

Long Form Application

Proposed facility changes in this application are as follows:

- 1. Section III-A, Item 2: Primary Feed
- 2. Section III-A, Item 8: Center of Radiation Above Ground Level
- 3. Section III-A, Item 9: Effective Radiated Power
- 4. Section III-A, Item 10: Transmit Antenna

Preclusion to LPFM Points

This application has been studied to determine preclusion to LPFM points. Due to the location of the proposed amended transmitter site being within 39km of a Spectrum Available Market Grid, a Grid Test is required. The proposed facility meets all minimum distance separation requirements with regard to co-channel, first and second adjacent channel stations, as can be seen in the following Grid Test summary page showing that no LPFM points are precluded:

GRID TEST - Omaha, NE

Yellow Highlighting shows Co, 1st, and 2nd adj channels to the proposed facility.

Omaha, NE
 Latitude 41-15-31
 Longitude 095-56-15
 Grid Size 31 x 31
 Micro FM 100 Watts at 30m HAAT
 Co-Channel and 1st Adjacent Protected
 2nd Adjacent Channel Protected
 3rd Adjacent Channel Not Protected
 I.F. Not Protected
 TV Channel 6 Protected
 CP Records Protected
 APP Records Protected
 FM Translators Protected
 TV Channel 6 Translators/LP Protected
 Auc83 FX App Records Protected

Chan	Avail								
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	0	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	0	286	24
207	0	227	0	247	0	267	961	287	1

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Exhibit 1
Millard, NE

208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	0
211	0	231	0	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	14
214	0	234	70	254	0	274	0	294	0
215	0	235	0	255	0	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	91	277	0	297	0
218	0	238	175	258	0	278	0	298	92
219	0	239	0	259	0	279	0	299	4
								300	124

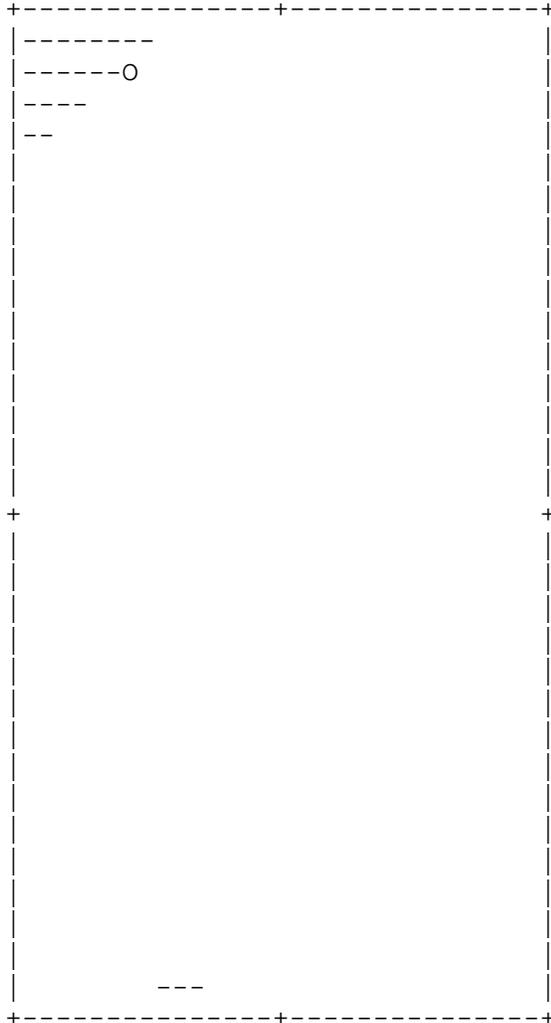
Total 1556

Total allotments, least preclusive spacing: 26
Total allotments, most preclusive spacing: 17

