ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WALO
HUMACAO, PUERTO RICO

March 28, 2005

1240 KHZ 1 KW U

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Engineering Statement

This Engineering Exhibit was prepared on behalf of radio station WALO, Humacao, Puerto Rico in support of an application for construction permit to relocate its transmitting antenna. There will be no change in frequency and the proposed facility will continue to serve Humacao as it city of license. The proposal is defined as a minor change according to the FCC Rules. Specifications for the proposed facility are included herein at Figure 1.

Tower Registration

The FCC Antenna Structure Registration Number (ASRN) has not yet been obtained. The FAA is being notified of the proposed construction. Upon receipt of a final determination of no hazard to air navigation from the FAA, the applicant will file an application for an ASRN.

Notification of FCC Monitoring Station and Arecibo Observatory

The proposed facility is located more than 65 km from the closest FCC monitoring station at Santa Isabel, Puerto Rico. At this distance there is no potential for interference. Therefore, notification to the FCC monitoring station is not necessary.

Pursuant to Section 73.1030 of the FCC Rules the National Astronomy and Ionosphere Center (Arecibo Observatory) at Arecibo, Puerto Rico was notified of

the proposal. The FCC will be notified when coordination with the Arecibo Observatory has been completed.

Proposed Transmitter Location

The proposed transmitting antenna will be constructed on the north side of Route 3, 1.5 km southwest of Punta Santiago, Puerto Rico. The site is located 4.6 km east-northeast of the licensed WALO transmitter site. Photographs of the proposed transmitter site are included herein as Appendix 1.

The FCC-defined 1000 mV/m blanketing contour extends radially from the proposed transmitter site to a distance of 0.3 km. There is a total population of 2 persons within the 1000 mV/m contour based on the 2000 Census block data. The licensed and proposed blanketing contours for the daytime and nighttime operations are illustrated herein at Sheet 2 of Figures 5 and 6.

Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation, the proposed transmission tower will be restricted from access with a fence not less than 2 m from the base of the tower in any direction. According to Supplement A of FCC Bulletin OET-65 (Edition 97-01), locations outside of the fenced area will not exceed FCC standards for RF energy for uncontrolled environments. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing. The applicant shall reduce power or cease operation as necessary to protect persons having access to the WALO tower from RF energy in excess of the FCC guidelines.

Predicted Field Strength Contours

The predicted field strength contours were calculated in accordance with Section 73.183 of the FCC Rules. Ground conductivity was based on Region 2 data, which is identical to FCC conductivity data for the island of Puerto Rico. Daytime and nighttime field strength contours are illustrated herein at Figures 5 and 6.

As indicated in Figure 5 and 6, the proposed 5 mV/m daytime contour and 18.9 mV/m nighttime interference-free (NIF) contour will encompass the entire community of Humacao. Therefore, the proposed facility is in compliance with Section 73.24 the FCC Rules concerning principal community coverage.

Daytime Allocation Study

Figure 8 is a tabulation of all of the stations considered in the allocation study. Figure 7 consists of five sheets each detailing the daytime allocation analysis with respect to a particular facility. The finding for each allocation analysis are summarized below:

Figure 7, Sheet 1 – HICV, Barahona, Dominican Republic (1240 kHz). There is existing grandfathered contour overlap between HICV and WALO. This sheet illustrates that there will be no increase in grandfathered overlap over land between these two facilities.

Figure 7, Sheet 2 – WNIK, Arecibo, Puerto Rico (1230 kHz). There is existing grandfathered contour overlap between WNIK and WALO. The existing overlap of the WNIK 0.5 mV/m contour with the WALO licensed 0.25 mV/m contour is a land area of 151 sq. km. The proposed overlap for these same contours is 148 sq. km, a decrease in the land area contour overlap of 3 sq. km. The land area overlap of the WNIK 0.25 mV/m with the WALO licensed and proposed 0.5 mV/m contour is 251 and 249 sq. km, respectively.

Figure 7, Sheet 3 – WJIT, Sabana, Puerto Rico (1250 kHz). There is existing grandfathered contour overlap between WJIT and WALO. The existing overlap of the WJIT 0.5 mV/m contour with the WALO licensed 0.25 mV/m contour is a land area of 211 sq. km. The proposed overlap for these same contours is 208 sq. km, a decrease in

the land area contour overlap of 3 sq. km. The land area of overlap of the WJIT 0.25 mV/m with the WALO licensed and proposed 0.5 mV/m contour is 86 and 78 sq. km, respectively.

Sheets 4 and 5 of Figure 7 demonstrate lack of prohibited overlap with second and third adjacent stations, WISO (License and Construction Permit), Ponce, PR and WHOY, Salinas, PR.

Nighttime Limit

The WALO nighttime interference free (NIF) limit contour was calculated according the FCC Rules. The contributors to the WALO nighttime limit are:

- YVLQ, La Victoria, Venezuala, 1240 kHz, 10 kW-U
- YVSF, Caripito, Venezuala, 1240 kHz, 10 kW-U.

YVLQ and YVSF cause individual NIF limits at WALO of 13.8 mV/m and 12.9 mV/m, respectively. This results in a 50% RSS limit of 18.9 mV/m. HICV, Barahona, Dominican Republic (1240 kHz) causes a limit of 4.6 mV/m at WALO based on its listed nighttime power of 0.25 kW. Therefore, it does not enter the WALO 50% RSS nighttime limit.

Louis Robert du Treil, Jr., P.E.

