



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

IHM LICENSES, LLC
7136 S. YALE AVENUE
SUITE 501
TULSA OK 74136

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 48686

Call Sign: WUST

Permit File Number: BP-20170407ABC

Grant Date: August 18, 2017

This permit expires 3:00 a.m.
local time, 36 months after the
grant date specified above.

Permit to add 0.05 kW DA nighttime pattern using existing towers.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Hours of Operation: Daytime with Secondary nighttime

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	7:30 AM	5:15 PM	Jul.	5:00 AM	7:30 PM
Feb.	7:00 AM	5:45 PM	Aug.	5:15 AM	7:00 PM
Mar.	6:15 AM	6:15 PM	Sep.	5:45 AM	6:15 PM
Apr.	5:30 AM	6:45 PM	Oct.	6:15 AM	5:30 PM
May	5:00 AM	7:15 PM	Nov.	6:45 AM	5:00 PM
Jun.	4:45 AM	7:30 PM	Dec.	7:15 AM	4:45 PM

Callsign: WUST

Permit No.: BP-20170407ABC

Name of Permittee: IHM LICENSES, LLC

Station Location: WASHINGTON, DC

Frequency (kHz): 1120

Station Class: D

Antenna Coordinates:

Day

Latitude: N 38 Deg 52 Min 09 Sec

Longitude: W 76 Deg 53 Min 47 Sec

Night

Latitude: N 38 Deg 52 Min 09 Sec

Longitude: W 76 Deg 53 Min 47 Sec

Critical

Latitude: N 38 Deg 52 Min 09 Sec

Longitude: W 76 Deg 53 Min 47 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 0.050 Critical: 3.0

Antenna Mode: Day: DA Night: DA Critical: ND

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1292062	
2	1292059	
3	1292061	
4	1292060	

Night:

Tower No.	ASRN	Overall Height (m)
1	1292062	
2	1292059	
3	1292061	
4	1292060	

Critical:

Tower No.	ASRN	Overall Height (m)
1	1292062	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2113.093 Night: 65.042

Standard RMS (mV/m/km): Day: 2220.064 Night: 69.097

Augmented RMS (mV/m/km):

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	63.8
2	0.9780	-7.400	106.2100	10.200	0	63.8
3	1.5330	129.800	98.8100	45.000	0	63.8
4	0.5520	-74.400	195.9000	27.000	0	63.8

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4220	107.300	0.0000	0.000	0	63.8
2	0.6470	165.900	106.2100	10.200	0	63.8
3	1.0000	0.000	98.8100	45.000	0	63.8
4	0.2020	118.900	195.9000	27.000	0	63.8

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Non-Directional Antenna: Critical

Radiator Height: 47.44 meters; 63.8 deg

Theoretical Efficiency: 288.72 mV/m/kw at 1km

Inverse Distance Field Strength:

The inverse distance field strength at a distance of one kilometer from the above antenna in the directions specified shall not exceed the following values:

Night:

Azimuth:	Radiation:
224	16.8 mV/m
294	14.1 mV/m

Special operating conditions or restrictions:

- 1 The ground system consists of 120 equally spaced, buried, copper radials about the base of each tower, each 67.1 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers, plus 120 interspersed radials 15.2 meters in length.
- 2 Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.
- 3 The permittee must submit a proof of performance as set forth in either Section 73.151(a) or 73.151(c) of the rules before program tests are authorized.
A proof of performance based on field strength measurements, per Section 73.151(a), shall include a complete nondirectional proof of performance, in addition to a complete proof on the (night) directional antenna system. The nondirectional and directional field strength measurements must be made under similar environmental conditions. The proof(s) of performance submitted to the Commission must contain all of the data specified in Section 73.186 of the rules.
Permittees who elect to submit a moment method proof of performance, as set forth in Section 73.151(c), must use series-fed radiators. In addition, the sampling system must be constructed as described in Section 73.151(c) (2) (i).
- 4 A license application (FCC Form 302) to cover this construction permit must be filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires.
- 5 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.
- 6 Before program tests are authorized, sufficient data shall be submitted to show that adequate filters, traps and other equipment has been installed and adjusted to prevent interaction, intermodulation and/or generation of spurious radiation products which may be caused by common usage of the same antenna system by Stations WUST, WZHF (ID# 73306) and WJFK (ID# 28638) and there shall be filed with the license application copies of a firm agreement entered into by the three stations involved clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment. In addition, field observations shall be made to determine whether spurious emissions exist and any objectionable problems resulting therefrom shall be eliminated. Following construction, and prior to authorization of program test under this grant, all three stations shall each measure antenna or common point resistance and submit FCC Form 302 as application notifying the return to direct measurement of power.

*** END OF AUTHORIZATION ***