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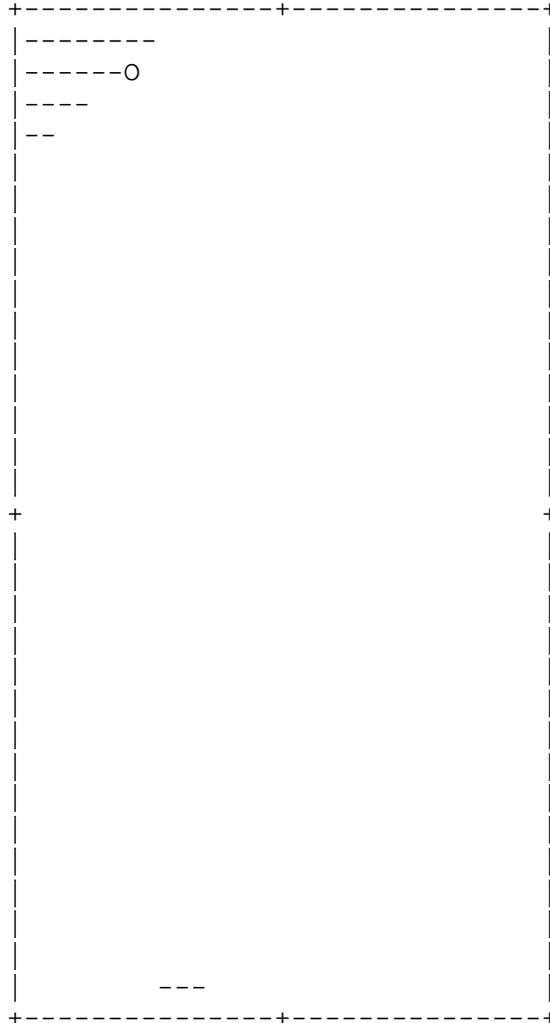
Exhibit 1
Millard, NE

Omaha, NE
Latitude 41-15-31
Longitude 095-56-15
Least preclusive siting
Availability of Channel 286 (X)



Point #774 at 41-29-31 096-05-15

Omaha, NE
Latitude 41-15-31
Longitude 095-56-15
Most preclusive siting
Availability of Channel 286 (X)

