



## **ENGINEERING STATEMENT**

**IN SUPPORT OF**

**APPLICATION FOR MINOR CHANGE TO CONSTRUCTION PERMIT**

**WHDT**

**STUART, FL**

### **Background**

Scripps Broadcasting Holdings LLC (Scripps) is the licensee of WHDT which has been authorized to operate its post-incentive auction facility on Ch. 34 (LMS File No. 0000034671) at Stuart, FL with an ERP of 1000 kW at an HAAT of 440.0m. The tower is located at the following coordinates:

26° 34' 30.7" N (NAD 83)  
80° 14' 31.1" W

Scripps only recently took possession. The previous owner of WHDT had intended to build the maximized facility at the site specified in the construction permit; however, given the current configuration of the tower at this site, the WHDT post-incentive auction facility cannot be built without the station going off-air for a significant period of time. Therefore, Scripps intends to

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build the WHDT post-incentive auction facility at a nearby tower location that it owns (ASR#1220033) so that construction of the post-incentive auction facility will not impact the interim operation of WHDT. The proposed facility will have the following parameters:

Coordinates: 26° 35' 21.2" N (NAD83)  
80° 12' 42.8" W  
ERP: 621.0 kW (DA)  
RCAMSL: 388.8m

### **Antenna System and Tower**

WHDT intends to install a new top-mounted directional coaxial slot antenna for Ch. 34 (Dielectric TFU-27JSC/VP-R P220). The azimuth and elevation patterns and dBk table for the proposed antenna have been attached to the application. The antenna will be installed on a candelabra tower which is currently occupied by one other television station that has a longer antenna than the proposed WHDT antenna. As such, the addition of the new WHDT top-mounted antenna will not result in a change in the overall height of the structure.

The new Ch. 34 antenna will have a center of radiation of 388.8 m AMSL (with a calculated HAAT of 384.0m) and it will be elliptically polarized. The vertically polarized radiation will not exceed the horizontally polarized component in any azimuth.

### **Coverage**

The entire principal community of Stuart, FL is well within the predicted F(50,90) 48 dBu contour based on the proposed directional 621 kW ERP.

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## **Interference**

Scripps is not seeking to expand the WHDT noise-limited service contour beyond the noise-limited contour of the facility authorized in the existing construction permit (LMS File No. 0000034671); therefore, no interference analysis is required. Figure 1, attached hereto, is a map showing the noise-limited contour of the proposed facility vs. the noise-limited of the current WHDT Ch. 34 construction permit facility.

## **Environmental/RFR**

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure is existing and registered, such conditions should not be an issue requiring further consideration.

The location of the proposed post-incentive auction facility is a multi-user site and it is assumed that the site is currently “in compliance” with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be  $0.007336 \text{ mW/cm}^2$ , which is less than 5% of the MPE for public exposure ( $0.395333 \text{ mW/cm}^2$ ) at Ch. 34 (590-596 MHz). The contribution to the overall RFR from the proposed facility is negligible and, therefore, the site will remain “in compliance” with FCC guidelines.

Scripps agrees to comply with the Commission’s requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR

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monitors when on the structure. The tower base is enclosed by a locked security fence and appropriate signage warning of potential RFR hazards is posted.

### **Certification**

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read "Ben Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.  
April 12, 2019

Attached:

Figure 1 - NLC of the proposed facility vs. NLC of the current WHDT construction permit facility

