

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of GREATER PHILADELPHIA ASIAN CULTURE CENTER, INC. in support of its Application for Construction Permit to operate a Low Power FM station on Channel 253 (98.5 MHz) in Philadelphia, Pennsylvania.

It is proposed to mount a standard two-bay circularly polarized antenna at the 31-meter level of an existing building. The proposed effective radiated power is 100 watts. Exhibit B is a map upon which the proposed 60 dBu service contour for the proposed facility is plotted. It is important to note that the proposed location meets all of the Commission's spacing requirements to pertinent co-channel and adjacent-channel full-power, FM translator and LPFM stations, except in two instances. The proposed site is short-spaced to second-adjacent-channel stations WOGL(FM) in Philadelphia, Pennsylvania and WUSL(FM) in Philadelphia, Pennsylvania. As a result, we request a waiver of the Commission's Rules with respect to WOGL(FM) and WUSL(FM) and the justification appears in Exhibit C. We have also determined that the proposed facility should not cause objectionable interference to the input signal of any existing translator station, based on the information contained in the FCC's CDBS database.

Employing the methods of OET Bulletin No. 65, and based on the elevation pattern of a standard 2-bay FM antenna, maximum power density two meters above ground of 0.0018 mW/cm^2 is calculated to occur 14 meters from the base of the building. Since this is only 0.9 percent of the 0.2 mW/cm^2 reference for uncontrolled environments (areas with public access)

EXHIBIT A

surrounding a facility operating in the FM band, a grant of this proposal can be considered a minor environmental action with respect to human exposure to non-ionizing electromagnetic radiation. Further the station owner will take whatever precautionary steps are necessary to ensure that workers operating in the vicinity of the antenna are not exposed to RF energy in excess of the Commission's guideline values.

Due to the diminutive height of the existing building and its proximity to the nearest airport runways, the FAA has not been notified of this application. In addition, FCC registration of this structure is not required for the same reasons. This conclusion is supported by the Commission's TOWAIR program.

I declare under penalty of perjury that the foregoing statements and the attached exhibit, which was prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KYLE T. FISHER