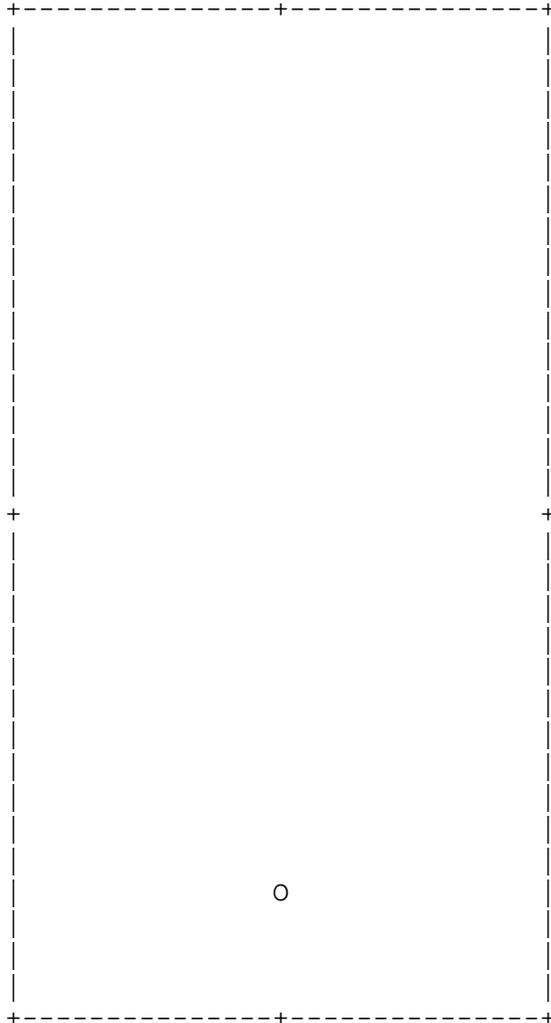


Point #774 at 41-29-31 096-05-15

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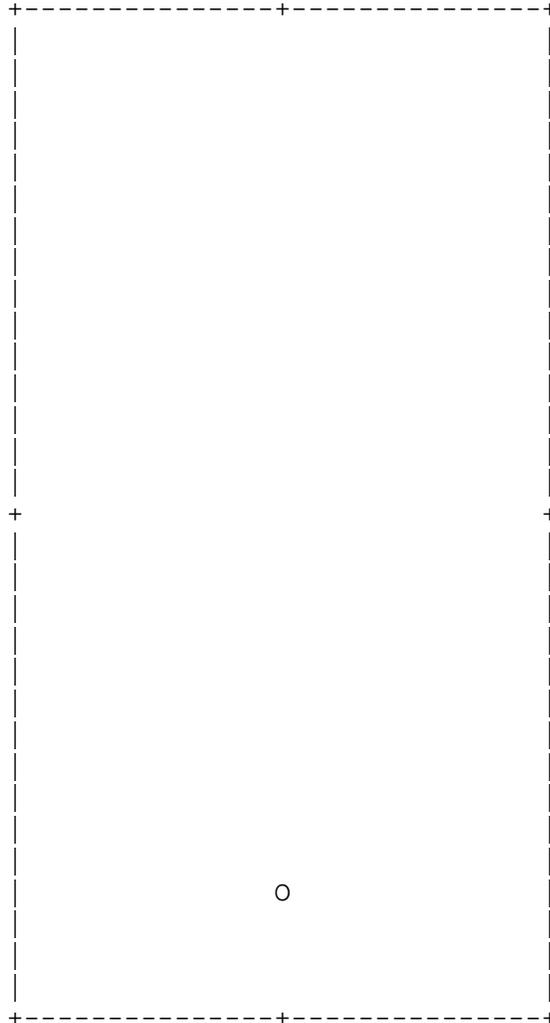
Exhibit 1
Millard, NE

Omaha, NE
Latitude 41-15-31
Longitude 095-56-15
Least preclusive siting
Availability of Channel 287 (X)

