000	7.1
5	1254.4	2-47.1, 1-108.7, 2-219.2, 1-348.7, 4-526.9, 5000-566.4, 4-626.3, 2-730.2, 2-1000	7.3
10	1288.6	2-245.9, 1-463.4, 4-608.2, 5000-665.5, 2-791.5, 2-1000	7.4
15	1315.0	2-89.8, 5000-96.3, 2-271.4, 1-594.9, 2-705.9, 5000-785.2, 2-857.5, 2-1000	7.4
20	1334.5	2-95.1, 5000-97.6, 2-296.9, 1-596.1, 2-785.2, 5000-928.4, 2-1000	7.5
25	1347.7	2-63.8, 5000-65.8, 2-71.1, 5000-97.4, 2-117.1, 5000-132, 2-328.8, 1-596.1, 2-862.5, 5000-995.2, 2-1000	7.5
30	1355.8	2-60, 5000-202.9, 2-214.4, 5000-219.6, 2-389.7, 1-522.5, 2-745.2, 5000-773.2, 2-909, 5000-985.8, 2-1004.7	7.6
35	1359.7	2-55.2, 5000-215.5, 2-220.7, 5000-226.5, 2-384.7, 1-468.1, 2-770.1, 5000-851.7, 2-895.4, 5000-987.3, 2-1000	7.6
40	1360.5	2-35.6, 5000-36.8, 2-53.6, 5000-241.8, 2-246.8, 5000-258.1, 2-264, 5000-299.5, 2-370.9, 1-454.4, 2-717.1, 5000-1000	7.6
45	1359.2	2-35.7, 5000-40.9, 2-56.9, 5000-344.1, 2-383.8, 1-451.9, 2-699.4, 5000-739.1, 4-772.9, 5000-1000	7.6
50	1356.7	2-20.5, 5000-27.7, 2-36.1, 5000-51.1, 2-53.3, 5000-528.8, 2-610.6, 4-710.2, 5000-741.1, 4-771.1, 5000-1000	7.6
55	1353.8	2-20, 5000-637.3, 4-728.4, 5000-775.3, 4-811.8, 5000-953.2, 1-990.1, 5000-1000	7.5
60	1351.3	2-19.8, 5000-460.1, 2-720.2, 4-834.1, 5000-864.7, 1-924, 4-993.7, 5000-1000	7.5
65	1349.5	2-13.2, 5000-17.9, 2-19.7, 5000-445.6, 2-605, 5000-643.2, 2-663.8, 5000-1000	7.5
70	1348.9	2-12.4, 5000-467.9, 2-499.7, 5000-1000	7.5
75	1349.5	2-12.1, 5000-1000	7.5
80	1351.3	2-12.6, 5000-1000	7.5
85	1353.8	2-13.2, 5000-1000	7.5
90	1356.7	2-14, 5000-1000	7.6
95	1359.2	2-15.1, 5000-1000	7.6
100	1360.5	2-16.4, 5000-23.4, 2-35.5, 5000-1000	7.6
105	1359.7	2-18.1, 5000-19.8, 2-38.3, 5000-1000	7.6
110	1359.2	2-41.9, 5000-96.4, 2-104.5, 5000-1000	7.6
115	1360.8	2-46.7, 5000-106.8, 2-112.3, 5000-1000	7.6
120	1361.6	2-51.9, 5000-110.3, 2-116.6, 5000-1000	7.6
125	1358.0	2-52.3, 5000-102.9, 2-118.9, 5000-1000	7.6
130	1346.5	2-70.1, 5000-95.1, 2-111, 5000-1000	7.5

Exhibit 13 - Table III-G

(Page 2 of 3)