November 13, 2013

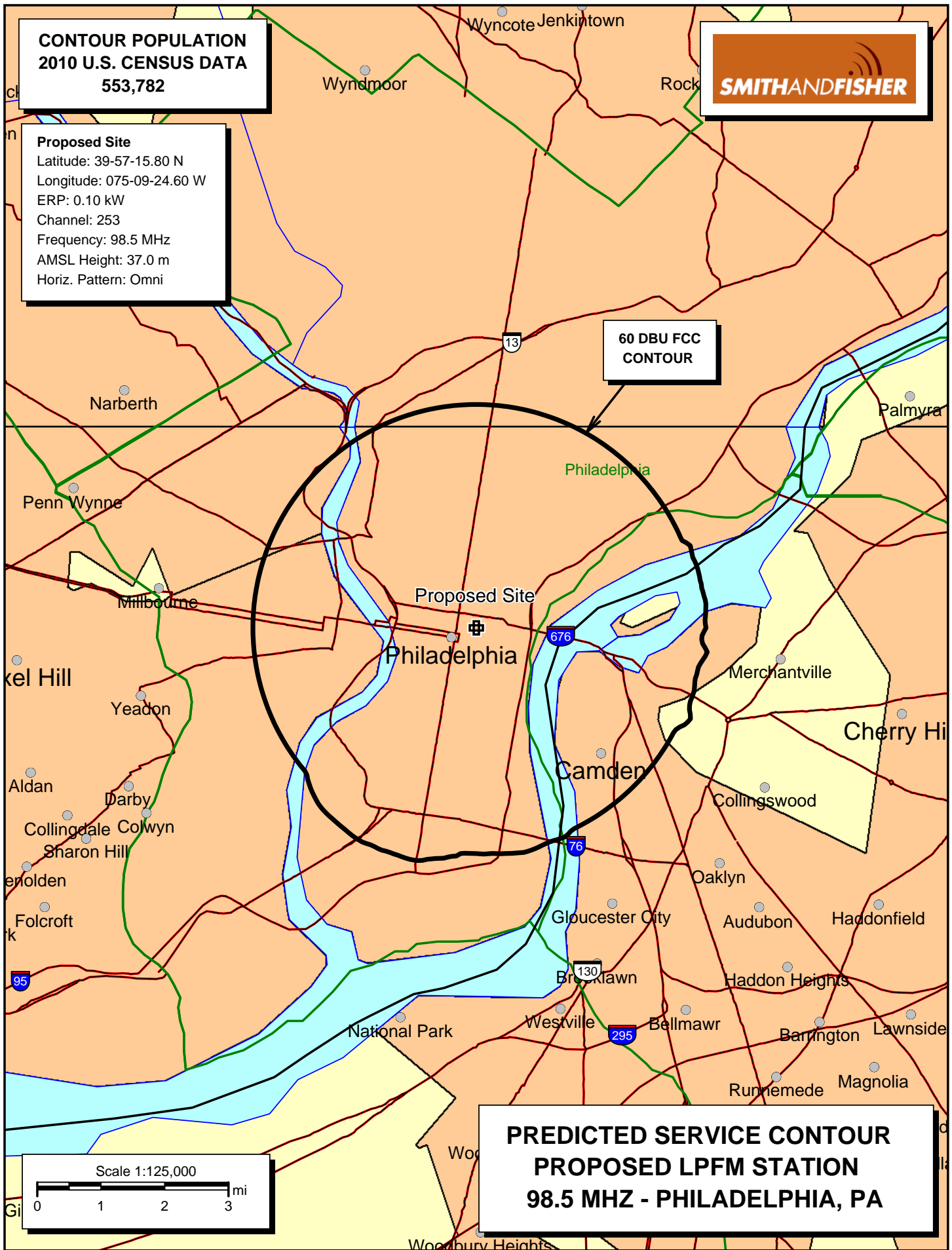
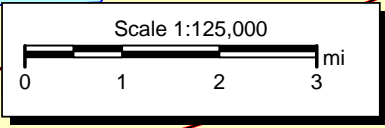
**CONTOUR POPULATION
2010 U.S. CENSUS DATA
553,782**



Proposed Site
Latitude: 39-57-15.80 N
Longitude: 075-09-24.60 W
ERP: 0.10 kW
Channel: 253
Frequency: 98.5 MHz
AMSL Height: 37.0 m
Horiz. Pattern: Omni

**60 DBU FCC
CONTOUR**

**PREDICTED SERVICE CONTOUR
PROPOSED LPFM STATION
98.5 MHZ - PHILADELPHIA, PA**



REQUEST FOR WAIVER OF SECOND-ADJACENT-CHANNEL SPACING RULE
PROPOSED LPFM STATION
CHANNEL 253 – PHILADELPHIA, PENNSYLVANIA

The site proposed herein is located 11.8 kilometers from that of WOGL(FM), which operates on Channel 251B in Philadelphia, Pennsylvania, and 12.3 kilometers from the site of WUSL(FM), Channel 255B in Philadelphia. Since the required spacing to each of these stations is 66.5 kilometers, a waiver of the Commission's spacing rules with regard to these stations is requested and believed to be justified for the reasons stated below.

In Exhibit C-2, we have plotted the proposed LPFM site. As shown, the 89.1 dBu contours of WOGL and WUSL pass close to the proposed site. Based on the 40 dB desired-to-undesired ratio applied to second-adjacent-channel situations such as this, we have also plotted the proposed LPFM 129.1 dBu interference contour, which extends only 20 meters from the antenna. Since the antenna will be mounted 29 meters above ground, the proposed LPFM facility will not cause any adverse effect on the reception of either WOGL or WUSL.