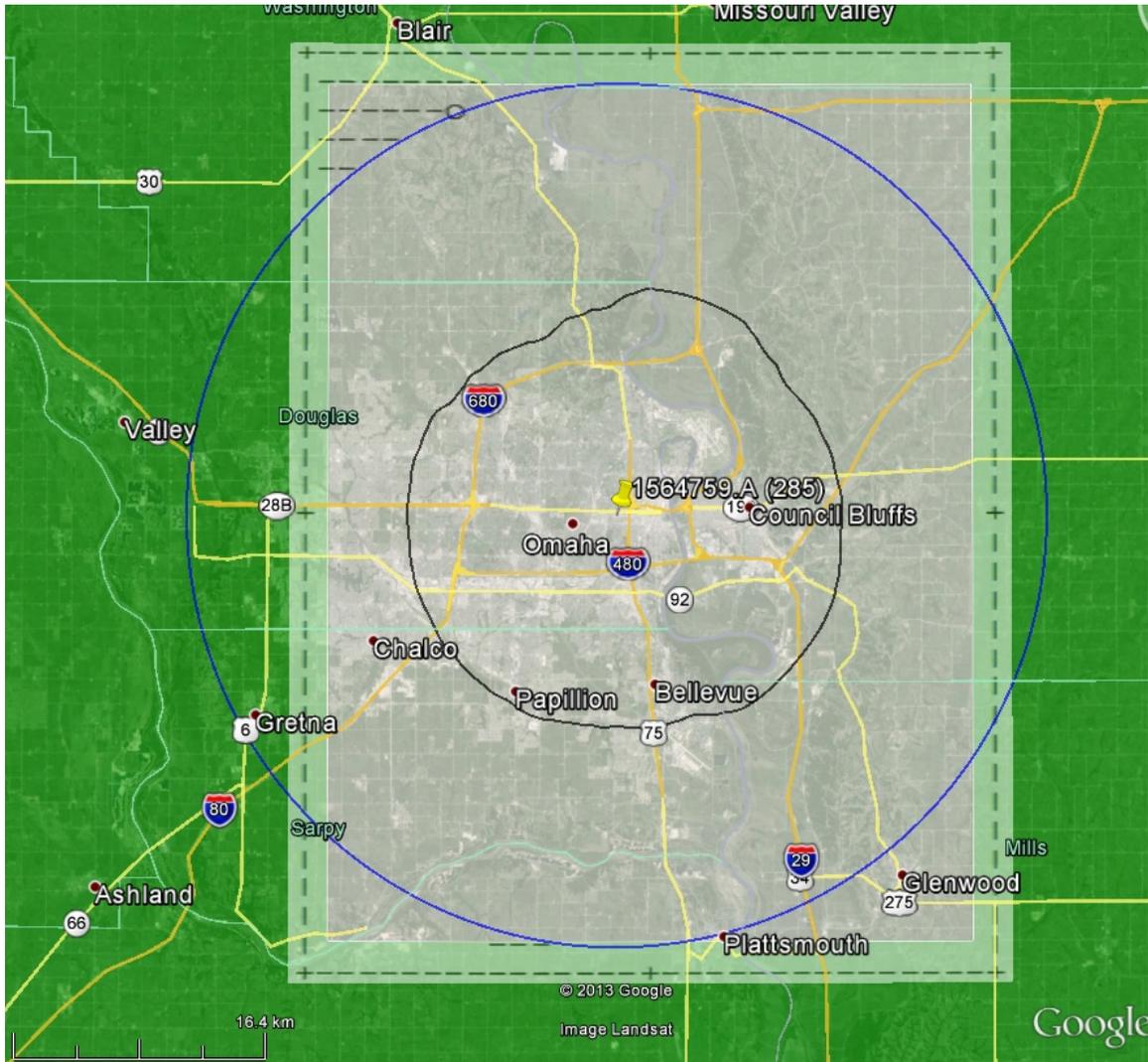


Point #469 at 41-03-31 095-56-15

Omaha, NE
Latitude 41-15-31
Longitude 095-56-15
Most preclusive siting
Availability of Channel 287 (X)