du Treil, Lundin & Rackley, Inc.
201 Fletcher Ave.
Sarasota, Florida 34237

March 28, 2005

Figure 1

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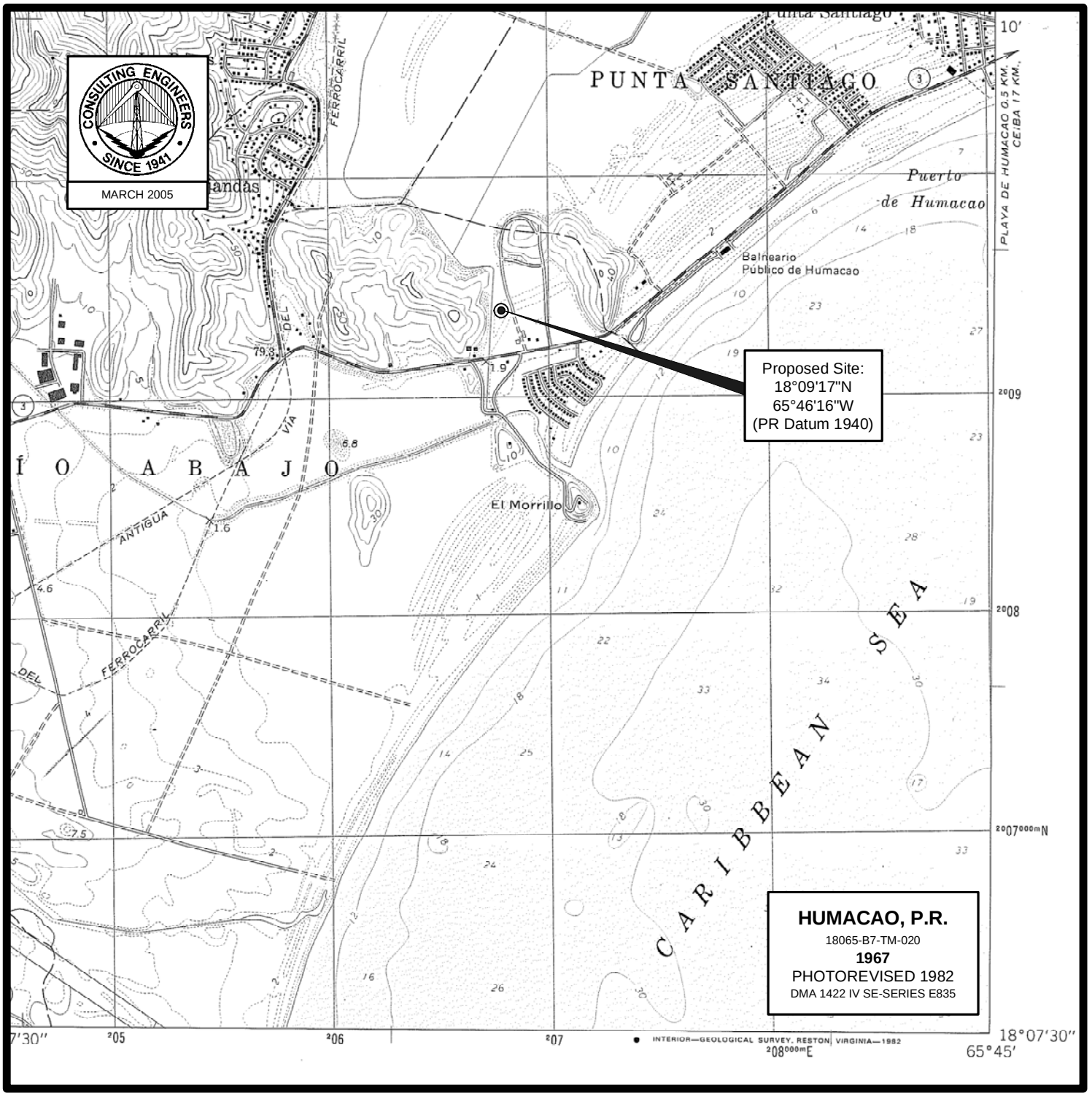
Engineering Specifications

Frequency	1240 kHz
Hours of Operation	Unlimited
Power	1 kW
Site Coordinates	18°09'17"North Latitude 65°46'16"West Longitude
Type of tower	Uniform cross-section, guyed, base-insulated
Antenna feed	series
Site elevation	1.0 m AMSL
Overall height of proposed structure with obstruction lighting	56.7 m AGL / 57.7 m AMSL
Tower height above base insulator (without light)	54.9 m (81.7°)
Ground system	To be installed about the base of the tower are 120 evenly-spaced copper wire radials (#10 AWG), extending 60 m (except where shortened at the property boundary)and buried to a depth of approximately 15 cm; plus 120 evenly-spaced buried short copper wire radials extending to a distance of 15 m interspersed between the long radials.