**WUNR(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region:* Indicates Measured Data	Distances To Contour 25 mV/m (km)
135	1323.8	2-102.2, 5000-1000	7.5
140	1287.5	2-97.4, 5000-1000	7.4
145	1236.3	2-74.3, 5000-80, 2-98, 5000-1000	7.2
150	1170.3	2-76.5, 5000-89.4, 2-95.5, 5000-1000	7.0
155	1090.9	2-79.8, 5000-1000	6.8
160	1000.7	2-79.1, 5000-1000	6.5
165	903.9	2-82, 5000-1000	6.2
170	805.6	2-87.1, 5000-1000	5.8
175	712.0	2-87.1, 5000-1000	5.5
180	622.2	2-62.3, 5000-65.9, 2-89.6, 5000-1000	5.1
185	532.0	2-70.1, 5000-1000	4.7
190	443.0	2-63.2, 5000-1000	4.3
195	357.0	2-56.9, 5000-59.8, 2-69.3, 5000-74.2, 2-80.4, 5000-81.7, 2-98.1, 5000-1000	3.8
200	275.5	2-109.4, 5000-1000	3.3
205	200.7	2-117.8, 5000-147.9, 0.5-154.5, 5000-1000	2.7
210	144.8	2-122.2, 5000-159.7, 0.5-174, 5000-816.6, 4-844.6, 5000-1000	2.2
215	88.9	2-128.6, 5000-185.8, 0.5-190.3, 5000-192.4, 0.5-198.7, 5000-738, 4-814.5, 5000-816.6, 4-834.1, 5000-843.9, 4-905.3, 5000-909.5, 4-1000	1.6
220	79.3	2-132.4, 5000-133.2, 2-145.5, 5000-188.6, 0.5-219.6, 5000-522.3, 2-613.9, 5000-695.6, 2-697, 5000-699.4, 2-702.2, 5000-720.6, 2-731, 4-738.3, 5000-746.3 2-960.6, 4-1000	1.5
225	96.7	2-160.1, 5000-206.3, 0.5-246.2, 5000-342.7, 4-343, 5000-347.8, 4-474.8, 5000-503.2, 4-564.8, 2-609.1, 5000-636.4, 4-641.8, 5000-655, 4-682.5, 5000-686.6 2-967.6, 4-1000	1.7
230	128.9	2-177.3, 5000-232.3, 4-234.2, 0.5-286.9, 5000-315.5, 4-479.4, 5000-486.6, 4-559.7, 40-562.6, 4-566.3, 40-603.4, 4-658, 5000-662.6, 4-682.4, 2-901, 4-1000	2.1
235	160.3	2-184.4, 1-233.1, 5000-267.2, 4-278.3, 5000-280.3, 4-509.2, 40-513.7, 4-530, 40-533.3, 4-539.7, 40-540.4, 4-554.7, 40-555.2, 4-562.8, 40-569.5, 4-605.6, 2-1000	2.4
240	175.4	2-175.7, 1-247.4, 4-303, 2-329.9, 4-559.9, 2-1000	2.5
245	188.2	2-168.3, 1-238.4, 4-281.1, 2-347.5, 4-542.6, 2-676.2, 4-776.6, 2-1000	2.6
250	196.3	2-160.3, 1-212.1, 4-282, 2-591, 4-839.6, 2-1000	2.7
255	188.2	2-143.3, 1-189.2, 4-443.5, 2-574.4, 4-618.9, 2-688.6, 4-950.8, 2-1000	2.6
260	175.4	2-111.7, 1-176.9, 4-510.9, 2-716, 4-813.8, 8-1000	2.5
265	154.5	2-98.5, 1-167.4, 4-610.5, 2-726.4, 8-982.2, 15-1000	2.3
270	128.7	2-89.7, 1-161.9, 4-792.9, 8-910.2, 10-953.4, 8-997.8, 15-1000	2.1
275	101.0	2-76, 1-158.7, 4-637.1, 8-697.7, 10-857.6, 20-958.3, 15-964.2, 8-1000	1.8
280	76.5	2-60.3, 1-156.8, 4-528.2, 8-644.9, 20-746.5, 4-809.5, 6-821.9, 20-890.1, 10-913.6, 8-927.7, 15-991.2, 8-1000,	1.5

