Long Form Application
WTRW, Inc.

REFERENCE CH# 250D - 97.9 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 365 M DISPLAY DATES
44 24 21.0 N. Average Protected F(50-50)= 7.09 km DATA 03-30-18
88 00 18.6 W. Standard Directional SEARCH 04-24-18

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*	
250D 1776502 Denmark	APP DC_ WI	0.0 0.0	0.00 BNPFT20180125ADP	44 24 21.0 88 00 18.6	0.250	0.00 365	0.00 Wtrw, Inc.	64.5R	-64.5M	/1
253C1 WQLH Green Bay	LIC _CN WI	338.6 158.5	28.53 BMLH19910422KJ	44 38 41.0 88 08 13.0	100.000 152	7.4 367	60.2 Cumulus Licensing Llc	3.6*	-32.8*<	/2
250C1 WSPT Stevens Point	LIC _CN WI	277.2 96.1	127.37 BLH19961015KB	44 32 17.0 89 35 43.0	100.000 103	145.6 436	50.0 Muzzy Broadcast Group, Llc	-30.8*<	35.9	/3
248A WTAQ-FM Glenmore	LIC _CX WI	270.0 90.0	0.00 BLH20100209AAC	44 24 21.0 88 00 19.0	3.000 143	2.4 371	26.5 Midwest Communications, In	-13.2*<	-26.9*<	/2
250D W247BY Appleton	CP _C_ WI	240.7 60.5	33.05 BPFT20180104AAW	44 15 37.0 88 21 59.6	0.038	23.2 282	6.9 Vcy America, Inc.	2.4	0.9	/4
251A WLKN Cleveland	LIC NC_ WI	157.7 337.9	50.62 BLH19991025AET	43 59 03.0 87 45 55.0	5.800 89	35.4 310	23.4 Seehafer Broadcasting Corp	2.9	9.0	
249C3 WFDL-FM Lomira	LIC ZCX WI	202.7 22.4	90.53 BLH20020422AAE	43 39 14.0 88 26 25.0	17.500 122	61.1 421	40.7 Radio Plus, Inc.	17.7	32.8	
249A WQDC Sturgeon Bay	LIC NCN WI	42.0 222.4	74.82 BLH19960422KC	44 54 14.0 87 22 13.0	1.850 182	41.2 378	27.3 Case Communications Llc	18.0	24.0	
247D W247BY Appleton	LIC _C_ WI	244.0 63.7	38.32 BLFT20161130ACS	44 15 16.0 88 26 12.6	0.008	0.2 305	5.2 Vcy America, Inc.	30.4	32.9	
247D W247AS New London	LIC _C_ WI	271.4 90.9	62.99 BLFT20070402JTS	44 25 02.0 88 47 45.0	0.010 145	0.2 391	7.2 Educational Media Foundati	51.6	55.3	
252D W252DR Oshkosh	LIC _C_ WI	229.9 49.5	65.10 BLFT20170605AAE	44 01 40.0 88 37 39.0	0.250	1.1 294	10.1 Hometown Broadcasting, Llc	56.0	54.7	

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.
< = Contour Overlap

/1 This is the subject facility of this instant application.
/2 Please see 74.1204 waiver request in the following pages.
/3 Protection is not required by full service FM stations to FM Translators.
/4 Please see the following page for the contour map.

Protected zones report for 1776502 on channel 250D 04-24-2018
Lat. 44 24 21.0 Lng. 88 00 18.6, ERP= 0.25 kw, HAAT= 0 m