Point #469 at 41-03-31 095-56-15



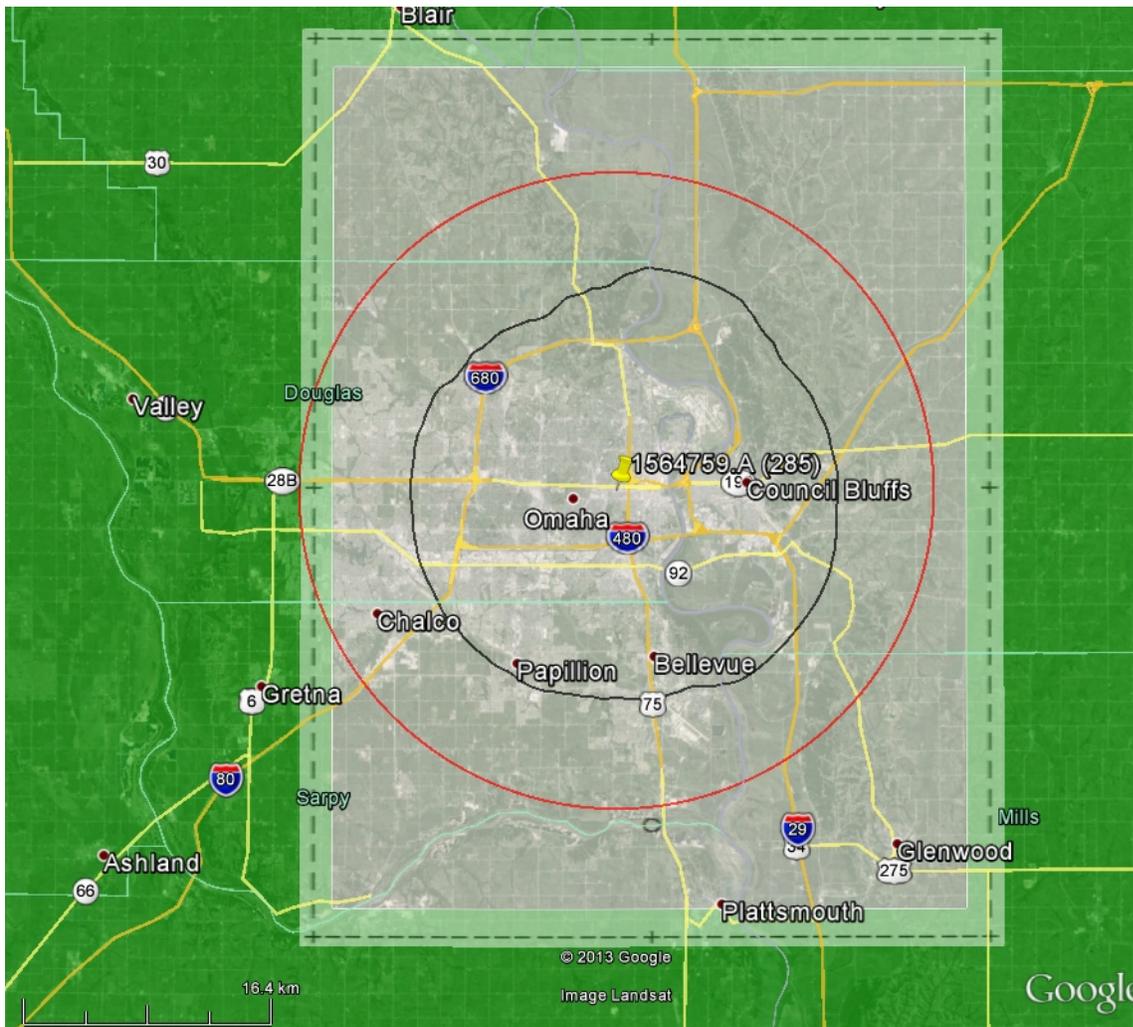
12-radial HAAT is 188.1 m
60 dBu contour distance is 14.083 km

LPFM Protected points for 1st Adj Ch 286 are shown aligned to Omaha grid.

The Yellow Tack indicates the proposed transmitter location.

The Black Contour (irregular) is the standard FCC F(50-50) 60dBu (FCC HAAT) contour.

The Blue Circle Contour indicates minimum 1st adjacent channel protection distance (28 km) to proposed transmitter (per 73.807). Due to graphical ambiguities in the map diagram, the two closest points to the contour were studied, using the Distance and Azimuth calculator on the FCC website. The point located at 41-29-31N by 96-05-15W was determined to be 28.053 km distant from the proposed translator location of 41-15-26N by 95-57-49W. The point located at 41-00-31N by 96-01-15W was determined to be 28.025 km distant from the proposed transmitter location. Based on that study, no LPFM points are within that minimum distance shown by the Blue Circle Contour; therefore the proposed transmitter does not preclude any LPFM opportunities on Ch 286.



12-radial HAAT is 188.1 m
60 dBu contour distance is 14.083 km

LPFM Protected points for 2nd Adj Ch 287 are shown aligned to Omaha grid.

The Yellow Tack indicates the proposed transmitter location.

The Black Contour (irregular) is the standard FCC F(50-50) 60dBu (FCC HAAT) contour.

The Red Circle Contour indicates minimum 2nd adjacent channel protection distance (21 km) to proposed transmitter (per 73.807). No LPFM points are within that minimum distance; therefore the proposed transmitter does not preclude any LPFM opportunities on Ch 287.