

**WNSH MINOR MODIFICATION TO FM CP BPH-20190213ABC**  
**40 kW DA FACILITY CH 234B FAC ID 20886 NEWARK, NEW JERSEY**  
**ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS**  
**JANUARY 2020**

WNSH is licensed to Entercom License, LLC and holds construction permit BPH-20190213ABC which authorizes a change in transmitter site to FCC tower registration 1237848, tower #1 in the WOR(AM) directional array. This application proposes a change to tower registration 1237850, tower #3 in the WOR(AM) array. This is a minor change in site of 328 feet. No change in ERP, HAAT or proposed DA pattern are proposed.

The applicant proposes herein to locate its ERI 1183-4CP-DA-SP, circularly polarized, 4 bay, 0.74 wave spaced antenna near the top of the tower with its radiation center 193.9 meters AGL. Utilizing the FCC FM Model online calculator for an EPA type 1 antenna with 40,000 watts ERP H & V with 0.74 wave spacing on CH 234 gives a maximum calculated power density of 2.98 microwatts per centimeter squared which is 1.49 percent of the 200 microwatts public exposure guideline. Based on this analysis, it is believed that the proposed facility follows OET-65 Public Exposure Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 worker Guidelines.

The tower, building and supporting infrastructure are existing.

Figure 1 attached is a 70 dBu F(50,50) predicted contour map depicting the licensed 70 dBu, CP 70 dBu and the Proposed 70 dBu. It is noted that the CP and Proposed contours are indistinguishable from each other. Figure 2 attached is a 54 dBu F(50,50) predicted contour map depicting the licensed 54 dBu, CP 54 dBu and the Proposed 54 dBu. It is noted that the CP and Proposed contours are indistinguishable from each other on this map as well. All contours were calculated based on 72 evenly spaced radials. The square kilometer area and population of the CP and Proposed 54 dBu contours have been determined and are tabulated below:

	Area Sq. km	Change	Population	Change
CP	13,023.0	ref.	17,008,834	0.01%
Proposed	13,028.8	0.04%	17,007,393	ref.

It is believed that the change in area and population is so small that there is no meaningful change in the 73.215 contour overlap data submitted in the application for CP and thus there is no discernible change in the allocation. For this reason, no allocation data is submitted other than the 73.207 allocation study tabulation below indicating that there have been no changes to the facilities which are 73.207 short spaced since the CP grant in BPH-20190213ABC.

Search of channel 234 (94.7 MHz Class B) at 40-47-53.4 N, 74-05-25.5 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
WNSH CP		234 B	0.06	241.00	72.4	-240.9
WNSH LIC	NEWARK	NJ 234 B	13.96	241.00	265.4	-227.0
WPST	TRENTON	NJ 233 B	93.16	169.00	223.6	-75.8
WMAS-FM	ENFIELD	CT 234 B	191.03	241.00	39.7	-50.0
WDSD	DOVER	DE 234 B	217.50	241.00	215.7	-23.5
WJLK	ASBURY PARK	NJ 232 A	63.17	69.00	179.9	-5.8
WWSK	SMITHTOWN	NY 232 A	67.87	69.00	89.3	-1.1
WIYN	DEPOSIT	NY 234 A	179.03	178.00	320.3	1.0
WDHA-FM	DOVER	NJ 288 A	36.07	15.00	280.4	21.1
WRKI	BROOKFIELD	CT 236 B	95.12	74.00	35.4	21.1
WZZO	BETHLEHEM	PA 236 B	103.54	74.00	259.4	29.5
WDAC	LANCASTER	PA 233 B	208.23	169.00	241.9	39.2
WYBC-FM	NEW HAVEN	CT 232 A	112.15	69.00	56.4	43.2