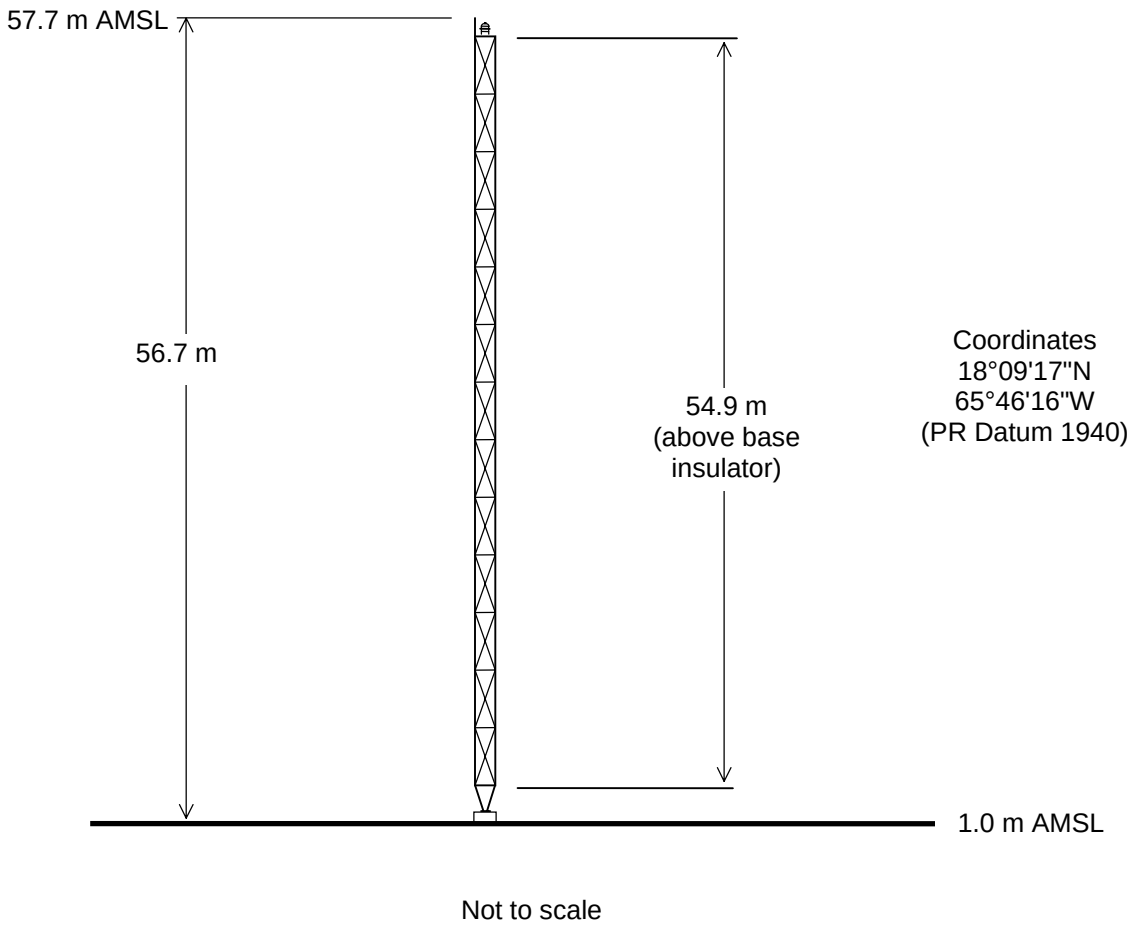
0.5 0 0.5 1.0 1.5 2.0 miles

0.5 0 0.5 1.0 1.5 2.0 2.5 kilometers

PROPOSED TRANSMITTER SITE

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

MARCH 2005



Antenna Structure Registration Pending
FAA Determination of No Hazard

SKETCH OF ANTENNA ELEMENT

RADIO STATION WALO

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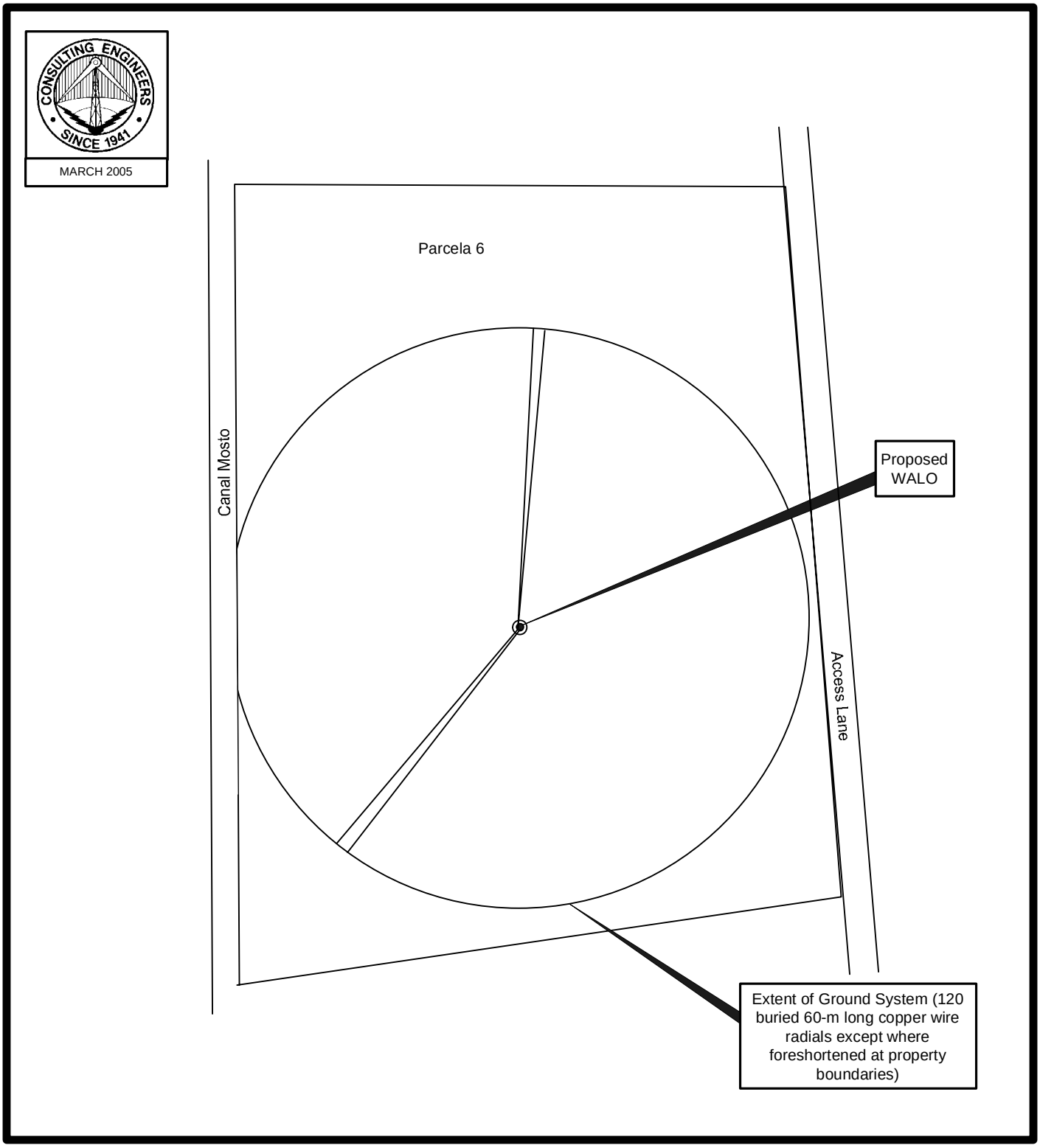
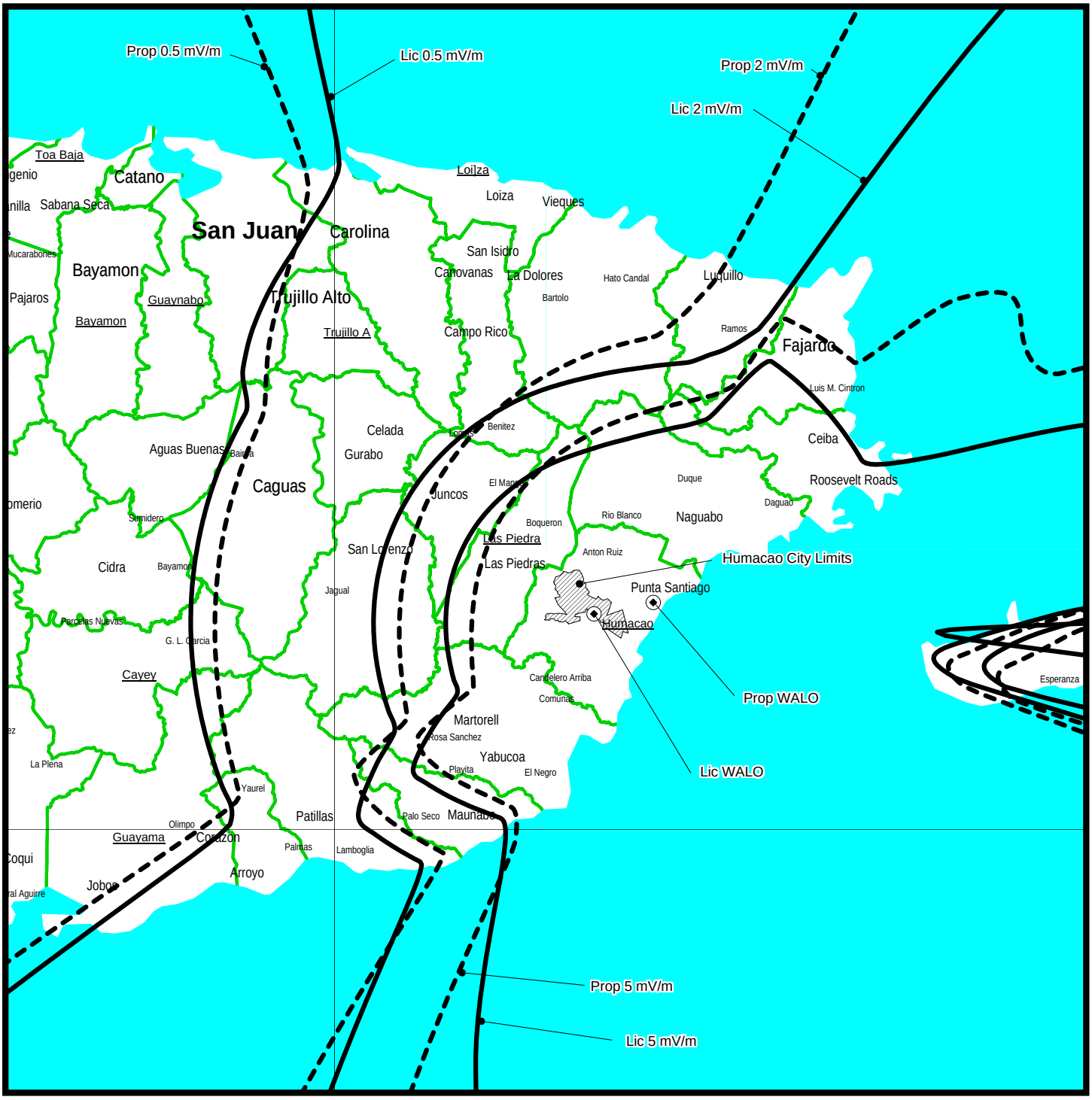


