

## Exhibit 13 A - 47 C.F.R. 74.1204 - 2nd Adjacent Signal Protection

**A Desired to Undesired Signal Analysis of the proposed translator and second adjacent stations shows the interference from the translator near the ground will extend no more than 98 meters from the tower base (See Exhibit 13 B). An Aerial View of the translator site (Exhibit 13 C) shows there are no occupied structures within 98 meters of the tower.**



### **W244nn** Burke, VA

Channel: 244D  
Latitude: 38-47-16 N  
Longitude: 077-19-47.50 W  
ERP: 0.25 kW  
HAAT 0.0 m  
Frequency: 96.7 MHz  
AMSL Height: 225.0 m  
Elevation: 131.63 m  
Horiz. Pattern: Directional  
Study Date: 3/3/2018

### **WASH**

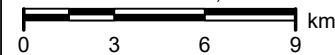
Washington, DC  
BMLH20040610ABF  
Channel: 246B  
Latitude: 38-57-01 N  
Longitude: 077-04-47 W  
ERP: 17.50 kW  
HAAT 242.0 m  
Frequency: 97.1 MHz  
AMSL Height: 315.0 m  
Elevation: 125.0 m  
Horiz. Pattern: Omni  
Study Date: 3/3/2018

### **WHUR-FM**

Washington, DC  
BLED20040413AAY  
Channel: 242B  
Latitude: 38-57-01 N  
Longitude: 077-04-47 W  
ERP: 16.50 kW  
HAAT 244.0 m  
Frequency: 96.3 MHz  
AMSL Height: 317.8 m  
Elevation: 124.9 m  
Horiz. Pattern: Omni  
Study Date: 3/3/2018

**Signal Level at Translator Site**  
WASH 71.65 dBu - WHUR 71.52 dBu

Scale 1:250,000



**W244nn**  
**Burke, VA Fill-In for WAVA AM**

**Exhibit 13 B**

**ERP 250.00 WATTS**

**Maximum ERP** *Interfering contour value ----->* **111.5** dBu  
0.25 kW *RCAGL (m)----->* **90** meters  
*Antenna Type ----->* **2**

Antenna Type 2 = **SHI, 2-bay, full-wave spaced**

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	W244nn ERP (kW)	W244nn ERP (dBk)	W244nn Free-Space Distance to interfering contour (meters)	Slant Distance (meters) *	Height of interfering contour above ground (feet)**	Proposed Interference within 30 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.2500	-6.021	294.4	N/A	295.3			966.0
5	0.960	0.2304	-6.375	282.6	928.2	214.5	No	281.6	923.8
10	0.848	0.1798	-7.453	249.7	465.9	153.0	No	245.9	806.7
15	0.672	0.1129	-9.473	197.9	312.6	127.3	No	191.1	627.0
20	0.455	0.0518	-12.860	134.0	236.5	145.0	No	125.9	413.0
25	0.225	0.0127	-18.977	66.2	191.4	203.4	No	60.0	197.0
30	0.000	0.0000	-106.021	0.0	161.8	295.3	No	0.0	0.0
35	0.188	0.0088	-20.537	55.4	141.0	191.1	No	45.3	148.8
40	0.340	0.0289	-15.391	100.1	125.9	84.2	No	76.7	251.6
45	0.445	0.0495	-13.053	131.0	114.4	-8.7	Yes	92.6	303.9
50	0.518	0.0671	-11.734	152.5	105.6	-88.0	Yes	98.0	321.6
55	0.528	0.0697	-11.568	155.5	98.8	-122.5	Yes	89.2	292.5
60	0.512	0.0655	-11.835	150.7	93.4	-133.0	Yes	75.4	247.3
65	0.472	0.0557	-12.542	139.0	89.3	-117.9	Yes	58.7	192.7
70	0.417	0.0435	-13.618	122.8	86.1	-83.2	Yes	42.0	137.8
75	0.350	0.0306	-15.139	103.0	83.8	-31.3	Yes	26.7	87.5
80	0.280	0.0196	-17.077	82.4	82.1	28.9	Yes	14.3	47.0
85	0.200	0.0100	-20.000	58.9	81.2	102.8	No	5.1	16.8
90	0.130	0.0042	-23.742	38.3	80.9	169.7	No	0.0	0.0

\* Slant distance from antenna center of radiation to location 30 feet (9.1 meters) above ground level at angle below horizontal.