Exhibit 13 - Table III-G

(Page 3 of 3)

**WUNR(AM) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region:* Indicates Measured Data	Distances To Contour 25 mV/m (km)
285	55.6	2-47.7, 1-156.2, 4-482.7, 8-486.7, 4-498.8, 8-641, 15-690.3, 6-705.3, 10-728, 4-773.7, 6-871.4, 10-908.8, 8-950.9, 15-991.7, 8-1000	1.6
290	135.8	2-43.3, 1-156.7, 4-236.9, 2-284.7, 4-437.1, 8-478.8, 15-606.2, 6-704.7, 4-857.7, 10-931.9, 8-1000	2.1
295	200.7	2-40.3, 1-158.3, 4-197.7, 2-275.9, 4-442.8, 8-446.9, 4-447.2, 8-470.7, 15-501.9, 4-505.3, 15-507.3, 10-513.7, 15-517.7, 4-596.3, 6-712.2, 4-727.5, 1-746.4, 10-757.5, 4-760.7, 10-873.7, 4-902.8, 10-1014	2.7
300	275.5	2-37.9, 1-160.9, 2-271.5, 4-458, 15-469.7, 10-500.4, 4-585.6, 1-788.8, 2-842.9, 10-915.9, 2-919.4, 10-926.4, 2-932.6, 10-937.6, 2-940.7, 10-952.4, 2-1000	3.3
305	357.0	2-36.1, 1-164.6, 2-272.5, 4-444.4, 10-477.8, 4-543.5, 1-746.5, 2-1000	3.8
310	443.0	2-34.9, 1-169.7, 2-275.9, 4-437.5, 10-479.3, 4-629.2, 1-721, 2-1000	4.3
315	532.0	2-34, 1-176.5, 2-284.7, 4-428.5, 10-499, 4-605.8, 2-1000	4.7
320	622.2	2-33.4, 1-185.1, 2-296.2, 4-400.1, 10-488.7, 4-517.5, 2-942.4, 6-1000	5.1
325	712.0	2-33.1, 1-195, 2-308.6, 4-372.3, 10-456.6, 4-482.7, 2-872.2, 6-995.8, 2-1000	5.5
330	799.8	2-33, 1-210.2, 2-214, 0.5-221.9, 2-324.4, 4-350.6, 10-416.6, 4-447, 2-696.5, 2-1006	5.8
335	884.1	2-33.2, 1-202.9, 0.5-254.6, 2-334.3, 4-366.7, 10-423.6, 4-456.3, 2-637.3, 2-1000	6.1
340	963.5	2-33.6, 1-205.4, 0.5-282.6, 2-322.4, 4-381.8, 6-395.2, 10-444.8, 4-474.9, 2-612.1, 2-1000	6.4
345	103.9	2-34.3, 1-211, 0.5-313.6, 4-386.8, 6-454, 4-493.5, 2-604.9, 2-1000	6.6
350	1103.2	2-35.5, 1-218.7, 0.5-307.9, 4-396.4, 6-473.2, 4-513.5, 2-613.2, 2-1000	6.8
355	1161.8	2-38, 1-231, 0.5-304.6, 4-421.8, 6-488.4, 4-538, 2-638.8, 2-1000	7.0



Exhibit 13 - Table III-H

(Page 1 of 3)