ANTENNA SITE PLAT

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WALO
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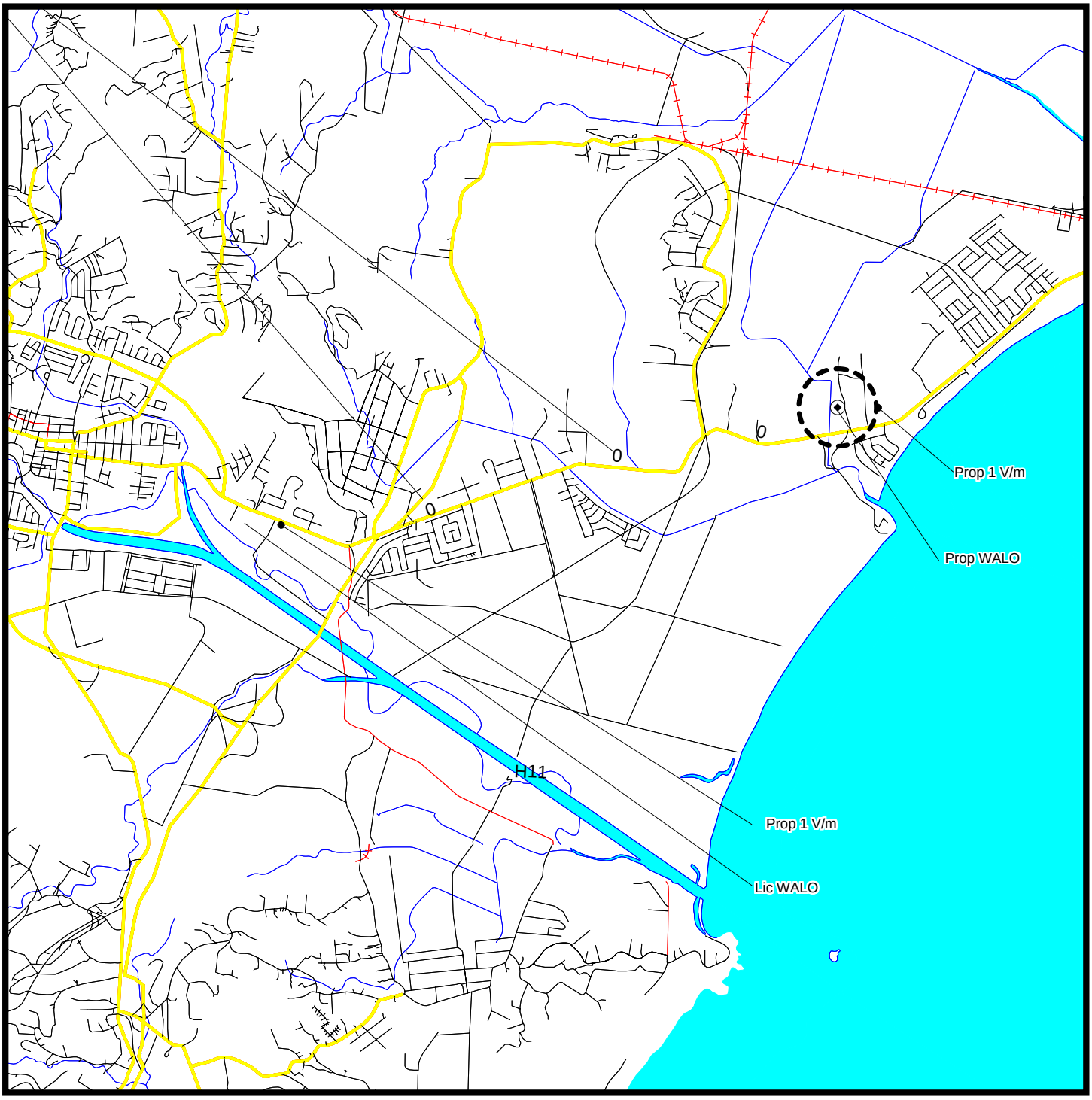

