TECHNICAL SUMMARY
SPECIAL DISPLACEMENT WINDOW
APPLICATION FOR CONSTRUCTION PERMIT
LOW POWER ANALOG STATION WJHJ-LP
NEWPORT NEWS, VIRGINIA
CHANNEL 34 15 KW (ND)

1. Application Purpose: The instant application is a special displacement window application for WJHJ-LP currently on channel 39 at Newport News, Virginia (FCC File No. BLTTL-20060221ABX).[1] As detailed below, WJHJ-LP is eligible for displacement Therefore, it is proposed to operate WJHJ-LP on "in core" channel 34 with a nondirectional antenna maximum effective radiated power (ERP) of 15 kW using an ERI model AL8O-34 horizontally polarized nondirectional antenna. The antenna radiation center height will be 118.8 m AMSL. There will be no change in the overall structure height (ASRN 1047304).

2. Eligibility to File in Special Displacement Window: Station WJHJ-LP is eligible to file in the special displacement window as (1) it was operating with its currently licensed facilities (FCC File No. BLTTL-20060221ABX) prior to April 13, 2017 – the release date of the *Closing and Channel Reassignment Public Notice*[2] and (2) it operates on analog channel 39 which has been repurposed for new, flexible 600 MHz Band wireless service.[3]

3. Interference Compliance: As indicated in the attached *TVStudy* analysis, WJHJ-LP's proposed channel 34 displacement operation meets the FCC's interference protection requirements with respect to all protected facilities based on both the pre-transition and post-transition allocation environments. A cell size of 1.0 km and a profile resolution of 1.0 points/km were utilized for the *TVStudy* analysis.

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[1] See FCC Public Notice dated February 9, 2018 entitled "*Incentive Auction Task Force and Media Bureau Announce Post-Incentive Auction Special Displacement Window April 10, 2018 through May 15, 2018 and Make Location and Channel Data Available*" (DA 18-124, MB Docket No. 16-306, GN Docket No. 12-268) ("FCC Special Displacement Window PN").

[2] See *Media Bureau Announces Date by Which LPTV and TV Translator Stations Must Be "Operating" In Order to Participate In Post-Incentive Auction Special Displacement Window, Public Notice,* 31 FCC Rcd 5383 (MB 2016).

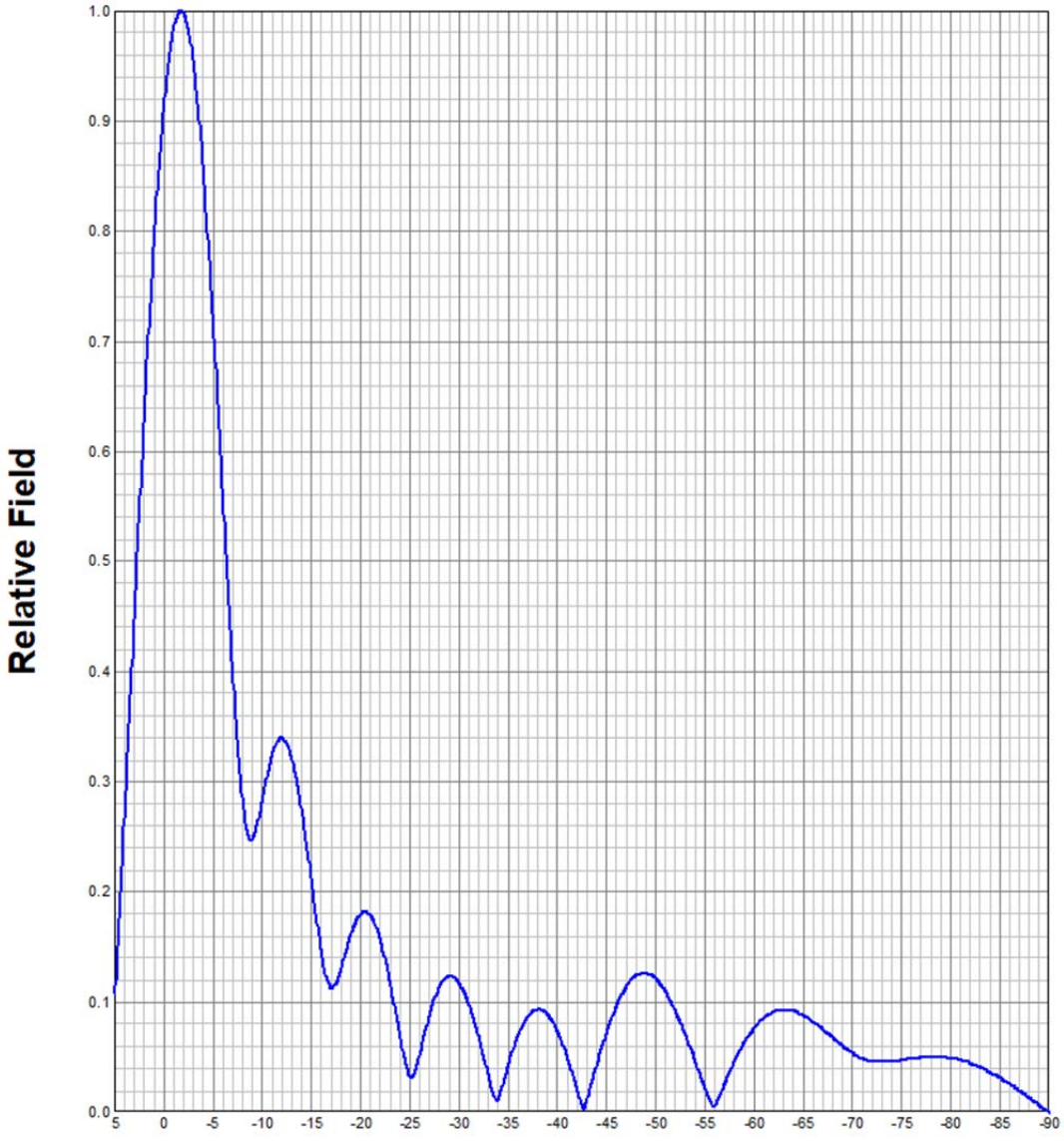
[3] See *The Incentive Auction Task Force and Media Bureau Announce Procedures for Low Power Television, Television Translator and Replacement Translator Stations During the Post-Incentive Auction Transition*, Public Notice, at Section III paragraph 8 (DA 17-442, Released May 12, 2017).

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 115.8 meters above ground level. The total DTV ERP is 15 (horizontal polarization). A greater than expected vertical plane relative field value of 0.1 is presumed for the antenna's downward radiation (-60° to -90° elevation, see attached vertical plane relative field pattern). The calculated power density at a point 2 meters above ground level is 0.4 uW/cm^2 which is 0.1% of the FCC's recommended limit of 395.3 uW/cm^2 for channel 34 for an uncontrolled environment. Thus, as this is less than the 5% threshold value, it is believed that the WJHJ-LP facility is in full compliance with the FCC's requirements with regard to radio frequency radiation exposure.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

ELEVATION PATTERN

Type:	AL8		Channel:	34
Directivity:	Numeric	dBd	Location:	
Main Lobe:	8.68	9.39	Beam Tilt:	-1.75
Horizontal:	7.30	8.63	Polarization:	Horizontal



Preliminary, subject to final design and review.