\*\* A negative number indicates that the interfering contour is predicted to reach ground level. If a negative number is present, the interfering contour reaches ground level at the "Horizontal Distance" described below.

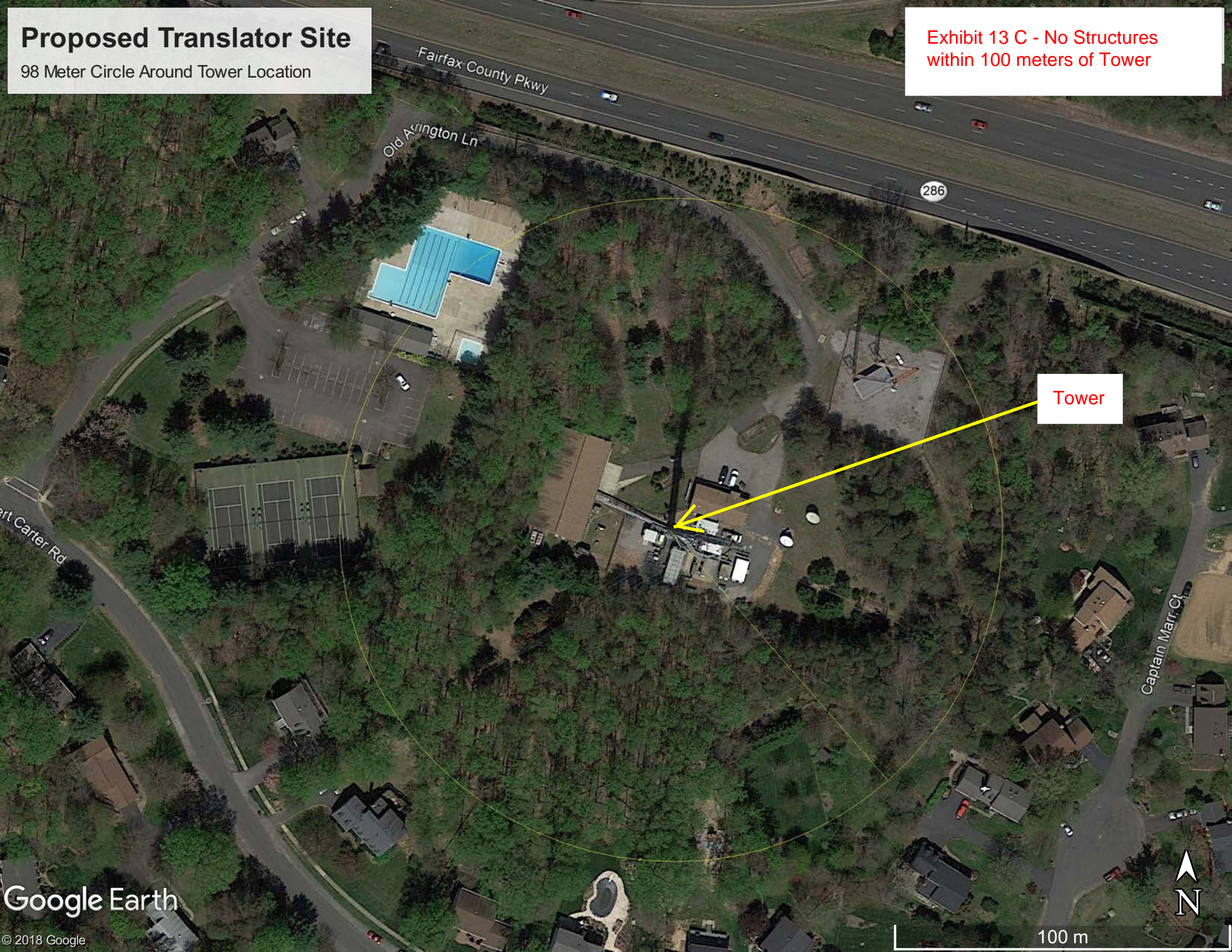
\*\*\* Horizontal distance from tower base to interfering contour at the indicated height above ground level. If a negative height above ground level is indicated, this horizontal distance is the distance from the tower base to the interfering contour. This horizontal distance is only relevant if the proposed interference is predicted to occur within 30 feet of ground level.



# Proposed Translator Site

98 Meter Circle Around Tower Location

Exhibit 13 C - No Structures within 100 meters of Tower



100 m



# Exhibit 13 D - 47 C.F.R. 74.1204 - WERA-LP Arlington VA & WQER-LP Rockville, MD