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**Mid-State Consultants**

**WHD (CP)**

0000034671

Latitude: 26-34-30.70 N

Longitude: 080-14-31.10 W

ERP: 1000.00 kW

Channel: 34

Frequency: 593.0 MHz

AMSL Height: 444.2 m

Elevation: 5.2 m

Horiz. Pattern: Directional

Vert. Pattern: Yes

Elec Tilt: 0.75

Prop Model: None

**WHD (WPTV Site)**

Latitude: 26-34-21.20 N

Longitude: 080-12-42.20 W

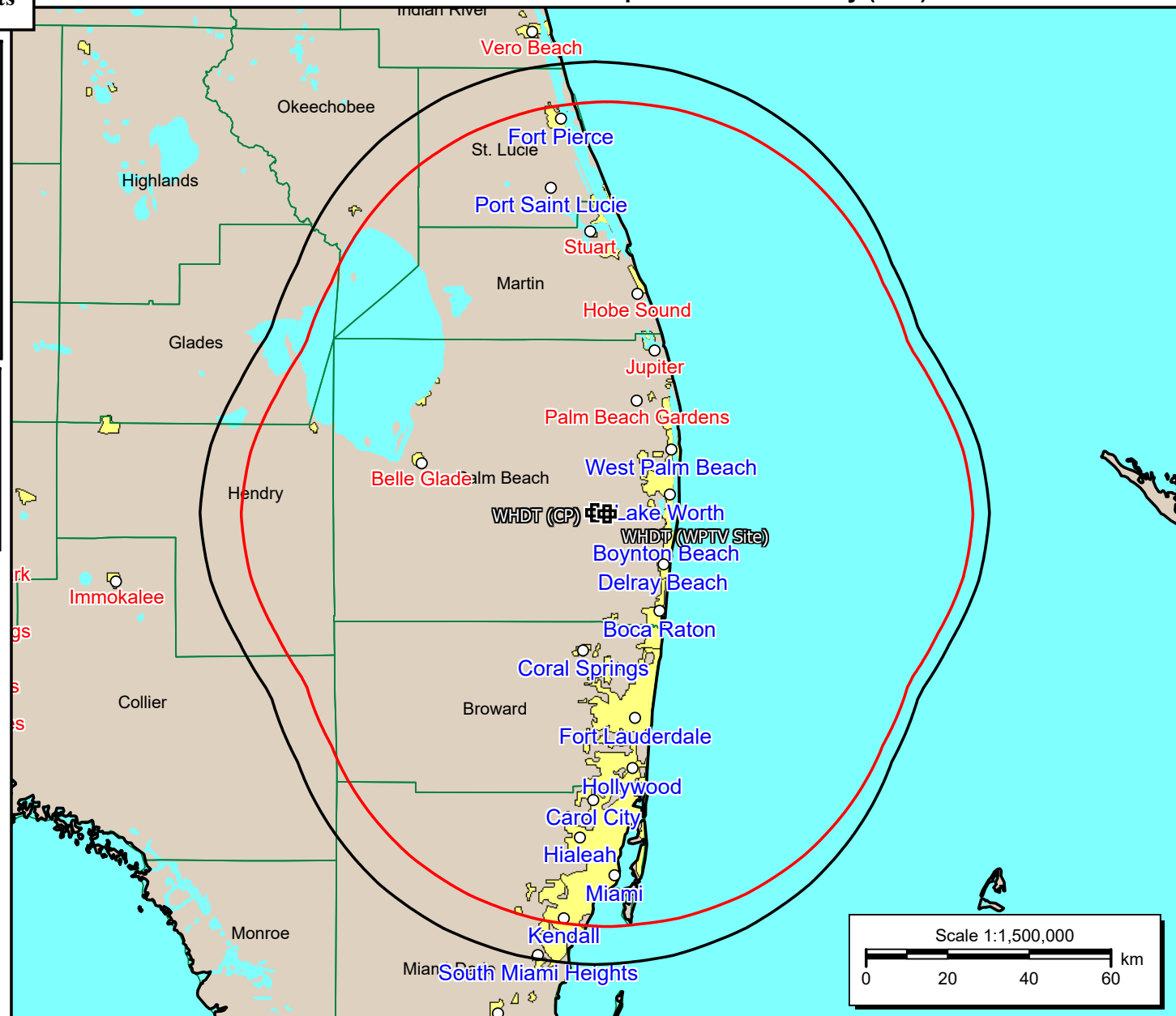
ERP: 621.00 kW

Channel: 34

Frequency: 593.0 MHz

AMSL Height: 388.8 m

**FCC Noise-Limited Contour of WHDT Ch. 34 CP Facility (Black)  
vs. Noise-Limited Contour of Proposed Ch. 34 Facility (Red)**



**Figure 1**  
**4-12-19**