Further, we have conducted a Longley-Rice-based interference analysis for each station, the results of which are attached as Exhibits C-3 and C-4. The studies were run with a cell size of 1.0 kilometer and a 0.1- kilometer increment spacing. It calculates predicted interference (based on the 40 dBu desired-to-undesired ratio for second-adjacent-channel situations such as this) from the proposed LPFM station in locations where there is a signal of at least 54 dBu for WOGL or WUSL available. The studies conclude that there is no population within the WOGL or WUSL protected contours that would be adversely affected by the operation of the proposed LPFM station. Accordingly, a waiver of the Commission's Rules with regard to WOGL and WUSL is requested and believed to be justified.

NOTE : THE PROPOSED INTERFERENCE CONTOUR
EXTENDS 20 METERS FROM THE LPFM ANTENNA.
SINCE THE ANTENNA WILL BE MOUNTED 29 METERS
ABOVE GROUND, NO RECEIVER WILL BE ADVERSELY
AFFECTED BY OPERATION OF THE LPFM STATION.



WOGL AND WUSL
89.1 DBU CONTOUR

Proposed Site

Philadelphia

PROPOSED LPFM
129.1 DBU CONTOUR
(20 METERS)

Philadelphia

Camden

Wood-Ly

Scale 1:60,938

0 0.5 1.0 1.5 mi

EXHIBIT C-2
WAIVER REQUEST TO WOGL AND WUSL
PROPOSED LPFM STATION
98.5 MHZ - PHILADELPHIA, PA

*Smith and Fisher Population Report**WOGL (251) Philadelphia, PA - BMLH20110422AAL**Lat: 40-02-29.60 N Lng: 075-14-11.40 W ERP: 9.6 kW AMSL: 403.0 m**FM Interference Study**Protected: FCC F(50-50): 54 dBu**Interference considered within 100 km.**Signal Resolution: 1.0 km**Study Date: 11/13/2013**FM Database Date: 10/25/2013**D/U Ratios Used:**Co: 20.0 dB**First Adj: 6.0 dB**Second Adj: -40.0 dB**Third Adj: -40.0 dB**Threshold for reception: 54.0 dBu.**Primary Terrain: V-Soft 3 Second US Terrain**Secondary Terrain: V-Soft 3 Second Alaska Terrain**Population Database: 2010 US Census (PL)**Percentages calculated using a baseline population of 6,376,144.**Stations considered which do not cause interference:**Proposed Philadelphia LPFM (253)**Totals for WOGL (251)**Calculation Area Population: 6,590,406 (13472.4 sq. km)**Not Affected by Terrain Loss: 6,376,144 (13229.3 sq. km)**Interfered Population: 0 (551.7 sq. km)**Interference Free: 6,376,144 (12677.7 sq. km)**Percent Interference: 0.00**Terrain Blocked Population: 214,262 (243.0 sq. km)**Contour Area Population: 6,593,493*

*Smith and Fisher Population Report**WUSL (255) Philadelphia, PA - BLH19980922KE**Lat: 40-02-37 N Lng: 075-14-32 W ERP: 27.0 kW AMSL: 271.0 m**FM Interference Study**Protected: FCC F(50-50): 54 dBu**Interference considered within 100 km.**Signal Resolution: 1.0 km**Study Date: 11/13/2013**FM Database Date: 10/25/2013**D/U Ratios Used:**Co: 20.0 dB**First Adj: 6.0 dB**Second Adj: -40.0 dB**Third Adj: -40.0 dB**Threshold for reception: 54.0 dBu.**Primary Terrain: V-Soft 3 Second US Terrain**Secondary Terrain: V-Soft 3 Second Alaska Terrain**Population Database: 2010 US Census (PL)**Percentages calculated using a baseline population of 6,293,681.**Stations considered which do not cause interference:**Proposed Philadelphia LPFM (253)**Totals for WUSL (255)**Calculation Area Population: 6,565,731 (13238.3 sq. km)**Not Affected by Terrain Loss: 6,293,681 (12891.0 sq. km)**Interfered Population: 0 (629.9 sq. km)**Interference Free: 6,293,681 (12261.1 sq. km)**Percent Interference: 0.00**Terrain Blocked Population: 272,050 (347.3 sq. km)*