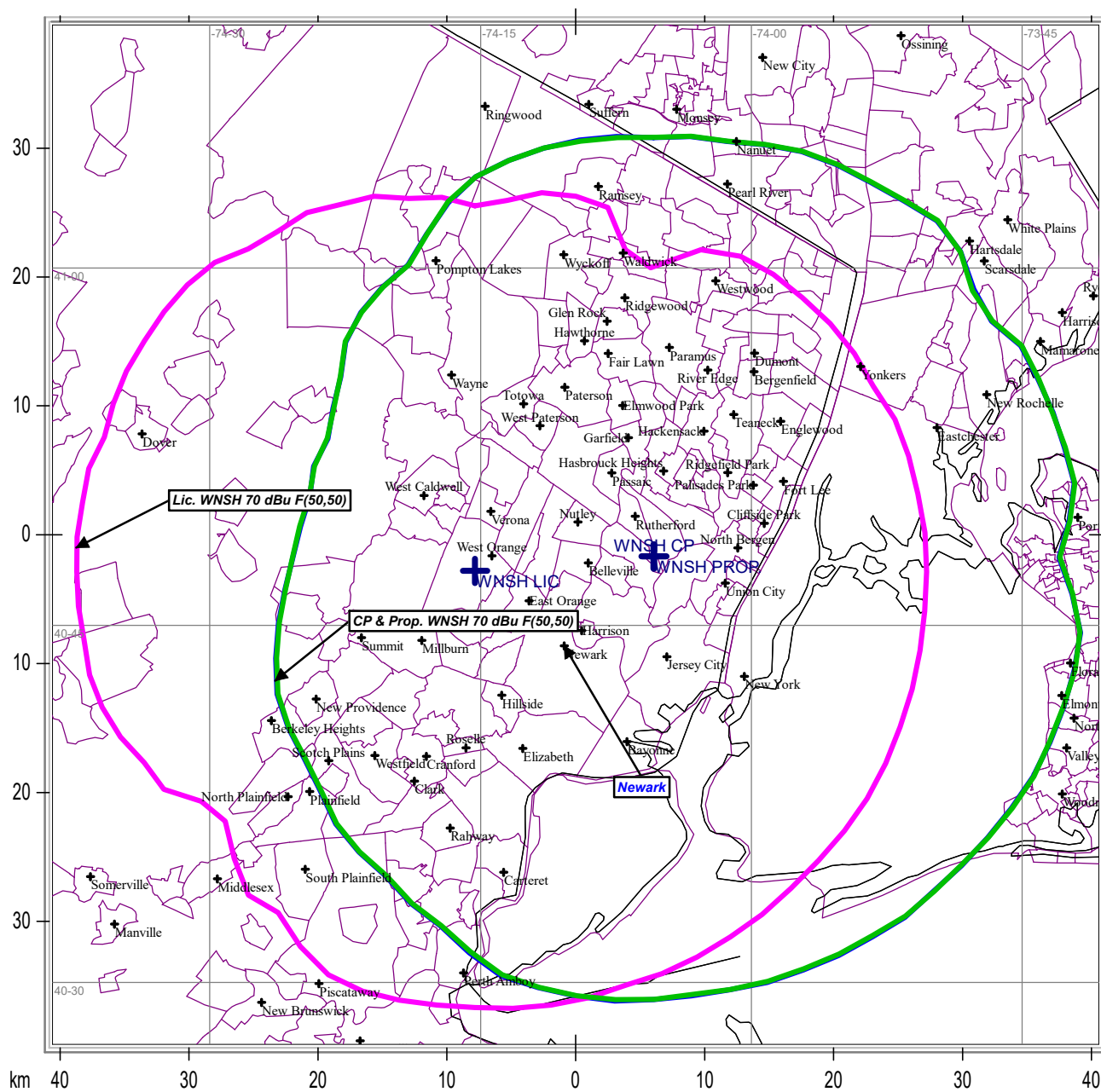
The twelve special operating conditions or restrictions specified in BPH-20190213ABC have been reviewed and will be complied with at the time of license application filing.