**WUNR(AM)(CP) - DISTANCES TO CONTOURS**

WUNR(AM)(CP) DA1 U 1600 kHz Brookline, MA Facility ID: 10118

prepared for

**Willow Farm, Inc.**

WNSH(AM) Beverly, Massachusetts

Facility ID 22798

1570 kHz 50 kW DA-D U

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 5.0 mV/m (km)
0	949.5	2-41.1, 1-134.9, 2-189.5, 1-253.9, 0.5-330.5, 4-502.5, 5000-506.5, 4-575.5, 2-676.9, 2-1000	6.3
5	1118.2	2-47.2, 1-108.6, 2-219.3, 1-348.7, 4-526.9, 5000-566.5, 4-626.3, 2-730.2, 2-1000	6.9
10	1276.6	2-246, 1-463.4, 4-608.2, 5000-665.6, 2-791.5, 2-1000	7.3
15	1425.0	2-89.8, 5000-96.4, 2-271.4, 1-594.8, 2-705.9, 5000-785.2, 2-857.5, 2-1000	7.7
20	1566.5	2-95.1, 5000-97.6, 2-296.9, 1-596.1, 2-785.2, 5000-928.4, 2-1000	8.1
25	1706.3	2-63.8, 5000-65.9, 2-71, 5000-97.4, 2-117.1, 5000-132, 2-328.9, 1-596.1, 2-862.5, 5000-995.2, 2-1000	8.4
30	1850.0	2-59.9, 5000-203, 2-214.5, 5000-219.6, 2-389.7, 1-522.5, 2-745.1, 5000-773.2, 2-909, 5000-985.8, 2-1004.7	8.8
35	2002.5	2-55.2, 5000-215.5, 2-220.7, 5000-226.5, 2-384.7, 1-468.1, 2-770.1, 5000-851.7, 2-895.4, 5000-987.3, 2-1000	9.1
40	2165.8	2-35.6, 5000-36.8, 2-53.6, 5000-241.8, 2-246.7, 5000-258.1, 2-264, 5000-299.5, 2-370.9, 1-454.3, 2-717.1, 5000-1000	9.5
45	2338.8	2-35.7, 5000-40.9, 2-56.9, 5000-344.1, 2-383.8, 1-451.9, 2-699.4, 5000-739.1, 4-772.9, 5000-1000	9.8
50	2517.1	2-20.4, 5000-27.8, 2-36.1, 5000-51.1, 2-53.3, 5000-528.8, 2-610.6, 4-710.1, 5000-741, 4-771.1, 5000-1000	10.2
55	2694.0	2-20, 5000-637.3, 4-728.4, 5000-775.2, 4-811.8, 5000-953.1, 1-990.1, 5000-1000	10.5
60	2861.1	2-19.8, 5000-460.1, 2-720.2, 4-834.1, 5000-864.7, 1-923.9, 4-993.7, 5000-1000	10.8
65	3009.8	2-13.2, 5000-18, 2-19.7, 5000-445.6, 2-605, 5000-643.2, 2-663.8, 5000-1000	11.1
70	3131.8	2-12.4, 5000-467.9, 2-499.7, 5000-1000	11.3
75	3220.0	2-12.1, 5000-1000	11.4
80	3268.5	2-12.6, 5000-1000	11.5
85	3273.4	2-13.2, 5000-1000	11.5
90	3232.6	2-14, 5000-1000	11.4
95	3146.2	2-15, 5000-1000	11.3
100	3016.3	2-16.4, 5000-23.3, 2-35.5, 5000-1000	11.1
105	2847.3	2-18.1, 5000-19.8, 2-38.3, 5000-1000	10.8
110	2645.1	2-41.9, 5000-96.3, 2-104.4, 5000-1000	10.4
115	2417.0	2-46.6, 5000-106.8, 2-112.3, 5000-1000	10.0
120	2171.0	2-51.9, 5000-110.3, 2-116.6, 5000-1000	9.5
125	1915.1	2-52.3, 5000-102.8, 2-118.9, 5000-1000	8.9
130	1656.4	2-70.1, 5000-95.2, 2-111, 5000-1000	8.3

Exhibit 13 - Table III-H

(Page 2 of 3)