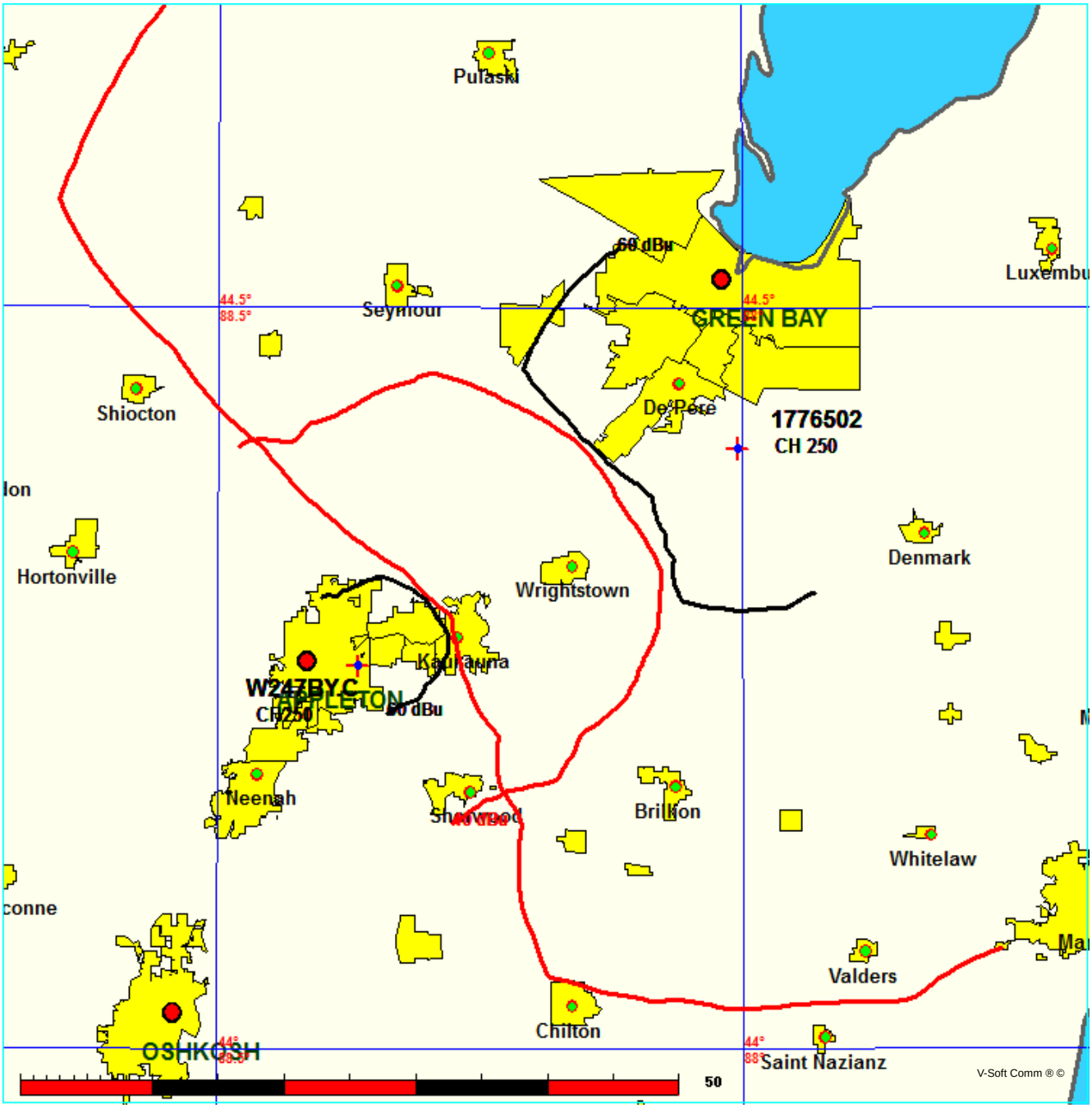
Facility is okay with respect to Canada. Distance = 353.4 km.
Facility is okay with respect to AM station towers.
Closest AM Facility is WTAQ, GREEN BAY, WI, L, DA2 at 294.8° at a distance of 6.6 km
Facility is okay with respect to FCC monitoring stations.
Closest FCC Monitoring Station is 259.8 km= Allegan, MI
Facility is okay toward West Virginia Quiet Zone. Distance to center = 977.1 km
Facility is okay toward Table Mountain. Distance to Center = 1498.9 km, Azimuth = 257.4 Degrees True

Proposed App 1776502 vs W247BY.CP contours
WTRW, Inc.