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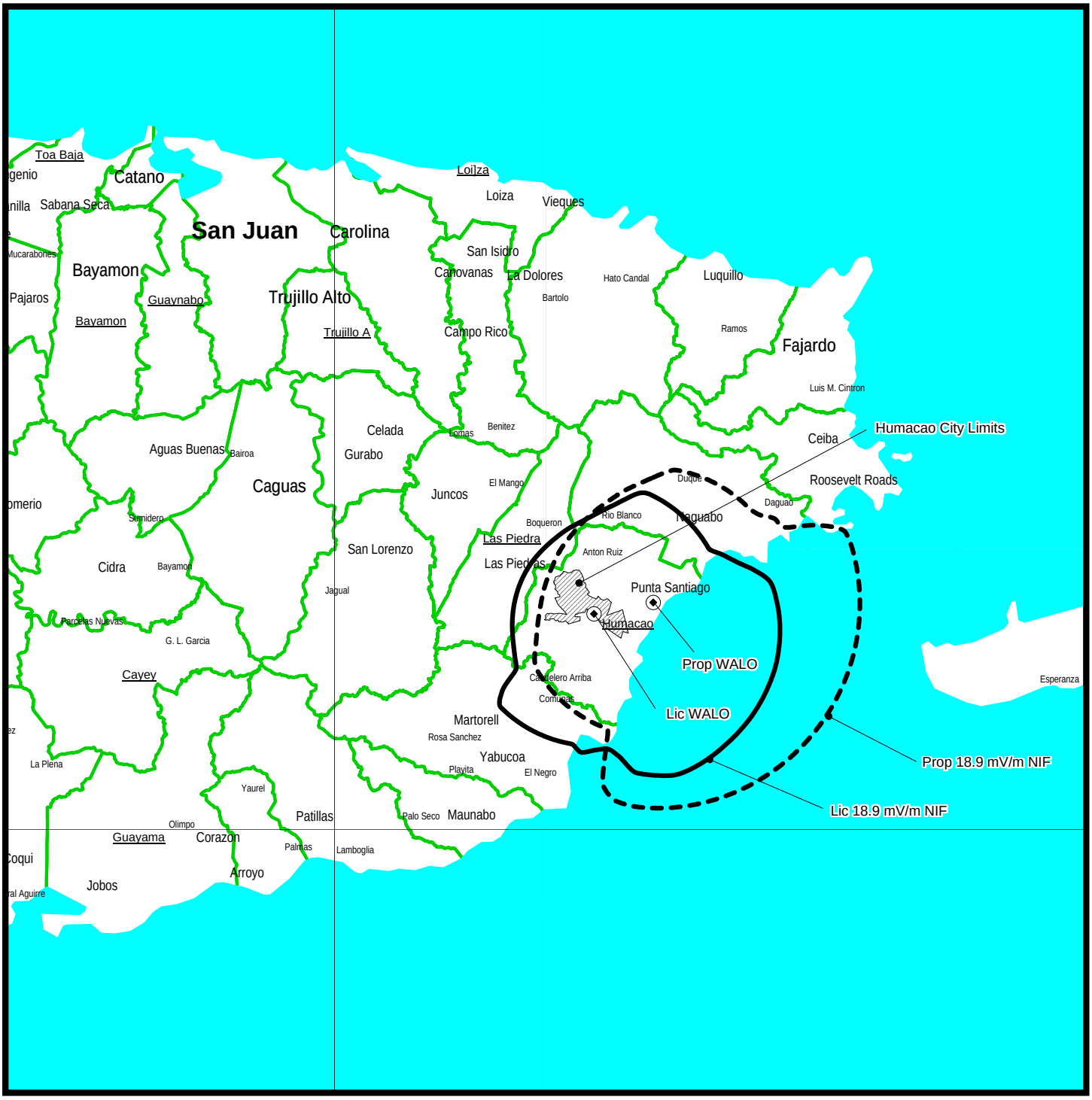

NIGHTTIME FIELD STRENGTH CONTOURS

RADIO STATION WALO
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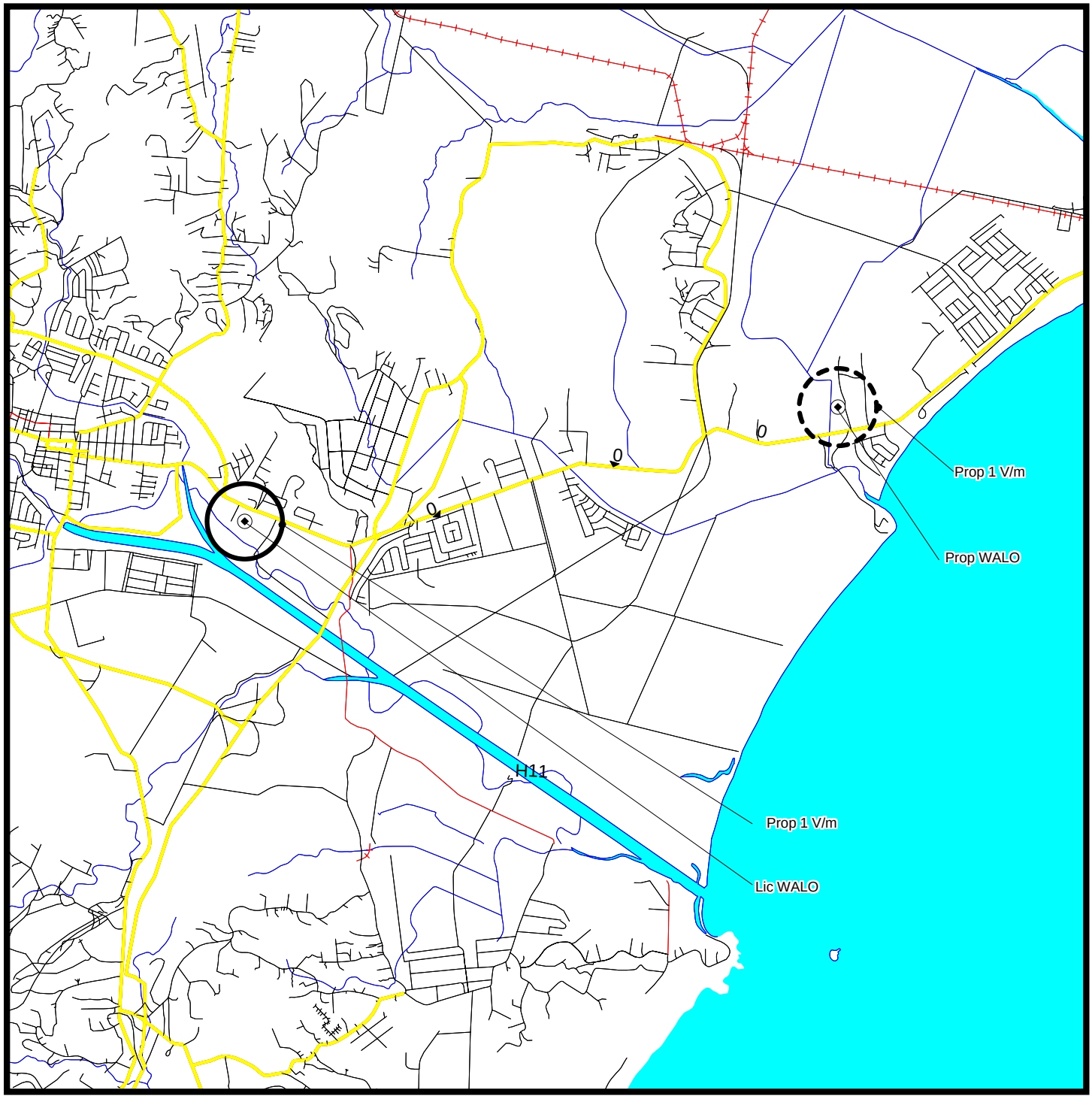