**WUNR(AM)(CP) - DISTANCES TO CONTOURS**

Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
135	1401.2	2-102.2, 5000-1000	7.7
140	1154.3	2-97.4, 5000-1000	7.0
145	919.5	2-74.3, 5000-80, 2-98, 5000-1000	6.2
150	700.4	2-76.5, 5000-89.4, 2-95.5, 5000-1000	5.4
155	502.0	2-79.8, 5000-1000	4.6
160	333.5	2-79.1, 5000-1000	3.6
165	219.1	2-81.9, 5000-1000	2.9
170	201.0	2-87.1, 5000-1000	2.7
175	256.7	2-87.1, 5000-1000	3.1
180	321.5	2-62.4, 5000-65.9, 2-89.5, 5000-1000	3.6
185	367.9	2-70.1, 5000-1000	3.9
190	388.0	2-63.2, 5000-1000	4.0
195	380.7	2-56.9, 5000-59.9, 2-69.3, 5000-74.3, 2-80.4, 5000-81.7, 2-98, 5000-1000	3.9
200	348.3	2-109.4, 5000-1000	3.7
205	295.6	2-117.8, 5000-147.9, 0.5-154.5, 5000-1000	3.4
210	226.3	2-122.2, 5000-159.7, 0.5-174, 5000-816.6, 4-844.6, 5000-1000	2.9
215	157.7	2-128.6, 5000-185.8, 0.5-190.3, 5000-192.5, 0.5-198.7, 5000-738.1, 4-814.5, 5000-816.7, 4-834.1, 5000-843.9, 4-905.3, 5000-909.5, 4-1000	2.4
220	92.4	2-132.4, 5000-133.2, 2-145.5, 5000-188.6, 0.5-219.6, 5000-522.4, 2-613.9, 5000-695.6, 2-697.1, 5000-699.4, 2-702.3, 5000-720.6, 2-731, 4-738.3, 5000-746.3 2-960.6, 4-1000	1.6
225	57.6	2-160.2, 5000-206.3, 0.5-246.2, 5000-342.8, 4-343, 5000-347.8, 4-474.7, 5000-503.3, 4-564.8, 2-609.1, 5000-636.5, 4-641.8, 5000-655, 4-682.6, 5000-686.6 2-967.7, 4-1000	1.2
230	75.3	2-177.3, 5000-232.4, 4-234.2, 0.5-286.9, 5000-315.5, 4-479.5, 5000-486.7, 4-559.7, 40-562.6, 4-566.4, 40-603.4, 4-658, 5000-662.6, 4-682.5, 2-901.1 4-1000	1.5
235	103.7	2-184.4, 1-233, 5000-267.4, 4-278.3, 5000-280.4, 4-509.1, 40-513.8, 4-530.1, 40-533.3, 4-539.7, 40-540.4, 4-554.7, 40-555.3, 4-562.8, 40-569.6 4-605.7, 2-1000	1.8
240	121.4	2-175.7, 1-247.4, 4-303, 2-329.9, 4-559.9, 2-1000	2.0
245	126.5	2-168.3, 1-238.4, 4-281.1, 2-347.5, 4-542.7, 2-676.2, 4-776.6, 2-1000	2.0
250	123.0	2-160.3, 1-212.2, 4-282, 2-591.1, 4-839.6, 2-1000	2.0
255	116.8	2-143.3, 1-189.2, 4-443.5, 2-574.4, 4-618.9, 2-688.6, 4-950.8, 2-1000	1.9
260	112.4	2-111.7, 1-177, 4-510.9, 2-716, 4-813.8, 8-1000	1.9
265	109.2	2-98.5, 1-167.4, 4-610.5, 2-726.4, 8-982.2, 15-1000	1.9
270	102.4	2-89.8, 1-161.9, 4-792.9, 8-910.2, 10-953.5, 8-997.8, 15-1000	1.8
275	87.9	2-76, 1-158.8, 4-637.2, 8-697.8, 10-857.7, 20-958.3, 15-964.2, 8-1000	1.6

Exhibit 13 - Table III-H

(Page 3 of 3)