FMCommander Single Allocation Study - 04-24-2018 - FCC NGDC 30 Sec
1776502's Overlaps (In= 2.39 km, Out= 0.91 km)

1776502 CH 250 D DA
Lat= 44 24 21.0, Lng= 88 00 18.6
0.25 kW 0 m HAAT, 365 m COR
Prot.= 60 dBu, Intef.= 40 dBu

W247BY CH 250 D BPFT20180104AAW
Lat= 44 15 37.0, Lng= 88 21 59.6
0.038 kW 0 m HAAT, 282 m COR
Prot.= 60 dBu, Intef.= 40 dBu



WQLH Interference

The site for the proposed facility is located within the protected contour on a channel which is second-adjacent to WQLH (the "Affected Station"). We predict the affected station protected contour at the proposed site will be 76.24 dBu F[50,50]. According to established third-adjacent channel contour Undesired-to-Desired (U/D) protection ratios, the contour from the interfering station should be 40 dB higher than the protected contour. Therefore the respective interfering contour for this proposed amendment is 116.24 dBu F[50,10].

Protection to WQLH from Interference

The predicted interfering contour at maximum radiation is 170.9 meters (the Affected Area). The proposed radiation center is 85.5m AGL. **Figure 1** displays the actual 116.24dBu interference radiating downward no more than 47 meters AGL, far above locations inhabitable by the public. Therefore, all structures and public locations within the Affected Area are well below the actual interference area.

WTAQ-FM Interference

The site for the proposed facility is located within the protected contour on a channel which is third-adjacent to WTAQ-FM (the "Affected Station"). We predict the affected station protected contour at the proposed site will be 159.49 dBu F[50,50]. According to established third-adjacent channel contour Undesired-to-Desired (U/D) protection ratios, the contour from the interfering station should be 40 dB higher than the protected contour. Therefore the respective interfering contour for this proposed amendment is 199.49 dBu F[50,10].

Protection to WTAQ-FM from Interference

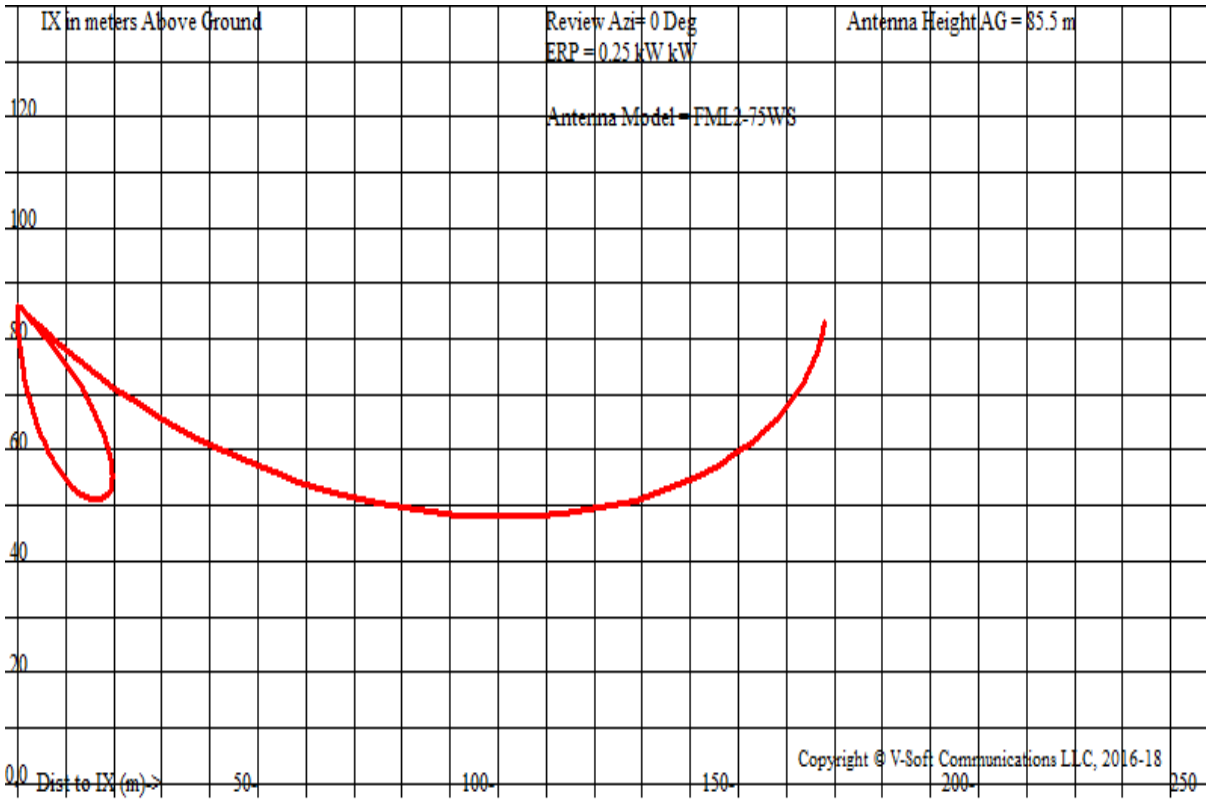
Due to the close proximity of the WTAQ-FM, the predicted interfering contour at maximum radiation is less than one meter (the Affected Area). The proposed radiation center is 85.5m AGL. Therefore, all structures and public locations within the Affected Area are well below the actual interference area.