NIGHTTIME FIELD STRENGTH CONTOURS

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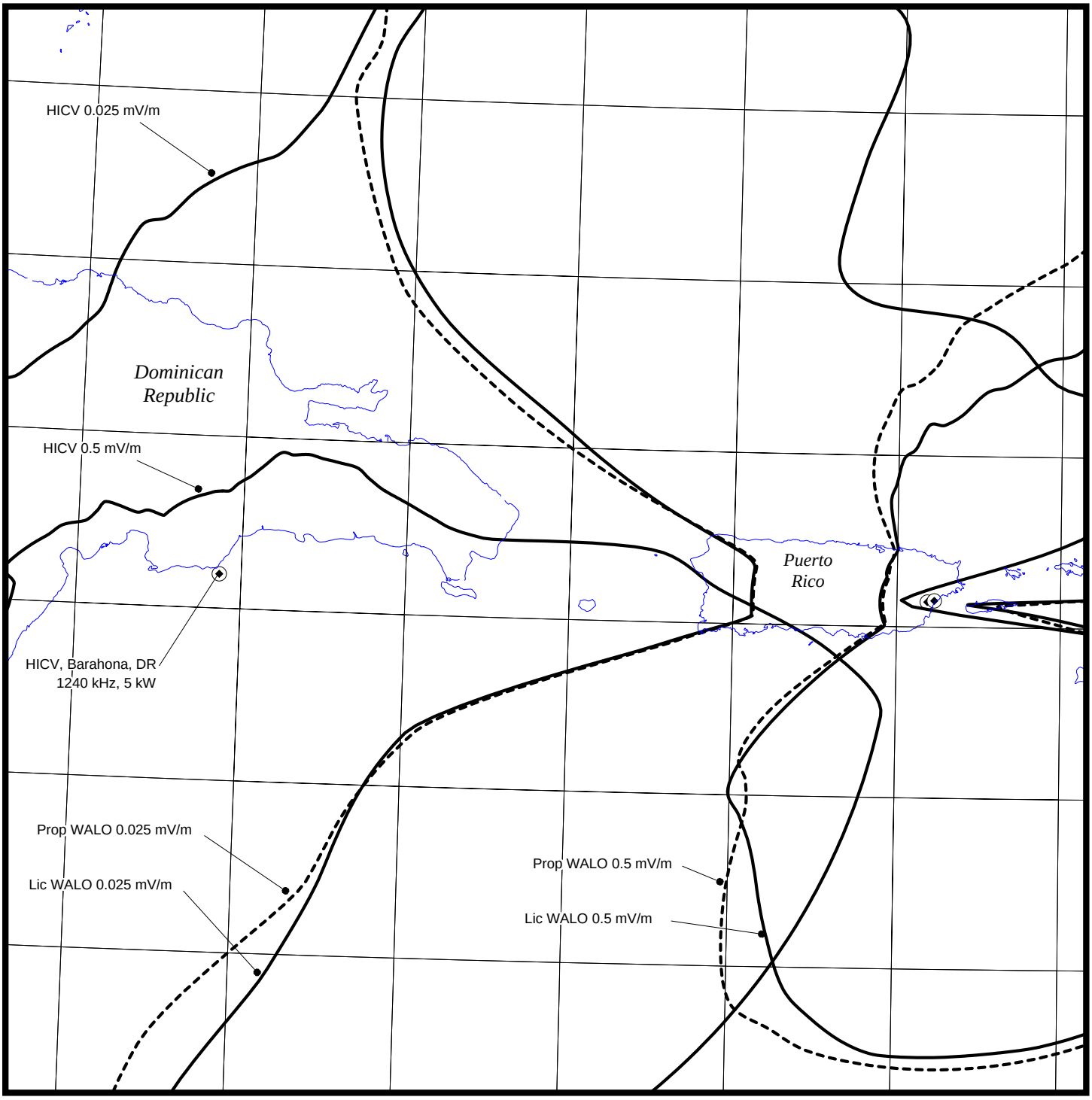

DAYTIME ALLOCATION STUDY

RADIO STATION WALO
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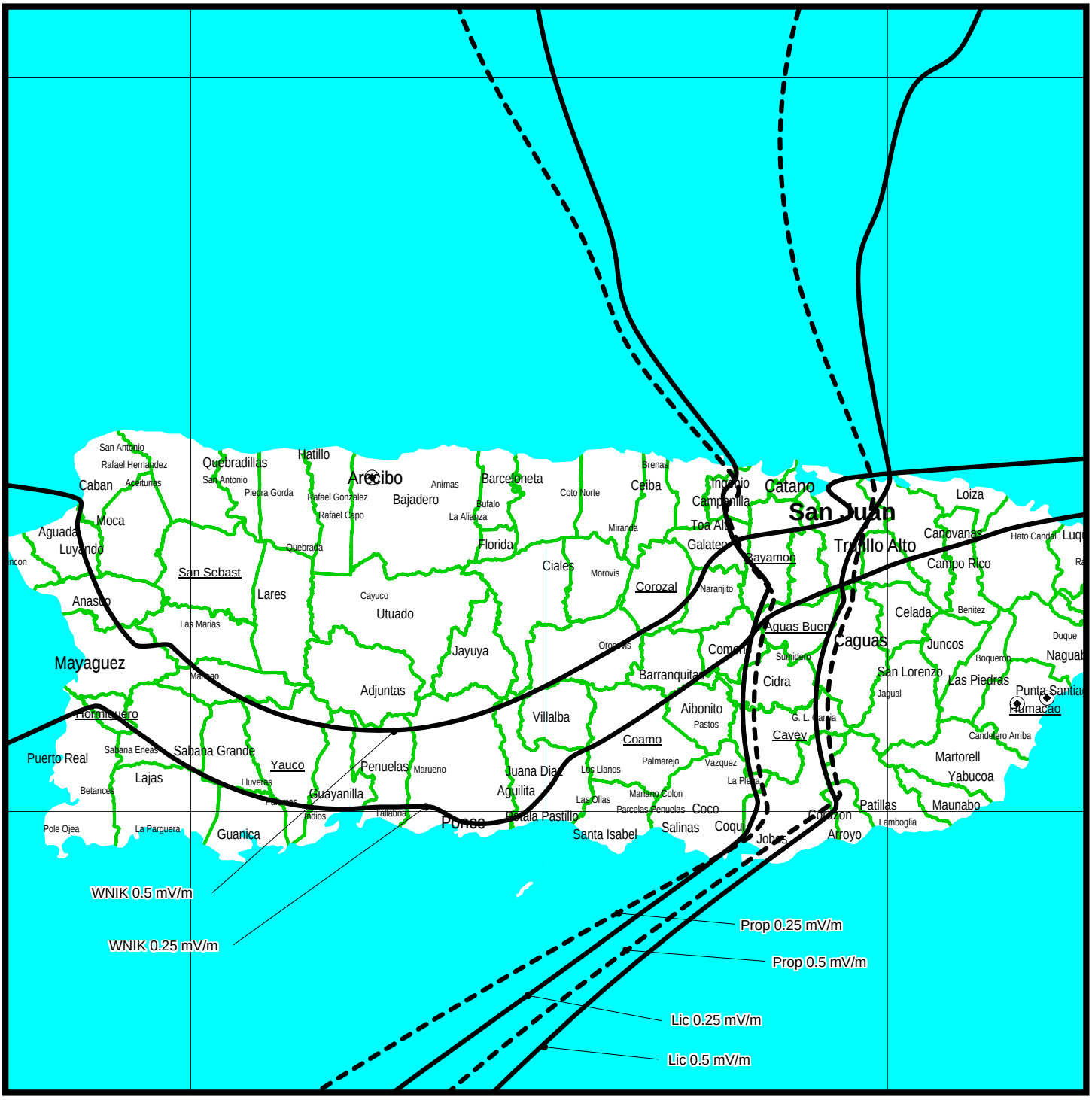