**WUNR(AM)(CP) - DISTANCES TO CONTOURS**

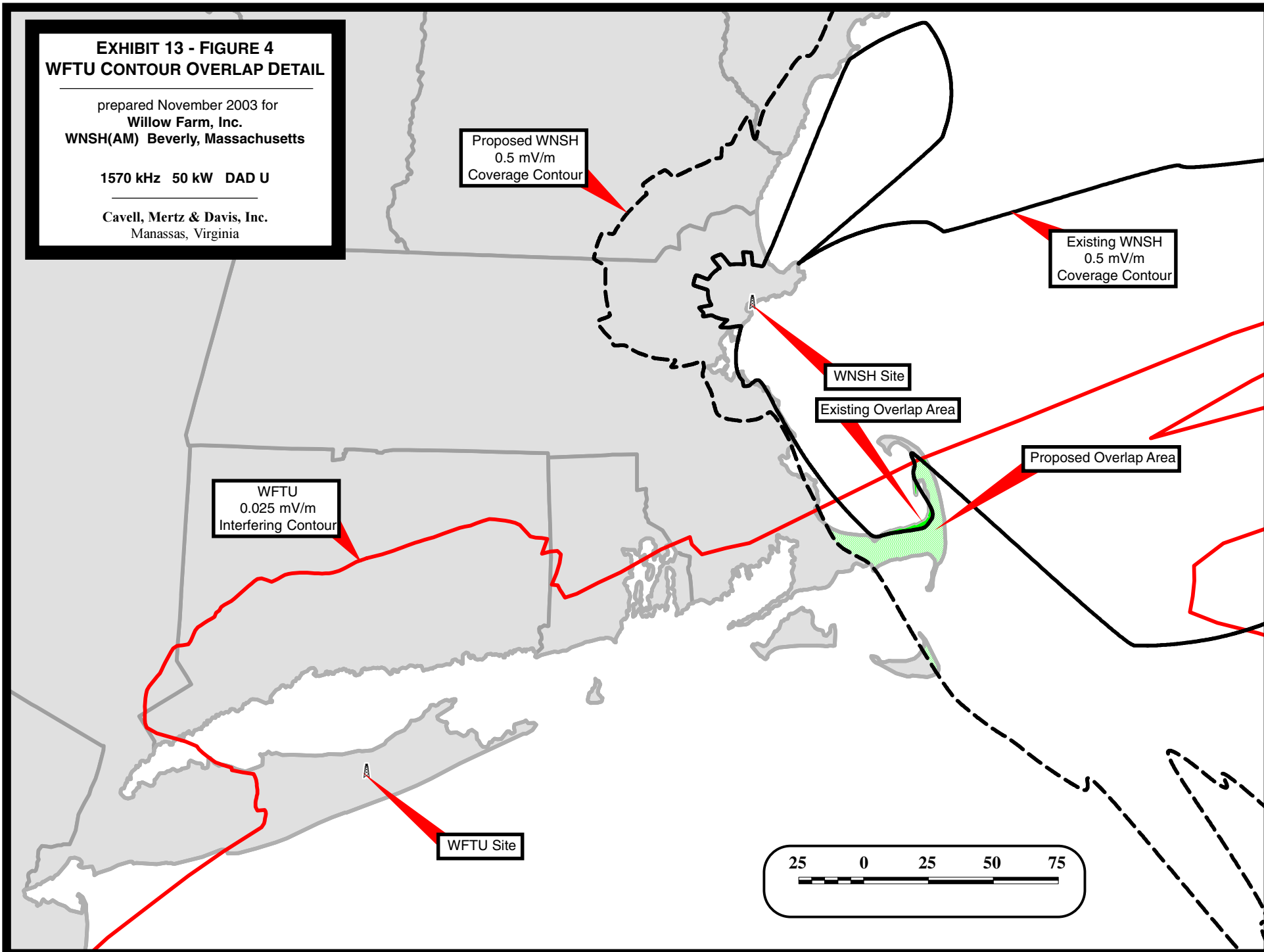
Azimuth (deg)	Field at 1 km (mV/m)	Ground Conductivity Data Region Conductivity Data in mS/m followed by distance in km to end of Region: * Indicates Measured Data	Distances To Contour 25 mV/m (km)
280	68.0	2-60.3, 1-156.9, 4-528.2, 8-644.9, 20-746.5, 4-809.5, 6-821.9, 20-890.1, 10-913.6, 8-927.8, 15-991.3, 8-1000	1.4
285	63.4	2-47.8, 1-156.2, 4-482.8, 8-486.7, 4-498.9, 8-641, 15-690.3, 6-705.3, 10-728, 4-773.7, 6-871.4, 10-908.8, 8-950.9, 15-991.8, 8-1000	1.3
290	97.4	2-43.3, 1-156.7, 4-236.9, 2-284.7, 4-437.1, 8-478.8, 15-606.2, 6-704.7, 4-857.7, 10-931.9, 8-1000	1.7
295	152.2	2-40.3, 1-158.4, 4-197.7, 2-276, 4-442.9, 8-447, 4-447.2, 8-470.7, 15-501.9, 4-505.3, 15-507.3, 10-513.7, 15-517.7, 4-596.4, 6-712.3, 4-727.5, 1-746.4, 10-757.5, 4-760.7, 10-873.7, 4-902.7, 10-1014	2.3
300	209.2	2-37.9, 1-161, 2-271.5, 4-458.1, 15-469.7, 10-500.4, 4-585.6, 1-788.8, 2-842.9, 10-915.9, 2-919.4, 10-926.4, 2-932.6, 10-937.6, 2-940.7, 10-952.4, 2-1000	2.8
305	256.9	2-36.1, 1-164.6, 2-272.5, 4-444.4, 10-477.8, 4-543.5, 1-746.5, 2-1000	3.1
310	286.5	2-34.9, 1-169.7, 2-275.9, 4-437.5, 10-479.3, 4-629.2, 1-721, 2-1000	3.3