The foregoing was prepared on behalf of Entercom License, LLC by Clarence M. Beverage of Communications Technologies, Inc., Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



Clarence M. Beverage  
for Communications Technologies, Inc.  
Marlton, New Jersey  
January 11, 2021

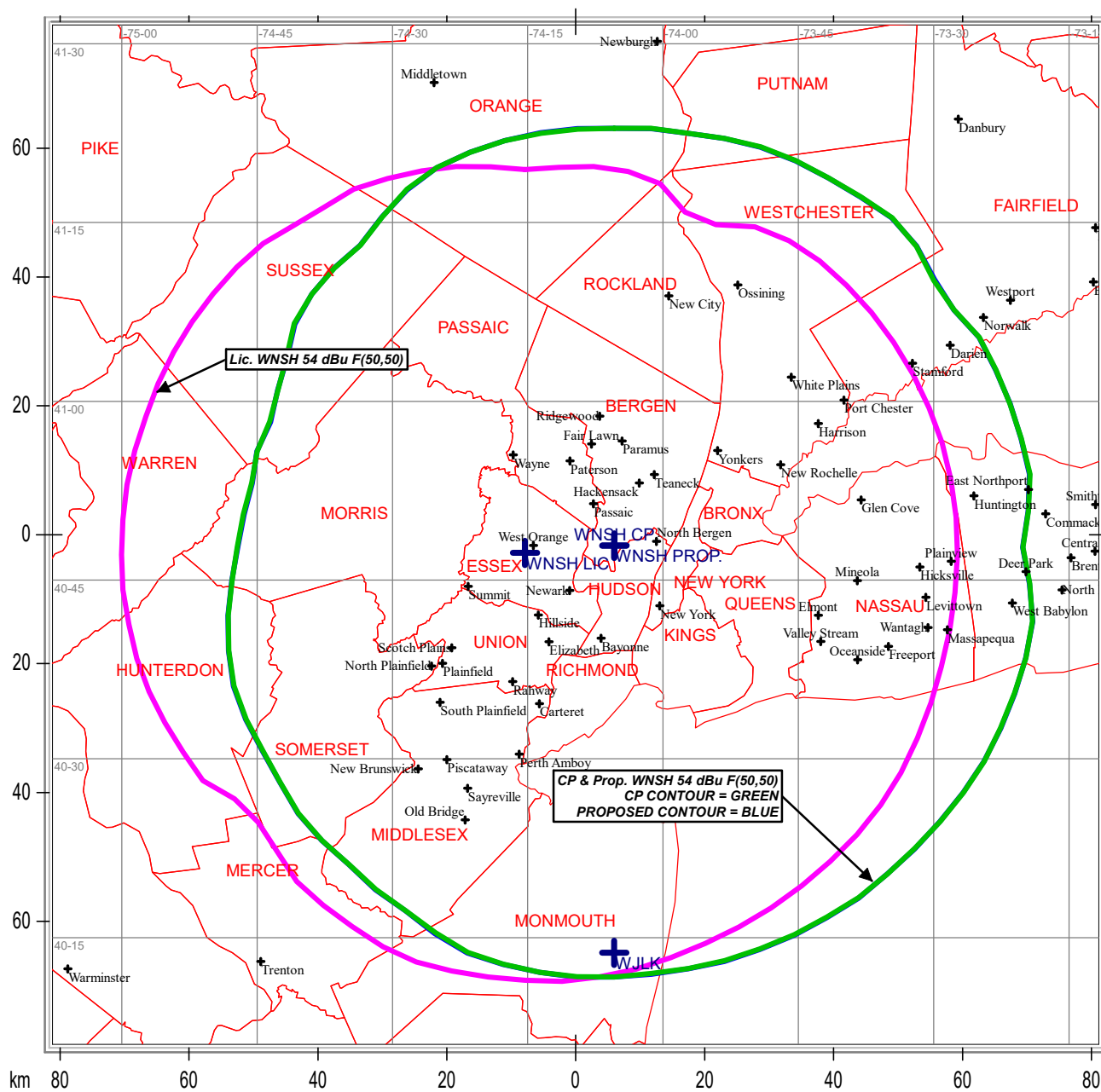
Depicting Lic. CP and Prop. WNSH, CH 234B, Newark, NJ COL 70 dBu coverage



Communications Technologies, Inc. Marlton, New Jersey

National Borders
  State Borders
  City Borders
  Lat/Lon Grid

Depicting Lic. CP and Prop. WNSH, CH 234B, Newark, NJ COL 54 dBu coverage



Communications Technologies, Inc. Marlton, New Jersey

County Borders Lat/Lon Grid