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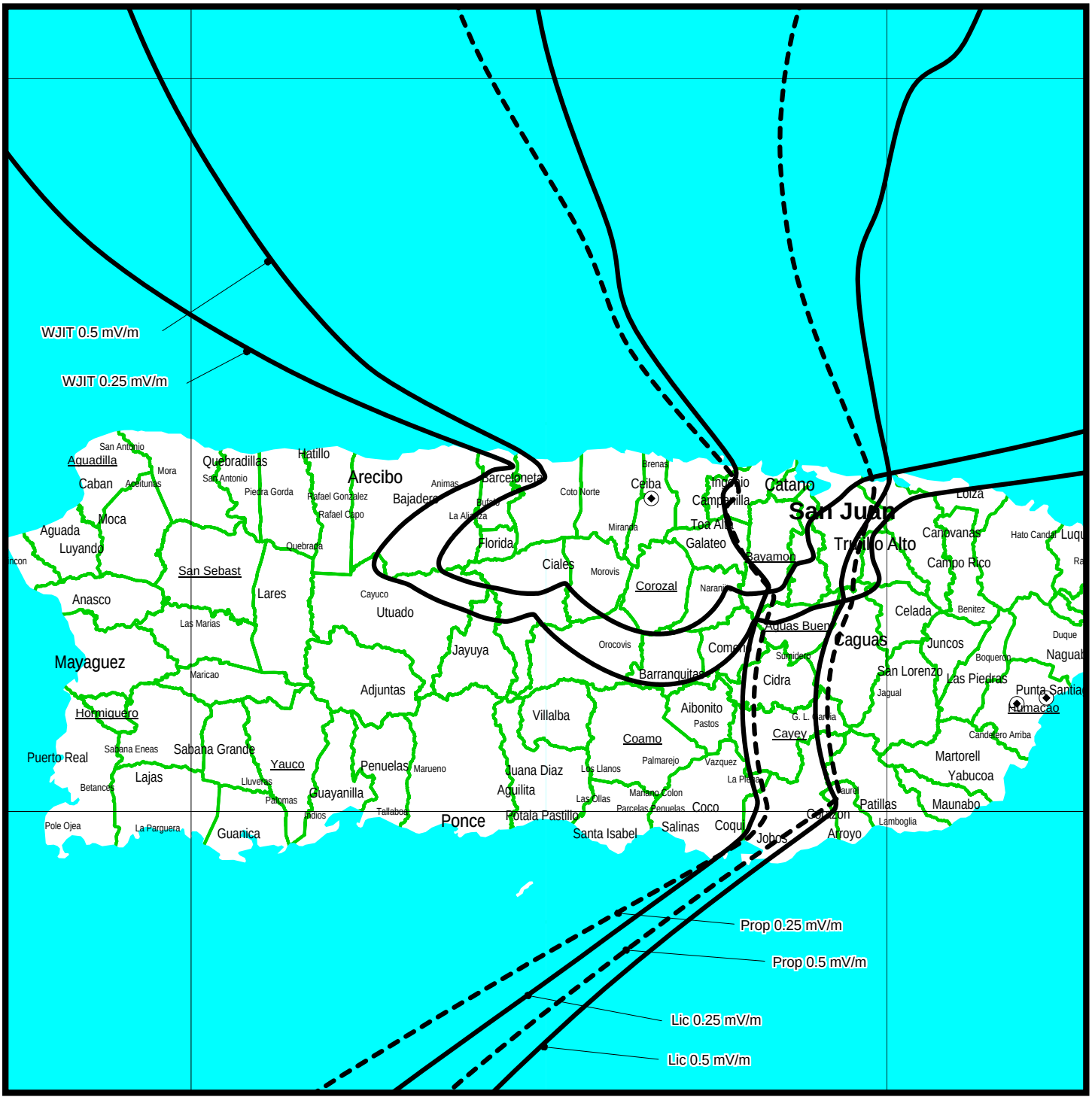

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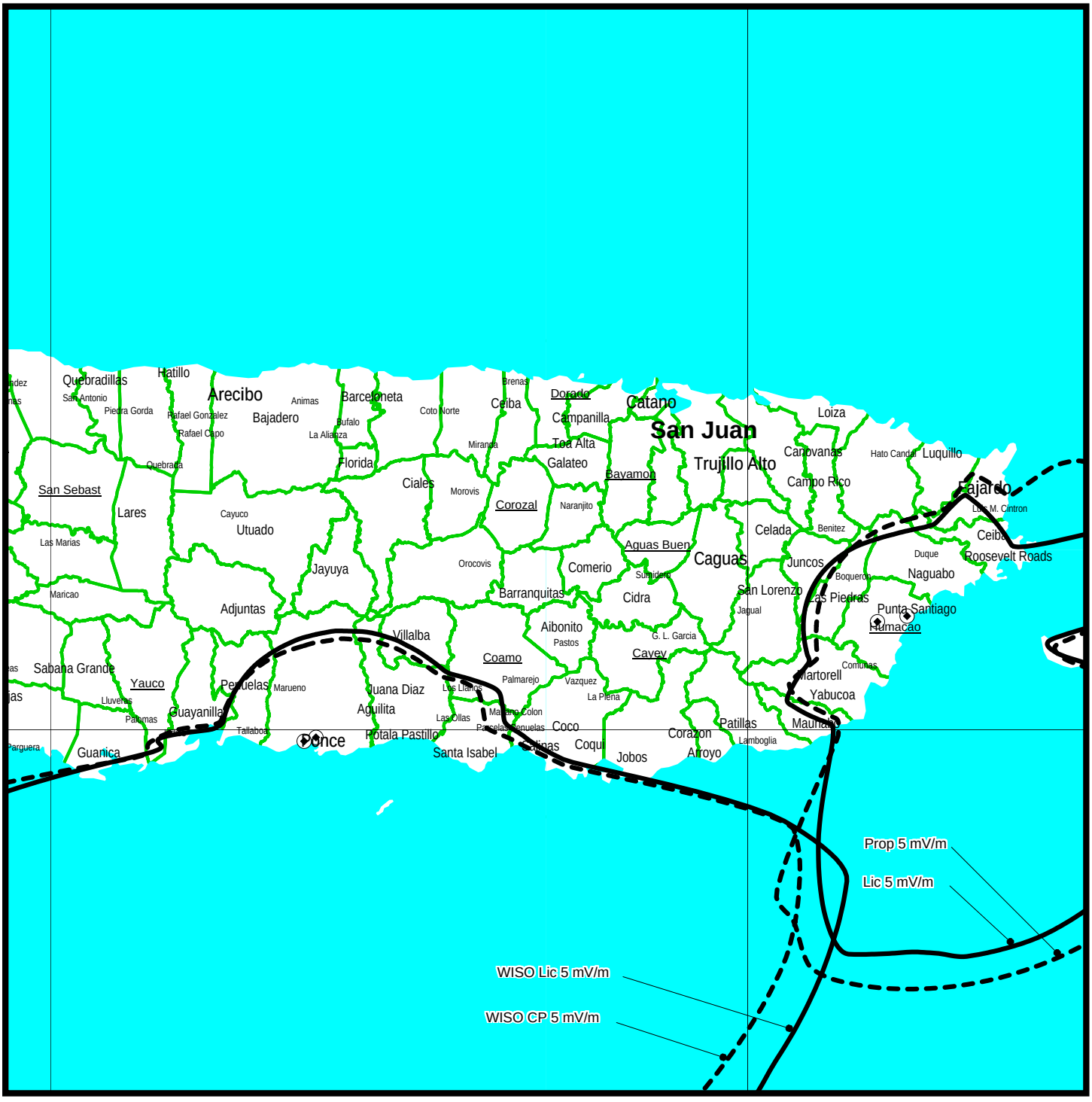

