

Comprehensive Technical Statement

in support of

University of Massachusetts

Application for Minor Change

WBPR, Facility ID # 69163

Channel 220A, 91.9 MHz

Worcester, MA

Coordinated Application

WUMB-FM, Facility ID # 66578, Boston, MA

Introduction

University of Massachusetts ("UMass") proposes to modify its WBPR, Worcester, MA, by reducing its maximum Effective radiated power. No other changes are proposed.

This application is being filed in coordination with an application for WUMB-FM, Boston, MA. WUMB-FM is forced to relocate from its current location, and this application is being filed to eliminate a small amount of prohibited overlap with the proposed new facility.

Interference

No relocation is proposed, only a reduction in maximum ERP. It is self-evident that the proposed coverage and interfering contours fall wholly within the current contours, and that there is no potential for new interference.

Skywaves Consulting LLC
PO Box 4, Millbury, MA 01527

Washington: 202-370-6357
Providence: 401-354-2400
<http://www.skywaves.com>

Boston / Worcester: 508-425-7176
New York City / NJ: 201-847-0933
Email dave@skywaves.com

Antenna data

Description	Two-bay circularly polarized directional antenna
Interbay spacing	0.5λ
Antenna center	29 m AGL 449 m AMSL 213 m AAT (from FCC online HAAT calculator)

ERP:

Horizontal	0.270 kW
Vertical	0.270 kW

Pattern:

brg	rel fld	brg	rel fld	brg	rel fld
0	0.235	120	0.630	240	0.620
10	0.270	130	0.790	250	0.540
20	0.305	140	0.980	260	0.430
30	0.340	150	1.000	270	0.375
40	0.375	160	1.000	280	0.300
50	0.410	170	1.000	290	0.240
60	0.455	180	1.000	300	0.220
70	0.500	190	1.000	310	0.220
80	0.500	200	1.000	320	0.220
90	0.510	210	1.000	330	0.220
100	0.520	220	0.980	340	0.220
110	0.550	230	0.850	350	0.220

This pattern meets the requirements of 73.510(b) in that the maximum directivity is less than 15db and the maximum change over any ten degree increment is 2db or less.

International

The distance to the nearest point along the US/Canada border is 301 km, and the nearest point on the Mexican border is 2,928 km distant. There will be no increase to the signal in any direction towards Canada, and the 34 dBu f(50,10) contour does not come near the border.

Notification to Industry Canada may be required, but prior coordination should not be.

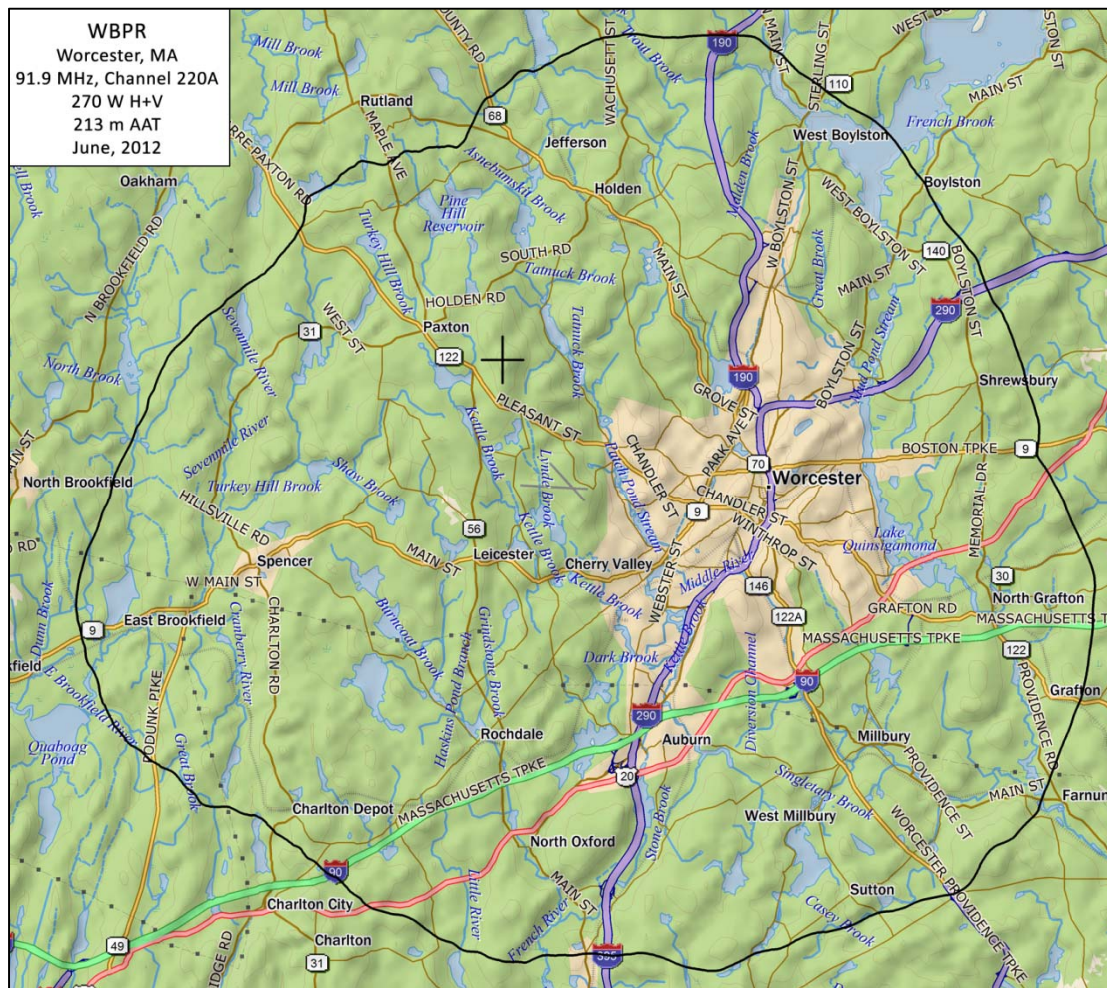
No notification or coordination is required with respect to Mexico.

Skywaves Consulting LLC
PO Box 4, Millbury, MA 01527

Washington: 202-370-6357
Providence: 401-354-2400
<http://www.skywaves.com>

Boston / Worcester: 508-425-7176
New York City / NJ: 201-847-0933
Email dave@skywaves.com

Coverage



Total area: 682 km²
Population (2010 Census): 318,279

Community Coverage

The principal community of Worcester, MA, falls entirely within the proposed 60 dBu f(50,50) contour.

Main Studio Location

UMass was granted a waiver of Section 73.1125 under license BLED-20090928AFP to operate WBPR as a satellite station of WUMB-FM. Continuation of that waiver is requested.

Skywaves Consulting LLC
PO Box 4, Millbury, MA 01527

Washington: 202-370-6357
Providence: 401-354-2400
<http://www.skywaves.com>

Boston / Worcester: 508-425-7176
New York City / NJ: 201-847-0933
Email dave@skywaves.com

Environmental / RF Exposure

No construction is proposed, only reduction in maximum ERP, and therefore in RF exposure.

Appropriate warning signage is provided. The applicant agrees to coordinate with other users on the tower to reduce power or shut down temporarily to protect workers on the tower.

-0-

Skywaves Consulting LLC
PO Box 4, Millbury, MA 01527

Washington: 202-370-6357
Providence: 401-354-2400
<http://www.skywaves.com>

Boston / Worcester: 508-425-7176
New York City / NJ: 201-847-0933
Email dave@skywaves.com