315	291.6	2-34, 1-176.6, 2-284.8, 4-428.5, 10-499, 4-605.8, 2-1000	3.4
320	269.0	2-33.4, 1-185.1, 2-296.2, 4-400.1, 10-488.7, 4-517.5, 2-942.4, 6-1000	3.2
325	221.8	2-33.1, 1-195.1, 2-308.6, 4-372.3, 10-456.6, 4-482.7, 2-872.2, 6-995.8, 2-1000	2.9
330	169.4	2-33, 1-210.3, 2-213.9, 0.5-221.9, 2-324.4, 4-350.6, 10-416.6, 4-447, 2-696.5, 2-1006	2.5
335	173.6	2-33.2, 1-202.9, 0.5-254.6, 2-334.3, 4-366.7, 10-423.6, 4-456.4, 2-637.3, 2-1000	2.5
340	272.8	2-33.6, 1-205.4, 0.5-282.6, 2-322.4, 4-381.8, 6-395.3, 10-444.8, 4-475, 2-612.1, 2-1000	3.3
345	423.2	2-34.4, 1-211, 0.5-313.6, 4-386.8, 6-454.1, 4-493.5, 2-604.9, 2-1000	4.2
350	594.6	2-35.5, 1-218.7, 0.5-307.9, 4-396.4, 6-473.2, 4-513.5, 2-613.2, 2-1000	5.0
355	773.0	2-38, 1-231, 0.5-304.6, 4-421.9, 6-488.4, 4-538, 2-638.8, 2-1000	5.7

**EXHIBIT 13 - FIGURE 4**  
**WFTU CONTOUR OVERLAP DETAIL**

prepared November 2003 for  
**Willow Farm, Inc.**  
**WNSH(AM) Beverly, Massachusetts**

**1570 kHz 50 kW DAD U**

**Cavell, Mertz & Davis, Inc.**  
Manassas, Virginia



**EXHIBIT 13 - FIGURE 5**  
**INTERFERENCE REDUCTION AREAS**

prepared November 2003 for  
**Willow Farm, Inc.**  
**WNSH(AM) Beverly, Massachusetts**

**1570 kHz 50 kW DAD U**

**Cavell, Mertz & Davis, Inc.**  
Manassas, Virginia