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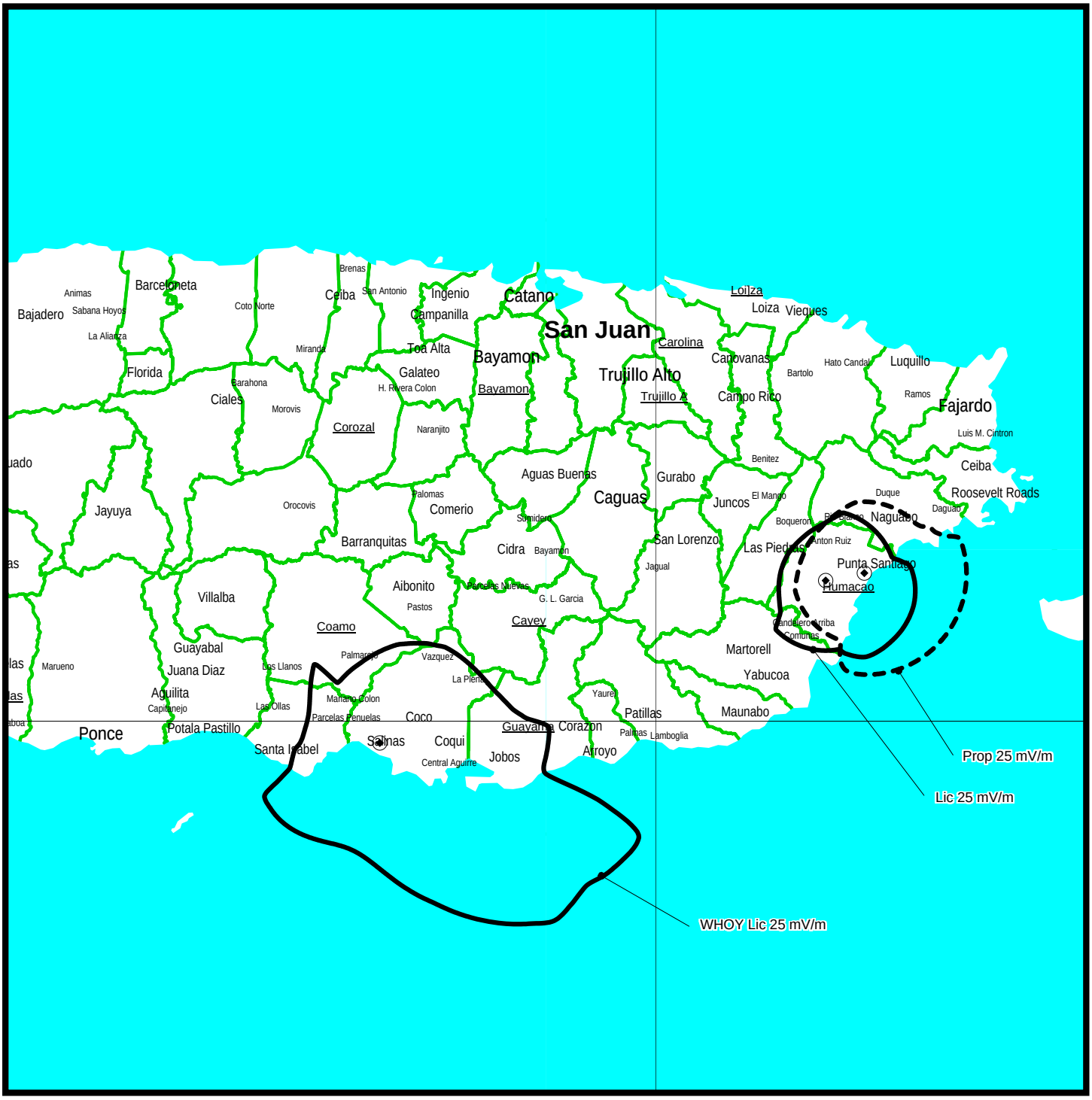

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Stations Considered in Daytime Allocation Study

Call Status	City FCC File No.	State Country	Freq. Class	Hours Mode	Power-kW RMS-mV/m	Latitude Longitude	Bearing deg-Tru	Dist. km/mi
WHOY	SALINAS	PR	1210	Day	5.000	17-58-38	250.77	59.73
Lic.	BL-800227AF	US	0B	DA2	700.06	66-18-14		37.11
(Basis for ground conductivity: Region 2 data)								
WNIK	ARECIBO	PR	1230	Unl	1.000	18-27-20	288.26	107.71
Lic.	-	US	0B	ND1	329.92	66-44-24		66.933
(Basis for ground conductivity: Region 2 data)								
WALO	HUMACAO	PR	1240	Unl	1.000	18-08-49	259.11	4.60
Lic.	-	US	0B	ND1	292.90	65-48-49		2.86
(Applicant's authorized facility.) (Basis for ground conductivity: Region 2 data)								
HICV	BARAHONA		1240	Day	5.000	18-12-00	271.31	461.55
	-	DR	C	ND1	300.35	70-08-00		286.80
(Basis for ground conductivity: Region 2 data)								
WJIT	SABANA	PR	1250	Day	.250	18-25-37	296.88	67.17
Lic	BL-19990608DD	US	0B	DA2	144.60	66-20-20		41.74
(Basis for ground conductivity: Region 2 data)								
WISO	PONCE	PR	1260	Unl	2.500	17-59-22	258.55	91.68
Lic.	BL-20020911ABX	US	0B	ND1	307.38	66-37-11		56.97
(Basis for ground conductivity: Region 2 data)								
WISO	PONCE	PR	1260	Unl	2.500	17-59-02	258.42	91.56
CP	BP-20040301ABT	US	0B	ND1	282.60	66-38-12		58.14
(Basis for ground conductivity: Region 2 data)								

Appendix 1

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Photographs of Proposed Transmitter Site

{Two Sheets Follow.}

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