Request for Waiver

Since this proposal complies with 47CFR74.1204(d) based upon the fact that no actual interference will occur due to no population and no public locations within the Affected Area, we hereby request waiver of 47CFR74.1204(a)(3) for separation between this proposed facility and the Affected Station.

Figure 1

XField (C) 2016-18, V-Soft Communications LLC



1776502 , , Showing Protection to WQLH
Geographic Coordinates: N.44 24 21.00 W.88 00 18.60
74.1204(d) Study - Using USGS 03 SEC Terrain Database
Translator or LPFM Maximum Licensed ERP = 0.25
Translator or LPFM Antenna Height AG = 85.5 Meters
1776502 Antenna Model = FML2-75WS

Protected Station's Contour = 76.21793 dBu
Translator's or LPFM's full Interference contour 116.21793

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 1.000
Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW
Distance between stations = 28.5 km
Protected Station= WQLH, 100 kW, 367 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.0	1.0	1.0	0.2500	171.4247	171.4247	085.500
05.0	0.975	1.0	0.2377	167.1391	166.5031	070.933
10.0	0.903	1.0	0.2039	154.7965	152.4448	058.620
15.0	0.792	1.0	0.1568	135.7684	131.1422	050.361
20.0	0.650	1.0	0.1056	111.4261	104.7063	047.390
25.0	0.493	1.0	0.0608	084.5124	076.5942	049.784
30.0	0.331	1.0	0.0274	056.7416	049.1397	057.129
35.0	0.178	1.0	0.0079	030.5136	024.9953	067.998
40.0	0.043	1.0	0.0005	007.3713	005.6467	080.762
45.0	0.068	1.0	0.0012	011.6569	008.2427	077.257
50.0	0.149	1.0	0.0056	025.5423	016.4183	065.933
55.0	0.202	1.0	0.0102	034.6278	019.8617	057.135
60.0	0.227	1.0	0.0129	038.9134	019.4567	051.800
65.0	0.226	1.0	0.0128	038.7420	016.3731	050.388
70.0	0.205	1.0	0.0105	035.1421	012.0193	052.477
75.0	0.168	1.0	0.0071	028.7994	007.4538	057.682
80.0	0.118	1.0	0.0035	020.2281	003.5126	065.579
85.0	0.061	1.0	0.0009	010.4569	000.9114	075.083
90.0	0.001	1.0	0.0000	000.1714	000.0000	085.329